

Access to hydrotherapy in the ACT

ACT Health

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1 Executive summary

Nous Group have been commissioned by the ACT Health Directorate to provide advice for the ACT Government on access to hydrotherapy services in the ACT. The need for advice arises because of the impending closure of the hydrotherapy pool at the Canberra Hospital (TCH).

The pool at TCH was due to close on 30 June 2018, but the closure was extended to 30 June 2019 because of mounting pressure on the ACT Government to keep it open. Pressure to keep the pool open was predominantly from non-Canberra Health Services (CHS) users of the facility, the Arthritis Foundation of the ACT (Arthritis ACT) and its members.

The hydrotherapy pool at TCH is one of only a few hydrotherapy pools on the south side of Canberra. Its impending closure has generated a high degree of angst on the south side, because it was replaced by a new facility at the University of Canberra Hospital (UCH). This project examined the current situation from a range of perspectives and uncovered the need for a solution to address the needs of multiple stakeholders.

Canberra Health Services (CHS) clinical professionals see hydrotherapy as a prescribed form of treatment for a range of specific medical conditions. Conversely other stakeholder groups believe hydrotherapy is a preventative health measure and needed on an ongoing basis. The opinion of senior medical professionals is that hydrotherapy has both rehabilitative benefits in certain circumstances as well as benefits as a form of maintenance treatment for people with certain types of chronic disease.

Stakeholders coming from these different perspectives have failed to communicate effectively because they are referencing different models of hydrotherapy and competing models of health service objectives.

In addition to the different frames of reference mentioned above, there are several factors that have exacerbated the current problem. These factors are affecting the ability of the ACT Government to reach a workable solution for Arthritis ACT and its members wanting access to hydrotherapy facilities on the south side of Canberra. These factors include:

- A lack of specificity in the Service Funding Agreement for hydrotherapy between the ACT Government and Arthritis ACT;
- Different user groups within Arthritis ACT and other community groups having different needs in accessing hydrotherapy facilities but with no quantification of the needs of different sub-groups;
- An increase in registrations for hydrotherapy and attendance at hydrotherapy sessions run by Arthritis ACT requiring a greater number of sessions needing to be made available; and
- The hydrotherapy pool at TCH approaching its end of life, attendant risk issues surrounding the TCH pool and some other aspects of supervised hydrotherapy under the Arthritis ACT contract.

The deeply concerning dilemma the CHS has is keeping open a possibly unsafe and no longer suitable venue because no one knows the needs for which alternative arrangements are needed.

The Nous consulting team was not engaged (and would not itself have the expertise) to undertake either an engineering report or a costing of rectification for the TCH pool. It is, however, implausible that the pool can be kept open considering the on-the-record safety and suitability conclusions that have been drawn by responsible managers in the ACT public sector. Nonetheless, many in the constituency of Arthritis ACT do not believe the relevant authorities.

It is important that CHS and ACT Health engage quickly and in enough depth with Arthritis ACT to make clear the basis on which it has drawn conclusions regarding the condition of the TCH pool. This needs to happen immediately, clearly and with a once-only opportunity to test the information provided. This process is important but cannot be dragged on.

Recommendation 1. CHS and ACT Health engage quickly and in enough depth with Arthritis ACT to make clear the basis on which it has drawn its conclusions regarding the safety and fit for purpose condition of the TCH pool. This should be a defined and time-bounded process, of weeks at most.

The Nous team is also concerned about the possible risk exposure of consumers, volunteers, Arthritis ACT and the ACT health system, not only at the TCH but through the overall contract for hydro-therapy services. It will be important for ACT Health and CHS to work with Arthritis ACT to understand the relevant risks inherent in the current service delivery arrangements and establish a workable solution that addresses all health and safety risks.

One priority for such a task is reviewing the current workforce undertaking supervision of water-based exercise classes:

- Working with Arthritis ACT to ensure that supervision meets the relevant standards and safety risks are appropriately managed;
- Embedding a requirement in the Service Funding Agreement for documenting demand and managing this in line with Phase 1; and
- Working with Arthritis ACT to determine the threshold for supported hydrotherapy use and hydrotherapy use that should be self-managed.

It is inevitable that the resulting funding agreement that meets these needs will cost more than the current agreement.

Recommendation 2. ACT Health Directorate should immediately conduct a review of the funding agreement with Arthritis ACT, with a view to constructively resolve the set of issues identified within it.

The most urgent need is for the diverse user group within Arthritis ACT seeking access to hydrotherapy for maintenance treatment to be better understood so that their individual needs can be catered for, as soon as possible. This is the highest immediate priority and should precede a closure of the TCH pool.

Such a task requires further investigation of the different precise needs for use categories and then subsequently assign individuals to the pools that are most aligned to their needs. This is an essential starting point to future management of hydrotherapy services in the ACT.

Recommendation 3. ACT Health and CHS should quickly select one of the options presented in this report to collect enough data on the users of hydro-therapy services for health maintenance purposes to assess the best alternatives for the individual, outline support the individual may need to access this service and determine whether there are some people who can self-manage their hydrotherapy, without health system support.

The last section of this report outlines in some detail information the consulting team was able to gather on the different hydrotherapy facilities in Canberra.

From the material gathered a case can reasonably be mounted for a new hydrotherapy facility in Canberra. For geographic reasons, it makes sense that such a pool would be located on the south of Canberra and not in an acute health facility.

Any new facility would need to be considered within the broader budget context for the ACT. It could also include consideration of a public-private partnership.

In part, the business case consideration for a new facility in the longer term is dependent on better data being available which breaks down existing express demand. The breakdown of data would be to understand what might be best met through individual self-management and which needs require more public support, either through a dedicated southern hydrotherapy facility or contractual arrangements with private providers.

Recommendation 4. ACT Health Directorate should conduct a study of the costs and benefits and different models for the longer-term establishment of a hydrotherapy facility in the south of Canberra.

2 Nous was engaged to provide advice on access to hydrotherapy in the ACT

In May 2019, ACT Health engaged the Nous Group (Nous) to provide advice for the ACT Government on access to hydrotherapy services in the ACT. Nous' engagement is to provide advice that:

- clarifies key technical debates regarding hydrotherapy;
- presents accurate data on current levels of use for hydrotherapy facilities used by Arthritis ACT; and
- provides realistic options regarding alternative hydrotherapy sites or arrangements to access hydrotherapy sites.

