

# AQUATIC PHYSIOTHERAPY SERVICES - SCH

## PROCEDURE <sup>®</sup>

### DOCUMENT SUMMARY/KEY POINTS

- Aquatic Physiotherapy, also referred to as Hydrotherapy, is provided by physiotherapists to appropriate inpatients and outpatients of SCH
- All patients will be assessed and screened by a physiotherapist for suitability, safety, assistance requirements and contraindications. Medical staff will be consulted if indicated.
- Physiotherapists conducting Aquatic Physiotherapy treatments must have current RESUS4KIDS training and have completed local orientation to the Aquatic Physiotherapy service

### CHANGE SUMMARY

- Mandatory review
- Updated links

### READ ACKNOWLEDGEMENT

- All physiotherapists, physiotherapy assistants and physiotherapy students who are involved in the delivery of Aquatic Physiotherapy services must read and acknowledge they understand the contents of this document.
- All staff requesting a consult for Aquatic Physiotherapy should be aware of this document.

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

<b>Approved by:</b>	SCHN Policy Procedure and Guideline Committee	
<b>Date Effective:</b>	5 <sup>th</sup> February 2024	<b>Review Period:</b> 3 years
<b>Team Leader:</b>	Senior Physiotherapist	<b>Area/Dept:</b> SCH Physiotherapy

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## Background

Aquatic Physiotherapy is the use of specific physiotherapy techniques that combine the hydrostatic and temperature properties of water with the knowledge and skills of the physiotherapist to provide therapy interventions with the aim of maximising treatment outcomes. At Sydney Children's Hospital Aquatic Physiotherapy is also commonly referred to as Hydrotherapy. For optimal therapeutic benefit the temperature of the water is maintained between 32° - 36°C.

The use of the warm water environment aims to assist the patient with pain management, as well as reduction of joint stiffness and muscle spasm. The water creates an environment that reduces load and thus weight bearing through joints, providing opportunity for movement to children who find it difficult to mobilise on land.

The role of Aquatic Physiotherapy at Sydney Children's Hospital is to provide a treatment environment for physiotherapy to assist with the rehabilitation of patients referred to our department. It is provided for both inpatients and outpatients.

The physiotherapist will assess each patient individually and prescribe an appropriate Aquatic Physiotherapy program.

## Referral

Referral for Aquatic Physiotherapy can be made by:

- Electronic Medical Record (eMR) referral
- Referral to the physiotherapy department as per the [SCH Physiotherapy Department Outpatient Referral Management Policy](#).

## Aquatic Physiotherapy Assessment and Intervention

All Aquatic Physiotherapy treatments are conducted by a physiotherapist, the physiotherapy assistant or physiotherapy students who may supervise sessions prescribed by a physiotherapist.

Only patients of the physiotherapy department have access to the Aquatic Physiotherapy service.

The Aquatic Physiotherapy pool is located in the physiotherapy department and is available for use during the hours of 8:00am to 5:00pm, Monday to Friday. There is no Aquatic Physiotherapy service available on weekends or public holidays.

**The pool is not to be used by staff or the public for recreational purposes.**

### **Screening for Aquatic Physiotherapy**

All patients will be assessed by a physiotherapist prior to commencement of Aquatic Physiotherapy treatment so that appropriate decisions about infection control, suitability for participation, safety, assistance requirements and session length can be made.

The physiotherapist must ensure that an Aquatic Physiotherapy (hydrotherapy) treatment clearance has been completed before the patient enters the pool. Documentation is made regarding the assistance required for mobility, transfers, dressing and entry into/exit from the pool on the treatment clearance form which is located by searching "hydrotherapy" in the Orders tab within the patient's eMR.

Carers or parents may assist with Aquatic Physiotherapy sessions and are subject to the same screening measures to determine their suitability to assist with a water-based program. Consent to assist or for education purposes must be given by parent or carer and be documented in the patient's eMR.

Assessment and screening must be updated when changes occur or at the beginning of each course of Aquatic Physiotherapy.

### **Precautions and Contraindications**

Aquatic Physiotherapy may be inappropriate for some patients. Reasons for this include:

- unstable medical condition
- heat sensitive conditions
- skin grafts/donor sites with poor skin integrity
- chemical sensitivity
- skin rashes or lesions
- radiotherapy sites
- acute deep venous thrombosis
- acute renal dysfunction
- hydrophobia
- acute inflammatory conditions

These conditions don't definitely exclude a patient. Each patient and circumstance will be risk assessed individually.

