

# Structured Education for Type 2 diabetes

A toolkit for optimal delivery

## Enter the toolkit >

www.hin-southlondon.org



## Foreword

The Health Innovation Network (HIN) is a membership organisation, driving lasting improvements in patient and population health outcomes by spreading the adoption of innovation into practice across the health system.

As the Academic Health Science Network for South London our work prioritises health challenges for local communities across a number of clinical areas; including diabetes, dementia, MSK, cancer and alcohol. Our work incorporates cross-cutting innovation themes to generate wealth and increase the quality of care in our communities.

We are proud to be collaborating with our partner and member organisations to align; education, clinical research, informatics, innovation, training and education in healthcare. We support knowledge exchange networks to ensure the patient is at the heart of healthcare delivery and to support early adoption of healthcare innovations.

## Introduction

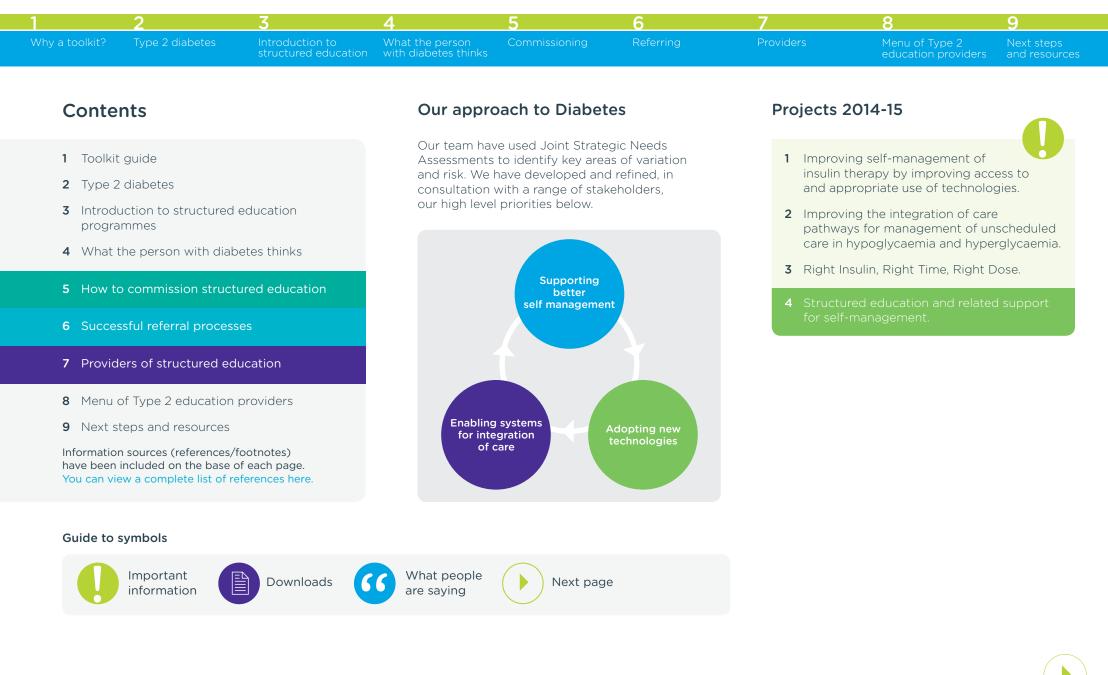
Dr Charles Gostling, Clinical Director (Diabetes), Health Innovation Network South London and GP, Lewisham



## Contents and context >

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The toolkit was informed by a representative group of service users, commissioners and providers who have contributed a number of resources and have generously shared their experiences and expertise with the Health Innovation Network.



## Why a toolkit?

Structured education is an effective selfmanagement tool to help people diagnosed with Type 2 diabetes understand and manage their life long condition. Yet uptake is shockingly low despite recommendations in NICE guidance<sup>1</sup> and the introduction of a QOF indicator<sup>2</sup> for referral to structured education programmes.

This toolkit will address the causes of low uptake and provide simple guidance on how to ensure high quality structured education is easily accessible.

## Who is the toolkit for?

- Commissioners of structured education programmes.
- Providers.
- Referrers into structured education.
- People with diabetes, their families or carers.

This toolkit makes commissioning high quality and accessible structured education programmes easier. Much of the hard work has already been done through sharing best practice, providing meaningful metrics to benchmark performance and giving you key performance indicators. It can be amended according to local needs with a menu of options allowing you to assess the range of structured education available and provide programmes to suit the 'harder to reach' individuals within your CCG.

<sup>1</sup> NICE, Clinical Guidance 87 (2014) Type 2 Diabetes: The Management of Type 2 Diabetes. Download

<sup>2</sup> NHS England, BMA & NHS Employers (March 2014). 2014/15 General Medical Services (GMS) contract Quality and Outcomes Framework (QoF). NHS England Gateway Reference: 01264G2ateway reference: 01264



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## Using the toolkit

## What is diabetes structured education?

Diabetes courses provide information on how to manage diabetes through diet, physical activity and medication. They are run by health professionals – usually a diabetes specialist nurse or dietitian often in a group setting.

## Find out more about the two most common programmes nationally:

Diabetes Education for Self-Management for Ongoing and Newly Diagnosed (DESMOND) The X-PERT Diabetes Programme for people with Type 2 diabetes





Links to useful and relevant resources can be found within the toolkit or via the Health Innovation Network's website. These include exemplar service specifications, health professional and patient resources, score cards, links to useful YouTube clips and case studies.

- <sup>3</sup> Department of Health & Diabetes UK (2005). Structured Patient Education in Diabetes. Report from the patient education working group. Download
- <sup>4</sup> Deakin, T., Cade, J., Williams, R. and Greenwood, D C., (June 2006). Structured patient education: the Diabetes X-PERT Programme makes a difference. Diabetic Medicine, 23(9): pp.994-54
- <sup>5</sup> HSCIC. Health and Social Care Information Centre. National Diabetes Audit 2010-2011. Report into the data quality of Diabetes Structured Education. 2012 Download
- <sup>6</sup> Cotter, B. and Grumitt, J., (2011). GP commissioning: Shaping diabetes care in Bexley. Diabetes & Primary Care, 13(6); pp.375-380. Website
- <sup>7</sup> Diabetes Modernisation Initiative (2014). Living well with Diabetes, Learnings report from the Diabetes Modernisation Initiative. Download
- <sup>8</sup> NICE, Quality Standard 6 (2011) Diabetes in Adults Quality Standard. Download

## The fundamentals

- Structured education programmes for people with Type 2 diabetes are an effective and cost efficient way of improving outcomes and are a key part of diabetes selfmanagement when linked with collaborative care planning, screening and medications<sup>3,4</sup>.
- Acting early to prevent complications limits their impact on the person's life and saves the NHS money<sup>4</sup>.
- However access to structured education is very poor and there is unacceptable variation across South London<sup>5</sup>.
- When people with diabetes, service providers, referrers and commissioners work collaboratively real change can happen allowing education to reach a greater number of the population, as has been demonstrated in Bexley, Southwark and Lambeth<sup>6,7</sup>.
- NICE states that structured education should be offered to every person with diabetes and/ or their carer around the time of diagnosis, with annual reinforcement and opportunity to be repeated as necessary<sup>8</sup>.
- It is vital to record and report those who are not attending the structured education offered (usually DESMOND or X-PERT) and provide a suitable alternative that meets their individual needs<sup>3</sup>.
- High quality alternative education programmes do exist for harder to reach groups and innovative ways should be sought to allow people with diabetes to access different types of learning. See the menu of options.



