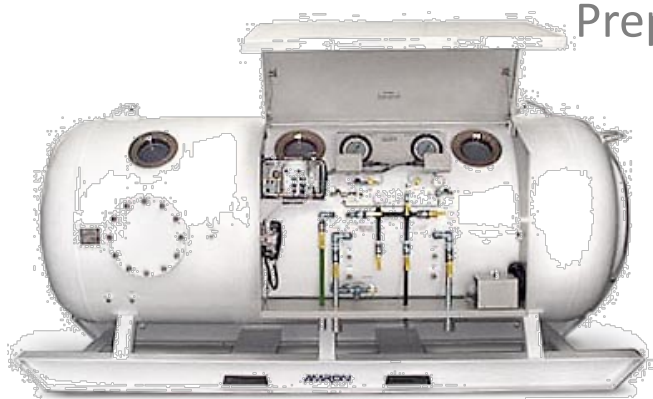


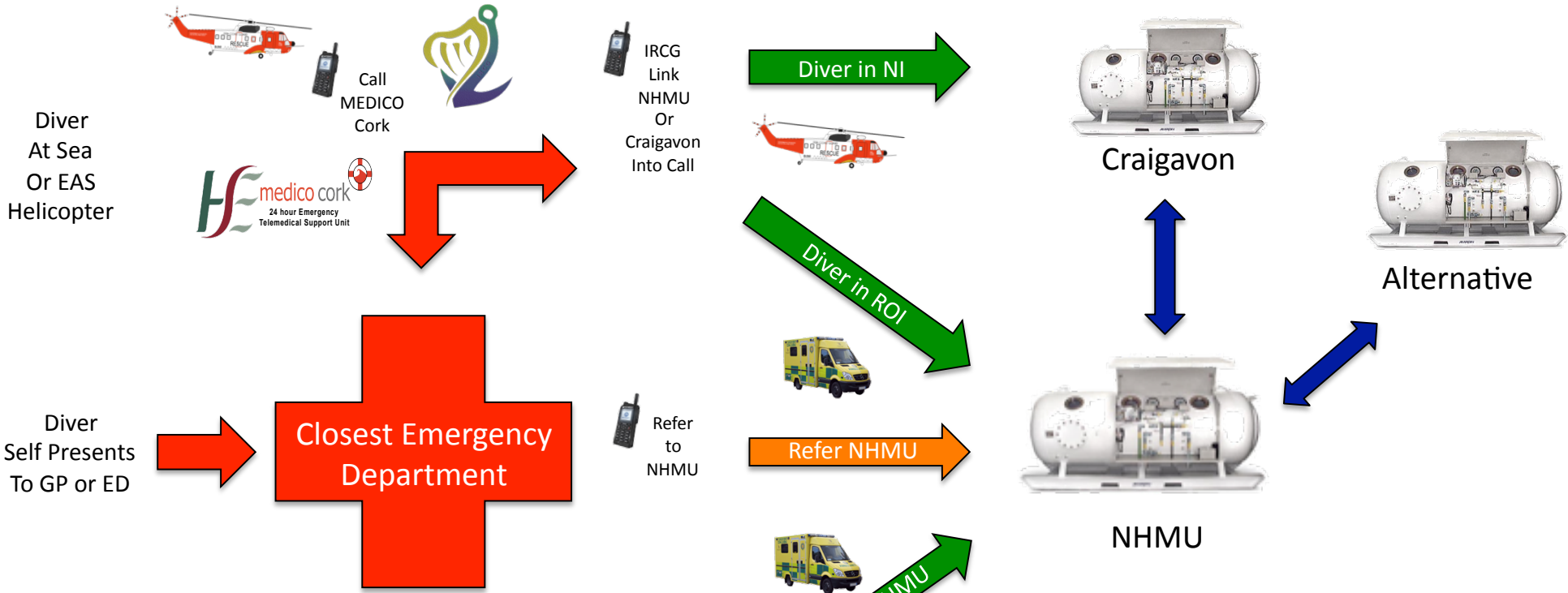


National Hyperbaric Medicine Proposed Patient Pathway



Prepared by: Dr. Jason van der Velde (MEDICO Cork)
Mr. Derek Flanagan (IRGC Malin Head)

