DIABETES UK
CARE. CONNECT. CAMPAIGN.

PSYCHOLOGICAL SERVICES

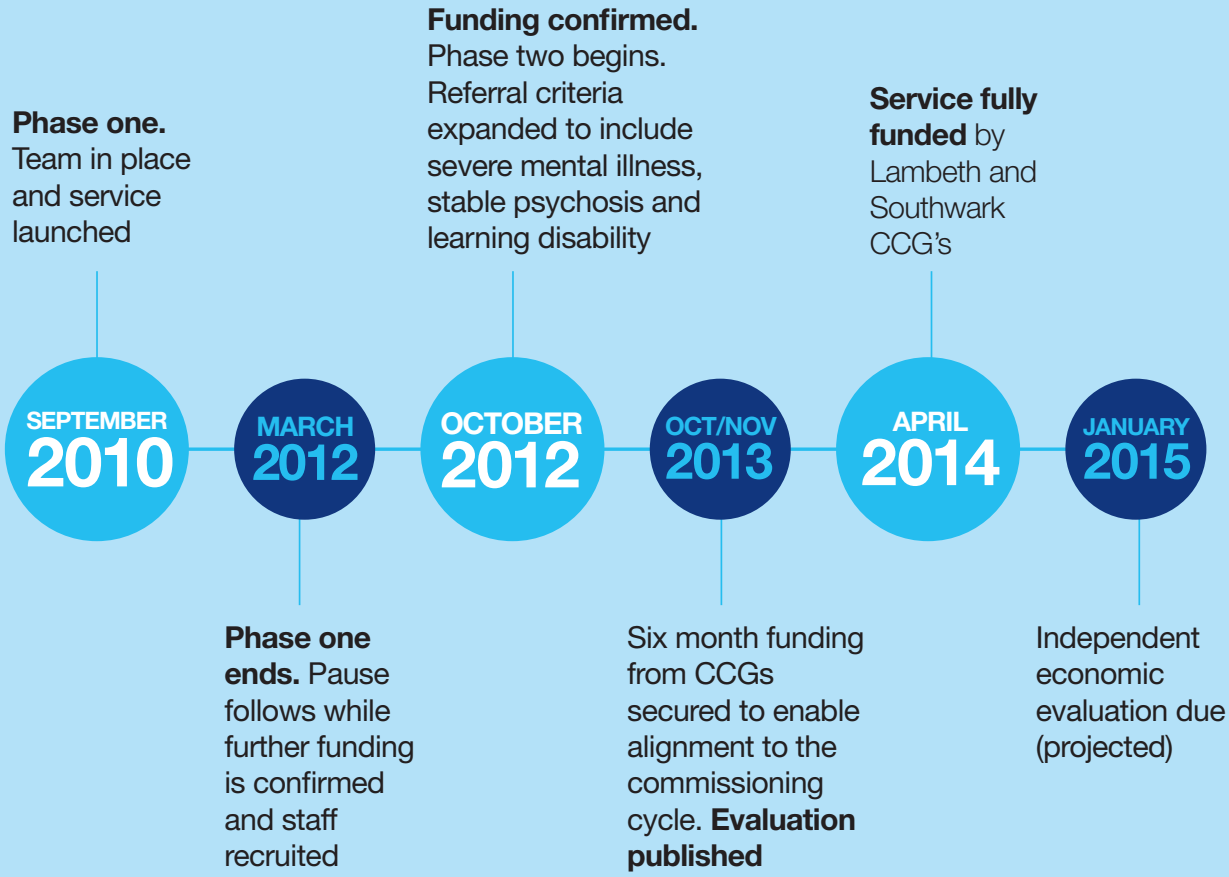
CASE STUDY 1: NOVEMBER 2014

Three dimensions for diabetes (3DFD): Integrating psychological, social and diabetes care for patients with poor glycaemic control

SUMMARY

The 3DFD service based at King's College Hospital NHS Foundation Trust is a UK-first model of care that integrates both psychological and social interventions specifically into diabetes care for people with complex psychological needs. Delivered in partnership with Thames Reach, a local third sector housing organisation, the service supports people struggling to cope with their diabetes and social problems such as homelessness, unemployment and debt. Since 2010, the service has successfully completed two consecutive pilot phases and demonstrated significant improvements in patients' glycaemic control, psychological status and health and social care service use.