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## Diabetes

## The national picture

## £10bn per year

Diabetes costs the NHS £10 billion per year, accounting for 10% of the NHS budget<sup>9</sup>.

## £16.9bn by 2035

Public health forecasting predicts that an aging population and rising prevalence of obesity will increase NHS spending on diabetes to £16.9 billion by 2035, accounting for 17% of the NHS budget. It is a leading cause of blindness in the UK<sup>10</sup> and over 100 amputations are carried out each week in people with diabetes due to complications – 80% of which are preventable.

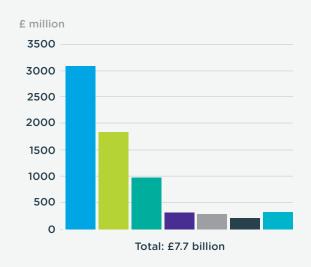
## 22,000 deaths

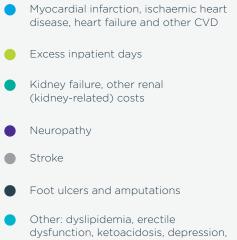
Each year 22,000 people with diabetes die prematurely<sup>5</sup>.

## Biggest risk groups

Type 2 diabetes is more common in people of black and south Asian origin, and tends to present at a younger age in these ethnic groups.

#### The costs of complications of diabetes9





aysfunction, ketoacidosis, depression, gestational diabetes, diabetic medicine outpatients, hypoglycaemia, hyperglycaemia and retinopathy

- <sup>5</sup> HSCIC. Health and Social Care Information Centre. National Diabetes Audit 2010-2011. Report into the data quality of Diabetes Structured Education. 2012 Download
- <sup>9</sup> Hex. N., Barlett. C., Wright. D., Taylor. M. and Varley. D. Estimating the current and future costs of Type 1 and Type 2 diabetes in the UK, including direct health costs and indirect societal and productivity costs. Diabetic Medicine 2012. DOI: 10.1111/j.1464-5491.2012.03698.x
- <sup>10</sup> NHS England (2014). Action for Diabetes. Download



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The main health and economic cost of diabetes is that of complications. Improving glycaemic control through self-management will ultimately reduce the costs. Increasing attendance at structured education for Type 2 diabetes could save each CCG £1.7 million per year\*<sup>16</sup>. 50% of people show signs of complications at diagnosis. This makes it all the more necessary for people with diabetes to understand what they can do to positively affect their own health and self-manage their diabetes<sup>11</sup>."



## The picture in London

Data suggests a 75 per cent increase<sup>12</sup> in the incidence and prevalence of Type 2 diabetes in London over the last decade. The rising prevalence of diabetes is believed to be due to an ageing population and unhealthy lifestyles leading to obesity.



## The picture in South London

The diabetes prevalence model for local authorities shows than in 2014 there were 174,627 people with diabetes over the age of 16 in South London and this is expected to rise to 249,848 by 2030<sup>12</sup>.

#### **Further information**

For more information on diabetes prevalence modelling for your borough please use the tool provided by Public Health England. You can download it here.

\* Figure based upon cost savings of £367 million per year across the NHS with X-pert, divided by 221 CCGs in England.

- <sup>11</sup> NHS England CCG Map. Download (accessed 9th September 2014).
- <sup>12</sup> Health Committee, London Assembly (April 2014). Blood Sugar Rush; Diabetes time bomb in London. Download
- <sup>16</sup> Deakin T. The Diabetes Pandemic: Is structured education the solution or an unnecessary expense? Practical Diabetes 2011; 28; 1-14



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Introduction to structured education

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## Introduction to structured education programmes

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NICE<sup>8</sup> recommends that well-designed and well-implemented structured education programmes are likely to be cost-effective for people with diabetes and should be offered to every person and/or their carer at and around the time of diagnosis, with annual reinforcement and review.

Structured education programmes for people with Type 2 diabetes are an essential component of effective diabetes management. Most people will spend only 1.5 hours with a health care professional per year, the rest of the time they are required to make daily lifestyle decisions that may have a significant impact on their health and overall quality of life<sup>13</sup>.

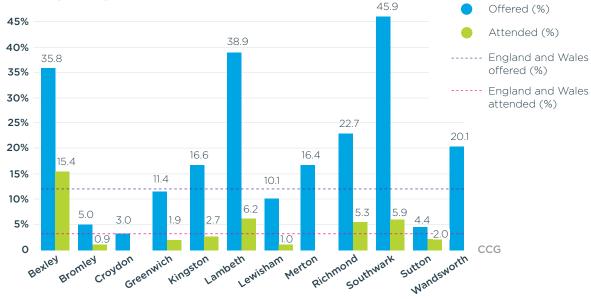
The aim of structured education is for people with diabetes to improve their knowledge, skills and confidence, enabling them to take increasing control of their own condition and integrate effective self-management into their daily lives. High-quality structured education can have a profound effect on health outcomes and can significantly improve quality of life.

- <sup>5</sup> HSCIC. Health and Social Care Information Centre. National Diabetes Audit 2010-2011. Report into the data quality of Diabetes Structured Education. 2012 Download
- <sup>8</sup> NICE, Quality Standard 6 (2011) Diabetes in Adults Quality Standard. Download
- <sup>13</sup> Steinsbekk, A., Rygg, L., Lisulo, M., Rise, M. and Fretheim, A., (2012). Group based diabetes self-management education compared to routine treatment for people with type 2 diabetes mellitus. A systematic review with meta-analysis. BMC Health Services Research, 12; 213. Website
- <sup>14</sup> National Diabetes Audit (November 2013), Are diabetes services in England and Wales measuring up? A summary of findings from the National Diabetes Audit 2011-12 for people with diabetes and anyone interested in the quality of diabetes care. Download

References

National Diabetes audit data shows that as few as 12% of people with Type 2 diabetes are offered structured education with only 2% taking up the offer<sup>5</sup>. This poor provision has been recognised, and referral to a structured education programme was made a Quality and Outcomes Indicator incentive in 2013/4. Despite this, preliminary work in South London suggests that not all providers collect data regarding uptake at structured education programmes. In boroughs where increasing uptake has been targeted, for example in Lambeth & Southwark, uptake is now in excess of 40% of those referred<sup>14</sup>.

