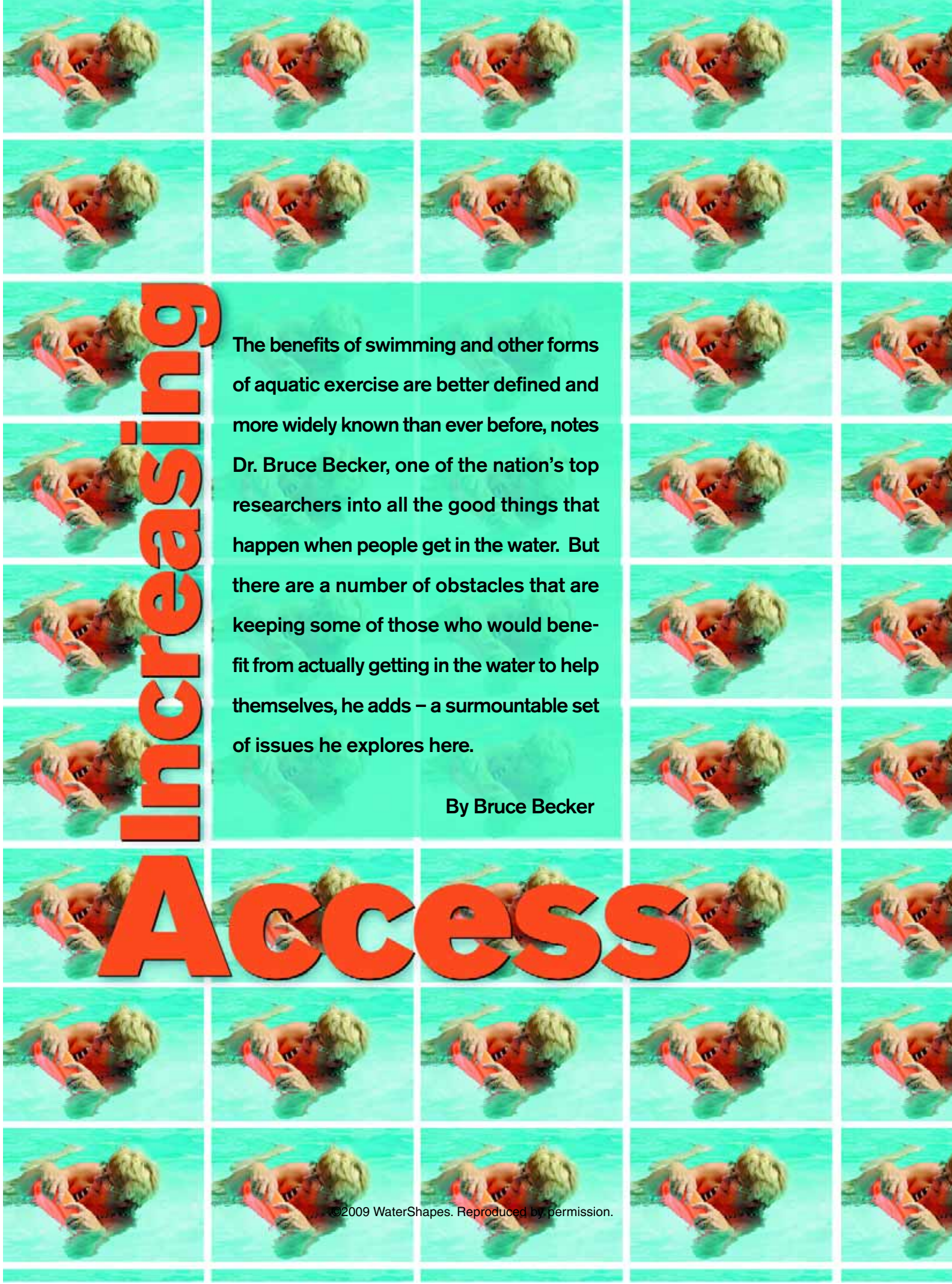

Increasing Access

The benefits of swimming and other forms of aquatic exercise are better defined and more widely known than ever before, notes Dr. Bruce Becker, one of the nation's top researchers into all the good things that happen when people get in the water. But there are a number of obstacles that are keeping some of those who would benefit from actually getting in the water to help themselves, he adds – a surmountable set of issues he explores here.

