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**NIGHTSCOUT**  
#WeAreNotWaiting

## ABCs of Nightscout

Confusing, but making life easier for T1Ds,  
Parents, and Carers



*Photo: Abbey Taylor, 8 years old.*



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# A CGMS (Continuous Glucose Monitoring System)

Consists of a sub dermal sensor, a Transmitter, and a Receiver unit. The transmitter continuously measures blood glucose in the interstitial fluid under the skin, and regularly transmits it to the receiver.

Australia has two approved brands of CGM systems

- Dexcom<sup>®</sup>™
- Medtronic™

Nightscout supports both Continuous Glucose Monitoring systems.

**Both companies advise - Never use a CGMS to make therapeutic decisions. Always use a standard Blood Glucose Meter.**



# What is Nightscout

- A way of remote monitoring a T1D's Blood Glucose.
- A way of being alerted if a T1D's Blood Glucose levels are going low or high, so action can be taken.
- A way of empowering both the T1D and those parents and carers to live more normal lives with less stress and worry than they would otherwise.
- A suite of Open Source Projects, freely available software and easily obtainable hardware components, put together by you.



# What Nightscout is NOT!

- A commercial product, with commercial support, and delivered in a nice box when you pay the money.
- An approved Diabetes product.
- **You undertake the construction and use of a Nightscout system at your own risk.**



# So, why would I use Nightscout?

- Convenience.
- Ability to know what is happening with a T1D in your care.  
AND/OR
- Ability to have someone watching over you in case you forget to take care of yourself.
- Access to a large, worldwide, support community.
- Access to rapidly evolving tools to make management of T1D, and even T2D, easier and safer for all.



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# Nightscout – The core

- A Web based application that can be displayed in any web browser on any device.
- It is constantly being improved, and announcements appear on the CGM in the Cloud Facebook page and on local Nightscout Facebook pages when a "Release" or new version is available.
- Deploying a new release is easy and automated.
- It is hosted on a service like Azure or Heroku.
- As long as the data in and out of the service is low enough, it will cost you little to nothing to run.



# Nightscout – The core.

- It uses a Cloud based Database engine called MongoDB.
- You will create your MongoDB using their free sandbox service.
- So, you create a MongoDB and an Azure/Heroku website.
- There are easy to follow steps, and people who will help you along the way.
- You are not alone, and don't need to be technically savvy for this.



# Nightscout – How do I see it?

- In a web browser, like Chrome or IE, from any computer anywhere
- In a web browser on your mobile Smart phone (Android or iPhone or Window Phone) or tablet.
- In a Nightscout App on your smart phone.
- On a smart watch paired with your smart phone.
- On your smart TV.



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# Nightscout – How does the BGL reading get there?

- From a mobile phone connected to a CGM Receiver. (Nightscout Uploader)
- From a Chrome browser on a computer connected to a Dexcom Receiver. (Chromadex)
- From a mobile phone connected to a CC1111 dongle listening to an Enlite transmitter.(MMComander)
- From a mobile phone paired with a Bluetooth Bridge that listens to a Transmitter. (wixel-xDrip/xBridge2, and xDrip app)



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# Where do I start?

- Do you have a CGMS?
- If so, use the data collection method suited to that system.
- If you have a Medtronic 640g Step-by-Step Guide [HERE](#) & FB Support Group [HERE](#)
- If you have Freestyle Libre Step-by-Step Guide [HERE](#) & FB Support Group [HERE](#)
- If you have a Dexcom Step-by-Step Guide [HERE](#) & FB Support Group [HERE](#)



# The ABC's and where do I get help?

[Nightscout Australia](#) is an Australian Facebook group that provides local support for people wanting to set up Nightscout - it is not a replacement for support from the original [CGM in the Cloud group](#) – however this is an additional Global Support group.

Nightscout Australia FB Group can offer help with suggestions for sourcing the components you will need to set up Nightscout eg: mobile phones, mobile data providers, cables etc and some support issues and 24/7 support. If you do not get a response from the Nightscout Australia Group, DANII recommend's you request help in the Global [CGM in the Cloud group](#) as there is usually someone online somewhere in the world who can help.

Nightscout Website [HERE](#) is a great place to start for an overview of Nightscout and instructions on how to setup. You can find Australian specific set up information [HERE](#)

Nightscout FAQ's to answer most common questions and problems available [HERE](#)

How Do You Get Your CGM in the Cloud? The various options for setting up Nightscout (Dexcom receiver connected to uploader phone, xDrip and Medtronic are found [HERE](#)



# The ABC's and where do I get help?

There is a streamlined setup guide which covers the process at a high level [HERE](#)

The Dexcom G4 and G5 are available in Australia, the Dexcom Share is only available in the US.

Nightscout can be added to a G5 to give additional benefits – Details [HERE](#)

For Medtronic 640G set up [HERE](#)

If you need to check the status of the Azure - [HERE](#)

If you need to check the status of Mongolab - [HERE](#)

[DANII Foundation](#) pioneered Nightscout into Australia and supports the Nightscout movement is underpinned by the concept of paying it forward - and there are many ways to do so. If you can help someone please do, spread the word about Nightscout or if you have technical development skills you can contribute to the development efforts.

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