#### SE offered and attended rates across South London according to the National Diabetes Audit (NDA) data



Percentage of diagnosed patients

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## Education can be flexible

The current NICE guideline<sup>8</sup> does not specify the exact format, intensity, or the setting for diabetes education.

## Different models exist

There are a number of structured education models. The most commonly provided programmes are: Diabetes Education for Ongoing and Newly Diagnosed (DESMOND), X-PERT, and the Diabetes Manual.

## Clinically effective

Group based structured education programmes are clinically effective. Meta-analysis of 21 studies showed significant reductions in HbA1c at 6, 12 months and 2 years as well as significant improvements in knowledge, self-management skills and empowerment<sup>13</sup>.

## Cost effective

The cost of providing structured education courses is in the region of £65-£250 per patient and given the scale of implementation with approximately 80 commissioning groups running the DESMOND programme and a similar number running the X-PERT programme across the UK the cost to the NHS is considerable<sup>15,16</sup>.

## Uptake of these programmes has been alarmingly low at around 2%<sup>14</sup>.

Not attending a course is wasteful, not only in terms of finance, but also a lost opportunity for people with diabetes.

To meet the requirement of the QOF, structured education has to be delivered to a minimum standard and meet key criteria. These were defined in the report from the Patient Education Working Group<sup>3</sup> – programmes should:

- Have a structured written curriculum
- Have trained educators
- Be quality assured
- Be audited.

## The evidence

- NICE guidance recommends programmes to give people **knowledge and motivation** to manage their condition<sup>8</sup>.
- Education of people with Type 2 diabetes is also cost effective. Data from X-PERT shows the programme costs are outweighed by savings made from the reduced need for cardiovascular and diabetes medication<sup>16</sup>.
   DESMOND also produces cost savings through reductions in weight and smoking rate<sup>15</sup>.
- There are a number of other types of structured education programmes for people with Type 2 diabetes which have undergone or are undergoing clinical trials and user evaluation. A full list of these programmes can be found in our menu of Type 2 education providers.

- <sup>3</sup> Department of Health & Diabetes UK (2005). Structured Patient Education in Diabetes. Report from the patient education working group. Download
- <sup>8</sup> NICE, Quality Standard 6 (2011) Diabetes in Adults Quality Standard. Download
- <sup>13</sup> Steinsbekk, A., Rygg, L., Lisulo, M., Rise, M. and Fretheim, A., (2012). Group based diabetes self-management education compared to routine treatment for people with type 2 diabetes mellitus. A systematic review with meta-analysis. BMC Health Services Research, 12; 213. Website
- <sup>14</sup> National Diabetes Audit (November 2013), Are diabetes services in England and Wales measuring up? A summary of findings from the National Diabetes Audit 2011-12 for people with diabetes and anyone interested in the quality of diabetes care. Download
- <sup>15</sup> Gillett. M., Dallosso. H.M., Dixon. S., Brennan. A., Carey. M.E., Campbell. M.J., et al. Delivering the diabetes education and self management for ongoing and newly diagnosed (DESMOND) programme for people with newly diagnosed type 2 diabetes: cost effectiveness analysis. BMJ 2010; 341:c4093
- <sup>16</sup> Deakin T. The Diabetes Pandemic: Is structured education the solution or an unnecessary expense? Practical Diabetes 2011; 28; 1-14



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## Best practice case studies

Projects in South London boroughs have shown that uptake of existing structured education programmes can be improved through a variety of interventions, including better marketing and organisation.

## Bexley

In Bexley attendance at the X-PERT structured education course improved from only 40 people in 2009 to over 1000 people in 2010<sup>4</sup>. This was achieved through a variety of methods:

- Consulting with people with diabetes to identify venues and timings for courses
- Using lay-educators as it was realised that people are not always inclined to listen to healthcare professionals
- Ensuring robust administration of the referral and booking process, including electronic referral systems.



View video:

John Grumitt, MD Metapath Solutions (Vice President, Diabetes UK, NHS England Commissioning Board, Diabetes CRG). Email: John@grumitt.co.uk

## Lambeth and Southwark

The Diabetes Modernisation Initiative in Lambeth and Southwark sought to increase numbers of people attending structured education programmes, in this instance DESMOND. In particular increasing the proportion of people booked onto a course that actually attended.

From the year 2011-12 to 2012-13 the booked to attend ratio in Southwark increased from 74% to 90%. Strategies for increasing uptake had included awareness training for primary healthcare practitioners.



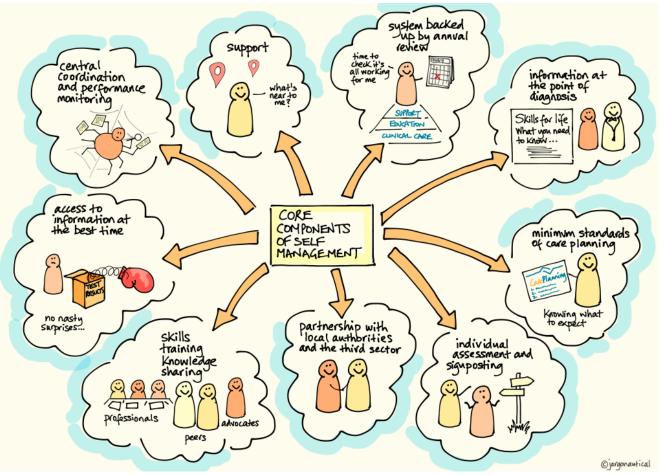
diabetes modernisation initiative living well with diabetes

<sup>4</sup> Deakin, T., Cade, J., Williams, R. and Greenwood, D C., (June 2006). Structured patient education: the Diabetes X-PERT Programme makes a difference. Diabetic Medicine, 23(9): pp.994-54



## What the person with diabetes thinks

Structured education is one aspect of diabetes self-management. For many people, diabetes is one of several long-term conditions they have to deal with day to day.



Feedback from South London patient engagement groups concluded that...

...people with diabetes want to feel that they have received all the information they need to understand their diabetes and selfmanage effectively.

Lessons learnt from interviews with non-attenders include:

- All healthcare professionals need to provide consistent **key messages** on diabetes and how to self-manage
- Effective and useful **signposting** to local structured education is required
- Having enough **time** with a healthcare professional to ask questions and fully understand their diabetes
- Access to a Dietitian and practical advice for day-to-day implementation.