By Bruce Becker

It seems obvious enough. To reap the physical and psychological benefits of swimming and other forms of aquatic exercise and therapy, a person must first get into the water.

Experience shows, however, that this initial step is often not so easily taken: Whether the reason is psychological, physical or practical, it has long been clear that many people who would benefit magnificently from immersion simply don't get into the water the way they should.

I've always believed the medical community needs to take the lead in developing and disseminating information that will help people get past these obstacles – yet I know personally that there's a mountain of ignorance and indifference to be overcome even among my medical colleagues before effective messages will reach the public on any sort of mass scale. This work has begun, but there's a long way to go.

As I've moved forward in my own mission of spreading the good word about aquatic activity, I've also become increasingly aware that a natural alliance exists between the medical and watershaping communities when it comes to getting people into the water. My purpose here is to share my observations about what keeps people out of pools and spas and explore some ways in which watershapers can get involved in turning these situations around.

Getting In

One of the key reasons people have trouble engaging in aquatic activities has to do with access: There simply aren't enough pools and spas to go around.

According to the most recent U.S. Census report, there were 36.3 million Americans older than 65 and 4.9 million older than 85 in 2004. We know our population is aging and it's certain those numbers will only increase for many years to come; we also know that approximately one in five U.S. citizens suffers with some type of disability. No matter how you slice these numbers, the current situation equates to a potentially enormous demand for aquatic facilities that are not nearly as common as they should be.

Where I live in Spokane, Wash., for example, there hasn't been a new public pool built since 1988 despite steady growth and migration of the population away from those areas where the existing pools were built. This adds up to a lack of nearby facilities where people can swim as well as a tendency toward crowding of existing facilities that drives many would-be swimmers away.

Certainly, there are people who have access to pools in their backyards, apartment or condo complexes or residential developments and therefore don't need to rely on public pools, but that access is far from universal; actual usage of these pools (especially in a place such as Spokane) is seasonal; and relatively few of these watershapes are designed with exercise or therapy in mind.

It's a tough situation from my perspective because the cost of suitable watershapes can be high, but my ambition is to get enough information out there that the public will demand construction of more pools and that even residential designs will start coming with standard features that increase the long-term, transferable value of these watershapes as homes change hands and new residents with new needs come into focus.

Any momentum to be found here will originate with increased awareness: Familiarity with the benefits of swimming and other aquatic activities will lead to greater use of and greater demand for facilities. Without that familiarity, there might be only limited motivation to build new pools – especially at the civic level, where city councils and parks departments face tremendous budget constraints and finding funds for projects as costly as public pools is decidedly hard to do.