Timeline



The case for change

The London Boroughs of Lambeth and Southwark have some of the highest levels of deprivation in London and there are an estimated 28,000 people living with diabetes. QOF[1] data shows that 22% have an HbA1c >9% and a third of people with diabetes (around 8,500) have psychological and/or social problems that affect their ability to self-manage.[2]

Within Lambeth and Southwark, there is a group of people in whom psychological and social problems often prevents the sustainable management of their diabetes. This results in non-engagement with routine health and social care services and frequent attendance at A&E.

For these people, prolonged periods of poor glycaemic control can lead to diabetes complications, reduced quality of life and premature death.

In 2010, 3DFD was launched by King's College Hospital NHS Foundation Trust to bridge the gap between services across the system, integrating care for people with poor glycaemic control and psychological needs that could not be met by existing, generic psychological therapies.

[1]Quality and Outcomes Framework. The annual reward and incentive programme detailing GP practice achievement results.
[2]King's College Hospital NHS Foundation Trust. 3DFD Evaluation. 2013.

Lessons learned

1. **Patients value being supported by a single team.** Feedback from patients has shown that the most important factor in their care was having access to a single team to help them overcome their problems. As a 'wrap around' service that is clinically considered part of the existing diabetes team, 3DFD benefits patients by bringing together different skill sets to allow a faster, more integrated response to their needs.
2. **Hospital admissions present valuable opportunities to intervene.** For patients who have repeated hospital admissions and poor engagement with scheduled care, the time spent in hospital is a key opportunity to assess and intervene in order to shorten admissions and enable patients to engage with services. It is also more appropriate for these patients to be reviewed by the 3DFD team rather than the generic liaison psychiatry service as it allows for both general psychiatric and diabetes-specific psychiatric assessment.
3. **Integrating expertise from local third sector organisations improves patient outcomes.** There is a wealth of experience, knowledge and skills in non-statutory organisations that statutory health care providers are not aware of and are therefore not accessing. By directly seconding social support workers from Thames Reach, the team have improved patient outcomes through an integrated approach. Assembling a team drawn from mental health, acute medicine and the third sector also requires patience, a willingness to learn and share knowledge, joint training and development of a shared vision.
4. **The 'hard-to-reach' are not necessarily hard-to-reach.** Patients' perceptions of the service were found to be an important factor that influenced their engagement and this contributed to the design and development of the service. The team found that telephone contact, SMS reminders, home visits and feedback to referrers improved attendance rates, particularly within Black, Asian and Minority Ethnic (BAME) communities. Psychiatric clinics were also overbooked to ensure maximum utilisation of clinician time.
5. **The 3DFD model can be expanded to include other long term conditions (LTCs).** The approach developed by 3DFD is not exclusive to diabetes. Scoping work undertaken by the team has shown that the model can be expanded to a number of other LTCs including asthma, COPD, HIV and arthritis, among others.
6. **Plan for continuation funding a year in advance.** Funding has been one of the biggest challenges for the service since it was launched in 2010, with six different organisations providing funding over the two pilot phases.[3] Future negotiations with funders need to be planned at least a year in advance. The team also found that overheads can be reduced by sourcing administrative support from community teams and negotiating reduced rental rates for clinic space.

[3]Funders include the NHS London Regional Innovation Fund, Guy's and St. Thomas' Charity, King's Diabetes Charity and NHS Lambeth and Southwark Clinical Commissioning Groups.