Most structured education is designed to meet these requirements yet patient uptake is generally poor.

Acknowledgements



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## What people with Type 2 diabetes told us

#### Why they do not always attend

- The majority had never been offered structured education by a health professional and didn't know it existed.
- The term 'Structured Education' was off-putting. The benefits of the course were not 'sold' to them.
- The referral process felt like a tick-box exercise.
- They felt there was no individualisation.
- A more personalised approach was requested- phoning people, inviting and 'selling' the benefits of the course.
- Timing of referral some felt that the time was wrong, as they had either just been diagnosed, or started tablets.
- Location and timing was very important venue and accessibility (transport links/car parking) were key barriers to attendance.
- Competing commitments such as work.
- Some would have preferred modular courses and e-learning with on-line options instead.
- Did not like the idea of group learning individual one to one education would have better met their needs.

<sup>17</sup> Winkley, K., Evwierhoma, C., Amiel, S A., Lempp H K., Ismail, K. andForbes, A. (August 2014) Patient explanations for non-attendance at structured diabetes education for newly diagnosed type 2 diabetes: a qualitative study. Diabetic Medicine doi: 10.1111/dme.12556

## Feedback from people who have attended

- They liked the peer support and information about diet.
- It was felt there was a lack of follow-up and need for refresher information.

"Everybody should be informed of the condition"

"When first diagnosed given medication and diet information, wanted more information but not told where to get information and support from – if you don't have the network you don't have the support"

> "...no parking... so you're talking an hour and a half on the bus"

"Menu of education options when diagnosed" **Research**<sup>17</sup> has succinctly grouped the above reasons into the below three themes: these are the most common reasons for patients not to attend commissioned Structured Education courses:

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- 1 Not enough information about the programme/ perception of benefit, for example not being informed of the course by a health professional, not perceiving benefit of attending the course
- 2 Unmet personal preferences such as parking, competing personal issues because of work or caring for others, preference for alternatives such as internet course/one to one sessions
- **3** Shame and stigma of diabetes including not wanting others to know of diabetes diagnosis.

"Because I work nights, because my wife is disabled, I haven't even got time to go to the foot clinic. The answer would be no"



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## How to commission quality structured education



Commissioning structured education programmes for people with Type 2 diabetes must be done with effective service user engagement and must be robustly based on public health needs. As with any commissioned service there will be a need to understand accessibility to the intervention, especially in terms of uptake.



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## Systematic engagement and feedback from service users

Services which have undertaken and acted on patient feedback have seen a significant improvement in patient attendance rates<sup>6,7</sup>.

The Network strongly recommends the inclusion of a **patient feedback system** as part of the service specification. Each provider should be asked to routinely collect course satisfaction questionnaires from all attendees and report the findings, with remedial action plans via their internal quality and governance process and local commissioning leads.

#### Get involved

The Network appreciates that many of the commissioning teams and service providers are already delivering best practice and local quality and performance initiatives. We would welcome your feedback and input on the above suggestions. We are keen to further develop joint working in partnership across all CCGs to build on best practice and quality initiatives, to improve health outcomes and use of resources across South London.

It is essential to decide who the target audience should be. NICE state that education should be available to all people with newly diagnosed Type 2 diabetes. The CCG Outcome Indicator Set 2014/15 will suggest measuring this. However, people with long-standing Type 2 diabetes may also benefit from structured education. Individual CCGs should decide their local remit, especially provision for longstanding diabetes.

#### Other important considerations

- Type of programme such as group education, one to one or online (see menu of different types of structured education available).
- 'Harder to reach' populations including people for whom English is not their first language or those who do not want to attend group education - what are the alternative options?
- Practicalities such as course times and venues (access via public transport or car parking availability): can you use community venues such as shops, libraries and religious buildings?

#### Consider the needs of the local people:

- Who may have multiple long-term conditions?
- Are people homebound or living in nursing/ residential accommodation?
- Do they have other specific needs including learning difficulties or a mental health illness?
- What are their cultural or religious needs?

Programmes must be consistent with NICE requirements and/or QISMET certification.



**QISMET** is an independent body developed to support self-management providers and commissioners to achieve the highest possible guality service for people living with long-term health conditions.

<sup>6</sup> Cotter, B. and Grumitt, J., (2011). GP commissioning: Shaping diabetes care in Bexley. Diabetes & Primary Care, 13(6); pp.375-380. Website <sup>7</sup> Diabetes Modernisation Initiative (2014). Living well with Diabetes, Learnings report from the Diabetes Modernisation Initiative. Download



#### Service level agreement must specify:

 Method of referral – consider a self-referral process in addition to referral by healthcare professional.



Download this document

- Needs for data/ metric collection and a process to allow people with diabetes to gain access to this data.
- Timeframe of referral to first contact/ appointment. Safety net to follow up non-attenders.
- Alternative education options to meet individual needs of non-attenders. See the menu of different providers of structured education.

Croydon CCG has a robust service specification for commissioning structured education, which they are happy to share.



Download this document

References

## **Electronic Administration Systems**

Clinicians require skilled administration support to provide electronic patient administration systems and formal databases enabling:

- Effective management of all referrals in a timely fashion
- Effective use of their resources by improving course utilisation, and maximising attendance
- Provision of patient accessible information to maximise choice of venue and timing of course
- Effective integration of care and timely transfer of information from referral to discharge
- Systematically and routinely identify all patients who declined the opportunity to attend before or after booking on a course, enabling the service provider and GP to take timely action and follow up
- Enables access to a complete and easily accessible database to assess service performance
- Provide data that can identify "cold spots" where further initiatives from the Network and others may be required to improve patient uptake of education, and reduce the variance in delivery of NICE standards of care across all sections of the population.

## Service specification key performance indicators

Commissioners should ensure that a diabetes service specification makes specific reference to structured education in terms of target audience, outcomes and should include key performance indicator metrics to ensure that the programme is being delivered effectively and widely to the intended audience.

To ensure that KPIs are routinely and robustly collected we recommend the use of electronic administration systems such as 'Choose and Book' to allow accurate and timely monitoring of the entire process flow.



## **Data collection**

This table shows data that should be regularly monitored to ensure an effectively running service and provide feedback for improvement.