Photo by Nancy Dressel, Dreamstime.com

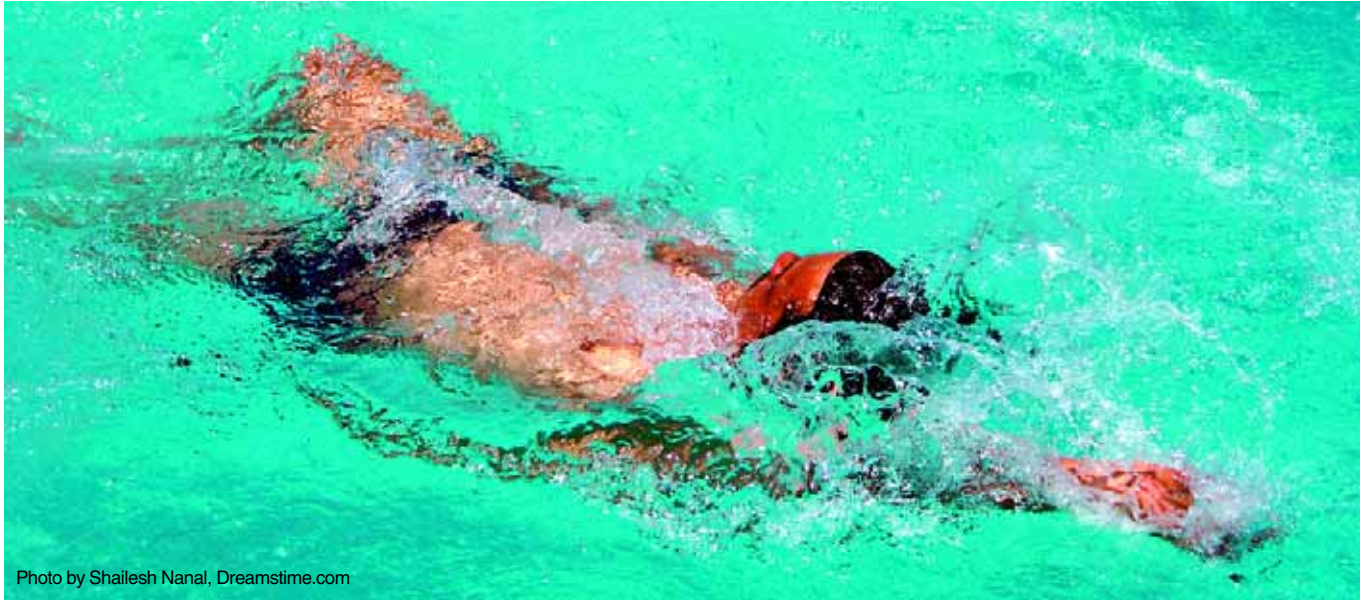

Photo by Shailesh Nanal, Dreamstime.com

The best way to turn this around, of course, is to get more people in the water, but that's difficult to do in a universe in which access is becoming more limited rather than expanding.

Indeed, at this point the problem may be self-perpetuating and will only get harder to overcome. For my part, however, I don't think we've reached the point of no return as yet, which is why I so firmly believe that the watershaping industry and the medical community need to come together and fully embrace and promote the health benefits we've been discussing.

There's also potential for a stop-gap approach in which existing pools might be upgraded to make them more accessible to citizens who need them most. Too many facilities are only marginally in compliance with the Americans with Disabilities Act (ADA) and are less than truly accessible. If we can't build new facilities from the ground up, perhaps the focus should be on retrofitting existing public pools and spas to enhance their ability to deliver the benefits of immersion.

If those benefits gain greater exposure in this way, demand will increase and perhaps our longer-term goal of seeing more pools and spas in more accessible places will be met as well.

Measured Accommodation

While the long-term trends have led to a situation in which precious few facilities are being designed or built to relieve the need to find more ways of getting people into the water, I was truly impressed by the article in the August 2007 issue of *WaterShapes* (page 46) in which Dr. Belinda Stillwell led us on a tour of a facility built from the ground up to meet a variety of aquatic-therapy needs.

Her article, which covered a facility built at California State University, Northridge, struck me because it was so unique in its accommodation of the wheelchair-bound that it merited special coverage. Indeed, such complexes are rare – and that's exactly the situation that needs to be changed.

It's my observation (and I'm certainly not alone) that when governing bodies consider either the installation of a new pool or the upgrading of an existing facility, there's seldom anyone in the deliberative loop who serves as an advocate for health benefits or can make the case for wheelchair-accessible design details. This is a critical moment: Developing a facility around concepts of utility and access doesn't cost that much, but adding suitable features later on can be prohibitively expensive.

The design elements involved here are all fairly basic and mainly have to do with easing passage into and out of the water. This might mean a wheelchair ramp or broader steps with adequate railings or a raised beam at the edge of the pool where someone might transition from a wheelchair into the water under their own power.

Lift-and-transfer systems also come into play here. The designs of these systems have come a long way with respect to ease of use, and there are several excellent options. Here and elsewhere, when you consider the benefits to users relative to the cost of these systems, it's staggering to consider how few pools are equipped with them.