2.1 Project background

The genesis of this project is the impending closure of the hydrotherapy pool at the Canberra Hospital (TCH). The pool was due to close on 30 June 2018, but the closure was extended to 30 June 2019. The extension in time was a result of mounting pressure on the ACT Government to keep it open. Pressure to keep the pool open was predominantly from non-Canberra Health Services (CHS) users of the facility, the Arthritis Foundation of the ACT (Arthritis ACT) and its members.

The hydrotherapy pool at TCH was a part of the allied health services practice within CHS. Until at least mid-2018, the primary users of the pool were CHS patients. Arthritis ACT were able to have access to the pool for members wanting hydrotherapy outside of the public health system via a service agreement and a user agreement with the ACT Government. Use of the pool occurred outside of those times when it was needed by CHS patients.

In 2018, Canberra Health Services moved rehabilitation related allied health services from TCH to the newly constructed University of Canberra Hospital (UCH), including all hydrotherapy services provided by CHS. It was the strategic intention of CHS to construct a purpose-built facility at the University of Canberra and repurpose the site of the old facility at TCH for clinical treatment in other areas of need. The strategic planning for UCH always included the closure of the hydrotherapy pool at TCH once the hydrotherapy facilities were running at UCH.

In the lead up to the development of the UCH facility, consultation was held with health consumer groups and peak bodies. Consultation discussed the movement of rehabilitation services from TCH to UCH and the consequences of opening UCH, which we were assured included advice that the TCH hydrotherapy pool would be closed.

The hydrotherapy pool at TCH is, however, one of only a few hydrotherapy pools on the south side of Canberra. Its impending closure has generated a high degree of angst among users who access hydrotherapy through Arthritis ACT and are based on the south side of Canberra. This project examined the current situation from a range of perspectives and uncovered the need for a solution that addresses the needs of multiple stakeholders.

Further, it uncovered a need to clarify the range of underlying reasons for people accessing hydrotherapy facilities in Canberra and the clearest and most sustainable way for these to be supported.

2.2 Our methodology

In progressing this piece of work, Nous used a combination of documentary evidence and stakeholder consultation. The range of documents examined included:

- The last 12 months of correspondence between ACT Health, Arthritis ACT, members of the public, community groups and the Minister for Health on the issue of hydrotherapy and the closure of the pool at TCH;
- Previous, current and proposed Service Funding Agreements for Arthritis ACT;
- The current user agreements between Arthritis ACT and CHS for use of the hydrotherapy pool at TCH;
- Attendance records for hydrotherapy sessions run by Arthritis ACT as well as membership data for the warm water exercise program;
- Academic literature on the utility and benefits of hydrotherapy;
- Australian Physiotherapy Association, *Australian guidelines for aquatic physiotherapists working in and/or managing hydrotherapy pools*;
- The Australian Standard for hydrotherapy pools; and
- Data on the specifications of hydrotherapy pools, both public and private, located in Canberra.

Nous consulted with the following stakeholders:

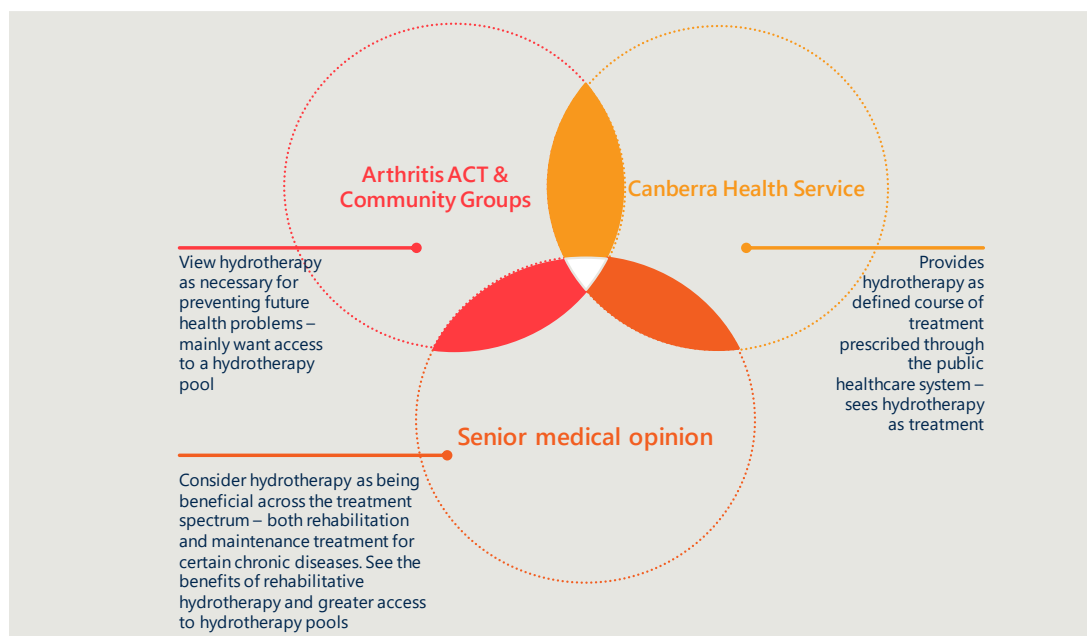
- Rebecca Davey, CEO of Arthritis ACT and the Operations Manager of Arthritis ACT;
- Linda Kohlhagen, Executive Group Manager, Division of Rehabilitation, Aged and Community Services and Todd Kaye, Director, Allied Health, Division of Rehabilitation, Aged and Community Services;
- Colm Mooney, Executive Group Manager Infrastructure and Health Support Services and James Robinson, Executive Officer Infrastructure and Health Support Services;
- Jacinta George Executive Group Manager, Health System Planning and Evaluation, ACT Health Directorate;
- Members of Arthritis ACT – one session held in Bruce and the other in Pearce;
- Michael Culhane, Executive Group Manager of Policy, Partnerships and Programs, ACT Health Directorate and members the policy team;
- Tom Anderson, CEO of Weston Creek Community Council;
- Professor Paul Smith, Orthopedics ACT, Head of Orthopedics ANU and Head of Orthopedics at CHS;
- Sharon Firth, Program Coordinator, Sharing Places; and
- John Nakkam, Senior Director, School Infrastructure Management, Education, ACT Government.