1st Draft 8 October 2012



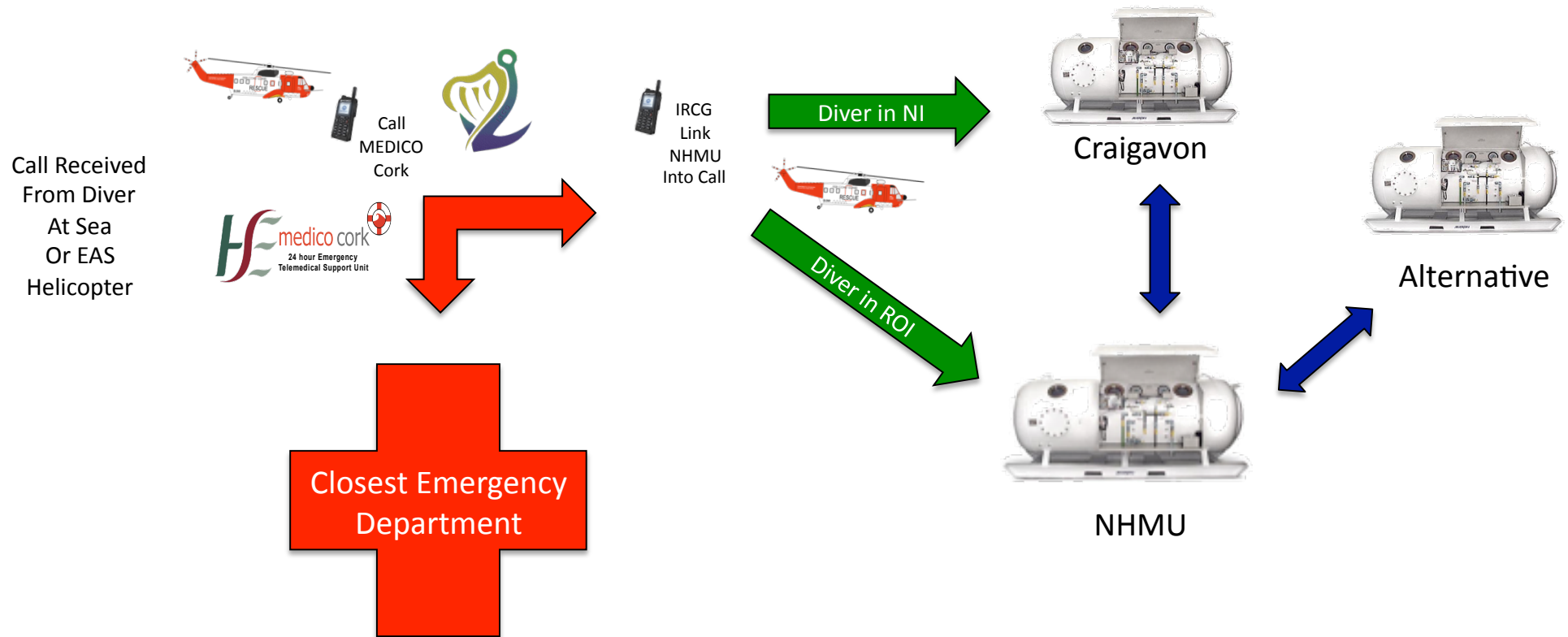
Referral to Hyperbaric Medicine

1. Medico Cork is primary point of contact to support IRCG and NAS in decision to transport to Closest ED or alternative definitive care provider.
2. If Medico Cork believe hyperbaric treatment may be required, IRCG or NAS controllers will link NHMU (Craigavon if Diver in NI) into this call.
3. If Patient presents to ED, direct referral should be made to NHMU.
4. If recompression is required and NHMU (or Craigavon) not available, it is NHMU's (or Craigavon's) responsibility to source alternative provider.

