



## New Units for Reporting HbA1c in Australia

The International Federation of Clinical Chemistry (IFCC), the peak global body representing the profession of clinical chemistry, has recommended that a new (internationally standardised) reference measurement system for HbA1c be adopted by all countries of the world, after much discussion with diabetes groups globally. This will make it much easier to directly compare HbA1c results from different methods across the world.

In line with these recommendations,

**the way in which HbA1c results are reported in Australia will be changing.**

This information sheet explains what the new units are, and when and how this will happen in Australia.

### What are the new HbA1c units?

The new measurement unit for HbA1c is called **millimoles per mole (mmol/mol)**.

The old measurement unit for HbA1c is **percentage (%)**.

Here is an example of how the new and old units compare:

Old HbA1c units [%]	New HbA1c units [mmol/mol]
6.0	42
6.5	48
7.0	53
7.5	59
8.0	64
9.0	75
10.0	86

Please don't be concerned about this change of reporting unit.

- It's still the **SAME** test; that is, it's still measuring the amount of sugar stuck onto Haemoglobin in the red blood cell.
- The test is still measured in exactly the **SAME** way on the DCA 2000 and Vantage; that is, by light measuring a colour change when HbA1c in the blood mixes with chemicals in the cartridge.
- The test is still telling us exactly the **SAME** clinical information; that is, how a person's diabetes has been controlled over the past three months.

... it's just the number or value of HbA1c that will change!

In many ways the new HbA1c unit will be better because the new HbA1c value (eg 53) is on a completely different scale and won't be confused in any way with a glucose = value. As you know, in QAAMS, we have had to spend a lot of time talking about the fact that an HbA1c value of 7% was different to a glucose value of 7 mmol/L.

### **When will this happen?**

Obviously there will be a great deal of education required about the change in units for doctors, nurses, Aboriginal Health Professionals and clients with diabetes. This will require some time.

To make the change to the new units easier for everyone, Australia has decided that there will be a period of time in which **both units (old and new) will be reported together**. This will be **from July 2011 to June 2013**.

So for example, the reporting of your HbA1c result should now read:

**Old HbA1c 7.0%      New HbA1c 53 mmol/mol**

**From July 2013 the new HbA1c unit (mmol/mol) will become the only unit by which HbA1c is reported.**

The strategy that Australia is using is entirely consistent with what most other countries of the world have decided to do.

### **Consequences for QAAMS services**

Working closely with the QAAMS Leaders Team, the QAAMS Management Group has developed a series of culturally safe education resources specifically for QAAMS participants. These include an electronic HbA1c unit converter on the QAAMS website ([www.qaams.org.au](http://www.qaams.org.au)) and an HbA1c unit Conversion Poster in your Workshop bag, which is also available to be downloaded from the QAAMS website.

POCT devices such as the DCA are required to report the same units as the laboratories where possible. The DCA Vantage can report both units (mmol/mol and %), but the DCA 2000 can only report % units. So, for the DCA 2000, you will need to use the converter on the website or your poster to help you report the new unit.

We are aiming to make the transition to the new system as easy and as simple as possible for all QAAMS participants. Please see either Mark Shephard, Anne Shephard or Chris O'Brien at the Workshop, or call us on 08 8201 7555 if you have any queries or concerns.

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