The model of care

QUICK FACTS

Staffing:
1 liaison psychiatrist (1.0 WTE)[5]
1 clinical psychologist (0.1 WTE)
2 social support workers (2.0 WTE)

Average intervention length:
3-6 months with a maximum social support worker intervention of 4 months

Clinic locations and frequency:
Liaison psychiatrist clinics: King's College Hospital (twice weekly) and St. Thomas's Hospital diabetes centres (weekly). Joint liaison psychiatrist and social support worker clinics: Diabetes Intermediate Care Teams in Lambeth and Southwark - Gracefield Gardens (weekly), Akerman Centre (bi-weekly), Dulwich Community Hospital (weekly). Social support worker clinics: Thames Reach, Stockwell (weekly)

Home visits:
Yes. Led by social support workers (occasionally supported by liaison psychiatrist)

Referrals received in 2013/14: 316 (26 per month)

Referral sources in 2013/14: GPs (27%), community teams (35%), hospitals (38%)

Health care professional education and support:
Yes. Delivered to GPs, practice nurses, community nurses and diabetes and endocrinology specialist registrars

Cost: £92,000 per borough, per year

Referrals and triage

3DFD targets people at the apex of Level 3 of the Pyramid of Need[4] (complex needs, multi-morbidity and multiple psychiatric morbidities) who require an integrated approach where psychological management is an integral component of their diabetes care.

On referral, the first assessment is completed by either the liaison psychiatrist and/or a social support worker depending on the level of complexity presented. A letter of assessment is sent to the person's GP and/or referrer outlining the plan, which may include medications, psychological therapies or further assessment e.g. cognitive assessment.

Inclusion	• Persistent poor diabetes control with an HbA1c >9% for 6 months or more • Considered to have significant social and/or psychological needs impeding ability to self-manage • Living in Southwark of Lambeth • Age 18+ • Severe mental illness e.g. major depression, anxiety disorders, eating disorder • Learning difficulties • Stable psychosis
Exclusion	• Acute psychosis

Table 1. 3DFD referral criteria

[4]Doherty A, Ismail K. Commissioning Support and Implementing Best Practise Factsheet: diabetes and mental health. Mental Health Training and Education Programme. 2013.
[5]Whole time equivalent.

Treatment and support

Patients remain under the care of 3DFD for the time they require the intervention. The service provides brief, focussed interventions, guided by intensive case-management and patient-led case conferences. The psychological treatments provided typically involve an average of eight sessions of cognitive behaviour therapy. Where psychiatric medications are required, the patient is kept under review until there is evidence of symptom resolution.

Psychological treatments are used to overcome a range of problems. These range from motivational issues to depression, anxiety, bereavement, family conflict and unhelpful health beliefs. Diabetes specific issues are also addressed including difficulty accepting diabetes diagnosis, needle phobia, fear of insulin, fear of hypoglycaemia (low blood sugars) and eating disorders.

On discharge, the patient returns to their usual diabetes care, which may be with a hospital diabetes team, in the community or in primary care. A discharge summary is also sent to the referrer and the patient's GP.