Diver On Land

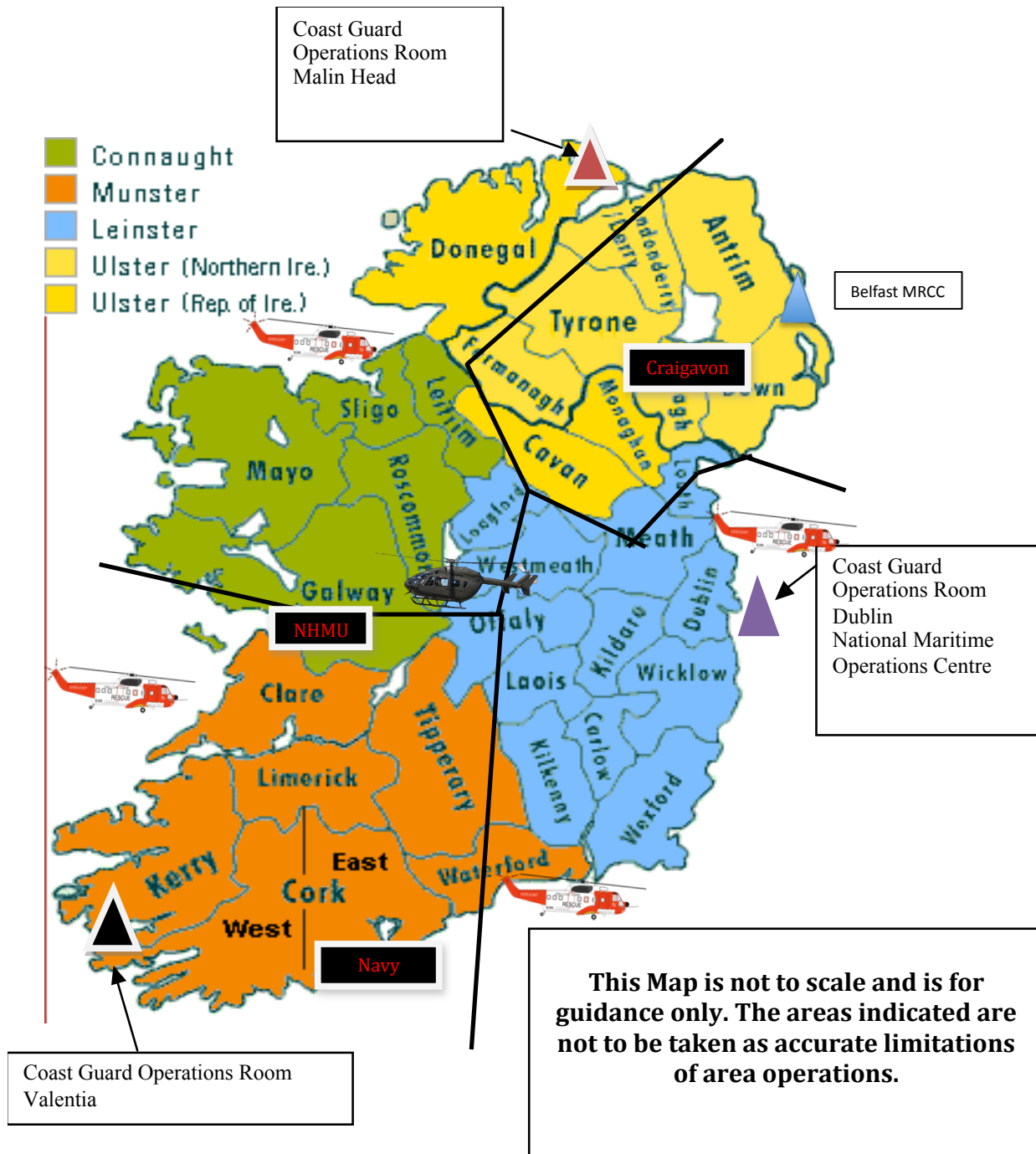


Diver at Sea or EAS Helicopter



Coast Guard Coordination Centres Areas Of Responsibility

Map Includes
Helicopter
Bases and
Hyperbaric
Chambers



How Calls Received by IRCG

- VHF Radio
 - Call from vessel or dive marshal ashore
- 999 / 112
 - Call from the divers, vessel or shore marshal
- Request from Ambulance Control for assistance with diving Casualty
- Request from Naval Command



Example of Emergency Calls STATS are Malin Head ONLY



2007

- 6 incidents, 3 fatal diving accidents

June 2 divers in Difficulty - rescued
July Missing Diver Closed Circuit - T4
Sept 2 diver's rapid ascent
Diver with chest pains
Missing Diver Open Circuit - T4
Oct Closed circuit diver - T4

