

# Opinion

## Insulin-dependent diabetes mellitus and recreational scuba diving in Australia

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### Abstract

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Dive medicine bodies worldwide recognise that, with comprehensive screening and careful management, people with insulin-dependent diabetes (IDDM) can dive safely. Despite this, people with IDDM in Australia are generally denied access to dive training, an out-dated status quo that is not acceptable to the Australian diabetes community. This paper reflects upon the important advocacy work that has been done to progress this issue, and what is still required to open up access and bring Australia into line with more flexible and supportive international standards.

### Key words

Medical conditions and problems; fitness to dive; disability; health status; DAN – Divers Alert Network; instruction – diving

### Introduction

Dive medicine bodies worldwide recognise that with comprehensive screening and careful management, people with insulin-dependent diabetes mellitus (IDDM) can dive safely. Despite this, it remains extremely difficult for people with IDDM to access dive training in Australia. People with IDDM are denied information, support and access to training courses, which drives some to choose not to declare their condition or to travel overseas in order to certify as divers, which is both unsafe and unfair.

Using advocacy processes and tools, such as creating awareness, education, and using legal levers, can open up access to dive training for people with IDDM in Australia. This article reflects upon the important advocacy work on this issue until now, and what must be done to change the current situation and bring Australia into line with the rest of the world.

### Stakeholders

*“Alone we can do so little. Together we can do so much.”*<sup>1</sup>

Breaking down barriers to dive training access needs a group of stakeholders invested in changing the status quo. Active people with IDDM can help drive change, and we are both connected and committed. Thousands of people with diabetes participate in thriving online communities, and can be connected to a cause with the touch of a button through prolific social media groups, forums, and other online platforms. Indeed, between 2006 and 2012, the Australian online type 1 diabetes forum ‘Reality Check’ played a vital role in connecting people with diabetes from across Australia

who were interested in breaking down barriers to accessing dive training. The diabetes online community has evolved and gathered momentum through social media, which is now the most effective way to disseminate information and drive change.

Both diving medicine and diabetes clinicians are also critical stakeholders, as they are the gatekeepers for patients seeking medical clearance to dive. The South Pacific Underwater Medicine Society (SPUMS) has taken the progressive step of adopting, in slightly modified form,<sup>2</sup> the Undersea and Hyperbaric Medical Society/Divers Alert Network (UHMS/DAN) guidelines for divers with diabetes, and showed a commitment to developing support for the diabetic diver with a strong focus upon diabetes at the 2015 SPUMS Annual Scientific Meeting. Dive medicine clinicians judge a patient’s fitness to dive according to the UHMS/DAN criteria; however, they generally require support from the patient’s diabetes clinician to find them fit to dive. Diabetes doctors, who are represented by the Australian Diabetes Society (ADS), are thus stakeholders in the process of screening and advising a patient with IDDM.

Dive training agencies and operators are also invested in this issue, as they train and certify divers. Their role is essential in not only providing dive certifications but in supporting divers to train safely without discriminating on the basis of disability.

### Barriers

A variety of barriers to accessing dive training in Australia emerged from a robust roundtable discussion with stakeholders at the OzTek diving show in Sydney in 2015,

facilitated by Dr Catherine Meehan of SPUMS. The barriers identified at OzTek were threefold: people with IDDM have difficulty obtaining medical clearance to dive, are denied access to training courses by dive schools, and do not have the information, advice and support they need to confidently manage diabetes whilst learning to dive. Breaking the problem down like this was an interesting and necessary exercise that helped stakeholders understand the issues, and allowed specific targets to emerge.

### Targets

The Australian diabetes community has a simple goal: to open up access to dive training for suitable diabetic candidates. However, important objectives sit within this: doctors must feel confident that their screening and advice will keep their patients safe, and training agencies and operators need to be aware of their role in supporting the diabetic diver.

### Action

#### MEDICAL CLEARANCE

Attaining medical clearance to dive has emerged as the most pressing and significant barrier for people with IDDM who wish to learn to dive in Australia. Currently, the professional medical organisations that represent diving doctors and diabetes doctors, SPUMS and the ADS, promote conflicting messages. Doctors belonging to the ADS have historically been directed by the 1994 ADS Diving and Diabetes Position Statement, which states that diving and IDDM are contraindicated. By contrast, SPUMS is supportive of the diabetic diver and states that “*some individuals with insulin-required diabetes may be able to dive with an acceptable level of risk*”<sup>3</sup> and includes comprehensive screening advice and practical how-to information for divers with IDDM in the Society’s dive medical.<sup>2</sup> Therefore, although a diving doctor may be willing to give the patient medical clearance to dive, the doctor is unlikely to have necessary support from the patient’s diabetes clinician who will be informed by the 22-year-old ADS position statement.

The ADS position statement has therefore emerged as a key target for advocacy action. Between 2014 and 2016, people from the diabetes community repeatedly raised the statement with the ADS President, showing that a significant body of evidence to support a new position now exists and arguing that Australia should be brought up to date with international standards. The ADS statement was also criticized in the media in Western Australia.

