



THINKGLUCOSE™

Inpatient care for people with diabetes
at Russells Hall Hospital
(The Dudley Group NHS Foundation Trust)

Three steps to success

The ThinkGlucose team at Russells Hall Hospital developed a three-stage campaign approach which has resulted in a new and effective organisational culture towards the treatment of patients with diabetes.

Stage 1: Campaign awareness

Back in July 2010 Consultant Dr Haroon Siddique was not short of innovative ideas to create a buzz around ThinkGlucose: "We took an upstream, downstream, multi-centric approach", he explains. This included a 'ThinkGlucose is coming!' message sent out with staff payslips, articles about the campaign posted on the staff website and published in patient, staff and GP magazines, and a lot of 'spreading the word' from Dr Siddique and his colleagues. These activities culminated in the ThinkGlucose Launch Day: "We had balloons, banners, posters, everything at the front at the hospital, and we distributed our leaflets to patients, staff, everyone, saying that we are here across the trust and we are here to help," Dr Siddique says.

Stage 2: Comprehensive education programme

Dr Siddique explains their strategy: "We made a list of all the frontline staff covering the hospital who were caring for patients with diabetes, irrespective of whatever ward they were on, and we took education to them rather than asking them to come to us." Ann Stroyde, Lead Nurse for ThinkGlucose is very pleased with the outcomes: "I think that the result

of the educational sessions is that the staff have really been empowered to treat their diabetes patients in a better way. They have more knowledge now around diabetes, so they are able to treat hypoglycaemia events better and they know more about insulin and when insulin should be given."



Dr Haroon Siddique

Stage 3: Embedding the learning

Sustainable change is challenging, but the team at Dudley have employed a number of effective strategies to help embed the ThinkGlucose learning.

- They have developed a trigger mechanism within their admissions process, so that whatever primary diagnosis a patient has, their diabetes will be identified at the outset.
- The diabetes team has a strong ward presence, with 'front-door' nurses available six days out of seven, a consultant doing two diabetes-orientated rounds every week and dietitian and podiatry support.
- There is a rolling education programme so that new and existing staff can keep up with the latest developments in caring for patients with diabetes.
- They have updated a number of relevant hospital protocols and guidelines to ensure changes and learning around identification and treatment of patients with diabetes are sustained.

Board Support + ThinkGlucose = winning combination

When a team from Dudley Group of Hospitals NHS Foundation Trust attended a regional launch of ThinkGlucose back in 2009, they realised the campaign was the catalyst needed to help shape the future care of patients with diabetes in their trust.

Dr Jane Dale, Consultant Endocrinologist explains: "The ThinkGlucose project was the inspiration for a complete service redesign of the diabetes and endocrine team to focus on the care of all in-patients with diabetes."

Andrew Ball, Endocrine Lead Nurse with Consultants Dr Haroon Siddique and Dr Dale drew up a business case which they took to the board. Chief Executive Paula Clark says: "We felt it was very important to get board support for ThinkGlucose because of the fact that it touches every area of the trust." Andrew was delighted to have their backing: "Board level support has been key to taking the ThinkGlucose campaign forward. In the current economic climate to

get any new post is very difficult but the board were immediately happy for us to embark on ThinkGlucose and gave us all the necessary resources available, along with a little bit of financial help as well. They have been very supportive all the way through and are always keen to find out how we are doing."

Board level support from the outset meant that the ThinkGlucose team could draw upon the valuable resources of the transformation, IT, communications and pharmacy departments, all essential to get their campaign off the ground.

The hard work and dedication of the ThinkGlucose team and diabetes staff at the hospital, combined with trust support, has created impressive and measurable success in the care of patients with diabetes, as Chief Executive Paula Clark confirms: "What we have noticed as a board and what we have seen from the reports is that we have reduced length of stay and prescribing errors. We have improved patient experience and the figures speak for themselves. We reckon the contribution of ThinkGlucose has been around £800,000 so far, so it has made a considerable contribution towards our cost improvement and efficiency programme."

Andrew (third from right) with the diabetes team



Andrew Ball

"Board level support has been key to taking the ThinkGlucose campaign forward."