2008

- 10 incidents, 2 fatal diving accidents

April - Free Diver T4
May Diver Bust Lung
Missing Diver Open Circuit T4
Diver with DCI
June 4 Divers missing - a drift
2 Divers DCI
July Diver Medivac from vessel CC DCI
2 missing divers - adrift
Aug - Missing diver - Oct - 2 Divers RA

2009

- 6 diving incidents

April EPIRB alert dive Rib
Dive boat Broken Down
Diver with DCI
Aug Dive Boat Broken Down
Divers Missing - adrift
Divers Missing - adrift

2010

- 3 Diving Incidents

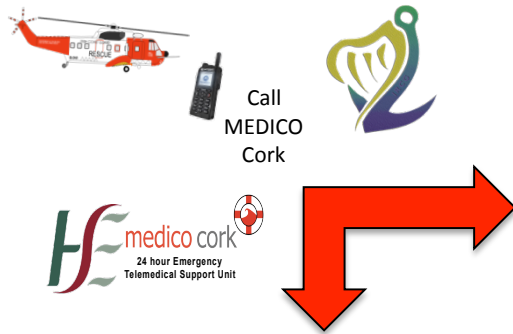
April Dive Boat Broken Down
May Dive Boat Broken Down
Sept Missing Diver - Located

2011

- 5 Diving Incidents

May - Diver with DCI
June - Diver with DCI
Missing Diver adrift
Aug Diver DCI - Pan Medico Call
Sept - Diver DCI