Booked referrals	Completed referrals	Time from referral to first contact
<b>Suggested measure</b> Your provider should tell you how many people are booked onto their courses compared to number referred.	<b>Suggested measure</b> Your provider could be measuring this in 2 ways – percentage attending of out all eligible and/or out of all referred.	<b>Suggested measure</b> How soon after referral has been made do you think your provider should be making first contact? And what percentage should be achieving this?
<b>ey thought</b> What should they be targeting? Texley achieves between 25-70%.	<b>Key thought</b> It's essential that you are not commissioning services that aren't being used. Without this information, you can't be sure you are meeting your population's needs.	Key thought Given that only about 50% of people who are referred will attend structured education it is essential that your provider runs a smooth service, contacting patients early to book them onto a course before motivation dwindles.
Attendance within 3 months of referral	Non-attenders	Graduates with goals
Suggested measure What is the waiting list like in your CCG? What percentage of people are waiting more than 3 months to attend a course? What percentage is acceptable?	<b>Suggested measure</b> It is important to ask your provider what proportion of eligible people are not attending education courses. The other suggested key indicators may provide insight as to why people don't attend. However many barriers to attendance exist including language, culture and mobility. Most of these barriers can be overcome.	<b>Suggested measure</b> We suggest measuring percentage of people completing a course with agreed goals.
<b>Key thought</b> Early intervention will provide people iving with diabetes the ability to self-care nore effectively. A well run service, meeting he needs of it's population is essential to acilitate this.	Key thought Research shows that 50% of patients are not attending education courses. Are you commissioning the right course for your population? Is there something else that will suit them better? One size does not fit all and you may need to commission alternatives to suit your CCG.	Key thought Given that only about 50% of people who are referred will attend structured education it is essential that your provider runs a smooth service, contacting patients early to book them onto a course before motivation dwindles.



## **Benchmarking metrics**

These metrics will be used by the HIN to measure performance between CCGs, but also between referrers (GP practices) within a CCG area. In this way it will be possible to identify hot and cold spots for referral.

References



## Hot and cold spots

A 'hot spot' is where the uptake to referral rate is high whilst a 'cold spot' relates to referrers where the uptake to referral rate is low.

In order to understand where the cold spots lie, and to eliminate the possibility of a lack of uptake due to ineffective referrals, regular scorecards should be provided to all referrers by their structured education provider, showing them their referral uptake rates.





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The referrer will play a huge role in successfully engaging the person with diabetes and increasing uptake of an education course. The Lambeth and Southwark **Diabetes Modernisation Initiative** and **Diabetes UK** patient focus groups have shown that the attitude of health care professionals and information given at time of diagnosis can have a profound impact on people's ability to self-manage their condition effectively.



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## Successful referral processes

I think my doctor failed me by not mentioning the DESMOND. Remove barriers? Just give out more information."

Whilst most people are likely to be referred by a practice/ community nurse or GP, there should be opportunity for people to self-refer as people's readiness to learn/change can vary.

I heard about it [DESMOND] but not told about it directly [from health professional]. I don't know about the [the benefits of the] programme so I can't decide."

The following information is highly recommended for discussion with patients when referring:

- Need to emphasise that structured education is an integral part of diabetes 'treatment'
- Give details of what the structured education course covers and the benefits of the course
- Show them the next available dates and
- Explain to them the referral pathway and who they will be hearing from next regarding this
- Direct them to trusted and reliable sites of information which they can read/watch for more information on Type 2 diabetes.

If you require any documents supporting the above, your structured education provider can provide them upon request or the Health Innovation Network can make them available.

## A number of other innovations can be considered:

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- Encouraging GPs and practice nurses to attend 'taster' sessions for structured education
- Providing skills training in motivational interviewing.

The Quality and Outcomes Framework for General Practice 2014/5 provides a financial incentive for GPs to refer patients to structured education within 9 months of diagnosis. This encourages referral but provides no encouragement to attend such courses.





Use these clips to learn about the benefits of structured education yourself or share them with people you are referring.

## X-PERT testimonies on YouTube



John's testimony

## **DESMOND** videos



Bob's testimony



Saira's testimony

## Getting to grips with Type 2 diabetes

If you would like to view in other languages please see the links below:

Gujarati Punjabi Polish Hindi



Alan's testimony



Indu's testimony



## Providers of structured education







The provider can play a vital role in increasing the probability of people attending structured education programmes. The Health Innovation Network supports the use of electronic administration systems and engagement and feedback from service users to ensure the needs of the local population are being met by the provider.







The Health Innovation Network held a structured education event in May 2014, that was attended by 40 providers and clinical educators from eight different Type 2 diabetes structured education programmes. It showed the views of the providers reflected those of the service users.

Their combined experience recognised hard to reach groups that do not attend structured education:

- Those with mental health issues or physical disabilities
- Those with poor literacy or a language barrier
- People who are housebound or in a care home
- Those in prison or other involuntary residence
- Those with childcare or caring responsibilities
- The working population, especially shift workers
- The travelling community or asylum seekers.

They also identified the referrer and the referral process as a barrier to attendance, echoing the service users' experience of not 'being sold' the benefits of attending. Hence structured education needs to be explained in a positive and effective manner, with a **simple referral pathway**.

## Effective referral processes

The following processes will increase the likelihood of a patient attending a course:

- Provide a variety of **times** suitable for different demographics of patients
- Provide a variety of easily **accessible** course venues taking into account bus routes, parking, disabled access etc.
- An easy to book service (e.g. choose and book) for booking
- A welcome letter to each patient referred, with clear information on what to expect on the course and how to book
- A **reminder** letter/call if patient has not been in touch to book
- A **confirmation letter** once the person has booked onto a course
- A reminder call or text to the patient on the week of the course
- Access and clear advertising for **self-referral** on to course.

## Supporting referrers to make more effective referrals

The following information should be made available to referrers to help assist effective referrals:

- Details of the structured education course; what type of information it will cover, how the class is run, the personal benefits to the patient attending the course etc.
- Any written information should be in language that is meaningful to the service user
- A list of the next available dates and venues
- The referral pathway, when they can expect to hear regarding the outcome of their referral and any follow-up that they are required to do with the patient
- A list of trusted and reliable patient-focused sites of information for more information on Type 2 diabetes
- Access to 'patient champions' who can provide first-hand testimony of the benefits
- A list of courses they would be welcome to observe to gain further insight into the course content.

Templates for the above documents can be found in the resources section of this toolkit or found on our website: www.hin-southlondon.org





Measure the number of people actually booked on to a course, compared to the number of referrals made.

#### Key thought

This will help check capacity and that you are meeting your commissioner's needs.

We suggest measuring this in 2 ways – number completing compared to all eligible and compared to number referred.

#### Key thought

How many people are completing your education courses? We know that Bexley GP practices vary from 25-70%.

#### Attendance within 3 months of referral

#### Suggested measure

A long wait will put people off, so consider what percentage should be attending within 3 months of referral.

#### **Non-attenders**

#### Suggested measure

Your commissioner will be interested to see how you are dealing with people who are referred but don't attend. You therefore need to be measuring this and have a strategy in place.