Getting the measure of ThinkGlucose

The group from Russells Hall Hospital who had attended the regional launch of ThinkGlucose in 2009 knew that the campaign would be excellent for their hospital, but needed some hard evidence to back them up. This was soon provided by the National In-patient Audit carried out at the hospital – ThinkGlucose Lead Nurse Ann Stroyde explains: “The audit showed us that there were gaps in nurses’ knowledge and in the care of our patients, for example, hypoglycaemia was not getting treated as it should have been. There were errors around insulin and also the patients who came in with diabetes would stay in longer than the patients who did not have diabetes even if they came in for the same reason.”

From the beginning Dr Haroon Siddique, Lead Consultant for ThinkGlucose at the hospital, has been heavily involved in making sure the campaign team, staff and the trust have reliable data on which to evaluate progress and improvements. Working with Graham Yapp from the trust’s IT department, they worked hard to initially establish baseline figures, and then measure the campaign’s impact on the care of patients with diabetes.

He explains: “Before setting up ThinkGlucose, we conducted a number of local audits including insulin drug errors, inappropriate hypoglycaemia management, inappropriate referral to our diabetes specialist nurses and our hospital prevalence for in-patients with diabetes, (whether it be primary or secondary cause for their admission), and we had these baseline figures to work with. We know we weren’t up to the mark to begin with, hence when ThinkGlucose was introduced we worked towards addressing those measures.”

Dr Jane Dale, Consultant Endocrinologist, continues: “Supported by our IT department, we tracked average length of stay during the two years, and showed a sustained reduction of 0.5 days amongst patients with diabetes, but no change for those without diabetes.”



*Ann Stroyde,
ThinkGlucose Lead Nurse*

“The audit showed us that there were gaps in nurses’ knowledge...”

She goes on: “Measuring other patient outcomes has been more challenging, but audits of prescribing, hypo management and reduction in HbA1c have all shown significant and sustained improvements. This is confirmed by an improvement in outcomes from the National Diabetes In-patient Audit.”

The figures speak for themselves; over the past 18 months alone, reductions in the length of stay has meant efficiency savings for the trust of around £800,000, and inappropriate referrals, which were running at 24% prior to the implementation of ThinkGlucose, have now dropped to 13%.

Measurement of patient satisfaction in the audit is also showing positive trends, as Andrew Ball, Lead Endocrine Nurse explains: “There is a section on the form where we ask the patients, ‘What do you think of the staff looking after you and their knowledge of diabetes?’, and I cannot think of a case where the patients have not been satisfied.”

