

# Inpatient diabetes – easy-to-emulate IT solution to support and enhance the ‘Think Glucose’ project

Bob Ryder<sup>1</sup>, Wyn Burbridge<sup>2</sup>, Lynne Braycotton<sup>2</sup>, Bobby Ryder<sup>3</sup>, Melissa Cull<sup>3</sup>, Pete Davies<sup>1</sup>, Parijat De<sup>1</sup>, Ansu Basu<sup>1</sup> and Brian Lee<sup>1</sup>

<sup>1</sup>Consultant diabetologist; <sup>2</sup>Diabetes inpatient specialist nurse; <sup>3</sup>‘Think Glucose’ administrator.  
Department of Diabetes, Sandwell and West Birmingham Hospitals NHS Trust, Birmingham, UK.

## Background

- ‘Think Glucose’ is a national initiative led by the NHS Institute for Innovation and Improvement. It aims to improve inpatient diabetes care including effective use of the inpatient diabetes specialist team (IPDST). The national initiative developed a comprehensive ‘traffic light’ system to give guidance to medical and nursing staff as to which patients should be referred to IPDST. The traffic lights include 31 types of cases – 16 types of ‘always-refer’ cases (red), 8 types of ‘sometimes-refer’ cases (amber) and 7 types of ‘rarely-refer’ cases (green) (Figure 1). It is difficult for busy clinical staff to keep all these possibilities in their heads, and even with reminder cards, leaflets and posters, staff do not have these readily at hand when needed. Previously, referral to IPDST required phone, fax or internal mail, with their built-in delays and patients being missed.

