

# Hypoglycaemia presentations – are they slipping through the net?

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## Background

The rate of hospital admissions for people with hypoglycaemia is concerning. Most admitted patients are referred to the Diabetes service however the presentations occurring outside hours or not requiring admission is unknown.

The Diabetes service is available Monday to Friday from 8.00am to 4.00pm. The opportunity to re-educate these unknown presenting patients is currently lost.

## Objective

Audit Hypoglycaemia presentations to Department of Emergency (DEM) to identify enhanced education opportunities.

## Methods

A report from Emergency Department Information System (EDIS) comprising all presentations to the Nambour Hospital, over 18 years, by diagnosis (diagnostic codes related to hypoglycaemia) and other diabetes related problems for 2013 was generated.

Data was cross-referenced with Hospital Based Corporate Information System, PractiX records and electronic health records.

## Findings

There were sixty-five occasions of service (OOS) presenting to DEM with hypoglycaemia during the time period.

One patient over the age of 65 years was admitted three times and another two patients were admitted twice. Of all the total presentations, forty-eight were admitted to either medical or short-stay wards and one was transferred. Twenty four patients were known to the diabetes service.

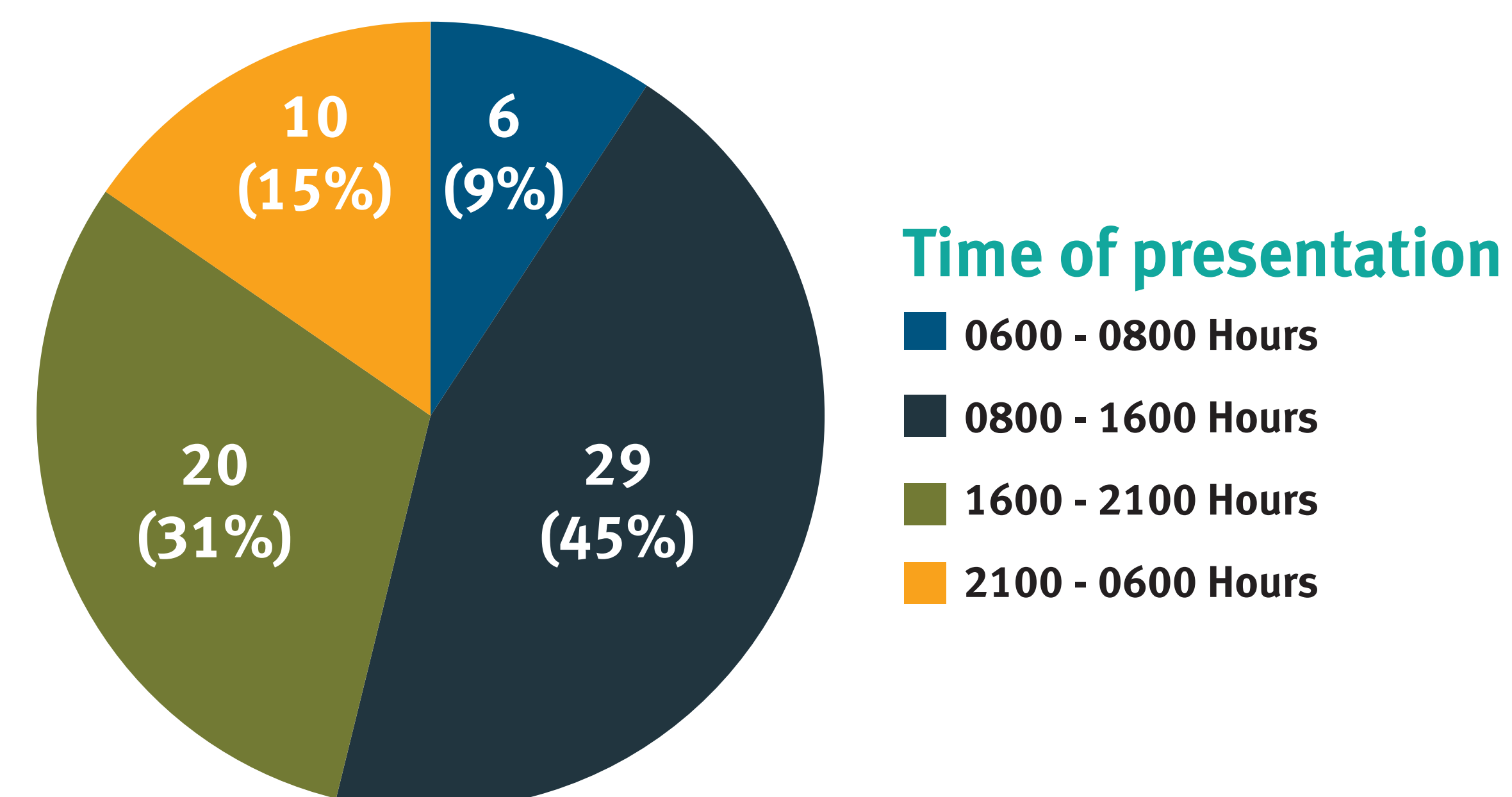
Thirty one were over age 65 years (48%). Thirty - six occurred outside service hours. Twenty presented between 16.00 and 21.00 hours and a further sixteen presented from 21.00 to 08.00 hours.

