

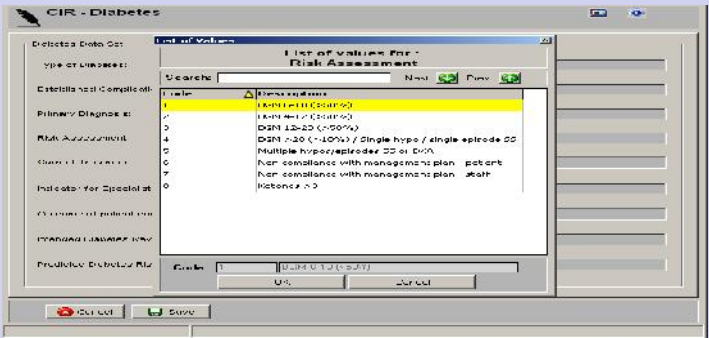
# A pilot project in the use of inpatient diabetes risk scoring tool

## Introduction

There is a 20% prevalence of diabetes in hospital patients.(1)  
 Patients with diabetes have longer in patient stays, due to increased co-morbidities, erratic glycaemic control and variability in management of diabetes by non specialist teams (2).  
 An inpatient diabetes risk scoring system was piloted at University Hospital Wales (UHW) to assess patients who are at increased risk of adverse glycaemic events related to their diabetes.  
 The online risk tool was designed to be universally available within the hospital intranet system and accessible on every ward.

It has the benefit of allowing diabetes specialists to communicate in-patient diabetes interventions using a paper free system.  
 The aim of the pilot study was to identify patients experiencing hyper and hypoglycaemia and providing intervention to prevent further glycaemic related complications and develop an in-patient electronic diabetes database.

## 1) The diabetes risk scoring tool

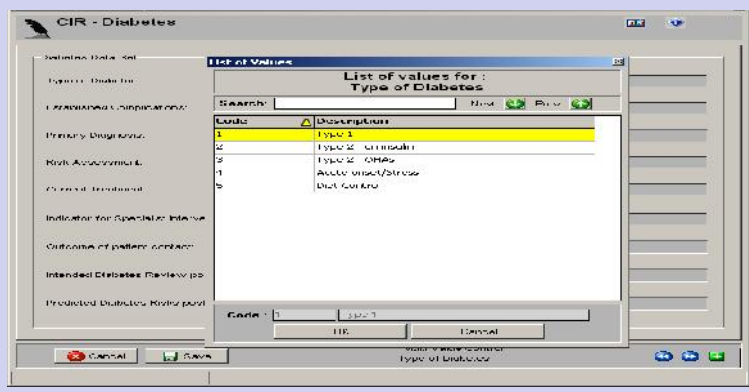


The in-patient diabetes team attended medical and surgical wards in UHW.  
 Information such as the type of diabetes and duration of the condition and associated complications were input into the online risk tool (fig 2,3,4).  
 Based on the individuals' glycaemic control, a score was appointed depending on whether they experienced glycaemic complications as an in-patient including- diabetic ketoacidosis, hypoglycaemia or hyperglycaemia (fig 1).

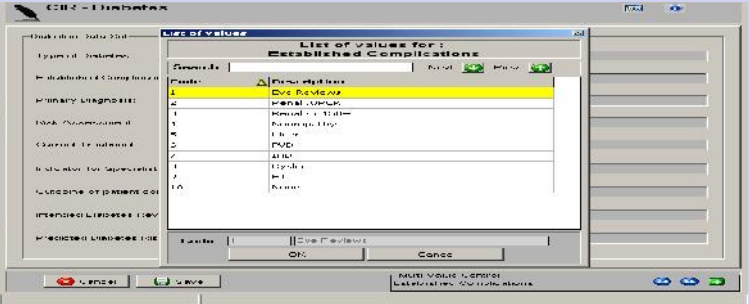
## Findings

- In a cross section of 38 patients:
  - 94% had Type 2 diabetes mellitus.
  - 30% were surgical inpatients.
  - The duration of diabetes ranged from 1-33 years.
  - 74% had either microvascular or macrovascular complications.
  - 37% of the patients had poor glycaemic control as identified by a risk score of 3 or above and required intervention which ranged from insulin dose adjustment to stopping oral hypoglycaemic medication.

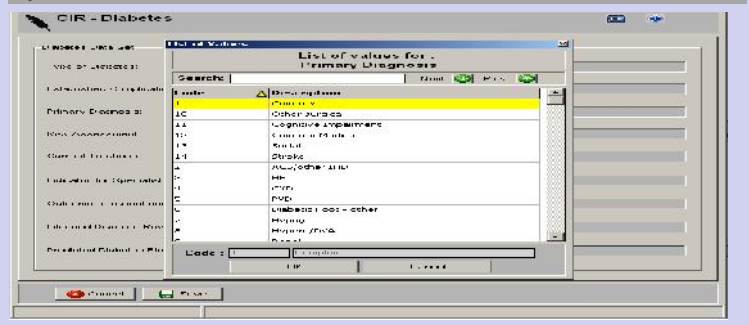
## 2) Snapshots of the risk tool



## 3)



## 4)



## Conclusion

- This pilot project demonstrates the utility of a web based tool accessible on the hospital intranet for the risk assessment of in-patients with diabetes.
- The data collected from this study, in addition to real world experience will be utilised to guide future in-patient service evolution and develop a closed loop referral and risk assessment system when combined with bedside glucose testing data.

## References

1)National inpatient diabetes audit; Diabetes UK 2013  
 2)Admissions avoidance and diabetes:guidance for clinical comissioning groups and clinical teams; ABCD 2013