Figure 1. The ‘Think Glucose’ traffic light system

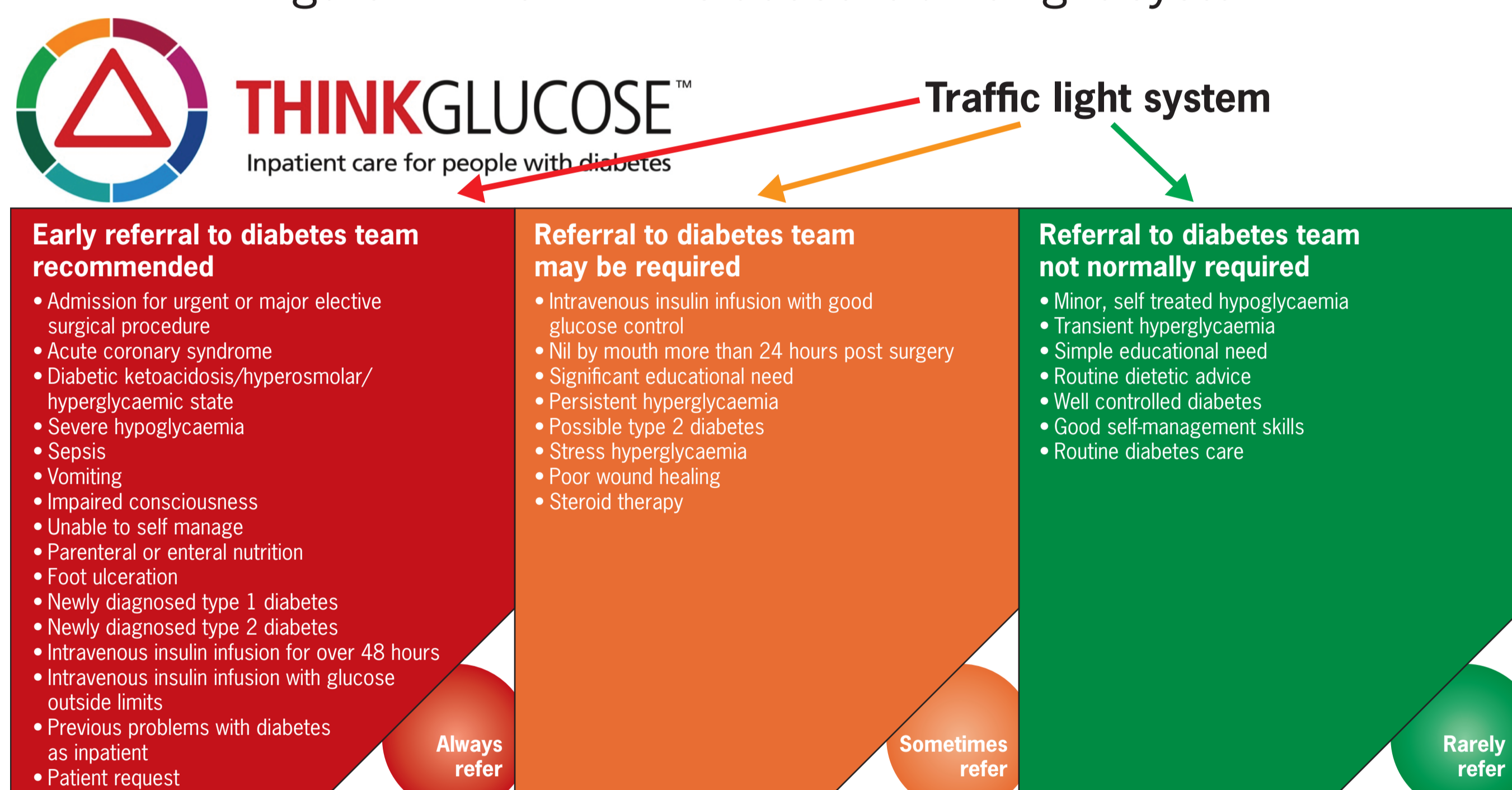
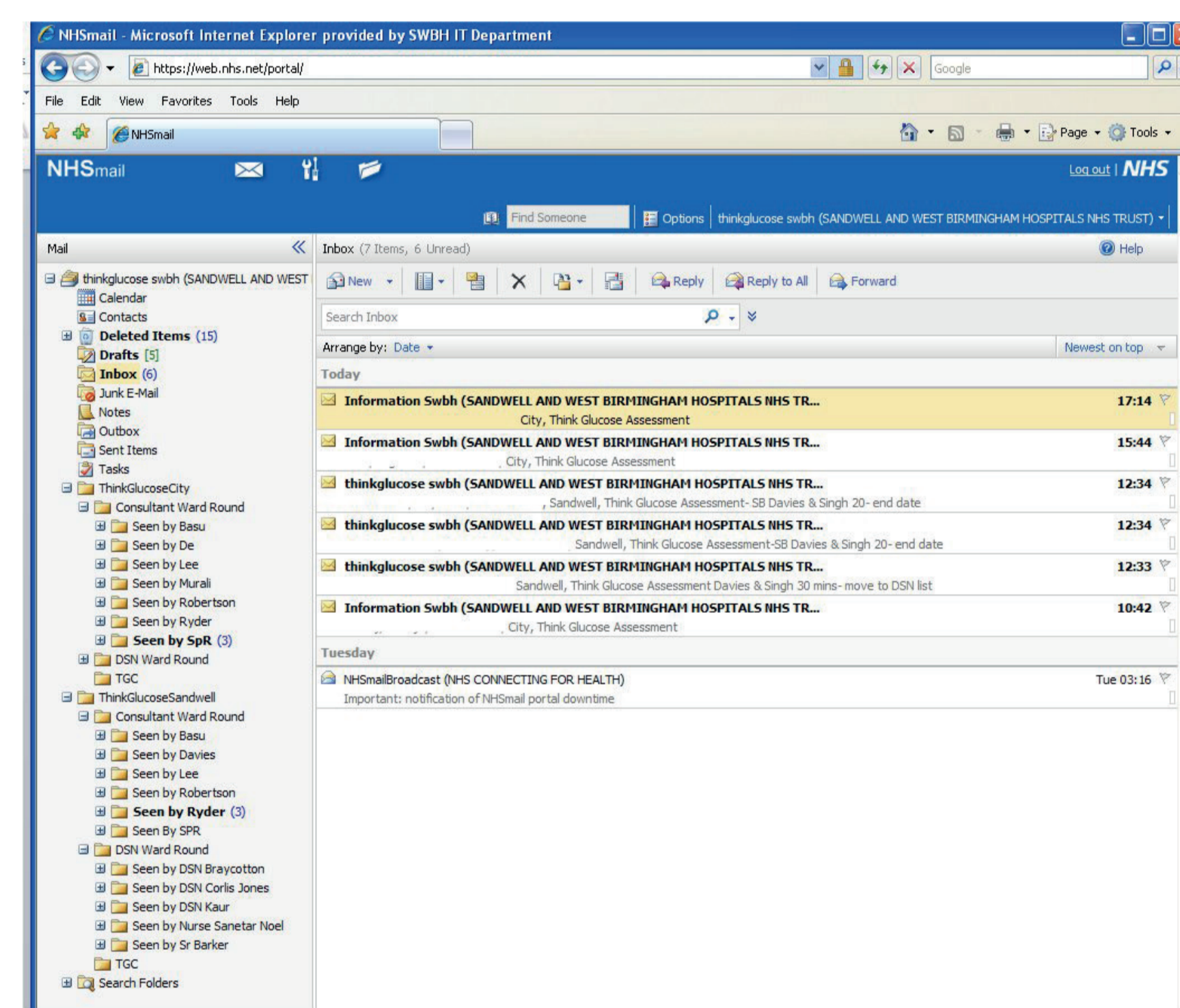


Figure 3. Section on the form for safety data

CONNECT, Trust's internal website; DKA, diabetic ketoacidosis; SU, sulphonylurea

Figure 4. The ‘Think Glucose’ NHS mailbox



## Results

- Over the year following implementation, the number of patients seen by the IPDST increased from 83/month to 452/month, whilst at the same time ensuring that the patients seen are only those requiring it according to the national traffic light criteria.