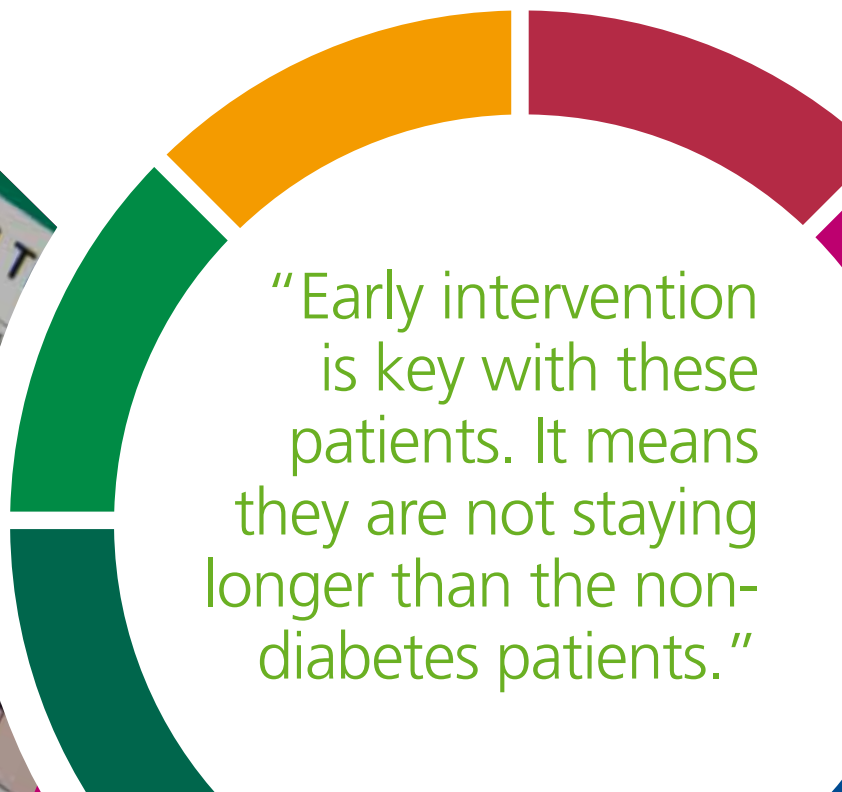
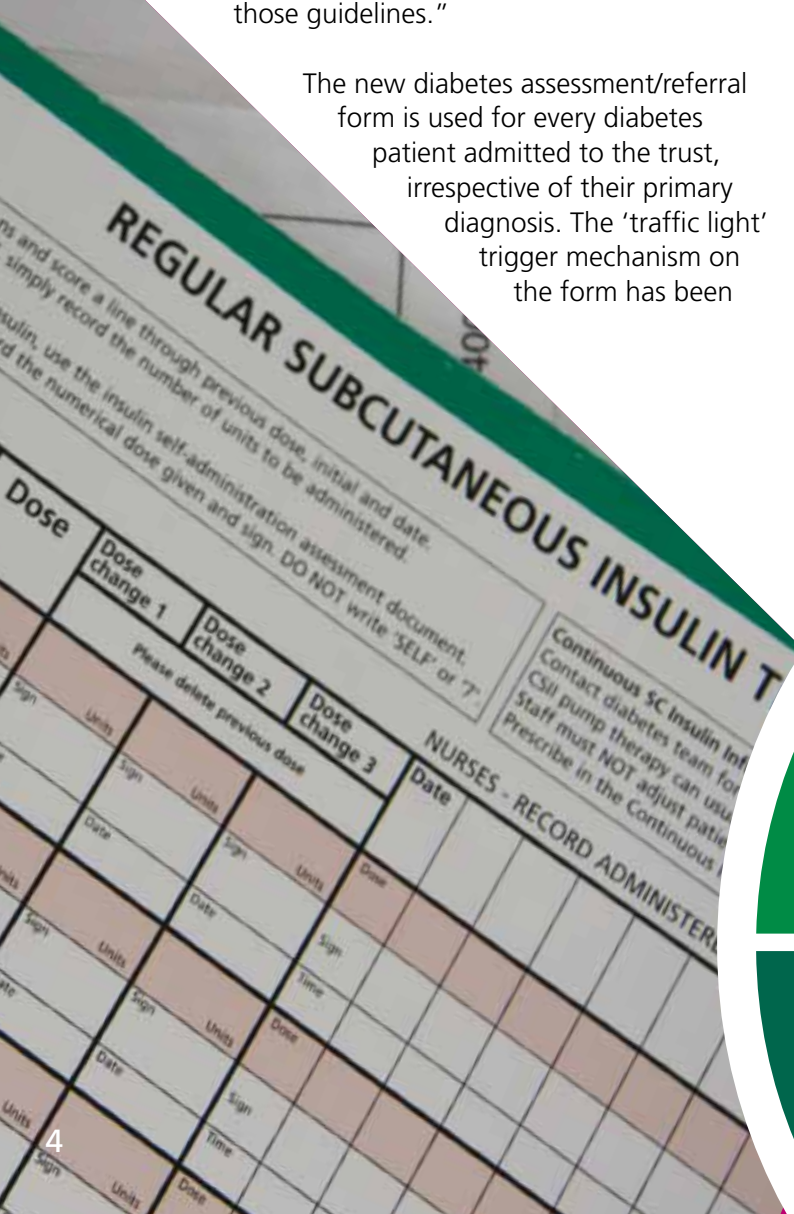
Guidelines show the way

New and updated guidelines and protocols have played a major role in ThinkGlucose's implementation success at Russells Hall Hospital. Dr Jane Dale, Consultant Endocrinologist explains: "Redesigning protocols to support latest guidance and safe practice has been a key area of focus. These colour-coded charts prompt staff to take action when readings are outside target range and include baseline assessment and referral guidance as well as DKA protocols, hypo guidance, HONK guidance and a safer insulin prescription chart." Dr Haroon Siddique, Lead ThinkGlucose Consultant, adds: "I think it was timely that a lot of national guidelines for diabetes were introduced around the same time [as ThinkGlucose] and I was very quick to adopt those guidelines."