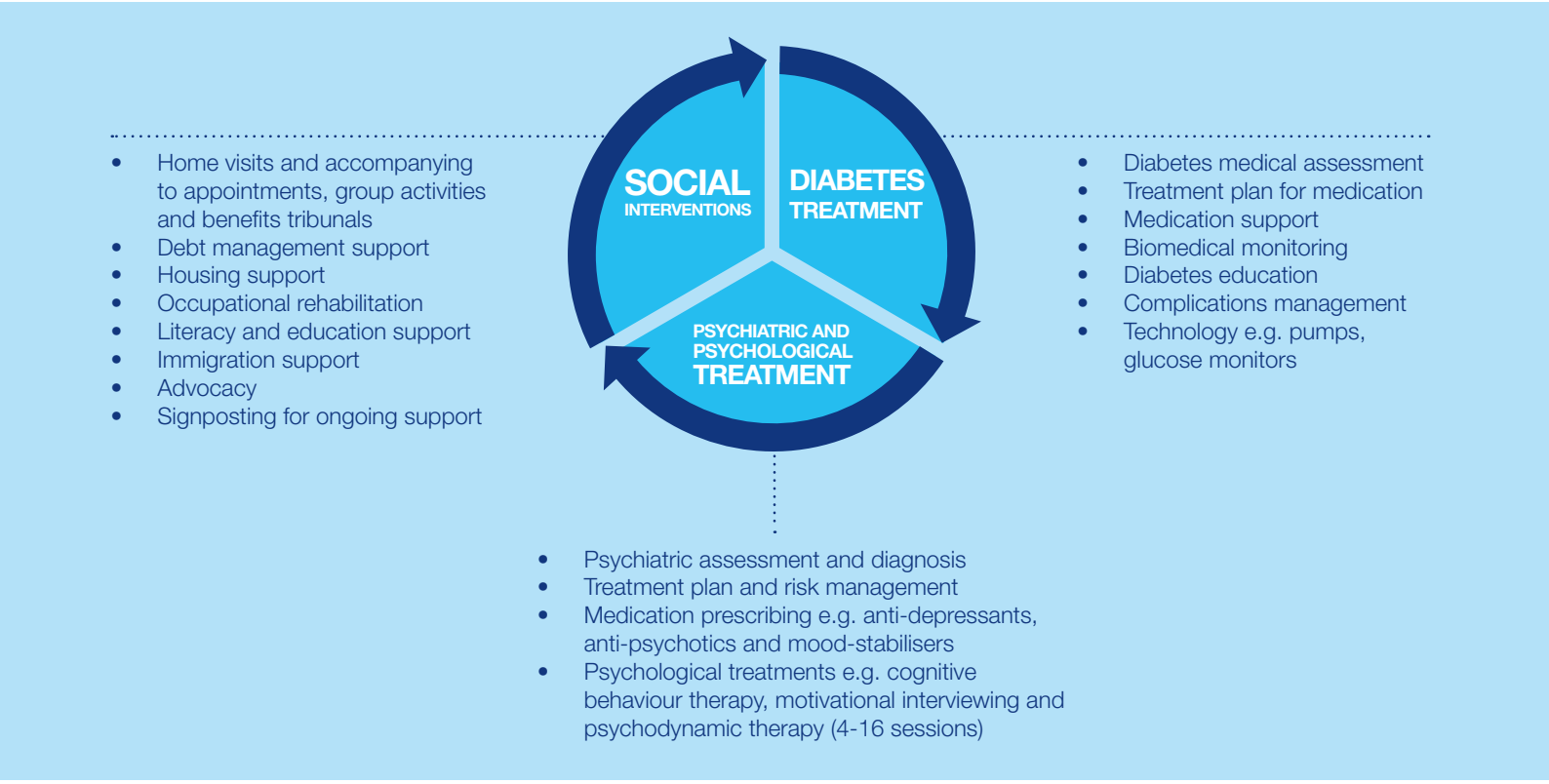


Figure 1. Summary of 3DFD treatment and support

Integration with existing pathways

3DFD is fully integrated with other diabetes, mental health and social care services across the system and fits into Level 3, and to a lesser extent, Level 2 of the King's Pathway for Psychological Care in Diabetes. (The pathway corresponds to the levels in the Pyramid of Need mentioned above).