Diver
At Sea
Or EAS
Helicopter

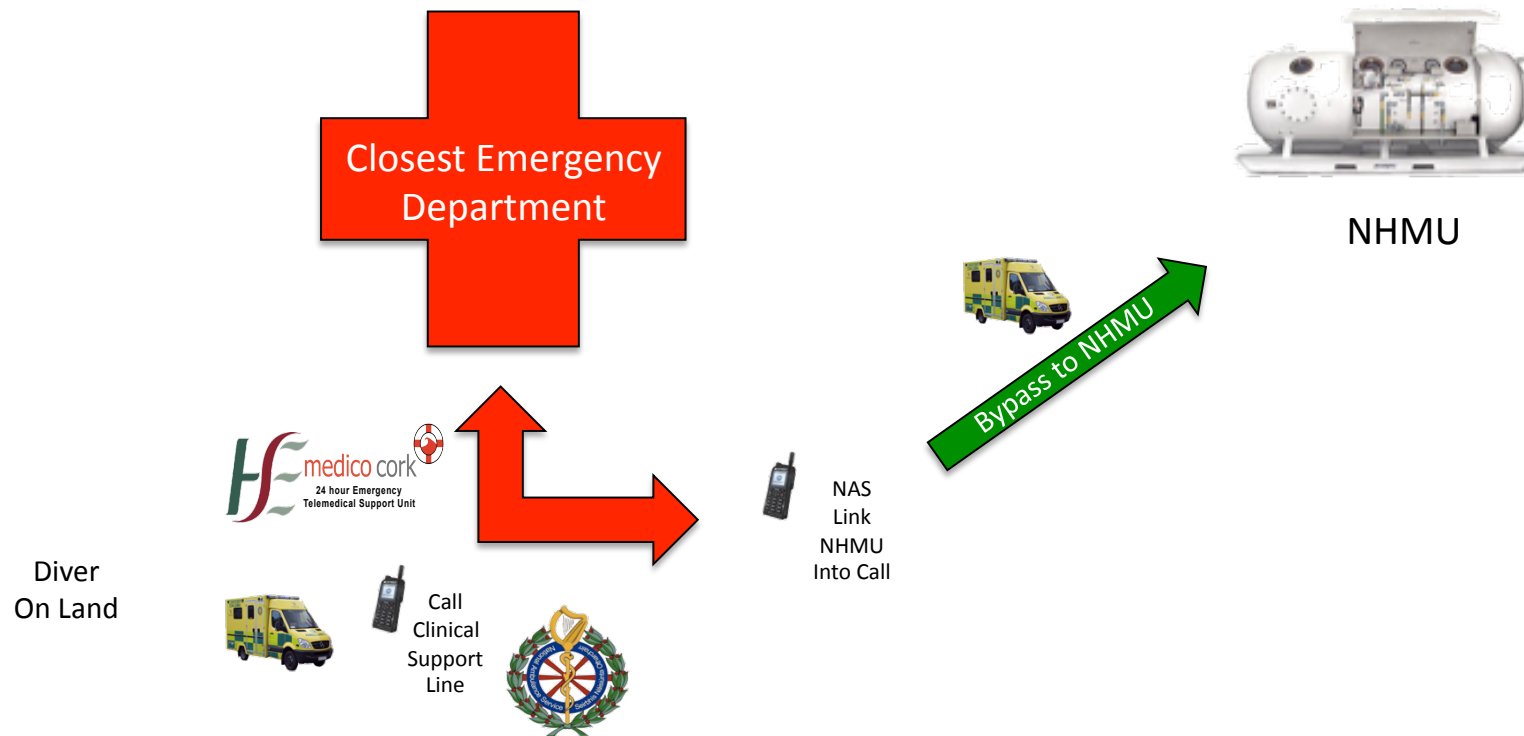


Rescue Phase

SOPS for IRCG Controllers

- SAR Mission Controller Dispatches relevant Rescue Resource.
- Medico Cork linked, if possible, to vessel with casualty to begin clinical interrogation.
- If link not possible, interrogation to begin by IRCG Controller as per MEDICO Cork Diving SOP. Communicate any important findings to both MEDICO Cork and Responding Rescue Resource.
- Once Rescue Resource secured patient and transporting to shore, Link MEDICO Cork with Rescue Vessel/Aircraft to support decision for onwards transportation.
- If Medico Cork believe hyperbaric treatment may be required, link NHMU (Craigavon if Diver in NI) into this call.

Diver on Land

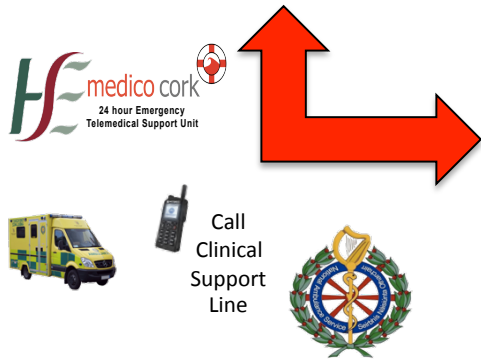


How Calls Received by NAS/DFB

- 999 / 112
 - Call from the divers, vessel or shore marshal
 - Call from Emergency Department
 - Call from GPs
- Request from IRCG for assistance with diving Casualty



Diver
On Land



Response Phase

SOPS for NAS/DFB Controllers

- Dispatch AP if available
- Conference call AP Support line with caller to begin medical interrogation as per MEDICO Diving SOPS.
- Dispatch alternative resources, eg. EAS or IRCG if required.
- Communicate any important findings to Responding Resources.
- On arrival of crew, Support line available to aid any further decisions as per standard SOPS.
- If Medico Cork believe hyperbaric treatment may be required, link NHMU into the conference call.

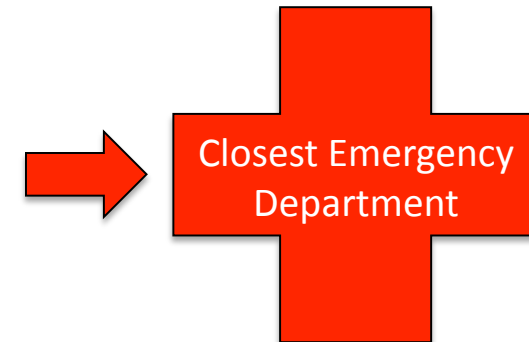
DIVING SOP

Primary Survey

Is the casualty in an unsafe location requiring immediate SAR?	<p>↓</p> <p>IF YES DISPATCH SAR ASSET</p> <p>↓</p>	<p>TRANSPORT TO CLOSEST EMERGENCY DEPARTMENT</p>
↓		
Is the casualty unconscious?		
↓		
Have they massive bleeding?		
↓		
Have they difficulty speaking?		
↓		
Have they difficult or painful breathing? Are they breathing faster than 20 breaths per minute or slower than 8 breaths per minute? Are there any injuries to their chest? Is there any blood stained or frothy sputum?		
↓		
"Take your thumb and push on the casualties forehead until the skin goes white, tell me how many seconds it takes for the colour to come back... " Does this take longer than 3seconds?		
↓		
Do they have any broken or deformed limbs?		