*'I didn't like the food they were giving me...so I didn't eat it' – had usual insulin but no meal.'*

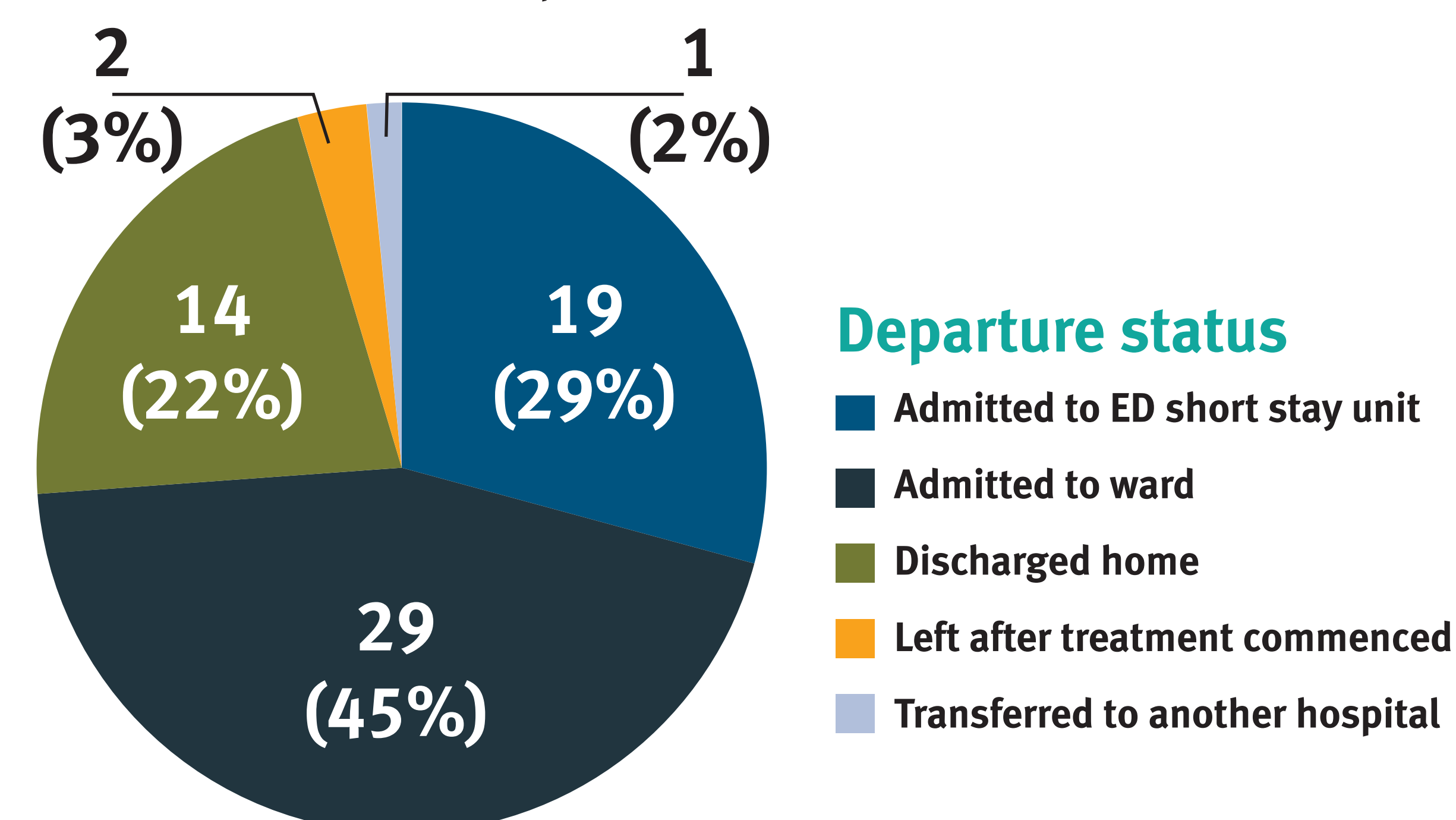
## Population: SCHHS vs QLD

Similar age and health risk factors but:

- Higher % >65 years
- Higher % born in Australia
- Lower % aged between 15 to 24 years
- Lower % Aboriginal and Torres Strait Islander people
- Population growth rate higher than Qld; 2.5 to 3 million tourists per annum.



Patients presented to DEM with hypoglycaemia, 74 % were admitted to the hospital.



Presenting patients known to diabetes service 24 (37%).