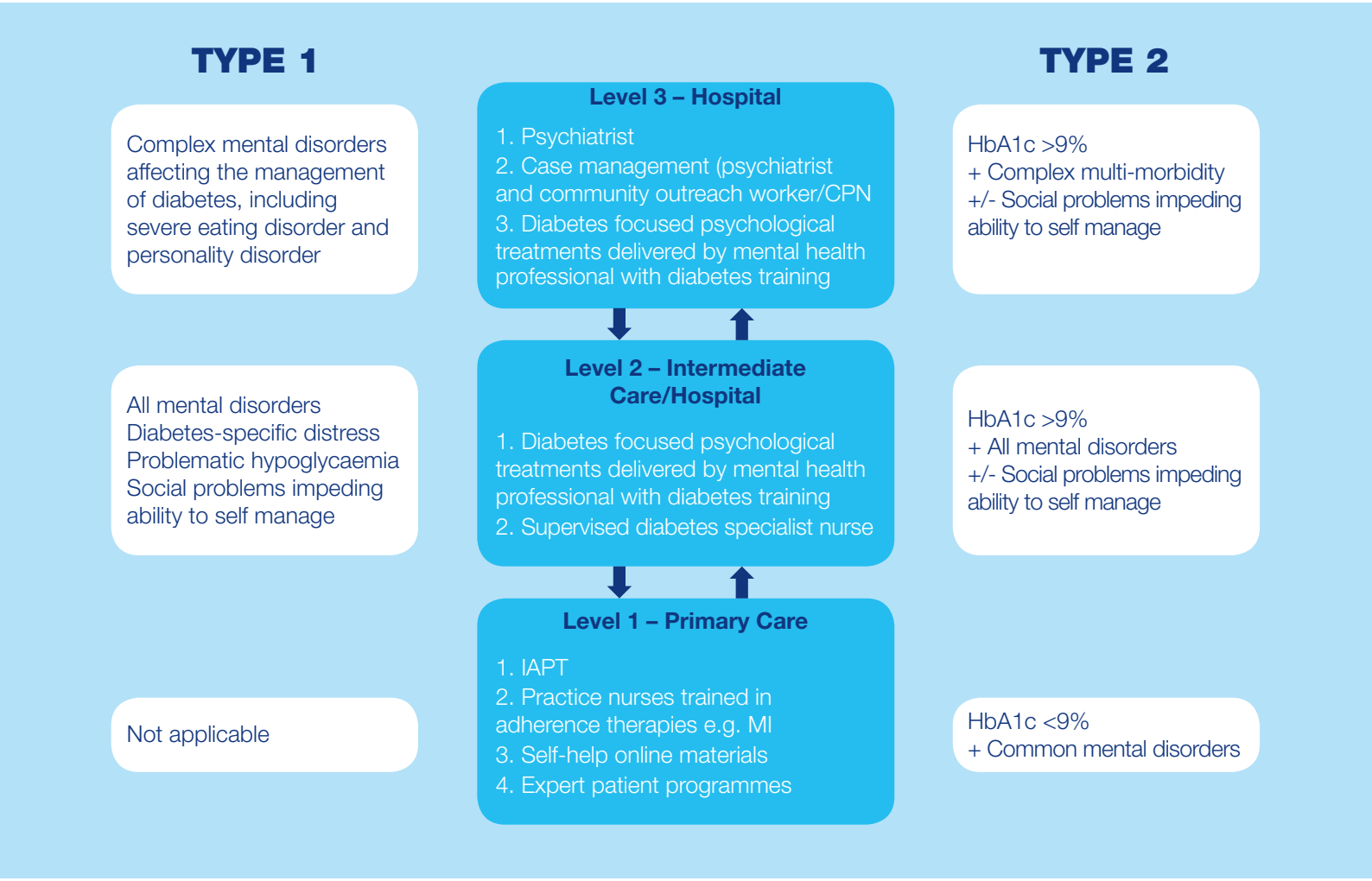


Figure 2. The King's Pathway for Psychological Care in Diabetes

FOCUS POINT

Patient-led case conferences

Conferences are held regularly to plan and coordinate patient care and are an essential part of 3DFD. By encouraging patients to lead their own case conference, the team are able to acquire in-depth learning about the problems patients are facing and tailor treatment and support to their individual needs. Conferences also allow patients to return to, and engage with, routine services as they recover and have been shown to improve self-esteem and self-management.