The new diabetes assessment/referral form is used for every diabetes patient admitted to the trust, irrespective of their primary diagnosis. The 'traffic light' trigger mechanism on the form has been

particularly effective in helping staff to identify the patients who require referral to the diabetes specialist nurses or the diabetes outreach team. Their quick identification means they will be referred automatically where appropriate and may even avoid being admitted to the hospital. Ann Stroyde, ThinkGlucose Lead Nurse says: "Early intervention is key with these patients. It means they are not staying longer than the non-diabetes patients."

The hospital's pharmacists have been very involved in spreading the learning around these re-designs. Dr Siddique explains: "We have fantastic pharmacy support in Dudley Hospital. We have a dedicated ThinkGlucose pharmacist, who was involved in introducing protocols such as the variable rate insulin chart, fixed rate insulin chart, hypoglycaemia chart, new drug charts and so on. It would be impossible to take the information to the most junior doctors without the support of the pharmacist. It is them who identified errors, rectified and educated the junior doctors to use the right form for the right patient for the right condition."



"Early intervention is key with these patients. It means they are not staying longer than the non-diabetes patients."



Ward presence makes the difference

It was obvious to the team championing ThinkGlucose that some extra 'people power' was going to be needed if the campaign was to succeed. They built this request into their business case and were delighted when the board agreed to employing both a nurse – Ann Stroyde, and consultant, Dr Haroon Siddique, to take ThinkGlucose forward.

With the extra staff support in place, the ThinkGlucose team was able to improve the services which impacted on patients with diabetes. Ann Stroyde explains: "The in-patient service has been re-developed to now include consultant backing as well. So not only do we have a six days a week diabetes specialist nurse service [previously it was a five-day service], but we also have two rounds a week where the consultant will go around with the diabetes outreach team and we also have podiatry and dietitian support as well. So it is a real multi-disciplinary team."

Kate Crowley, Diabetes Specialist Nurse and member of the Diabetes Outreach Team (DOT for short) explains how this extra cover has changed the patient experience: "If you have got patients coming in newly diagnosed with diabetes, before the system was in place, they would be admitted, and then by the time they saw a consultant, they could be in hospital three to five days before they had the education. Because we work a six-day service, I have been here on a Saturday, seen a person with newly diagnosed type 1 diabetes, who is symptomatic, but not ill enough to be admitted, but you give them the tools, you give them the education, you give them the support, you can get them on insulin and they are quite safe to go home. So, we have prevented an admission and that is quite common, we see a lot of people with type 1 diabetes who do not need to be admitted, and through prompt education and support, they have been discharged the same day."



*Kate Crowley,
Diabetes Outreach Team*

"In our trust, we see the patient well before a complication sets in, resulting in addressing their problems at a very early stage and hence reducing the length of stay."

Andrew Ball, Senior Charge Nurse and Endocrine Lead Nurse, shares a personal view on diabetes as a condition and the impact of ThinkGlucose

“The difference ThinkGlucose has made to me is that it has put diabetes to the forefront of healthcare. When I interviewed for the role of diabetes nurse specialist a couple of years ago, the title of the presentation I wanted to do for them was ‘Diabetes is the Condition of Our Time’ – to me, diabetes **is** the condition of our time, and we have got to move with the times and address the problems that society is facing, in particular with the increasing numbers of people with Type 2 diabetes.