Referral Phase

SOPS for MEDICO Cork



If No
Go to secondary
Survey



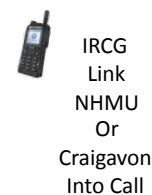
DIVING SOP Secondary Survey

Referral Phase SOPS for MEDICO Cork



If NO To All	Divers at Increased Risk of Decompression Illness or Arterial Gas Embolism	If YES To Any
Nearest Emergency Department	Dive Deeper than 30m?	Contact Hyperbaric Unit
	Trimix / technical diver?	
	Closed Circuit (re-breather)?	
	Localised deep pain or pain in joints?	
	Itching or crawling sensation?	
	Mottled or marbled skin rash?	
	Visual abnormalities?	
	Tingling or numbness?	
	Amnesia?	
	Headache?	
	Seizures?	
	Weakness or Paralysis?	
	Loss of Balance / coordination?	
	Vertigo?	
	Extreme & Unusual Fatigue?	
Difficulty Urinating		

If Medico Cork believe hyperbaric treatment may be required, IRCG or NAS controllers will link NHMU (Craigavon if Diver in NI) into this call.



Final decision on tertiary referral lies with NHMU (or Craigavon if Diver in NI).

Referral Phase

SOPS for MEDICO Cork

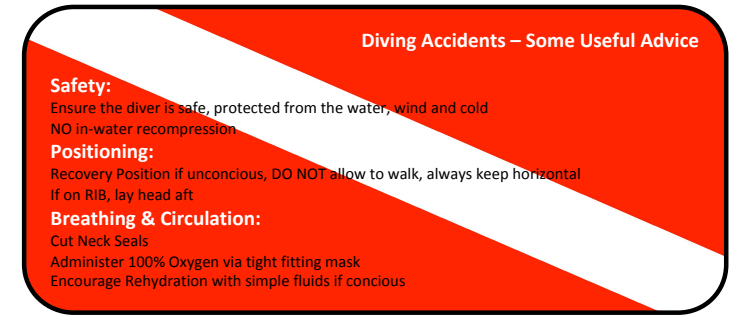
DIVING SOP

Additional Notes

The following Require Emergency Department Assessment and Most Do NOT require recompression if in doubt Discuss with NHMU.

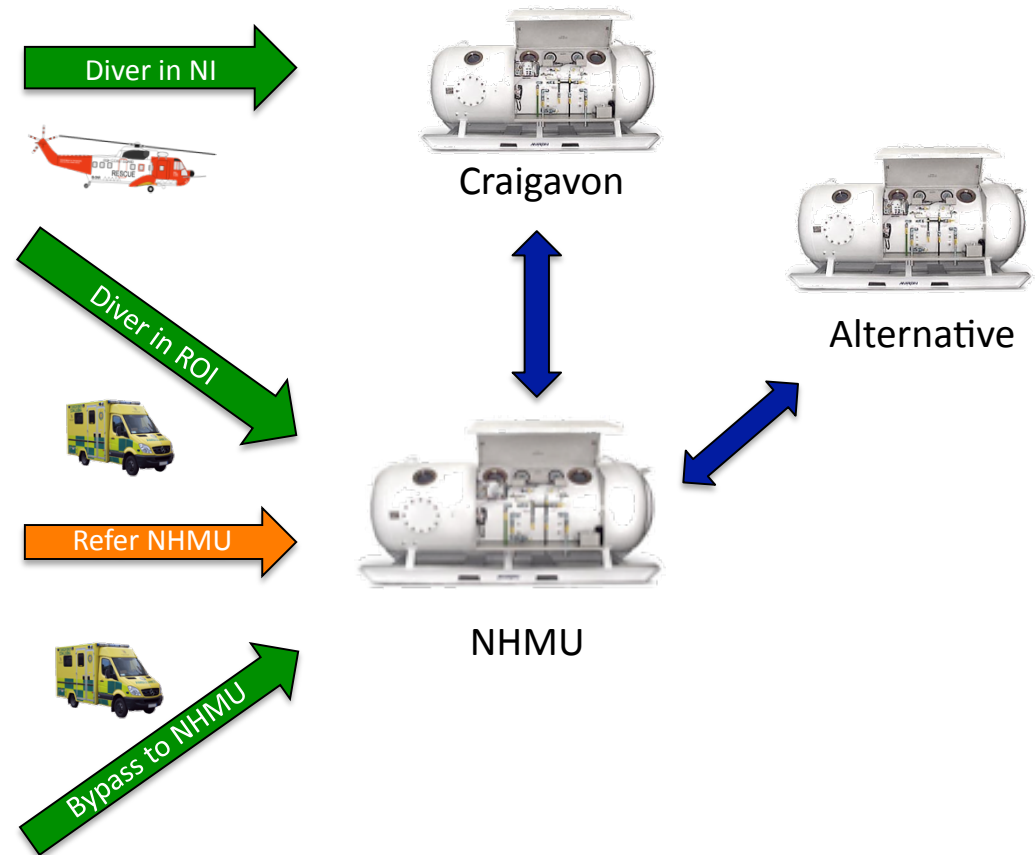
All Barotrauma
Pulmonary over inflation syndrome
Oxygen Toxicity
Nitrogen Narcosis
Caustic Cocktail (inhalation soda lime)
Mediastinal & Subcutaneous Emphysema
“Reversed ears”
Otitis Externa “swimmers ear”