#### Key thought

Acknowledgements

23 GP practices in Lewisham have less than 30% of their referrals actually attend a course. Early contact will boost attendance rate and show commissioners that you are providing a well run service worth investing in.

#### Key thought

Are you contacting them? Are they offered alternative courses? Perhaps they have language or mobility barriers? At the moment 50% of referrals do not attend a course. Are you providing an alternative? Can you prove this? Your provider is likely to set a target number of days from receiving referral to making first contact, therefore you need to be measuring this?

#### Key thought

Patient motivation is high when they have just been told by their GP that they have diabetes. To help achieve your attendance targets you need to be contacting patients early and offering them courses that are convenient for them.

#### Graduates with goals

#### Suggested measure

All people who attend an education program should graduate with personalised goals linked to care plans. This gives them an objective and helps their GP too.

#### Key thought

How often do you discuss personalised goals at the end of the course? Are you communicating this to their GP?



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## **Electronic Administration Systems**

Electronic patient administration systems and formal databases should be used by teams to:

- Effectively manage all referrals in a timely fashion
- Effectively use their resources by improving course utilisation, and ensuring courses run with maximised attendance
- Provide a systemic and easily accessible recording system enabling patients to have maximum choice as to time and location of appointment
- Support effective integration of care and transfer of information in a timely fashion from referral to discharge
- Systematically and routinely identify all patients who declined the opportunity to attend before or after booking on a course, enabling the service provider and GP to take timely action and follow up
- Enable easy access to a database to assess service performance
- Provide 'hot and cold spots' referrer data to all the referrers (e.g. scorecard) on a routine basis to ensure they see the results of their referrals and have the opportunity to make them more effective if necessary.

## Systematic engagement and feedback from service users

Structured education services should routinely take account of the service user's views on delivery and accessibility.

Services, which have undertaken and acted on patient feedback, have seen a significant improvement in patient attendance rates. The network strongly recommends the inclusion of a patient feedback system as part of the service specification.

Providers should routinely collect course satisfaction questionnaires from all attendees and report the findings, with remedial action plans via their internal guality and governance process and local commissioning leads.

I think I prefer one to one, I don't think I prefer the group at all...I think it is erm, you know, you in a group of strangers with people you've never met before. I don't think I'll like it."

I didn't tell anybody [family, friends, including partner]. I keep it to myself. I don't want it [diabetes].... I don't want to go [to the DESMOND course] because I might see someone I know."

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## Menu of Type 2 education providers

If you would like a copy of the Menu of Providers of Structured Education in Excel format please email hin.southlondon@nhs.net

It is clear that people with Diabetes should be offered a range of options to allow them to learn the skills to self-manage their life long condition. Individual CCGs should ensure the services commissioned meet the local needs of their population and alternatives are offered to those who don't attend the first line structured education course. The following tables show there is a large range of structured education available.

Type of	Group education	Education aimed	Education aimed at	One-to-one	Online
programme	programmes	at BME groups	hard to reach groups	intervention	intervention
Links to providers	<ul> <li>DESMOND         <ul> <li>newly diagnosed</li> <li>For: newly diagnosed</li> <li>Type 2 diabetes or established diabetes</li> </ul> </li> <li>Self Management UK For: anyone with a long term condition</li> <li>X-PERT Diabetes Programme For: people with Type 2 diabetes or at risk of developing it.</li> <li>Conversation Maps<sup>™</sup> For: newly diagnosed or established Type 2 diabetes</li> </ul>	<ul> <li>DIMPLE For: people with Type 2 diabetes or at risk of developing it</li> <li>DESMOND BME For: BME people with newly diagnosed Type 2 diabetes or established diabetes</li> <li>Apnee Sehat For: newly diagnosed  Type 2 diabetes of South Asian languages Bengali,  Urdu, Hindu and Punjabi</li> </ul>	<ul> <li>STEPS to your healthy future</li> <li>For: newly diagnosed or established Type 2 diabetes</li> </ul>	• Diabetes Manual For: Type 2 diabetes with an HbA1c over 7%, people with Type 2 diabetes who need or wish for a one-to-one programme delivered in usual diabetes time	<ul> <li>HeLP-Diabetes: Healthy living for people with Diabetes</li> <li>For: people with Type 2 diabetes</li> <li>Diabetes UK - Type 2 Diabetes and me</li> <li>For: people with Type 2 diabetes</li> </ul>





	ined educators to groups of 10 people who can osed module - for those within first 12 months of	
<b>Target audience</b> Newly diagnosed Type 2 diabetes or establishe	d diabetes	
Outcome evidence base? Yes	NICE <sup>1</sup> Compliant and quality assured? Yes	What is the cost* per patient? *greater economy of scale with the more courses run
Is there any user evaluation/feedback? Yes	<b>Is it used nationally?</b> National and International, Ireland, Gibraltar, Australia and about to launch in the Middle East	Available in different languages? Yes, language of educator
<ul> <li>Why choose this programme? What are the US</li> <li>Most widely used structured education prog</li> <li>Rigorous quality assurance of all educators s</li> <li>Range of education for ongoing training e.g.</li> <li>Can be delivered by peer educators.</li> </ul>	ramme for Type 2 diabetes in the UK. so they all undergo mentoring and assessment o	f their behaviours in terms of delivery.

## Contact www.desmond-project.org.uk

<sup>15</sup> Gillett. M., Dallosso. H.M., Dixon. S., Brennan. A., Carey. M.E., Campbell. M.J., et al. Delivering the diabetes education and self management for ongoing and newly diagnosed (DESMOND) programme for people with newly diagnosed type 2 diabetes: cost effectiveness analysis. BMJ 2010; 341:c4093

<sup>&</sup>lt;sup>1</sup> NICE, Clinical Guidance 87 (2014) Type 2 Diabetes: The Management of Type 2 Diabetes. Download





2 Also run the Expert patient programme v	specific programmes. Diabetes specific is X-PER hich is peer led six week programme suitable for programme with 7 weekly sessions, 3 hours long ong term conditions.	any long term condition.
Target audience Anyone with a long term condition		
Outcome evidence base? Yes	NICE <sup>1</sup> Compliant and quality assured? Yes	<b>What is the cost per patient?</b> N/A
Is there any user evaluation/feedback? Yes	<b>Is it used nationally?</b> National programme	Available in different languages? Yes, language of educator
<ul> <li>Why choose this programme? What are the</li> <li>All programmes run by peer educators wh</li> <li>Delivered using a range of methods to suit communication difficulties or hearing impact</li> <li>Can help self-manage multiple conditions.</li> </ul>	o have a long term condition. individual needs e.g. different languages, differen	t community settings, for those with





