

Summary of consumer feedback on certain CareSens diabetes management products

In 2016, PHARMAC contracted Diabetes New Zealand (DNZ) to facilitate consumer end-user feedback of blood glucose and blood ketone meters that had been shortlisted following a Request for Proposals (RFP), so were being considered for funding.

The purpose of this feedback was to assist PHARMAC in identifying any consumer concerns about usability or suitability of the shortlisted meters. It was intended that this feedback would be used to design information and support activities that might be required if the relevant meters were funded.

The following pages of this document provide a summary of the report DNZ produced on the consumer end-user feedback on the CareSens Premier and Dual Meters. The CareSens N and N POP meters were not looked at by these consumer end-user feedback assessment processes, as these meters are already funded which meant PHARMAC had enough information and feedback about these meters to design information and support activities if required.

We are not publishing the sections of the DNZ report that relates to other meters that were shortlisted in the RFP and looked at by consumers as all bids were submitted to PHARMAC on a commercial in confidence basis. We have also removed all summary information about the consumers who participated (ages, locations, gender, ethnicity etc) to maintain privacy. We note, for the avoidance of doubt, that PHARMAC was never informed of the names or contact details of any consumers that participated in focus groups.

Overview of approach and participants in the end-user feedback:

- 60 individuals participated in focus groups that were facilitated by DNZ; while 29 individuals undertook individual home user assessments (where they 'lived' with a meter for up to 2 weeks and provided written feedback).
- 10 focus groups were held in Auckland, Wellington, Christchurch and Dunedin.
- The 29 individual home users were located across New Zealand.
- 56 people with Type 1 diabetes participated, aged 5 to 75 years.
- 33 people with Type 2 diabetes participated, aged 50 to 85 years.

General feedback from Focus Groups

Each focus group session commenced with a brainstorming session where thoughts around *must have, like to have and shouldn't have* features for a meter were discussed by the participants and their thoughts were recorded. The resulting themes from these sessions were fairly consistent across different groups. This process clearly identified that people with Type 1 and people with Type 2 have different requirements of their meters; with people with Type 1 preferring a meter with many advanced features, while people with Type 2 required only simple functionality.

A summary of the main important features identified in these sessions is detailed below:

1. Accuracy of the test.
2. Sufficient temperature range for NZ conditions.
3. The smaller the blood sample the better.
4. Speed of blood test - the faster the better.
5. Able to do ketones.
6. Able to do statistics e.g. averages.
7. Easily downloadable.
8. Backlighting. Port light would be great.
9. Discreet look.
10. Durability.
11. Accessories such as a lancing device that does not feel like a nail gun and decent bag.
12. Easy setting of date and time.
13. Good battery life and secure battery compartment.
14. Groups were split in terms of strip packaging preference with some preferring pottles and others individually foil wrapped strips.
15. Having a choice of meter would be preferable.

Each focus group participant was randomly allocated a shortlisted meter to review either in pairs or individually. The meters were handed to the participant in their boxes with no advice offered on how to start.

Participants were offered the opportunity to do a blood test if they wished using either their own lancing device or a single use lancet provided. Because of the health and safety issues the lancets provided with the individual meters were not able to be used for finger pricking by the participants, but they were inspected.

On average individuals/pairs took 15 – 20 minutes to look at a meter, test its features, and complete their feedback forms. This enabled each participant to review 2 or 3 of the shortlisted meters in each session.

A further discussion was conducted at the end of each focus group session. Main themes from the end of focus group sessions were:

1. Accuracy is critical.
2. Having a choice is important as one size does not fit all.
3. Need to keep up with technology.
4. Accessories – cases need to be robust.
5. Back lighting is important.
6. Instructions need to be simple (and multi-lingual?).

DNZ observed that younger Type 1 participants were much faster and more savvy with the meter reviews and much clearer in terms of the features desired, liked and disliked. Older, Type 2 participants struggled with many of the advanced features and most stated they were features they were unlikely to use.

