



Audit of Meal Times and Diabetic Therapies Mismatch in Central Manchester Foundation Trust

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Do patients with diabetes in hospital receive appropriate timings of food and diabetic medication?



Aims

- To investigate the extent of meal time insulin and oral hyperglycaemic agents (OHA) mismatch in hospital
- To establish the effect of any mismatch on glycaemic control
- To assess the current knowledge base of nursing staff who administer diabetes therapies to in-patients

Methods

- Single day (August 2010) prospective audit in 27 wards of MRI

Demographics:

- 113 (18%) patients with diabetes.
 - Males 63% – Median age= 71 – Type 2 (92%)
- 62 patients included. 51 patients excluded.
- Patients were asked whether diabetic therapies coincided with last 6 meals in hospital.
- Medical records and capillary blood glucose charts reviewed for effects pertaining to mismatch.
- 73 nurses responded to questionnaire.

Results

Figure 1:
In hospital 78% of diabetic therapies are administered by nursing staff.

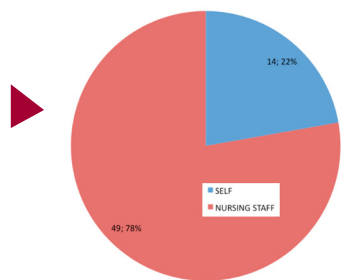
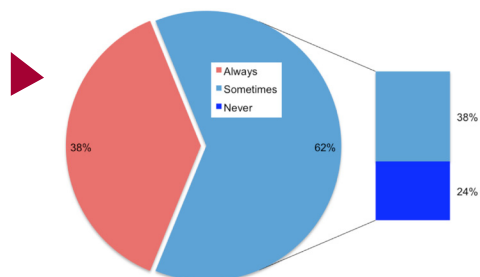


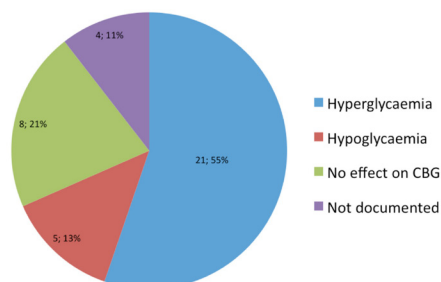
Figure 2:
62% of diabetic inpatients had meal-insulin mismatch. 24% of diabetic inpatients never received their diabetic therapies with their meals.



For audit purposes:

hyperglycaemia CBG >9mmol/l
hypoglycaemia CBG <4mmol/l

Figure 3: CBG profile post mismatch. 55% of patients experienced hyperglycaemia 13% of patients experienced hypoglycaemia.



Nursing Questionnaire

Figure 4: Nursing Knowledge of the diabetes therapies that should be given with meals

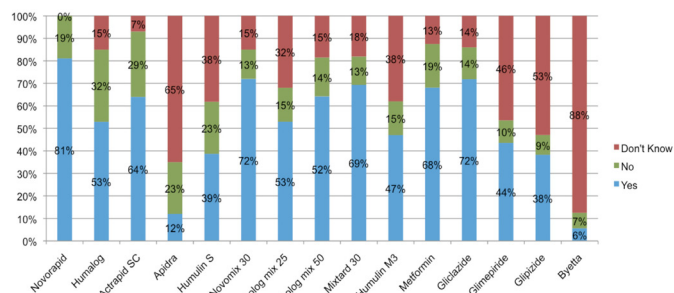
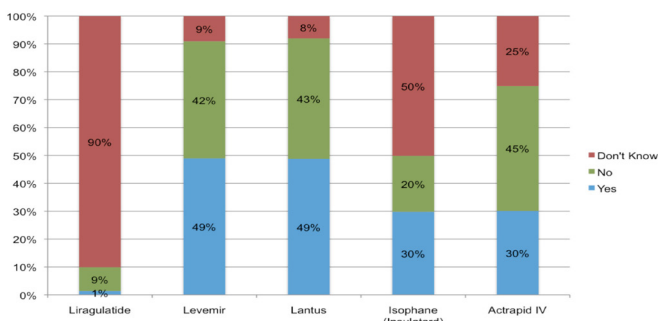


Figure 5: Nursing Knowledge of the diabetes therapies that do not need to correspond with meals



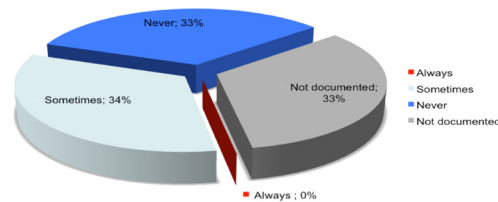
Intervention

- Pilot "Purple Diamond" wall chart in 2 wards
- DSN Education series
- Trust wide re-audit in 6 months



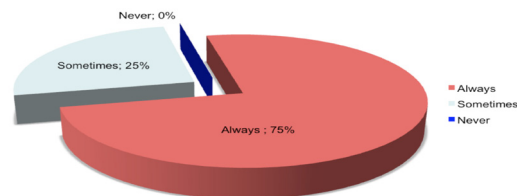
Pilot Wards

- Before Purple Diamond: 0% of patients received diabetic therapies with meals



RE AUDIT - Much Better!

- After Purple Diamond: 75% of patients received diabetic therapies with meals



References

- Department of Health: National Services Framework for Diabetes. Care of people with diabetes during admission to hospital. Available from: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH_4903302 (accessed 20 Sept 2010)
- Nursing and Midwifery Council. Standards for medicines management. Available from: <http://www.nmc-uk.org/Documents/Standards/nmcStandardsForMedicinesManagementBooklet.pdf> (accessed 24 Sept 2010)

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