3 The fundamental challenge for managing access to hydrotherapy is that “hydrotherapy” means different things to different people

Access to hydrotherapy in the ACT is a vexed issue, largely stemming from the fact that there are multiple contexts in which arguments about the efficacy and use of hydrotherapy are made. These are essentially the public funded clinical health context represented by CHS, the preventative health context represented in large part by the interests of Arthritis ACT, and then finally the clinical view of medical specialists dealing with those health conditions that are likely to benefit from access to hydrotherapy in one form or another.

At this point in time, the only point of cross over between the different contexts is access to hydrotherapy pools at both TCH and UCH. It is the hydrotherapy facility that drives a point of commonality, not an agreed understanding of the benefits and efficacy of hydrotherapy, either in general or for specific groups of patients. Figure 1 highlights the current situation in the ACT.

Figure 1 | Different contexts for hydrotherapy in the ACT



Examination of the current situation revealed that “hydrotherapy” is conceptualised differently depending on the stakeholder group, meaning that any conversation between the different entities occurs from a different frame of reference. Representatives of CHS see hydrotherapy as a prescribed form of treatment for a range of specific medical conditions. Conversely other stakeholder groups believe hydrotherapy is a preventative health measure and as such this group argues for increased access to hydrotherapy facilities on an ongoing basis. The opinion of senior medical professionals is that hydrotherapy has both rehabilitative benefits in certain circumstances, as well as benefits as a form of maintenance treatment for people with certain types of chronic disease.

This confusion extends beyond the size of the need for hydrotherapy to a clear understanding of what the term means and what, therefore, are the features of acceptable hydrotherapy facilities. Consequently, neither Arthritis ACT nor CHS can sufficiently understand the views of one another, let alone reach an agreed position in relation to the adequacy of access to hydrotherapy facilities.

The following section describes the different frames of reference and seeks to provide a degree of clarity for what is driving the different viewpoints.

3.1 Hydrotherapy as treatment

CHS views hydrotherapy as a range of treatment options that take place in warm water, specifically for a defined course of treatment within a single episode of care. In this context the term 'hydrotherapy' is used to describe a wide range of movement and exercise activities carried out in a heated pool. The activities undertaken in a hydrotherapy pool are recognised to improve rehabilitation outcomes and can have significant therapeutic effects.

The allied health professionals working within CHS suggest that hydrotherapy as treatment is better considered as 'aquatic physiotherapy'. This is in line with the views of the Australian Physiotherapy Association¹ (APA) who assert that 'hydrotherapy' be considered the generic term to describe a range of activities occurring within a warm water pool (specifically aquatic physiotherapy services, water exercise services, aquatic fitness activities and swimming activities). APA further suggest that 'aquatic physiotherapy' be the preferred term to describe a narrower range of activities where hydrotherapy is used for specific courses of treatment.

Aquatic physiotherapy is prescribed and can only be carried out by physiotherapists who have training in rehabilitation in water. The treatment is undertaken by a physiotherapist who conducts an individual assessment of a client and then outlines a targeted treatment program. The aim of this prescribed form of physiotherapy is to assist with the rehabilitation of neurological, musculoskeletal, cardiopulmonary and psychological function of the individual. It may also be used for preventing injury or deterioration of a condition. On average, prescribed hydrotherapy programmes undertaken are six to eight weeks in duration. Following completion of a supervised hydrotherapy program, patients may be discharged or referred to other services.

Use of hydrotherapy pools by CHS follows from how it understands the distinction between hydrotherapy and aquatic physiotherapy. From this perspective the UCH facility is a wholly adequate replacement, in fact better meeting accepted standards, for aquatic physiotherapy. From this clinical perspective within the acute health system, priority use of either UCH or TCH facilities is for patients to which aquatic physiotherapy has been prescribed, with all other use of the facilities considered to be secondary to the needs of CHS patients. Permitting access to the facilities to occur only around the needs of CHS and patients receiving rehabilitation as part of a broader episode of care makes sense from this clinical view.

3.2 Hydrotherapy as a preventative health measure

Arthritis ACT members understand hydrotherapy as being movement in a hydrotherapy pool that can take the form of relaxation and/or exercise depending on the needs of the individual. In this context the emphasis is on having access to a hydrotherapy facility on an ongoing basis. For individuals in this category, general hydrotherapy is seen as a necessary activity for managing long term health conditions. It is thus considered a necessary preventative health measure that members believe should be supported by Government as it keeps them from needing more acute forms of treatment from the public health system.

Hydrotherapy in this context is best characterised as maintenance therapy undertaken over a prolonged period of time as opposed to a prescribed period of treatment. Mooventhan and Nivethitha (2014, p. 199) support such an understanding by defining hydrotherapy as 'the external or internal use of water in any of its forms (water, ice, steam) for health promotion or treatment of various diseases with various temperatures,

¹ Australian Physiotherapy Association, *Australian guidelines for aquatic physiotherapists working in and/or managing hydrotherapy pools*, 2nd edn, guidelines, viewed 30 May 2019, <https://faculty.psau.edu.sa/filedownload/doc-11-pdf-c1e5d11423cd9bf95ea0e85a90c125cd-original.pdf>.

pressure, duration, and site.² The conditions that benefit from hydrotherapy according to Mooventhan and Nivethitha include: recovery from injuries, arthritis, pain management, fibromyalgia, osteoporosis, asthma, diabetes, mental wellbeing and heart conditioning.³ Rather than treatment being prescribed, users choose to participate in hydrotherapy exercises at their own discretion. Hydrotherapy is overseen by exercise physiologists for sessions and Arthritis ACT volunteers for others (warm water exercise classes). Many of whom participated in consultations and presented as a type of peer workforce – beneficiaries of the same service and providing safety supervision and orientation for their fellow consumers.

Nous' consultations with members of Arthritis ACT and Sharing Places revealed that many users of hydrotherapy pools in the ACT have been undertaking warm water exercise in a hydrotherapy pool for months and years to assist with mobility, pain management, post-traumatic stress disorder, muscle strength and for pre-and-post surgery. The benefits for individuals undertaking hydrotherapy on an ongoing basis have resulted in pain reduction, an increase in joint mobility, and an increase in general well-being as it encourages people to remain active and provides an environment in which social interaction is supported.

Many members strongly believe that prolonged hydrotherapy has significantly enhanced their quality of everyday life and reduced the chance of injury by improving mobility. Figure 2 provides a snap shot of the sentiments provided by hydrotherapy users and demonstrates a clear need for some form of long-term hydrotherapy.