<b>Programme overview</b> Group education delivered by trained educat	ors: 2.5 hour sessions over 6 weeks with annual f	ollow-up sessions.	
<b>Target audience</b> People with Type 2 diabetes or at risk of deve	loping it		
Outcome evidence base? Yes	NICE <sup>1</sup> Compliant and quality assured? Yes	What is the cost per patient? $\pm 6$	35
Is there any user evaluation/feedback? Yes	Is it used nationally? National programme	<b>Available in different languages?</b> Yes, language of educator	/
	I <b>SPs?</b> and supports continual professional developmen tional background, literacy skills, spoken language		ealth



<sup>1</sup> NICE, Clinical Guidance 87 (2014) Type 2 Diabetes: The Management of Type 2 Diabetes. Download

<sup>16</sup> Deakin T. The Diabetes Pandemic: Is structured education the solution or an unnecessary expense? Practical Diabetes 2011; 28; 1-14





2 Sponsored by Eli Lilly and supported by Di	for newly diagnosed - 'Managing my diabetes' a abetes UK. ssional - usually a diabetes specialist nurse or die		
<b>Target audience</b> Newly diagnosed or established Type 2 diabet	es		
Outcome evidence base? Yes	NICE <sup>1</sup> Compliant and quality assured? No (meets NICE criteria except Quality assurance and audit. Internal QA using toolkit provided by Lilly based on reflection and self/peer evaluation)	What is the cost per patient? N/A	
Is there any user evaluation/feedback? Yes	Is it used nationally? National programme. Used in 105 countries and 34 languages. Extensively used in Canada and US since 2006	<b>Available in different languages?</b> Yes, language of educator	<
<ul> <li>Why choose this programme? What are the U</li> <li>Developed in partnership with Diabetes UK.</li> <li>The map tools are flexible in delivery and or</li> <li>Small groups may be preferred by some inc.</li> <li>Widely used nationally and Internationally</li> </ul>	line modules are available for those who have at	tended a group session.	
Contact www.lillypro.co.uk/diabe	etes/hcps		





## Menu of Type 2 education providers: Education aimed at BME groups

DIMPLE		
<ol> <li>Volunteers recruited to undertake champie</li> <li>Branded as Know diabetes.</li> <li>Peer educators work along side dietitians</li> </ol>		rogrammes.
Outcome evidence base? Yes	NICE <sup>1</sup> Compliant and quality assured? Yes, educators undergo the same training and evaluation as the health professionals delivering the programme but none give clinical advice	What is the cost per patient? £60,000 was initial year start up costs for 60 volunteers In Fulham & Hammersmith
Is there any user evaluation/feedback? Yes	<b>Is it used nationally?</b> No	Available in different languages? Yes, language of educator
<ul> <li>Why choose this programme? What are the U</li> <li>Can double number of courses available as</li> <li>Can use the educators to make phone calls</li> </ul>	only one health care professional needed rather t	:han two.







## Menu of Type 2 education providers: Education aimed at BME groups

DESMOND BME		
<b>Programme overview</b> DESMOND but delivered with interpreters. DI	ESMOND can be culturally adapted to meet the n	needs of individual groups
<b>Target audience</b> BME people with newly diagnosed Type 2 dia	betes or established diabetes	
Outcome evidence base? Yes	NICE <sup>1</sup> Compliant and quality assured? Yes	What is the cost* per patient? *greater economy of scale with the more courses run £76 <sup>15</sup>
Is there any user evaluation/feedback? Yes	<b>Is it used nationally?</b> National and International, Ireland, Gibraltar, Australia and about to launch in the Middle East	Available in different languages? Yes, language of educator
Contact www.desmond-project.c	org.uk	

<sup>1</sup> NICE, Clinical Guidance 87 (2014) Type 2 Diabetes: The Management of Type 2 Diabetes. Download

<sup>15</sup> Gillett. M., Dallosso. H.M., Dixon. S., Brennan. A., Carey. M.E., Campbell. M.J., et al. Delivering the diabetes education and self management for ongoing and newly diagnosed (DESMOND) programme for people with newly diagnosed type 2 diabetes: cost effectiveness analysis. BMJ 2010; 341:c4093



1	2	3	4	5	6	7	8	9
Why a toolkit?	Type 2 diabetes	Introduction to structured education			Referring	Providers	Menu of Type 2 education providers	Next steps and resources

## Menu of Type 2 education providers: Education aimed at BME groups

<ul><li>2 Group education programmes for newly d</li><li>3 Also runs like a one stop shop at the personal stop stop stop stop stop stop stop stop</li></ul>	alth in the South Asian population of the Midland iagnosed. on's GP practice in own language. 15 minutes wit one education plus telephone and one face to fa	h a consultant, 30 minutes with a	
<b>Target audience</b> Newly diagnosed Type 2 diabetes of South As	ian languages - Bengali, Urdu, Hindu and Punjab	i	
Outcome evidence base? No. Undergoing pilot evaluation and research currently	NICE <sup>1</sup> Compliant and quality assured? No	What is the cost per patient? Pilot estimated to be £250 per patient £250	0
Is there any user evaluation/feedback? Yes	<b>Is it used nationally?</b> No	Available in different languages? Yes. Bengali, Urdu, Hindu and Punjabi	
<ul> <li>Why choose this programme? What are the U</li> <li>1 Aimed at specific 'harder to reach' commun</li> <li>2 Opportunities exist to adapt this programme</li> </ul>		t the HIN for more information.	







## Menu of Type 2 education providers: Education aimed at hard to reach groups

STEPS to your healthy future					
<ul> <li>Programme overview</li> <li>1 A bespoke year-long programme. Ten wee and two monthly facilitated sessions.</li> <li>2 Centred on behavioural change, nutrition a</li> </ul>	kly 1 hour sessions for up to ten in a group. Follo and movement.	wed by 9.5 months of regular support			
<b>Target audience</b> Newly diagnosed or established Type 2 diabet	es				
Outcome evidence base? Yes	NICE <sup>1</sup> Compliant and quality assured? Yes	What is the cost per patient? £250 per patient for the year £250			
Is there any user evaluation/feedback? Yes	<b>Is it used nationally?</b> No	<b>Available in different languages?</b> No			
<ul> <li>Why choose this programme? What are the U</li> <li>Delivered outside the NHS - by fitness profe</li> <li>Year long programme is the only one of its I</li> </ul>	essionals rather then healthcare professionals.				