Perhaps the ultimate system is one described in some detail by Dr. Stillwell – that is, movable floors in which the bottom of the pool rises to deck level and those in wheelchairs simply move onto the surface to be lowered gradually into the water. Obviously, this approach is a significant investment, but it's a benefits-delivery system of the highest order and should be considered in more design processes.

Along with these direct aids to getting people wet, facility designers also need to think through the physical layout of such amenities as locker rooms. In many cases, these spaces are so cramped that they discourage the use of a facility, no matter how accessible the water itself might be. The same can be said of pool decks that are too narrow for easy wheelchair maneuvering: It's not horribly costly to accommodate these physical needs in the design phase, but later on it might simply become impossible.

Before I move on, it's extremely important to note that this discussion does not only apply to helping people in wheelchairs. When a pool has a ramp, for example, many people will use it who aren't in wheelchairs simply because it's the easiest way for them to get in and out of the water. Indeed, as our population ages and people have hips or knees replaced, cope with arthritis or simply deal with being in poor physical condition, not having to negotiate steps can dramatically increase their comfort level as they enter the water.

In the Mind

So far, we've dealt with some of the large-scale, facility-oriented issues that separate people from the water. Now it's time to narrow the focus to the individual level and explore some factors I've encountered that are just as capable as poor facility design of keeping people away from the many benefits of getting in the water.

In some cases, for example, people who are either able-bodied or limited in some way suffer from a fundamental fear of water. (According to a recent Gallup Poll, a staggering 46 percent of adults are afraid of deep water in a pool, while fully 64 percent fear open water.) We are, in fact, land-dwelling creatures and instinctively know that water is a foreign environment. We know as well that swimming in the ocean or in other natural bodies of water can be dangerous and that even swimming pools can be risky at times.

As I see it, without increasing their awareness of the health benefits of immersion, there's not much at hand to counterbalance innate fears. Watershapers have, of course, done a great deal to ease such concerns and have made the case for years that the controlled environment of a swimming pool or spa involves low risk. We in the medical community have done our part by letting people know that injuries in therapeutic settings are exceedingly rare.

Again, this is all about exposing the public of the benefits in order to create greater momentum toward the water: You don't have to be a psychologist to know that if an apprehensive person sees others using a pool or spa to improve their physical condition, it's easier to overcome fundamental phobias.

On a different level, I've also encountered people with disabilities or other physical limitations who are reluctant to get into the water along with the able-bodied. It's understandable: If you're in a wheelchair or use a walker to get around, the thought of swimming with aggressive teenagers isn't exactly inviting. This is a basic programming issue, of course, and simply involves setting aside certain times for purely therapeutic usage of a pool.

There are also people for whom vanity is a deterrent to immersion. They're uncomfortable being seen in swimwear because they have issues with their physical appearance – a significant challenge for the obese, for example. It can take real courage for these people to overcome this particular type of modesty, and doing so is both a programming issue as well as a matter of communication, staff attitudes and peer support in many cases.

All of these programming issues boil down to this: While it can be difficult to arrange schedules and staffing in such a way that people with certain issues can be grouped and their passage into the water eased by being matched with others who face the same issues, the sooner they become comfortable in the water (and with other people being around them in the water), the easier the scheduling becomes.

Indeed, I've found that as significant as this cluster of issues can be for some people, once they overcome the basic hurdle it disappears very quickly because they feel so much better as a result of moving around in water. After just a few workouts, they see the activity as something that improves their self-image – a wonderfully positive outcome.

Ease and Comfort

Along with fears, I've found through my work with those in need of aquatic therapy that there's an additional cluster of factors that can keep them from wanting to get in the water. Most of these have to do with personal comfort: Water temperature, for example, can play a surprisingly large role in the desire to enter a pool.

Photo by Kathy Wynn, Dreamstime.com

Overcoming Fear

Given the fact that so many people have a fear of water, it would be useful for both the medical and watershaping communities to embrace approaches and programs designed to address this issue.