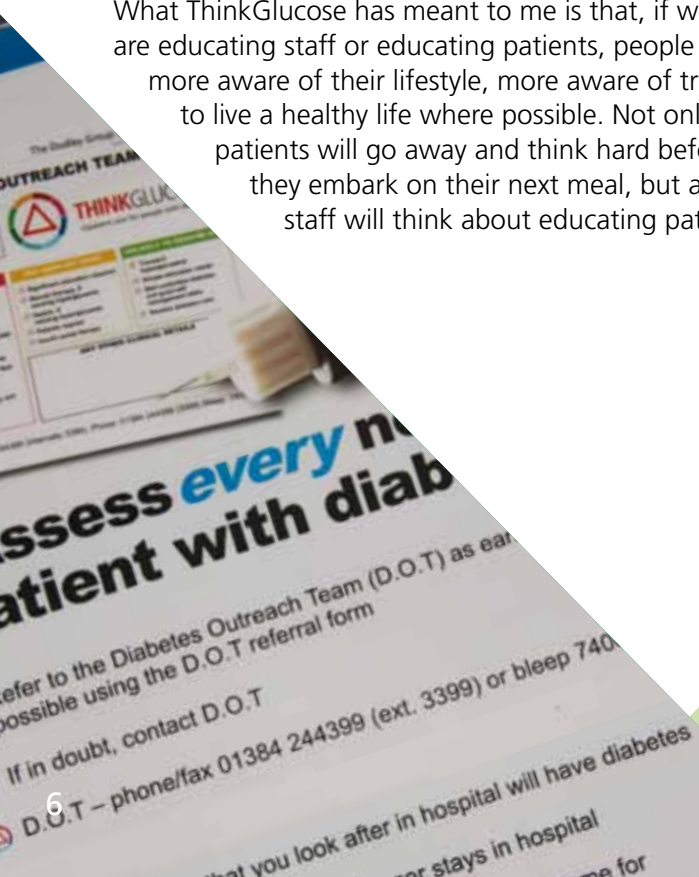
“People’s lifestyle and the ready-made foods that are available are leading to an increase in Type 2 diabetes. What ThinkGlucose has meant to me is that, if we are educating staff or educating patients, people are more aware of their lifestyle, more aware of trying to live a healthy life where possible. Not only the patients will go away and think hard before they embark on their next meal, but also staff will think about educating patients



*Andrew Ball,
Senior Charge Nurse and
Endocrine Lead Nurse*

“I think in the last couple of years, we have made significant progress.”

on maintaining a healthy weight, living a healthy lifestyle. The ThinkGlucose campaign has added to that and made people more aware of it. Obviously, with the limited resources available in the trust, there is a limit to what we can do, but I think in the last couple of years, we have made significant progress and as the manager, I am very pleased with what we are doing.”





Education, Education, Education!

Having successfully raised the awareness of ThinkGlucose right across the trust through their proactive communications strategy, the campaign team didn't want to slow down to tackling one ward at a time with the changes. So they designed a tailored education programme and then rolled it out across the hospital over an intensive three-month period. Andrew Ball, Endocrine Lead Nurse, sums up the aspirations for the ThinkGlucose education programme: "Our aim was to empower all of the nurses on the wards and to educate the staff to improve diabetes care for patients."

Dr Haroon Siddique, ThinkGlucose Lead Consultant explains their ambitious approach: "We took a list of all the frontline staff covering the hospital who were caring for patients with diabetes irrespective of whatever ward they were on, and took education to them rather than asking them to come to us."

Ann Stroyde, Nurse Lead for the campaign goes on: "The programme of daily visits to the wards involved a 30-minute education package – we even had some night sessions as well where we went in between the hours of 1am and 5am and did a rolling package, probably five to six sessions in that time, and they were very well-attended."

Hospital wards are inherently busy so the training had to be flexible: "In order to catch everybody on the ward, we decided to allocate three dates per ward whereby one of us would go along and deliver a session to that particular group of people, including the night staff. We let the lead nurse of each ward know in advance so that she could try and allocate staff to attend that particular session," says Andrew.

They have now scaled back the training to weekly education sessions, and nurses come from all over the hospital to attend and update their knowledge around diabetes.

It is clear from subsequent audits that the ThinkGlucose education programme has been extremely effective. Ann Stroyde explains: "I think that the result of the educational sessions is that the staff have really been empowered to treat their diabetes patients in a better way. The re-audits that we have done show that the nurses' knowledge of diabetes has improved greatly. Now hypoglycaemia is getting treated correctly more of the time, there are fewer insulin errors and omissions, and the length of stay of our diabetes patients has reduced."