In April 2015, the ADS archived its statement and announced it was under review. At the time of writing (20 August 2016), a new statement has yet to be released. A change in the ADS position is crucial to overcoming the barrier to attaining medical clearance to dive. Despite the disability

rights maxim “*nothing about us without us*”, people with diabetes are not participants in the development of the revised ADS position statement. However, we continue to maintain pressure, and expect the ADS to issue soon a new position statement that acknowledges the evidence base and international standards.

SPUMS demonstrated a commitment to the diabetic diver with the adoption of the DAN/UHMS guideline; however, discussions at the 2015 SPUMS ASM revealed a need to build the knowledge and confidence of both SPUMS members and training agencies around managing the needs of the diver with diabetes. Adapting the DAN online module about diving with diabetes into a brief online education tool was discussed at the 2015 SPUMS Annual Scientific Meeting, where it was agreed that this initiative should be pursued. This has yet to eventuate.

#### TRAINING ACCESS

A second barrier to learning to dive as a diabetic in Australia is being accepted to participate in an open water course. There are reports of divers with diabetes in Australia who have managed to overcome the hurdles and obtain medical clearance, only to be refused access to courses by dive schools. In the rare circumstance a person with IDDM is declared fit to dive in Australia, they may have special conditions placed upon their medical clearance recommending, for example, certain dive depth limits and surface interval lengths. However, dive schools in Australia do not generally accept conditional medical clearances. People with diabetes report that the two main reasons given to them by operators are that schools cannot manage the risks attached to training a diabetic diver, and that dive schools are unable to change the logistics of dive courses to suit special conditions. Neither reason stands up to scrutiny – in reality, the diabetic diver is simply put in the ‘too hard’ basket.

Major training agencies need to take the lead here, and assist dive schools to change their thinking about managing a diabetic diver. Indeed, in 2006, at a discussion about adopting the UHMS/DAN guidelines for diving with diabetes in Australia, the PADI representative present committed to supporting the guidelines if they were adopted: “[If] SPUMS wishes to evolve guidelines and integrate these into the diving community ... I can assure you that PADI would cooperate fully in getting the word out to divers and diving professionals.”<sup>3</sup> Now that SPUMS has fully adopted the UHMS/DAN guidelines into the SPUMS medical, it falls to major training agencies to not only help ‘get the word out’ but meet their legal obligations in relation to offering training that does not discriminate on the basis of disability.

Dive schools internationally access the information they need to manage the needs of the diabetic diver, and Australian dive schools have access to that same information. Further, active people with IDDM are generally experts at blood glucose

management during physical activity and will know how to manage and articulate their needs; dive schools can learn how to support them by talking with a diabetic diver directly. Beyond that, resources about diving with diabetes are easily accessible online to educate and upskill dive schools: DAN offers an online training module about the guidelines and a series of informative papers on diving with diabetes,<sup>4,5</sup> and the SPUMS medical contains comprehensive information about dive-day management.<sup>2</sup> Indeed, in this issue an in-depth, stepwise account of how this author manages her IDDM on a dive day is presented.<sup>6</sup> The concept of a work slate (similar to those used in managing dive accidents) to assist dive instructors training people with IDDM was discussed in 2006,<sup>3</sup> and may well be a useful additional contribution from SPUMS.

Under disability discrimination legislation, operators are obliged to make reasonable adjustments for people with disabilities. The adjustments needed to support people with diabetes to undertake dive training are far from onerous; they may involve slightly altering dive times, depths or surface interval lengths. The issue of discrimination against divers with diabetes by failure to make reasonable adjustments is live – it emerged in 2015 in Queensland in an action brought to the Anti-Discrimination Commission, which was resolved by conciliation. As the diabetes community becomes more connected internationally, the discrepancy between international standards and Australian standards becomes more apparent; it is unlikely the action in Queensland will be the last.

Training agencies and dive schools must be aware of their legal obligations, and diabetes organisations have an important advocacy role to play in raising awareness of patient rights. On the ground, people with diabetes should not accept discriminatory practices; if they are cleared for diving but refused training they are likely to have grounds to lodge an action against the provider with their state anti-discrimination commission.

#### PATIENT CONFIDENCE

The final barrier to diving with IDDM is patient confidence. Unlike sports such as cycling or triathlon, which have built up large communities of participants with diabetes in clubs and online groups, as yet there is not a culture or community for the diabetic diver in Australia. However, this will change quickly as medical clearance and training barriers are broken down and people with diabetes are given access to this exciting sport. The diabetes community is agile and quick to embrace change; it is simply a matter of time before a local community of divers with diabetes arises in Australia.

One of the primary roles of SPUMS is to provide information about underwater medicine, and now is the time to deliver information in a targeted way to advocate for change. The diabetes community is relying on SPUMS to actively raise

awareness of its position and the evidence that supports it with the ADS during the ADS position statement review. Beyond this, SPUMS' early commitment to the diabetic diver needs some follow through: adaption and simplification of the online training materials from DAN and developing a work slate or tool to inform diving instructors will build confidence amongst dive schools and divers and are certainly worth pursuing. Australian dive training agencies need to develop a more inclusive and progressive approach to divers with disability in order to avoid discrimination claims. Finally, people with diabetes need to keep this issue on the agenda – the medical community and training agencies need to see the demand from the diabetes community in order to be motivated to change.

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#### Conflict of interest

The author is the CEO, Telethon Type 1 Diabetes Family Centre, Perth, Western Australia and is a qualified Divemaster.

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