Figure 2 | Benefits of long-term hydrotherapy for current users



3.3 Medical opinion on hydrotherapy

Medical opinion on hydrotherapy bridges both the views of CHS' clinical domain and the views of Arthritis ACT. According to Professor Paul Smith, Chief of Orthopaedics at CHS and Head of Orthopaedics at the Australian National University, hydrotherapy is relevant at different parts of the treatment spectrum.

As a form of rehabilitation, hydrotherapy is beneficial in recovering from muscular skeletal surgery and major trauma surgery. Patients in these categories are unlikely to be able to do very much on land but in water can achieve significantly more to rehabilitate themselves.

For individuals suffering chronic diseases, in particular forms of inflammatory arthritis, fibromyalgia, and any neuromuscular degeneration, hydrotherapy provides significant benefits as it provides a form of maintenance treatment. The benefits are achieved only when individuals undertake hydrotherapy for a

² A Mooventhan and L Nivethitha, 2014, 'Scientific Evidence-Based Effects of Hydrotherapy on Various Systems of the Body,' *North American Journal of Medical Sciences*, vol 6, no6, pp. 199-209.

³ A Mooventhan and L Nivethitha, 2014, 'Scientific Evidence-Based Effects of Hydrotherapy on Various Systems of the Body,' *North American Journal of Medical Sciences*, vol 6, no6, pp. 199-209.

minimum of 1-2 sessions per week. According to Professor Smith, the benefit of people undergoing hydrotherapy in this context is that it keeps them out of formal treatment.

4 The current situation has occurred because of four main factors

In addition to the different frames of reference mentioned above, there are several factors that have exacerbated the current problem. These factors are affecting the ability of the ACT Government to reach a workable solution for Arthritis ACT and its members wanting access to hydrotherapy facilities on the south side of Canberra. These factors include:

- A lack of specificity in the Service Funding Agreement for hydrotherapy between the ACT Government and Arthritis ACT;
- Different user groups within Arthritis ACT and other community groups having different needs in accessing hydrotherapy facilities but with no quantification of the needs of different sub-groups;
- An increase in registrations for hydrotherapy and attendance at hydrotherapy sessions run by Arthritis ACT requiring a greater number of sessions to meet this demand; and
- The hydrotherapy pool at TCH approaching its end of life and attendant risk issues surrounding the TCH pool and some other aspects of supervised hydrotherapy under the Arthritis ACT contract.

4.1 The Service Funding Agreement between the ACT Government and Arthritis ACT lacks specificity with respect to scope and delivery standards

The current Service Funding Agreement (SFA) 2016-2019 was extended in June 2019 by Deed of Variation to 2022. Annual letters of variation have amended the funding amount for annual indexation. The funding amount for each FY over the 2016-19 period was as follows:

- FY 2016/17 \$222, 744 (ex GST)
- FY 2017/18 \$227, 959 (ex GST)
- FY 2018/19 \$233, 544 (ex GST)

The Service Funding Agreement has consistently provided funding to Arthritis ACT for the following:

- Community education activities;
- Ongoing support groups;
- Newsletters;
- Provision of Support and Information; and
- Hydrotherapy sessions (614 per annum).

Of note is the lack of detail surrounding hydrotherapy sessions. There is not a defined user group for accessing hydrotherapy sessions, and there are no guidelines as to how the service should be governed and what outcomes should be achieved through the provision of the services. This leaves a significant degree of service management, access prioritisation and clinical governance to Arthritis ACT, with little if any definition and support. It also means that demand for hydrotherapy is not easily quantified due to the fragmented nature in which hydrotherapy is provided and the lack of data collection from individual service users.

The current arrangement does not define service standards for delivering hydrotherapy, possibly because hydrotherapy itself is not a term that holds a single meaning. The agreement simply requires that Arthritis ACT deliver up to 614 hydrotherapy sessions per annum, maintaining a monthly record of the number of attendances at each hydrotherapy session and no other detail is provided.

The lack of specificity in the current agreement has created a situation whereby Arthritis ACT has become a hydrotherapy provider and yet it does not have a level of access to a permanent hydrotherapy facility that corresponds to an agreed measure of demand. Arthritis ACT relies on the ACT Government to provide

access to its own hydrotherapy pools at both UCH and TCH, under the auspice of a user agreement, in order to be able to deliver hydrotherapy sessions. It also relies on having access to other hydrotherapy pools in and around Canberra to be able to provide enough sessions to meet the demand of current members.

The contracting out of hydrotherapy services, so poorly defined and specified, to a third-party organisation with limited capacity to access, ration or clinically govern such a service was always a high risk of producing this set of problems. ACT Health services have unintentionally exacerbated this situation by corresponding with members of the public that should they require hydrotherapy outside of the public health system, then they should access this through Arthritis ACT.

This means that the ACT health system has channelled demand for hydrotherapy through Arthritis ACT, with no discussion about parameters on funded access, clinical standards or prioritisation of a publicly funded good.