FOCUS POINT

Thames Reach social support workers

Thames Reach helps homeless and vulnerable people to live in decent homes, build supportive relationships and lead fulfilling lives. They specialise in helping people with complex and multiple needs, including mental health issues and drug and alcohol problems. The 3DFD social support workers are seconded from Thames Reach and receive specific training in diabetes at King's College Hospital, in addition to sitting in on structured diabetes education for patients.

Outcomes

An evaluation of phase one and phase two was undertaken in 2013.[6] A summary of the outcomes from phase two (unless otherwise stated) are shown below:

- The average reduction in HbA1c from referral to six months later was 18 mmol/mol. This is greater than the improvements seen with the introduction of new diabetes drugs (e.g. Glicazide, Gliptin, Dapagliflozin) and greater than achieved by local community diabetes clinics.[7]
- Statistically significant improvements were achieved in psychological scores relating to depression (PHQ-9 scale), anxiety (GAD7 scale) and diabetes specific distress (Diabetes Distress Scale).
- Improvements in the measures of social functioning were also achieved across multiple domains including personal responsibility, living skills, social networks, substance misuse, meaningful use of time and accommodation (Outcomes Star scale).
- Of the 201 patients seen by the psychiatrist, 22% had a known psychiatric diagnosis and 60% received a new diagnosis.[8]
- Less than 10% of patients from phase one were referred back to 3DFD in phase two, demonstrating integration of patients back into routine care and low relapse rates.
- A saving of £56.7K for 119 patients during phase one was achieved through a reduction in A&E and acute diabetes-related hospital admissions and readmissions over a 12 month period. Analysis undertaken by the Diabetes Modernisation Initiative (DMI)[9] in Lambeth and Southwark projected further savings of £102K per 120 patients, year-on-year, in delaying or preventing diabetes complications.

At the time of going to print, an independent economic evaluation of 3DFD was due for publication in January 2015. For more information, please contact Diabetes UK at sharedpractice@diabetes.org.uk

[6]Phase one ran from August 2010 to March 2012. Phase two ran from September 2012 to March 2014.
[7]For every decrease in HbA1c of 11mmol/mol, there is a 40% reduction in risk of diabetes complications e.g. retinopathy, nephropathy and cardiovascular disease.
[8]This includes a relapse of a previous condition.
[9]See http://dmi-diabetes.org.uk/

Adaptation of the model in other areas

In 2013, The Hillingdon Hospitals NHS Foundation Trust and Central and North West London NHS Foundation Trust piloted a similar model of care in Hillingdon. The Diabetes Wellbeing Service: 'A Space to Think,' supports patients with the non-medical challenges of managing their condition. Rather than criteria-based mental health diagnoses however, the primary inclusion criteria for the service is 'poorly controlled diabetes' (Type 1 or Type 2). Patients are then offered sessions with a clinical psychologist that aim to identify barriers to self-management, develop an action plan and provide cognitive behavioural/solution focused therapy based strategies. Of the 50 patients engaged in the pilot, the average reduction in HbA1c was 12 mmol/mol and significant improvements in psychological status were also achieved.

For more information, please contact Dr Jen Nash, Clinical Psychologist, The Hillingdon Hospitals NHS Foundation Trust at **jen.nash@nhs.net**

Acknowledgements

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Further information

For further information about 3DFD, please contact Dr Anne Doherty, Liaison Psychiatrist, NHS King's College Hospital NHS Foundation Trust at **annedoherty1@nhs.net**
The following documents from 3DFD are available to access:

- Service referral form
- Thames Reach assessment form
- Patient information leaflet
- 3DFD Evaluation (2013)

To request copies, please contact Diabetes UK at **sharedpractice@diabetes.org.uk**

Disclaimer

The information in this case study was gathered via the 3DFD team and 3DFD Evaluation (2013). The views expressed in this publication do not necessarily reflect the views of Diabetes UK.

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