Andrew adds: "A couple of years ago, the incidences of diabetes and insulin errors was significant. Now, we are finding that they are less significant because where people are unsure, they come back to us and ask us what to do rather than blindly go forward."

Dr Jane Dale, Consultant Endocrinologist sums up: "It has been hard work but we feel that the "whole trust" approach we took, whilst challenging, delivered robust improvements in patient care that are still sustained two years later and I would recommend this approach. We have lots more to do, and continue to want to improve outcomes for our patients."



Award winners

Since the introduction of ThinkGlucose at their trust, Dr Haroon Siddique and his team have a number of awards under their belts.

Dr Siddique proudly recalls: “The first award that we won was a trust award for ‘Business Excellence’ in November 2011. Since then, we received the national award for ‘Best Emergency/Inpatient Care Initiative in Diabetes’ awarded by the Director of Diabetes UK as a part of Quality in Care Programme, and we were also finalists for ‘NHS Team of the Year’ at the same ceremony. We also won a Finalist award for ‘Improving Services in Training & Development’ from the Lean Healthcare Academy in 2012.”

It is gratifying that the work Dr Siddique, his team and all the staff at the Dudley Group of Hospitals NHS Foundation Trust have put into ThinkGlucose is clearly being recognised at both a local and national level.



Dr Haroon Siddique and Ann Stroyde



ThinkGlucose – the next steps

Paula Clark, Chief Executive at the Dudley Group of Hospitals NHS Foundation Trust along with ThinkGlucose Consultant Dr Haroon Siddique are already thinking about future ThinkGlucose challenges. Paula says: “We are really excited about the next stage, bringing ThinkGlucose into the community. We have a lot of patients who are admitted on an emergency basis from care and nursing homes because of poor control in terms of their diabetes, so actually working out in the community, integrating the community service with the hospital service means that we can really start working on the whole pathway to improve patient care.”

On a more local level, the team are keen to see an increase in patients managing their own diabetes while at Russells Hall Hospital. Endocrine Lead Nurse Andrew Ball says: “We have come a long way, but there are still individuals who want to look after the patients’ diabetes for the patients rather than allowing the patients to manage themselves. But we will continue, as the diabetes team, to try and empower the patients to manage their own diabetes.” Ann Stroyde, ThinkGlucose Lead Nurse adds: “We are looking at developing that further in the future to actually include a policy for self administration.”



*Paula Clark,
Chief Executive at
the Dudley Group
of Hospitals NHS
Foundation Trust*



What the staff say about ThinkGlucose



Ann Stroyde, Sister, Diabetes Specialist Nurse and Lead Nurse, ThinkGlucose:

"ThinkGlucose has been very challenging, but it is also very well worth doing and we have proved that through our figures, through our patients having a better experience whilst they are in hospital and my colleagues and myself as well. We all think it is a well-designed project and recommend it to everybody."



Dr Haroon Siddique, Lead Consultant for ThinkGlucose:

"ThinkGlucose plays a very important role in improving the standard of care given to patients with diabetes irrespective of the primary diagnosis. By doing this, through our experience, I can say that one can improve the quality of care as well as reduce the length of stay and the diabetes-related errors can be minimised."

Andrew Ball, Senior Charge Nurse and Endocrine Lead Nurse:

"The difference that ThinkGlucose has made to me is that it has put diabetes to the forefront of healthcare."

"Before ThinkGlucose, the incidence of diabetes errors and insulin errors was tremendous. We still have a long way to go but by educating the staff, they have learnt to make sure that patients get their insulin on time. They know more about treating hypos and hyperglycaemic episodes and the number of incidences have been reduced since it has been implemented."





Kate Crowley, Diabetes Specialist Nurse and member of Diabetes Outreach Team:

“Because we are doing a longer day and we are also providing a six-day service, we’re not missing these patients like we were in the past. It is more structured. I have got more guidelines so the patients are receiving more prompt treatment and education and support. We are giving patients the knowledge to take ownership of their own diabetes.”

“Staff have more knowledge, because part of ThinkGlucose is not only supporting the patients, it is supporting the staff and that is ongoing. We like to think that our patients are in safe hands because of the knowledge of the staff on the ward.”





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