4.2 Demand for hydrotherapy sessions run by Arthritis ACT has increased

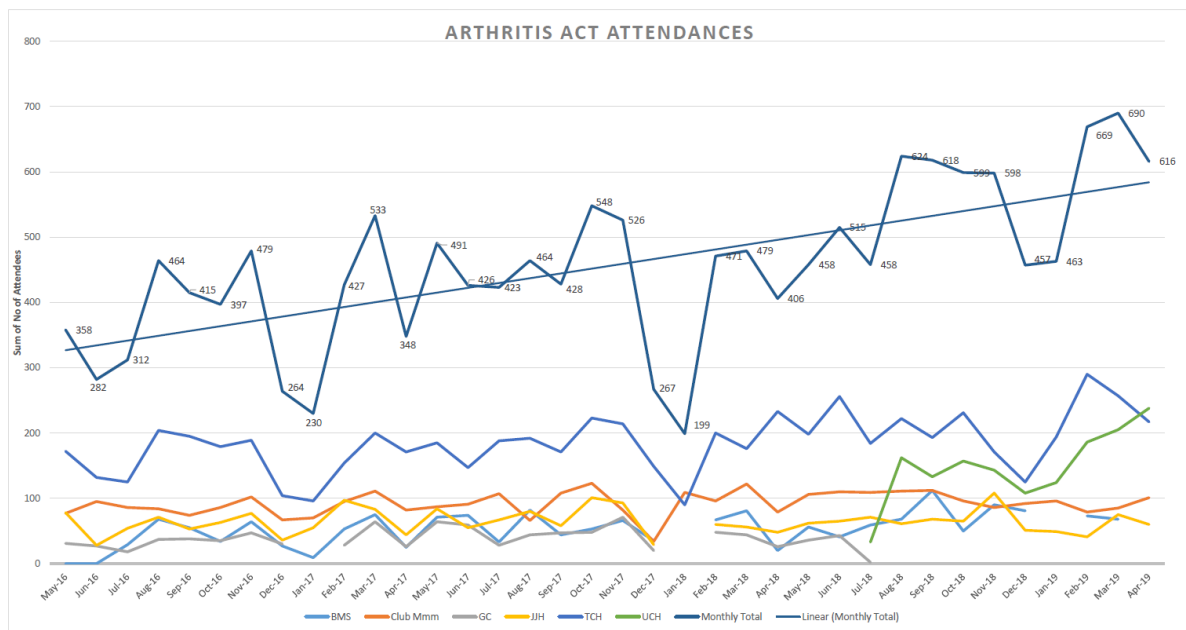
Over the last three years, Arthritis ACT has experienced an increase in demand for hydrotherapy sessions, as well as an increase in the total number of people registering with Arthritis ACT for the hydrotherapy program (approximately 31% over the last years from a starting base of 300 people in 2016). Attendance at hydrotherapy sessions has not been limited to sufferers of arthritis and includes a wide range of ailments affecting muscle and joint function as well as some neuromuscular degenerative conditions. Data is not kept which would allow Arthritis ACT, or the consulting team, to break down demand for hydrotherapy to different chronic disease categories.

Figure 3 shows the increase in attendance at Arthritis ACT run hydrotherapy sessions. Attendance is shown for the six facilities that Arthritis ACT uses for their hydrotherapy program. These include Black Mountain School (BMS), ClubMMM, Gold Creek, Calvary John James Hospital (JJH), TCH and UCH. While the attendance at each location can be seen to fluctuate, when totalled at an aggregate level, there is an upward trend suggesting a demand for more hydrotherapy sessions. The greatest percentage increase in attendance has been at UCH.

The current suite of pools used by Arthritis ACT have different characteristics. Black Mountain School is smaller than the other hydrotherapy facilities used by Arthritis ACT and has been suggested to be ideally suited for very frail and/or elderly persons. ClubMMM is a facility that meets a range of user needs as it is heated within the optimum range, has sufficient depth for upper body ailments and is large enough for group classes and multiple users. However, availability can fluctuate given it is used by private providers. The pool at Calvary John James is technically a hydrotherapy pool but is consistently heated below the optimum temperature for hydrotherapy which is between 33 and 35 degrees. The depth is also apparently not suitable for individuals needing to conduct upper body exercises.

The pool at UCH meets all current standards for hydrotherapy and is generally considered suitable for group sessions and multiple user needs. Access to UCH is considered to be a challenge for many. The pool at TCH is the most popular and seems to meet the majority of user needs because it is consistently at a suitable hydrotherapy temperature (approximately 34 degrees), is easily accessible for most, and has variable depths. It does not, however, comply with all the latest standards, for example having a gradual increase in rather than stepped access to deeper water. Further detail on the specifications of each pool can be found in Table 1.

Figure 3 | Attendance data for Arthritis ACT run hydrotherapy sessions



An important point to consider when examining this data is that attendance alone cannot be representative of demand for hydrotherapy in a holistic sense because it doesn't distinguish either between unique users or categories of user needs. It is not possible to determine if it is one person attending six sessions per week, two people attending three sessions per week or six people attending one session. Further, it is not possible to tell if the sessions used at each facility are those best suited to the needs of the individuals who use them. What the data shows is that there is demand for hydrotherapy sessions, that is time allocated to Arthritis ACT members in a hydrotherapy pool, but it does not illustrate demand for a certain type of hydrotherapy.

4.3 Different users have different needs and therefore different requirements for a hydrotherapy pool

The cohort of hydrotherapy users within Arthritis ACT is not uniform and there are a range of people with varying conditions seeking access to hydrotherapy and/or access to a hydrotherapy facility. There are also other groups within the community seeking access to hydrotherapy facilities. The organisation Sharing Places is one example of such a group. What the diversity of the user group suggests is that no single pool will satisfy all needs of users as the maintenance therape needs differ substantially.

The types of needs for hydrotherapy users range from those seeking defined courses of hydrotherapy under the supervision of an exercise physiologist and those seeking access to a hydrotherapy facility to be able to undertake their own program of exercise. The later might involve simply accessing a warm water swimming pool for severely disabled people. Some examples of the different uses for maintenance treatment include:

- hydrotherapy sessions in a calm environment, therefore requiring session with a small number of participants to lessen the movement of water and therefore impact other users' own sensory experience. This might cover individuals with mental health disorders and serious physical disabilities, as well as individuals with severe neuro muscular conditions and pain disorders;
- facilities for aqua jogging which in some cases requires specific harness equipment;
- a hydrotherapy pool with sufficient space and time available to complete a set of upper and/or lower body exercises, requiring a pool with variable depths and session times of at least one hour; and

- mobility impaired individuals needing facilities with ample disabled parking and/or appropriate public transport options that minimise the distance they are required to travel.

The diversity in stated needs across the different user groups within the maintenance therapy category cannot be satisfied by a single hydrotherapy facility. This is particularly true of the current range of options for hydrotherapy facilities in Canberra which range in size, depth, temperature and accessibility (with accessibility referring to session times, cost of access and transport options).

The highest immediate priority is the further investigation of the varied precise needs for different user categories and then subsequently assigning individuals to the pools that are most aligned to their needs. This is an essential starting point to future management of hydrotherapy services in the ACT.

4.4 The hydrotherapy pool at TCH has reached its end of life and there are other risks in service delivery

The hydrotherapy pool at TCH was built in the 1970s. Overtime it has undergone various renovations, however it has now reached a point in time where it is beyond its useful life.

According to the Infrastructure team at CHS, equipment needed to maintain the pool is obsolete, meaning that any repair and/or replacement of equipment that might be required cannot occur within a timely manner, if at all. It has been indicated that certain parts for the pool are no longer manufactured and hence should any part break, a significant work around would be needed with the cost of this being unknown.

Furthermore, access to the plant room to undertake maintenance for the hydrotherapy pool at TCH is via a single access step ladder. According to the Executive Director of Infrastructure Services at CHS, the current situation is seriously sub optimal and presents an increased staff safety risk in the event of emergency such as a fire or pool chemical spill. Representatives of CHS have indicated that the risk to personnel safety is unacceptable and is not one that the organisation can continue to carry.