Urinary and faecal incontinence or urgency, and vomiting are contraindications to Aquatic Physiotherapy treatment for patients receiving chemotherapy treatment.

For other patients who are not toilet trained or who are incontinent the following procedure should be followed.

#### **Urinary incontinence**

- Empty bladder prior to treatment session
- Water specific or swimming nappy must be worn

## **Faecal Incontinence**

- Be aware of bowel regime, eg. toilet timing
- Evacuate bowel prior to treatment session
- Water specific or swimming nappies and a firm fitting outer layer such as leggings must be worn
- Anal plugs or anal taping can be used

A relevant Medical Officer will be consulted and medical clearance gained if there is any concern that patient status or safety may be compromised by attending Aquatic Physiotherapy, but the final decision regarding acceptance for Aquatic Physiotherapy rests with the physiotherapist.

Refer to [Australian Guidelines for Aquatic Physiotherapists Working in and/or Managing Aquatic Physiotherapy Pools](#) for further information.

## ***Booking and documentation***

Aquatic Physiotherapy sessions need to be booked in advance in the Aquatic Physiotherapy (hydrotherapy) book within eMR Scheduling. Priority may be given to inpatients.

Documentation of Aquatic Physiotherapy sessions is recorded in the patient's eMR.

## **Emergency and Safety Procedures**

All staff using the Aquatic Physiotherapy pool will be trained in the hospital emergency procedures and pool rescue procedures. All staff must complete annual mandatory RESUS4KIDS training.

There must be a land-based observer at each Aquatic Physiotherapy session. This observer must know the emergency procedures including the location of the emergency buttons and telephone.

No patient, parent, sibling or other helper is to be present in the pool or pool area without a physiotherapist, physiotherapy assistant or physiotherapy student present.

There is a modified resuscitation trolley outside the Aquatic Physiotherapy pool door which is checked weekly by a physiotherapist.

The safety of patients and staff must be ensured at all times.

In the event of a cardiac arrest or medical emergency, standard hospital emergency procedures should be followed.

Any incident or near miss must be reported in the Incident Information Management System IMS+ by the attending physiotherapist.

The pool doors must be securely locked when no staff member is in attendance.

Refer to [Safe Work Practice for Aquatic Physiotherapy Pool](#)

## Infection Control

All physiotherapists will take stringent infection prevention and control (IPC) measures to protect their patients, other staff members and themselves. They must follow and abide by all SCHN Infection Control Policies and Guidelines. Refer to Public Swimming Pool and Spa Pool Advisory Document for further information: [NSW-guidelines-for-public-swimming-pools-and-spa-pools-draft-aug-2022](#)

Effective infection control principles for Aquatic Physiotherapy include ensuring that the chemical levels of the water are within NSW Public Health Regulation and that every effort is made to prevent bodily products contaminating the water.

Maintenance of the Aquatic Physiotherapy pool is managed by an external contractor **Network Pools and Spas** Ph.: 9543 9766, or 0413 730 457 who attends twice weekly, on a Monday and Friday, to perform pool testing and other maintenance as required. The physiotherapy assistant or designated proxy performs daily pool chemical levels and temperature testing.

Chemical testing and balancing of the Aquatic Physiotherapy pool water is performed in accordance with Public Swimming Pool and Spa Pool Advisory Document:

- [Public swimming pools and spa pools - Water quality \(nsw.gov.au\)](#)
- [Public health legislation \(nsw.gov.au\)](#)

### Chemical Testing

1. Chlorine levels, pH and alkalinity are tested at 8:00am daily by the **physiotherapy assistant, or delegate**, using the PALINTEST KIT. In periods of high usage, a second test is performed at 1.30pm. Refer to [Procedure for testing Pool Water – Resources](#) section, for instructions and further details including acceptable chemical ranges.  
***If the tested values are not within the normal range, contact Network Pool and Spa Services for instructions.***
2. Network Pool and Spa Services tests the chemical levels twice weekly and test for calcium hardness and total dissolved solids as required.

Bacterial testing - Water samples are collected monthly by an employee from Network Pool and Spa Services and sent to the Division of Analytical Laboratories for microbiological testing and analysis. Results are reported to the Head of Department for interpretation, monitoring and actioning as appropriate.

### Personal Hygiene

Everyone entering the pool must wear their own swimming costume. Staff will be provided with a swimming costume and a rash vest.