Individual Home User Assessments

A total of 29 meters were sent to individual consumers for home user feedback. Users were asked to trial the meter received for up to two weeks and return with a completed feedback form.

Nineteen home users had Type 1 diabetes, 9 had Type 2 diabetes and one had glycogen storage disease. Fourteen participants had one or more co-morbidities.

Summary of Meter Feedback – focus groups and home users

CareSens Dual

Meter

The majority of respondents found the instructions to be clear, although one respondent felt that they didn't match what you actually needed to do. One of the home users had attempted to get the Bluetooth function working and commented that the instructions for this were wrong in terms of the steps required. Two respondents also suggested an abbreviated quick start menu would be helpful.

The meter was easy or very easy to use with a clear and easy to read display for the majority of participants, and was generally found to be a good size for adults but potentially very large for a child's hand.

Accessories

The lancing device was not well liked but found to be an improvement on the previous CareSens lancing device that comes with the currently funded meter. The case was too large for some participants while others appreciated the larger size.

General Comments

Participants with Type 1 diabetes particularly liked the Bluetooth functionality and the ability to test ketones on the same meter. The range of functionality on the meter was also liked by participants with Type 1 diabetes who felt they would use many of these features whereas many of the Type 2 participants thought there was too much functionality; they considered that they needed to be able to easily do a blood test and would not use most of the other features. The large meter size was a negative for some participants and a positive for others.

“A not bad multi-purpose meter for Type 1 – only feature missing for general testing is a port light for night time testing.”

Summary of meter rating via feedback forms

CareSens Dual

1. Instructions – helpful

Yes	No	Blank
22	6	0

2. Turning meter on and off – easy?

Very Difficult	Difficult	Blank	Easy	Very Easy
0	1	1	13	13

3. Ease of opening strip packaging

Very Difficult	Difficult	Blank	Easy	Very Easy
1	2	1	15	10

4. Inserting strip in to meter

Very Difficult	Difficult	Blank	Easy	Very Easy
0	2	0	14	12

5. Size/clarity of display – easy to read

Yes	Blank	No
28	0	0

6. Performing a test

Very Difficult	Difficult	Average	Blank	Easy	Very Easy
0	0	0	5	10	13

Summary of Meter Feedback – focus groups and home users

CareSens N Premier

Meter

Participants who looked at this meter found the instructions easy to understand and the quick start sheet very helpful. The meter itself was found to be generally easy to use and read but some respondents commented that, in low light, strip insertion (black strip on black meter) was difficult. It was suggested that a port light may have helped with this. The meter size was found to be good for many but some identified it was potentially too big for smaller hands and children to hold comfortably.

Accessories

As with the CareSens Dual the case was noted to be large, this was a positive for some respondents and unnecessary for others. Some respondents also thought the case would benefit from being padded or firmer to offer more protection to the meter inside. The lancing device was also identified again as not great but “the red dot that showed it was ready” was liked.

General Comments

The backlighting on the screen and the Bluetooth functionality were positively commented on by many respondents, as was the clear screen display and big buttons. Some respondents commented that the meter felt too big and also expressed concern with the brand itself. The meter was thought potentially appropriate for people with type 2 diabetes but not for people with type 1 diabetes due to it not having ketone testing functionality.

“I like this meter – an improvement on the current CareSens N on offer. Bluetooth connectivity to an app is a big plus.”

Summary of meter rating via feedback forms

CareSens N Premier

1. Instructions – helpful

Yes	No	Blank
23	4	0

2. Turning meter on and off – easy?

Very Difficult	Difficult	Blank	Easy	Very Easy
0	1	0	10	16

3. Ease of opening strip packaging

Very Difficult	Difficult	Blank	Easy	Very Easy
0	1	0	16	10

4. Inserting strip in to meter

Very Difficult	Difficult	Blank	Easy	Very Easy
0	0	0	15	12

5. Size/clarity of display – easy to read

Yes	Blank	No
23	0	4

6. Performing a test

Very Difficult	Difficult	Average	Blank	Easy	Very Easy
0	0	0	4	14	9