In addition to the concerns regarding the mechanics of the pool, it has also been suggested that the pool is no longer fit for purpose. This view is not restricted to infrastructure and management officials. It is also the view shared by senior medical professionals. Further, this observation is supported when comparing the current specifications for the pool with the Australian Standard⁴ for hydrotherapy pools and the Australasian Health Facility Guidelines⁵ for hydrotherapy pools.

The particular points of difference include the need for a pool with a gradual slope, not a step change in pool depth, the depth of the pool needing to be ideally between 0.9 metres to 1.5 metres, with a preferred depth of 1.1m to 1.3m, as well as a range of access conditions that are designed to ensure ease of access and safe use of the facility by mobility impaired individuals. The deepest part of the pool at TCH is 1.65m and access to the pool is via five steps. The Australian Standards recommend a graded ramp with rails for access into a hydrotherapy pool. Hydrotherapy also covers any physical exercise performed in a pool with a temperature between 30 and 36 degrees, with an optimum temperature of 33 – 35 degrees providing benefits for the greatest number of ailments.

The pool at TCH therefore presents a health and safety risk to both the users of the pool and those charged with maintaining it. Further, as it increases in age the costs of running and maintaining the facility will likely increase exponentially as it becomes more difficult to fix and subsequently, the rate of error is more likely to increase.

⁴ *Australian Standard: Hydrotherapy pools*, 4 April 2016: 5-17

⁵ *Australasian Health Facility Guidelines*, AusHFG, 20 March 2017

Notwithstanding this information, which would normally lead to a very quick determination by any public sector authority, it needs to be understood that there is an absolute standoff on key points of facts, between the CHS and hydrotherapy constituents.

There is correspondence going back some time and strong representations at consultations that a significant portion of the constituency advocating for the TCH pool to remain open believe that CHS management are exaggerating the issues.

The Nous consulting team was not engaged (and would not itself have the expertise) to undertake either an engineering report or a costing of rectification. It is, however, implausible that the pool can be kept open considering the on-the-record safety and suitability conclusions that have been drawn by responsible managers in the ACT public sector.

It is important that CHS and ACT Health engage quickly and in enough depth with Arthritis ACT to make clear the basis on which it has drawn these conclusions. This needs to happen immediately, clearly and with a once only opportunity to test the information provided. This process is important but cannot be allowed to drag on. This should be a defined and time-bounded process, of weeks at most.

These are fundamental issues of the responsibility of public officials and both the government and opposition need to avoid any temptation to politicise this public information process.

Unless some completely unforeseen piece of information were to come to light in that process, it is then implausible to keep open the question about safety, suitability and the viability of keeping the pool at TCH open.

There is also the added risk to the safety of persons accessing the pool for hydrotherapy sessions that are supervised by an Arthritis ACT volunteer. During consultation it was revealed that the current workforce supervising Arthritis ACT's use of the different hydrotherapy pools is drawn from the same cohort of individuals who are accessing hydrotherapy as a way of managing their own health problems. This can include individuals with severe arthritis and other physical ailments.

The User Agreement between Arthritis ACT and CHS for use of the hydrotherapy facilities at TCH and UCH requires that Arthritis ACT provide "a supervisor, who has current basic life support and pool rescue training as provided by Lifesaving Australia, to accompany and supervise Group Members at each attendance at the pool". It is understood by Nous that the volunteers receive some degree of training, but we were not made aware of the standard by which this training is accredited. Further, the Australian Physiotherapy Association guidelines for working in and/or managing hydrotherapy pools do not recommend using volunteers to supervise water exercise classes as "most volunteers do not meet the minimal training standards expected of other pool professionals".⁶

The current practice of using members as supervisors for hydrotherapy needs further investigation. The consultancy team is of the view that a person requiring extraction from the water and/or CPR may need a higher degree of oversight than this voluntary peer model can provide, notwithstanding the passion, commitment and community mindedness shown by the volunteers.

The Nous team is concerned about the possible risk exposure of consumers, volunteers, Arthritis ACT and the ACT health system, not only at the TCH facility but across the services covered by the funding agreement. It will be important for ACT Health and CHS to work with Arthritis ACT to understand the relevant risks inherent in the current service delivery arrangements and establish a workable solution that addresses all health and safety risks.

⁶ Australian Physiotherapy Association, *Australian guidelines for aquatic physiotherapists working in and/or managing hydrotherapy pools*, 2nd edn, guidelines, viewed 30 May 2019, <https://faculty.psau.edu.sa/filedownload/doc-11-pdf-c1e5d11423cd9bf95ea0e85a90c125cd-original.pdf>.

5 A phased approach for providing access to hydrotherapy is needed

Almost certainly, the pool at TCH will, for the reasons specified in the previous section, at some point soon, be permanently closed. This requires detailed consideration of a range of options, executed through the development of a comprehensive transition plan. Nous recommends the following to effectively manage the current situation:

- ACT Health to work with Arthritis ACT to document demand including documenting the full range of health conditions for current users accessing hydrotherapy and the different needs of the different groups.
- ACT Health and Arthritis ACT use the improved data on demand to channel users to different hydrotherapy facilities, negotiating changes to the arrangements with each of the facilities to improve accessibility.
- ACT Health amend the current Service Funding Agreement to include requirements for documenting service demand and reviewing the credentials of current supervision arrangements
- The ACT Government investigate the feasibility of a new hydrotherapy located on the south side of Canberra.

These recommendations should be progressed through the execution of a phased approach as outlined below.

5.1 Phase 1: Establish alternative options for hydrotherapy based on a considered approach to documenting demand

The urgent need is for the diverse user group within Arthritis ACT seeking access to hydrotherapy for maintenance treatment to be better understood so that their individual needs can assuredly be catered for, as soon as possible.

As outlined in the previous section, the troubling dilemma the CHS has is keeping open an unsafe and no longer suitable venue because no one knows the needs for which alternative arrangements are needed.

Currently, it is not clearly understood who accesses hydrotherapy and for what purpose. There is no data of this nature kept and hence no structured approach to ensuring that individuals have access to the facility that best meets their needs, not to mention a lack of understanding which individuals are best supported through the public system and which individuals can reasonably be expected to self-manage.