Figure 5. ‘Think Glucose’ activity data month by month

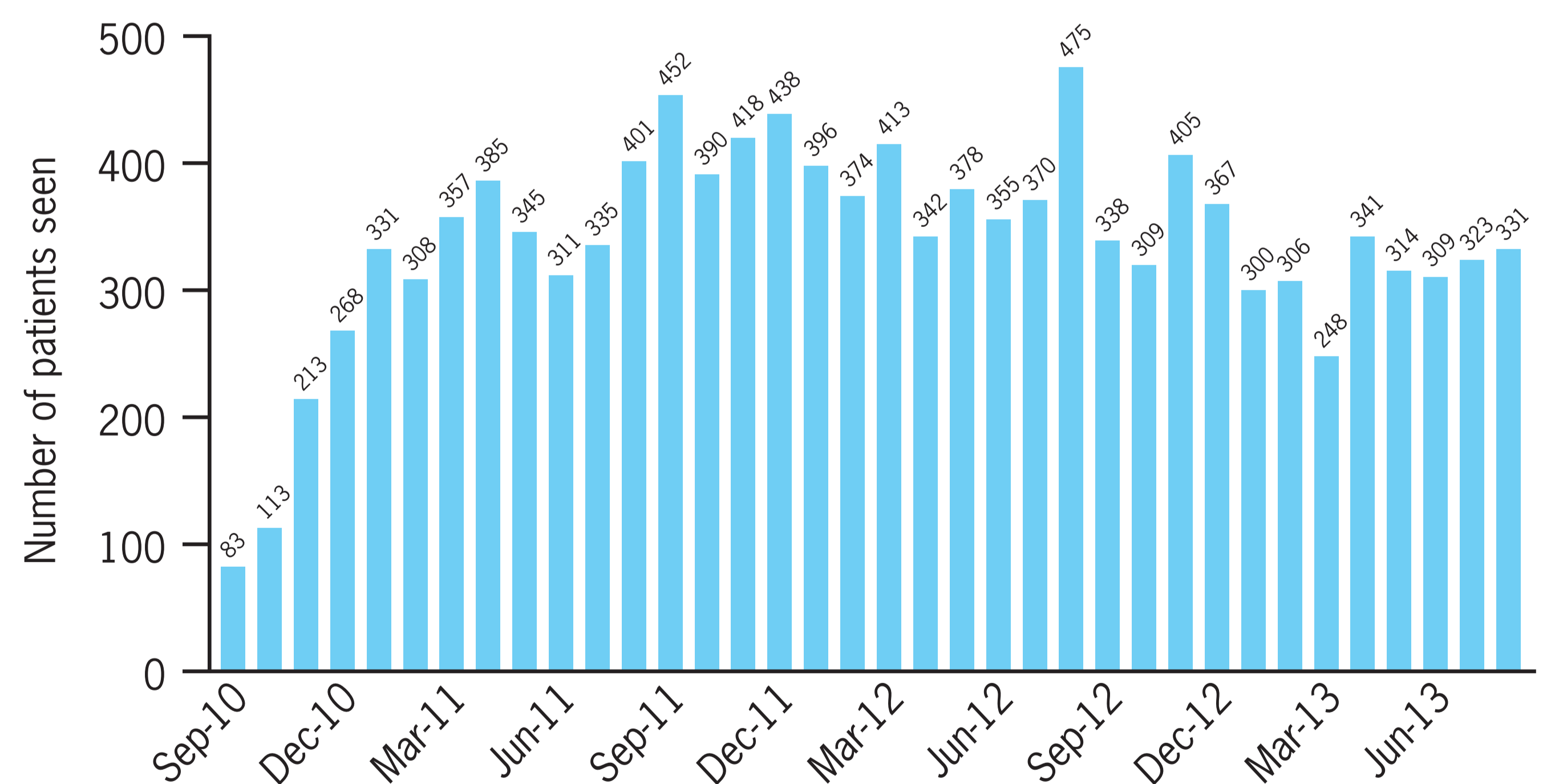
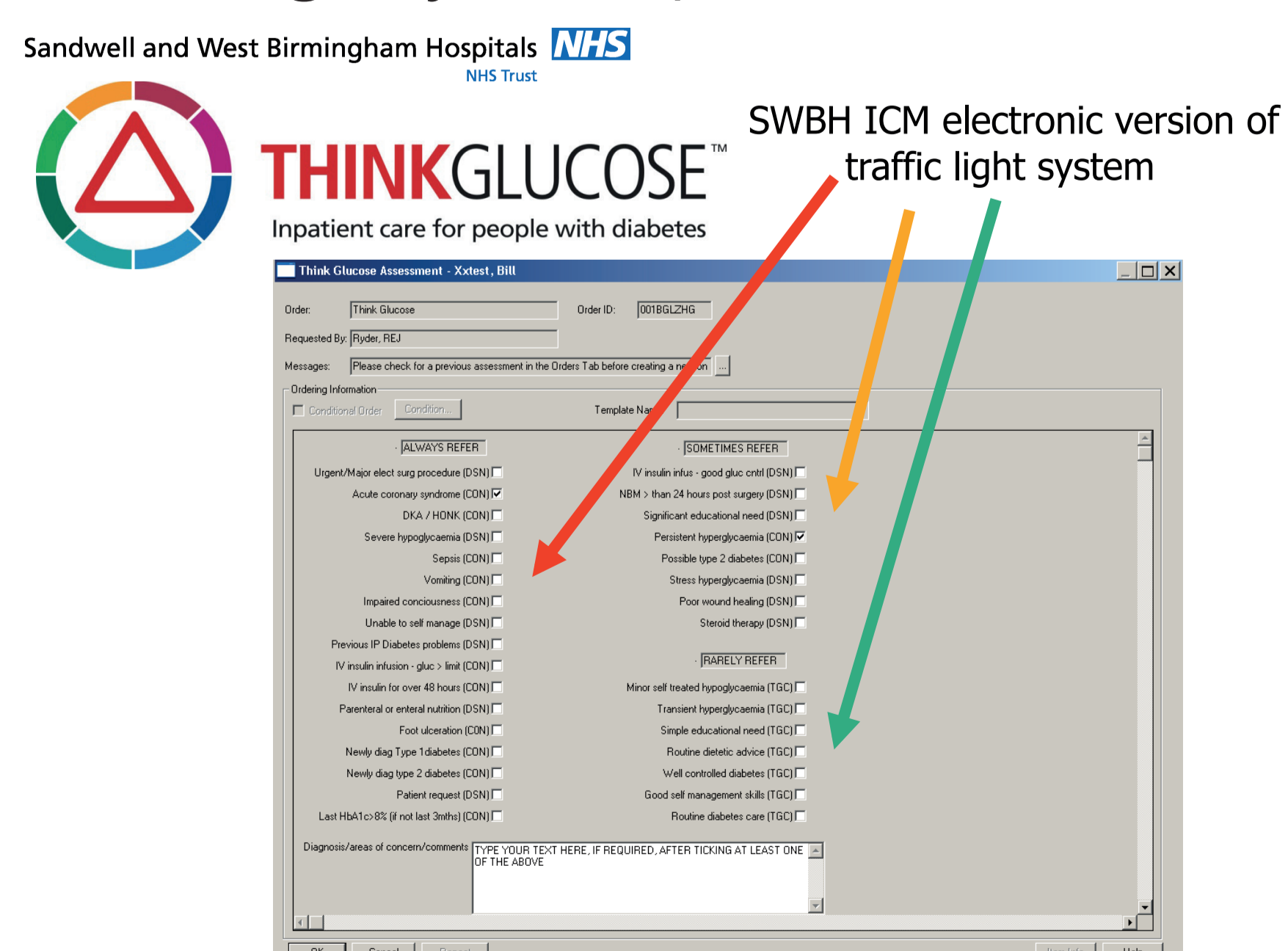


Figure 2. The traffic light system reproduced as an iCM electronic form



CON, consultant; DKA, diabetic ketoacidosis; DSN, diabetes inpatient specialist nurse; HONK, hyperglycaemic hyperosmolar non-ketotic syndrome; NBM, nil by mouth; SWBH ICM, Sandwell and West Birmingham Hospitals iSoft Clinical Manager; TGC, Think Glucose Champion (ward nurse with extra training in diabetes)

## Conclusion

- All hospitals with electronic test ordering systems could easily emulate our system.

## Acknowledgement

This innovation was a joint project with the Sandwell and West Birmingham Hospitals NHS Trust IT department. From the IT department we are grateful in particular to Andy Page, Alison Whitehall, Neil Isham, Bill Aldridge, Rob Jones, Mohammed Latif, David Kiffin, Michael Collins, Matthew Maguire, John Borland and Sue Wilson. The authors take full responsibility for the content of this poster. Printing of this poster has been supported by Novo Nordisk.



Where  
**EVERYONE**  
Matters