One such program I've become familiar with is known as "Conquer Fear." It's an adult-education program offered by a Sarasota, Fla.-based organization called the Miracle Swimming Institute, which offers swimming classes designed to help adults overcome hydrophobia. The program is currently being offered in several locations in California, Florida, Massachusetts, New Jersey, Nevada and overseas; there are also videos, books and instructor-training programs.

In a nutshell, the 24-hour program teaches participants the five stages identified as being essential to feeling in control in the water. Once people gain that control, they can learn to swim.

As I see it, this course might serve as a model for overcoming the fear of water – another concept that should be embraced and promoted by anyone interested in promoting the health benefits of aquatic activity.

For more information, visit *www.conquerfear.com.*

– B.B.

Photo by Iris Schneider, Dreamstime.com

For the most part, happily, water temperatures suitable for exercise are basically the same for people with physical limitations as they are for those in good condition: Whatever initial shock there is in getting into water that's below body temperature goes away very quickly when exercising starts.

But water can be plain too cold, as often happens in unheated pools in shaded courtyards of apartment complexes, for example. In these cases, both chilly water and the cost of heating the pool become substantial obstacles to sustaining an environment suitable for swimming or exercising. The use of energy-efficient heating systems such as heat pumps or solar heating grids can be a big help – and represents yet another case where accommodating such issues at the design stage is far more cost-effective than bringing them up after the fact.

It's also true that there are some people who really only benefit from exercising in water that most would consider to be exceptionally warm – in the 95 to 98 degree range in some situations – because they need the initial warmth to increase their flexibility and relieve tightness in their joints. The good news here is that there's no need to go any higher, because the water temperature for a workout should never go higher than body temperature, but even indoors keeping water so warm is an expensive proposition.

This issue with aligning water temperature with the needs of bathers is quite complex and is among a number of factors that are almost matters of individual need and preference. My thought here is that designing with flexibility in mind is the key: If temperature is something that makes people reluctant to get in the water and that can be overcome by some mechanical means, making allowance for a heating system (or at least considering it in the planning stages) has real long-term value.

Another concern some express about getting wet has to do with water quality: Few among us want to be in water that seems dirty and therefore possibly unhealthy. Dealing with this issue is a challenge in facilities that focus on aquatic exercise because of frequently high bather loads and the byproducts of strenuous physical effort.

As I see it, there's no substitute for good maintenance, but my preference is to see human operation supported by automatic chemical treatment systems that make the job easier. This is certainly why so many health departments now require use of these systems. It's also a matter of common sense: Why even build an aquatic facility if the water itself is going to become an obstacle to use?

Making It Work

My desire as a researcher and physician is to change what the general population thinks about getting into the water and, in addition, to get them to consider and embrace the value of swimming and other forms of aquatic exercise. A big part of that is overcoming any obstacles that stand between any given person and any given pool or spa; even my limited experience so far tells me that this task is larger than any of us might think.

In other words, while overcoming the resistance people have to getting into the water may be a simple matter of implementing some very straightforward measures, making these upgraded facilities available won't necessarily change things overnight.

As one who studies these issues and works directly with people with physical challenges, I know aquatic exercise should become commonplace not just as therapy for treating existing conditions, but also as a means of preventing physical problems by making us all healthier. Simply put, these activities should be our core values: There is no form of exercise that more profoundly improves quality of life for people of all ages and physical capabilities.

That in mind, I've long been puzzled about why the medical community has yet to embrace this cause and put water exercise over the top; I've also wondered why the watershaping industry hasn't invested more energy in persuading people of the health-related benefits of its products. Perhaps the natural alliance I mentioned at the outset of this article is the key and we're all on the verge of a real breakthrough.

I look at it this way: When aquatic exercise becomes more commonplace, there will be a greater demand for pools and spas – which makes pressing these points a matter of informed self-interest for the industry. As important, if we in the medical community keep pushing and the benefits of aquatic exercise and therapy become more widely known, more people will turn to the water to improve their physical condition and even greater momentum will build toward increasing the availability of recreational water to help those who are still reluctant to enter the water to get past their resistance and finally take the plunge.

What a wonderful world *that* would be!