This creates a scenario where the demand for a health service is unchecked, meaning that any change to the current arrangement could significantly increase costs for ACT Health and Arthritis ACT unless it is managed appropriately. It is therefore critical that the demand for hydrotherapy in this category be better understood before any alternative options are progressed. There are two options for achieving this.

Option 1 would be to have each member of Arthritis ACT work with a physio and or GP to outline their current treatment needs. The information could be collated on a single form, provided by ACT Health. This option would require a broad clinical set of criteria to be developed for those in the maintenance therapy category to define what ACT Health should continue to fund through the public system and which user needs can reasonably be accepted to be self-managed.

Option 2 would be for ACT Health to fund a physiotherapist to assess each member of Arthritis ACT against a clinical set of standards for maintenance therapy, to then determine their respective treatment need. Based on the assessment, each member could be allocated to a hydrotherapy facility in Canberra which suits their needs. If a person chose not to undertake this exercise, then support from the health system could reasonably be restricted.

Both options activities could reasonably be completed by the end of September 2019 so that members have access to a facility other than TCH available by the end of October 2019. This would ensure that the pool at TCH can be closed within the next three months and alternative options made available.

The activity for documenting current demand provides the basis for channelling users into the different hydrotherapy facilities across the ACT. This would differ from the current approach which sees demand being channelled into a community organisation which is then left to find hydrotherapy facilities that meet the full range of user needs.

In Table 1, Nous has outlined the range of hydrotherapy pools available in the ACT and has made some preliminary observations about the types of users that might benefit from access to the facility. This is an initial assessment only and with more granular data on demand this could be further refined by ACT Health.

Once a more granular understanding of need is achieved, it should be possible to consider the range of support that individuals can reasonably claim to shift their service requirement to an alternative venue. This could include, for example, the ACT Health Directorate liaising with the Education Directorate or various private providers. It could also involve liaison with ACT community transport providers. In any of these cases, the ACT Health Directorate may need to fund support on a generous basis to purchase alternative and convenient sessions in other venues (including UCH), reduce physical access issues, including transport, parking, building topography and so on.

A report on progress with this analysis of need and arrangement of alternative provision could be a useful commitment to consolidate trust in the ACT Health Directorate's direction and intent.

5.2 Phase 2: Remediate current problems with the Service Funding Agreement and negotiate a new approach

The current Service Funding Agreement needs to be reviewed and renegotiated to ensure that the current problems do not resurface in the future. This includes:

Reviewing the current workforce undertaking supervision of water-based exercise classes;

- **Working with Arthritis ACT to ensure that supervision meets the relevant standards and safety risks are appropriately managed;**
- **Embedding a requirement in the Service Funding Agreement for documenting demand and managing this in line with Phase 1; and**
- **Working with Arthritis ACT to determine the threshold for supported hydrotherapy use and hydrotherapy use that should be self-managed.**

Should the current Service Funding Agreement not be changed and the lack of specificity on hydrotherapy continue, it will be difficult to change the current situation and hence manage hydrotherapy in a more considered way.

It is inevitable that the resulting funding agreement that meets these needs will cost more than the current agreement.

5.3 Phase 3: Investigate the development of a new hydrotherapy facility

From Nous' consultations and the research undertaken to inform this project, a case can reasonably be mounted for a new hydrotherapy facility in Canberra. For geographic reasons, it makes sense that such a pool would be located on the south of Canberra and not in an acute health facility.

However, the Nous team acknowledges that any new facility would need to be considered within the broader budget context for the ACT and progressed in line with the Territory's process for infrastructure approval. It could also include consideration of a public-private partnership.

In part the business case consideration for a longer-term new facility is dependent on data that breaks down and categorises existing demand. This would enable a better understanding of what might be best met through individual self-management and which needs require public support, either through a dedicated southern hydro-therapy facility or contractual arrangements with private providers.

Hydrotherapy will, of course, be assessed against other health funding needs, taking its turn in an always stretched health budget. The alternative options examined as part of Phases 1 and 2 thus may need to be adopted for some time.

Nonetheless, the Nous team were convinced that it should be a priority, once more granular data is available, to consider the business case for a new hydrotherapy pool in south Canberra.

Table 1 | Hydrotherapy pools in the ACT and options for improving access

Pool	Technical Specifications	Positives	Negatives	Ideal use (Suitability, Organisations/Providers)	Possible actions for ACT Health to improve accessibility
South Canberra Hydrotherapy Pools					
The Canberra Hospital	<p>Length: 10295mm Width: 4900mm Depth: 1650m, Temp: 33-34 degrees 5 steps- 1315mm wide</p> <p>Changing cubicles, staff bathroom, male and female bathrooms, Underground plantroom, single access</p>	<p>Rehabilitation and hydrotherapy support equipment available</p>	<p>Varying depths but are not gradual (Steps), ageing infrastructure: cannot guarantee repair or replacement in a timely manner, capacity issues.</p>		<p>None. Pool has reached its end of life.</p>
Calvary John James Hospital	<p>Temp: 31 degrees Depth: 0.9-1.2m Stair access with hand rails, two change rooms, access to pool directly from car park</p>	<p>Accessible from the car park, good for lower body exercises</p>	<p>Paid parking, disabled access is not easy, temperature not suitable, pool is one level, not deep and big enough, cleanliness.</p>	<p>Good for people who are not strong swimmers because it has a large shallow area</p>	<p>Work with Calvary John James to ensure that the temperature is consistently ~34 degrees</p>

Pool	Technical Specifications	Positives	Negatives	Ideal use (Suitability, Organisations/Providers)	Possible actions for ACT Health to improve accessibility
Hartley Hydrotherapy	Size: 5 x 10m pool Temp: 32-35 degrees Depth: 1.1-1.5m-graded Stairs with rail, hoist (150kg limit)	Equipment available or you can take your own	Expensive, limited availability, small, not easily accessible.	Used by private users, Kingston Physiotherapy and Sports Injury Centre, Neurospace	Subsidise the cost for small group sessions and negotiate an agreement for weekly sessions.
Lakeside Leisure Centre	Length: 25m pool, Temp: 32 degrees Depth: 0.3-1.1 Hand rails at all entrances	Not warm enough	Does not have sufficient depth for people with spinal conditions.	Certain individuals are comfortable in water that is 32 degrees. This temperature may be appropriate for those attempting high intensity exercise.	Negotiate access to dedicated sessions during the hours of 10am and 4pm.
Active Leisure Centre	Pool is currently closed until July/August 2019.				Investigate access pending confirmation of the new facility having a hydrotherapy pool
Stellar Canberra	Length: 17m pool Temp: 32 degrees Depth is 1.05-1.2m Entry is via stairs with rail and also has a ramp with rails.		Requires membership	Used for Learn to Swim classes. Casual access is available but only during located member times.	Subsidise the cost for small group sessions for those not requiring deeper water,