Pneumothorax
Alternobaric Vertigo
Coloric Vertigo
Near Drowning
Vomiting underwater
Underwater blast injuries
Hypothermia
Heat Exhaustion

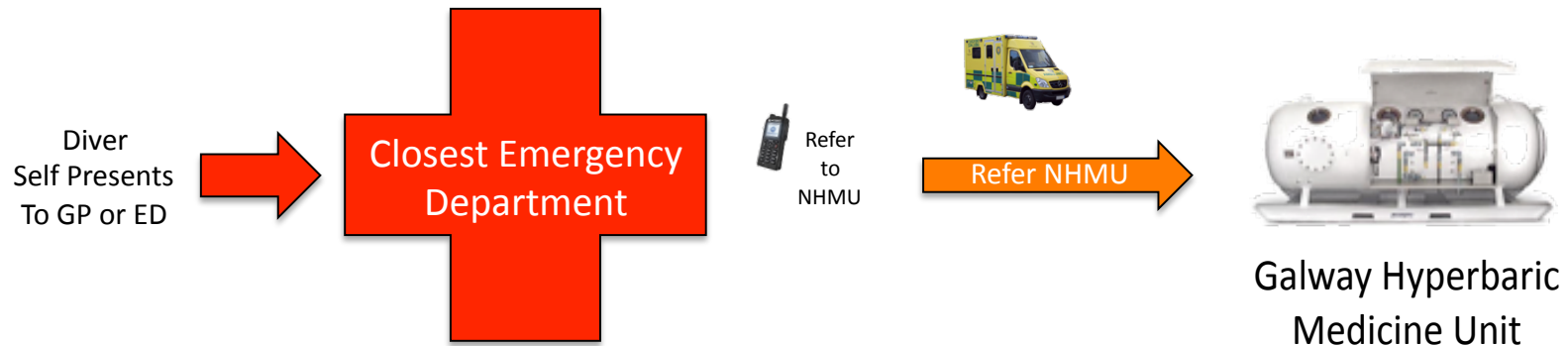


Transfer Phase

- Once accepted, any ambulance service involvement is managed as a ASA1 retrieval. Consider using EAS or IRCG assets if appropriate.
- If recompression is required and NHMU (or Craigavon) not available, it is NHMU's (or Craigavon's) responsibility to source alternative provider.



Diver Self Presents to GP or ED



If Patient presents to ED:

Direct referral should be made to NHMU Hyperbaric Medicine Unit for advice

Once accepted, any ambulance involvement is managed as a ASA1 retrieval.

Consider using EAS or IRCG assets if appropriate.

If recompression is required and NHMU chamber (or Craigavon) not available, it is NHMU's (or Craigavon's) responsibility to source alternative provider.