*'I've been giving my insulin but my eyes aren't too good so I'm not really sure if it is the exact dose – I thought the most important thing is making sure I have my insulin.'*

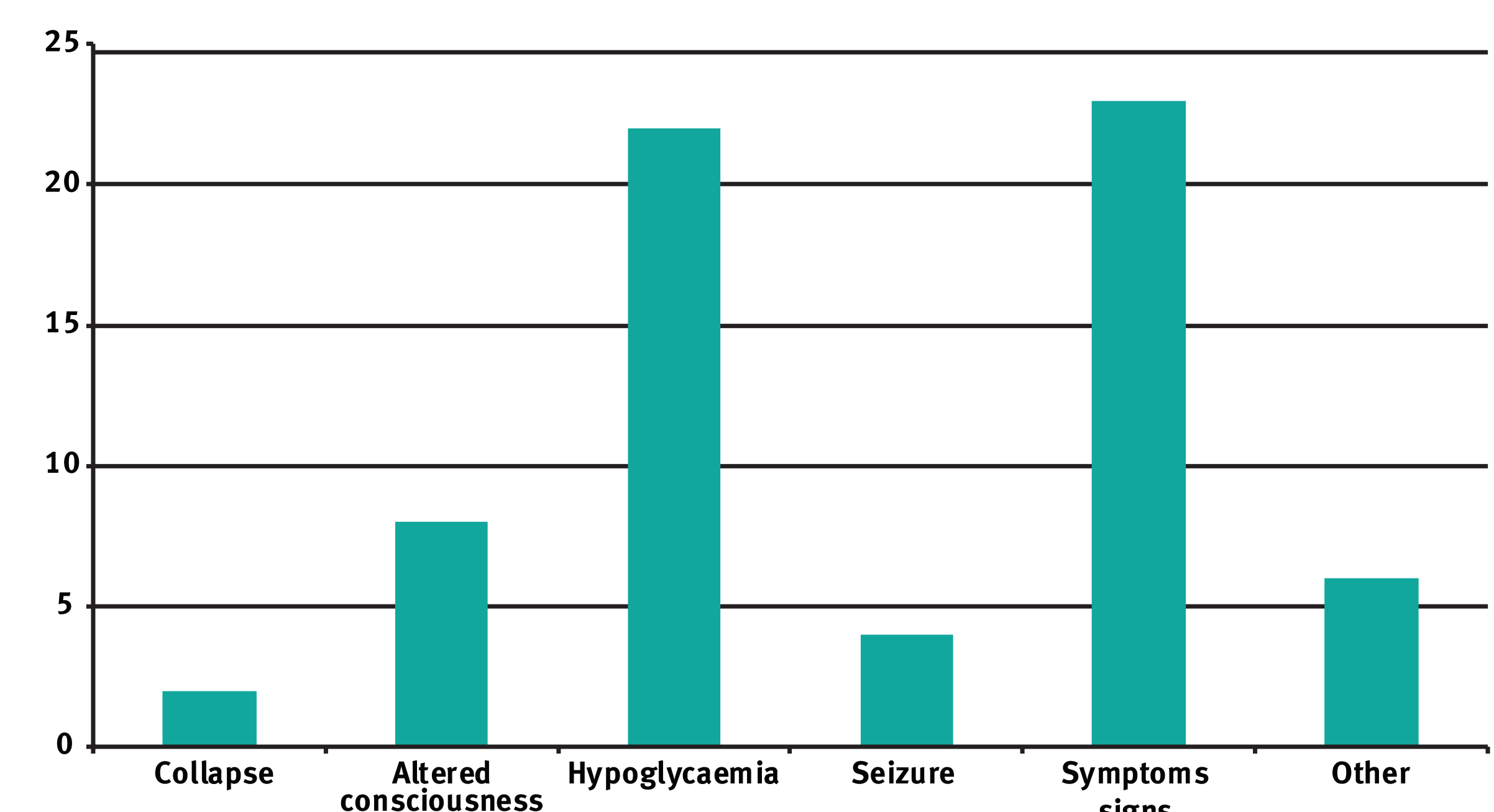
Presentations to DEM	%	No. OOS
Occurrences of service (fitting inclusion criteria)	0.18%	65
No. Patients presenting x 1	95%	61/65
No. Patients presenting x 2	3%	2/65
No. Patients presenting x 3	2%	1/65

Table: Number of presentations/OOS per patient

*'I don't get hypos (lost hypo awareness symptoms) and my GP is really happy with my HbA1c being 6.8% and told me I was doing well.'*

## The implications

1. Offer a CDE service between 16.00 and 21.00 hours
2. Provide an on-call CDE service
3. Implement referral process for CDE to follow-up patients
4. Up-skill DEM nurses to educate patients
5. Trial carers management guide



*'I had my usual insulin, no one told me that I need to ensure I have some carbohydrates with my meal.'*

*'I always have my insulin, go for a walk and then come home and have breakfast'*

## The way forward

Point three and four above are the most cost effective, sustainable way of managing these patients where they can be scheduled an appointment or phone consultation with the CDE. Daily EDIS reports of those over 65 years presenting to DEM with hypoglycaemia are sent to the NUM.

The development of a carers guide stating the individual symptoms signs and treatment of hypoglycaemia is underway. The next step is to meet with DEM personnel to discuss implementation of this proposed pathway.

*'They told me that my kidneys were not working well, but no one told me to reduce my insulin and I hate BGM.'*

*'I don't get shaky anymore so it must be good for me to run my BGL at 2.5 - 5 mmols' – hypo unawareness.'*

*'I had my insulin and then went for a shower before breakfast.'*



My carers guide to my diabetes management