## Contact www.stepstoyourhealthyfuture.co.uk/



1	2	3	4	5	6	7	8	9
Why a toolkit?	Type 2 diabetes	Introduction to structured education			Referring	Providers	Menu of Type 2 education providers	Next steps and resources

## Menu of Type 2 education providers: One to one intervention

<ol> <li>Programme overview</li> <li>One to one programme, 12 week programme</li> <li>Delivered by practice nurses or diabetes sp</li> <li>Includes a patient manual, relaxation CD, CD</li> </ol>		w up at weeks 1, 5 and 11.	
<b>Target audience</b> Type 2 diabetes with an HbA1c over 7%, people usual diabetes time.	e with Type 2 diabetes who need or wish for a o	ne-to-one programme delivered in	
Outcome evidence base?       NICE <sup>1</sup> Compliant and quality assured?       What is the cost per patient         Yes       Yes       *excluding health care professional time			
Is there any user evaluation/feedback? Yes	<b>Is it used nationally?</b> No	Available in different languages? Yes. South Asian resources available	
2 People work at own pace and have the man	me, with practice nurse (trained as diabetes man ual and relaxation CD for future reference. Prefer not to have group based structured educ		





1	2	3	4	5	6	7	8	9
Why a toolkit?	Type 2 diabetes	Introduction to structured education	What the person with diabetes thinks	Commissioning	Referring	Providers	Menu of Type 2 education providers	Next steps and resources

## Menu of Type 2 education providers: Online intervention

HeLP-Diabetes: Healthy living for people	e with diabetes	
<ul> <li>Programme overview</li> <li>1 Internet based self-management tool, NIH</li> <li>2 DESMOND non-attenders contacted by tra as alternative, 2 parallel studies - RCT and</li> </ul>	ained volunteer, conversation map used to identi	fy barriers and signpost to HeLP
<b>Target audience</b> People with Type 2 diabetes		
Outcome evidence base? No. Undergoing research currently	NICE <sup>1</sup> Compliant and quality assured? N/A	What is the cost per patient? N/A
Is there any user evaluation/feedback? Yes	<b>Is it used nationally?</b> No	<b>Available in different languages?</b> No

Contact

/-----

Elizabeth Murray, Professor of e-Health and Primary Care, University College London



1	2	3	4	5	6	7	8	9
Why a toolkit?	Type 2 diabetes	Introduction to structured education		Commissioning	Referring	Providers	Menu of Type 2 education providers	Next steps and resources

## Menu of Type 2 education providers: Online intervention

<b>Programme overview</b> Online education tool available for free on the of structured education.	e Diabetes UK website. Can be used as a steppir	ng stone to accessing other types
<b>Target audience</b> People with Type 2 diabetes		
<b>Outcome evidence base?</b> No	NICE <sup>1</sup> Compliant and quality assured? No	What is the cost per patient? Fre
Is there any user evaluation/feedback? Yes	Is it used nationally? Yes	<b>Available in different languages?</b> No
<ul> <li>Why choose this programme? What are the U</li> <li>1 Internet education resource via Diabetes Uk</li> <li>2 Can be used as a stepping stone to other prime</li> </ul>	< for people with Type 2 diabetes.	





## Next steps

We hope you find this toolkit useful in helping you deliver high quality and effective structured education to people with Type 2 diabetes. If you would like further support or find out any more about the work of the HIN please contact us on our e-mail:

Hin.southlondon@nhs.net or via our website at www.hin-southlondon.org

## Resources

You can find all the downloadable resources in this toolkit at the Health Innovation Network website. This will be updated regularly and also contains examples of resources for use in day to day clinical practice.



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References



## References

- 1 NICE, Clinical Guidance 87 (2014) Type 2 Diabetes: The Management of Type 2 Diabetes. Download
- 2 NHS England, BMA & NHS Employers (March 2014). 2014/15 General Medical Services (GMS) contract Quality and Outcomes Framework (QoF). NHS England Gateway Reference: 01264G2ateway reference: 01264
- 3 Department of Health & Diabetes UK (2005). Structured Patient Education in Diabetes. Report from the patient education working group. Download
- 4 Deakin, T., Cade, J., Williams, R. and Greenwood, D C., (June 2006). Structured patient education: the Diabetes X-PERT Programme makes a difference. Diabetic Medicine, 23(9): pp.994-54
- 5 HSCIC. Health and Social Care Information Centre. National Diabetes Audit 2010-2011. Report into the data quality of Diabetes Structured Education. 2012 Download
- 6 Cotter, B. and Grumitt, J., (2011). GP commissioning: Shaping diabetes care in Bexley. Diabetes & Primary Care, 13(6); pp.375-380. Website
- 7 Diabetes Modernisation Initiative (2014). Living well with Diabetes, Learnings report from the Diabetes Modernisation Initiative. Download
- 8 NICE, Quality Standard 6 (2011) Diabetes in Adults Quality Standard. Download
- 9 Hex. N., Barlett. C., Wright. D., Taylor. M. and Varley. D. Estimating the current and future costs of Type 1 and Type 2 diabetes in the UK, including direct health costs and indirect societal and productivity costs. Diabetic Medicine 2012 DOI: 10.1111/j.1464-5491.2012.03698.x
- 10 NHS England (2014). Action for Diabetes. Download
- 11 NHS England CCG Map. Download (accessed 9th September 2014).
- 12 Health Committee, London Assembly (April 2014). Blood Sugar Rush; Diabetes time bomb in London. Download
- 13 Steinsbekk, A., Rygg, L., Lisulo, M., Rise, M. and Fretheim, A., (2012). Group based diabetes self-management education compared to routine treatment for people with type 2 diabetes mellitus. A systematic review with meta-analysis. BMC Health Services Research, 12; 213. Website
- 14 National Diabetes Audit (November 2013), Are diabetes services in England and Wales measuring up? A summary of findings from the National Diabetes Audit 2011–12 for people with diabetes and anyone interested in the quality of diabetes care. Download
- 15 Gillett. M., Dallosso. H.M., Dixon. S., Brennan. A., Carey. M.E., Campbell. M.J., et al. Delivering the diabetes education and self management for ongoing and newly diagnosed (DESMOND) programme for people with newly diagnosed type 2 diabetes: cost effectiveness analysis. BMJ 2010; 341:c4093
- 16 Deakin T. The Diabetes Pandemic: Is structured education the solution or an unnecessary expense? Practical Diabetes 2011; 28; 1-14
- 17 Winkley, K., Evwierhoma, C., Amiel, S A., Lempp H K., Ismail, K. andForbes, A. (August 2014) Patient explanations for non-attendance at structured diabetes education for newly diagnosed type 2 diabetes: a qualitative study. Diabetic Medicine doi: 10.1111/dme.12556
- 18 Stratton, I., Adler, A Neil, A., Matthews, D., Manley, S., Cull, C., Hadden, D., Turner, R. and Holman, R (August 2000). Association of glycaemia with macrovascular and microvascular complications of type 2 diabetes (UKPDS 35): Prospective observational study. British Medical Journal, 321; pp.405-412. Website