Each patient should be showered and toileted prior to Aquatic Physiotherapy sessions. Staff members, students and others should shower before entering the pool and at the completion of the session.

### Procedure for managing pool contamination

Refer to Procedure for [Managing Pool Contamination for instructions](#).

Contact the Infection Control CNC page 47140 or ext. 21876 with any other queries e.g. presence of PEG/gastrostomy button.

## Orientation to Aquatic Physiotherapy

All new physiotherapy staff members, including students, will be orientated to the Aquatic Physiotherapy procedure by the department manager or delegate.

Orientation will include information about Aquatic Physiotherapy screening assessment, booking procedure, use of hoist and emergency procedures.

Refer to [Checklist for Orientation to the Aquatic Physiotherapy Pool](#) for further detail.

## Aquatic Physiotherapy for Patients with Complex Conditions

From time to time patients with complex conditions will be referred to Aquatic Physiotherapy. This includes patients with a tracheostomy and/or continuous long term ventilation (LTV), patients with Epidermolysis Bullosa (EB) and patients who are receiving chemotherapy or cytotoxic agents.

Each patient and circumstance will be assessed individually and the final decision regarding acceptance for Aquatic Physiotherapy rests with the physiotherapist.

### ***Patients with a tracheostomy and/or mechanical long-term ventilation (LTV)***

Patients with a tracheostomy, including those requiring continuous ventilation, may participate Aquatic Physiotherapy. The added risk imposed by the tracheostomy and / or need for continuous ventilation requires adherence to strict patient / carer ratios and emergency procedures outlined in this policy. The appropriateness and safety of Aquatic Physiotherapy will be determined by the physiotherapist in consultation with the patient's medical team and the Network Care Coordinator Tracheostomy/Long-term Ventilation. The final decision about acceptance for Aquatic Physiotherapy rests with the physiotherapist.

Refer to [Aquatic Physiotherapy for Children with a tracheostomy or long-term mechanical ventilation](#) practice guideline and Australian Guidelines for [Aquatic Physiotherapists Working in and/or Managing Aquatic Physiotherapy pools](#) for information regarding equipment and safety requirements.

### ***Patients with Epidermolysis Bullosa (EB)***

Patients with EB may participate in Aquatic Physiotherapy. Patients are assessed on an individual basis and are preferably booked for the last session of the day. Any request for a diversion from this directive should be confirmed with the department manager.

### ***Patients receiving chemotherapy***

All patients referred for Aquatic Physiotherapy who are receiving chemotherapy require a medical clearance. The safety of other users of the Aquatic Physiotherapy service, including staff, is paramount.

The decision to accept a patient for Aquatic Physiotherapy will be made by the physiotherapist in consultation with the patient's oncologist and pharmacist and will include consideration of the risk posed by excretion of toxic agents. This includes consideration of



the chemotherapy treatment regime (interval or maintenance), the specific cytotoxic medication used, its potency and half-life.

Urinary and faecal incontinence or urgency, and vomiting are contraindications to Aquatic Physiotherapy treatment.

The physiotherapist will make the final decision about the acceptance of a patient for Aquatic Physiotherapy.

## Related Information

1. Australian Guidelines for aquatic physiotherapists working in and/or managing Aquatic Physiotherapy pools. Australian Physiotherapy association Aquatic Physiotherapy Group 2nd Edition 2015:  
[https://australian.physio/sites/default/files/tools/Aquatic\\_Physiotherapy\\_Guidelines.pdf](https://australian.physio/sites/default/files/tools/Aquatic_Physiotherapy_Guidelines.pdf)
2. Public Swimming Pool and Spa Pool Advisory Document. NSW Health.  
[NSW-guidelines-for-public-swimming-pools-and-spa-pools-draft-aug-2022](https://www.health.nsw.gov.au/publications/Pages/public-swimming-pools-and-spa-pools-draft-aug-2022)
3. Public Health Regulation 2022  
<https://legislation.nsw.gov.au/view/pdf/asmade/sl-2022-502>
4. NSW health Public Swimming Pools and Spa Pools  
<https://www.health.nsw.gov.au/environment/water/Pages/public-pools-and-spas.aspx>

## Resources for staff

- [Safe Work Practice for Aquatic Physiotherapy Pool](#)
- [Procedure for testing Pool Water](#)
- [Procedure for managing contamination](#)
- [Aquatic Physiotherapy Orientation Checklist](#)

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