Pool	Technical Specifications	Positives	Negatives	Ideal use (Suitability, Organisations/Providers)	Possible actions for ACT Health to improve accessibility
Kingswim	<p><u>Calwell</u></p> <p>Temp: 33 degrees Depth: 0.75-1.2m Steps with rail, hoist</p> <p><u>Deakin</u></p> <p>Temp: 33 degrees Depth: 0.9m-1.5m Ladder with hand rail</p> <p><u>Majura Park</u></p> <p>Temp: Heated to 33 degrees Depth: 0.9m-1.3m Steps with rail</p>	Suitable temperature	Depth does not cater for arthritis of the spine, set times for use and bookings are essential.	Private organisations using the pools include: Southside Physiotherapy Canberra, Watermovers, Elite Rehab & Sports Physiotherapy	Subsidise the cost for small group sessions and secure at least 3 sessions per week at each facility. Not suitable for users with spinal issues.
Malkara School	<p>Temp: 32.9 degrees Depth: 950mm to 1200mm Size: 14m x 4m Parking facilities are 70m from the pool.</p>		Access three mornings a week in the early morning, difficult to remove pool covers, not deep enough for upper body work	Not available during business hours	Work with ACT Education to establish weekly session availability. Not ideal for upper body work.

Pool	Technical Specifications	Positives	Negatives	Ideal use (Suitability, Organisations/Providers)	Possible actions for ACT Health to improve accessibility
North Canberra Hydrotherapy Pools					
Black Mountain School	Length: 8m Width: 6m Temp: 32 degrees Depth 0.95m – 1.5m	Hydrotherapy exercises conducted in the shallow depth, \$4.60 per client accessing this pool	Currently closed, small, shallow depth limits exercises, location accessibility, not available during business hours.	Reportedly very good for frail, elderly people.	Access to Black Mountain School is not viable at present due to an issue with a student. ACT Health should work with the Education Department to manage the current problem and reopen Black Mountain School for Arthritis ACT members. This would be a significant benefit to Arthritis ACT members.
Club Mmm- Canberra International Sports & Aquatic Centre	Hydrotherapy Pool: Length: 12m Temp: 33 degrees Depth: 0.9-1.9m Ramp and bilateral rail access, pool noodles available to use.	North Side, ideal length	Difficult to get into, capacity issues.	Individuals needing smaller group classes or individual sessions Provide providers using the facility: Active Recovery, Belconnen Physiotherapy Clinic, Canberra City Health Network, EmPower Exercise Physiology	Club MMM is privately owned and operated. ACT Health should look to provide subsidised access to at least 3 sessions a week at ClubMMM. This would be an expansion of the current sessions that Arthritis ACT hold.
Acquatots at Gold Creek	Temp: 31-33 degrees Length: 20m		Cost of parking, difficult to access, too far for South Canberra residents,		Negotiate access to dedicated sessions during the hours of 10am and 4pm. Distance may make this lower priority

Pool	Technical Specifications	Positives	Negatives	Ideal use (Suitability, Organisations/Providers)	Possible actions for ACT Health to improve accessibility
			<p>considered too cold, staffing availability, limited availability for public access.</p>		
<p>University of Canberra Hospital</p>	<p>Length: 15000mm Width: 6000mm Depth: 1640mm</p> <p>Temperature maintained between 30-36 degrees with an optimum thermoneutral temperature of 33.5-35 degrees</p> <p>Pool access is via a graded ramp with handrails on the sides, changeroom and bathroom facilities are located within hydrotherapy space</p>	<p>Rehabilitation and hydrotherapy support equipment provided, Lunch time sessions available</p>	<p>Daytime usage is limited, accessibility issues, size limitations and demand.</p>	<p>Patients of the University of Canberra Hospital get priority access to the pool.</p> <p>Hydrotherapy pool is built to current specifications and can provide hydrotherapy for several conditions.</p>	<p>Work with Arthritis ACT to understand the impediments to access and work to remediate the issues. This could include:</p> <ul style="list-style-type: none"> • Improved community transport options for Arthritis ACT members travelling from the South Side. • Extending the time available for Arthritis ACT sessions at UCH • Considering scheduling a greater number of sessions between 10am and 4pm to minimise travel time and exposure to congested roads for vulnerable people

Pool	Technical Specifications	Positives	Negatives	Ideal use (Suitability, Organisations/Providers)	Possible actions for ACT Health to improve accessibility
Gungahlin Leisure Centre	Size: 1x50 and 1x25m pool Temp: 29-31 degrees Steps with rail		Pool closures, temperature not suitable	Used privately by Sport and Spinal Physiotherapy	Pool is likely to be too cold for Arthritis ACT members. ACT Health could investigate the feasibility of group classes for certain members as well as clients of Sharing Places and other organisations.
Kingswim	<u>Macgregor</u> Temp: 33 degrees Depth: 0.75-1.3m Steps with rail	Suitable temperature	Depth does not cater for arthritis of the spine, set times for use and bookings are essential	Southside Physiotherapy Canberra, Watermovers, Elite Rehab & Sports Physiotherapy	
ClubLime at ANU	Temp: 32.5 degrees Depth: 1.1m to 1.2m		May be too cold for some users, cost prohibitive noting membership is needed, limited parking available at ANU and public transport does not enter the campus	Swimming lessons are booked in this facility between 4pm and 7pm. All other times it is available for general use.	

Pool	Technical Specifications	Positives	Negatives	Ideal use (Suitability, Organisations/Providers)	Possible actions for ACT Health to improve accessibility
Cranleigh School	Temp: 35 degrees Depth: 800mm to 1150mm Size: 1.9m x 4.3m	Parking is 30 metres from the pool	Depth may not be sufficient for those with upper body issues. Not available during business hours.		Work with ACT Education to establish weekly session availability. Not ideal for upper body work.
Turner Primary	Temp: 32-34 degrees Depth: 650mm to 1200mm Size: 9.2m x 4.55m	Available during business hours		Suitable for smaller group use or individual use	Work with ACT Education to establish weekly session availability. Not ideal for upper body work