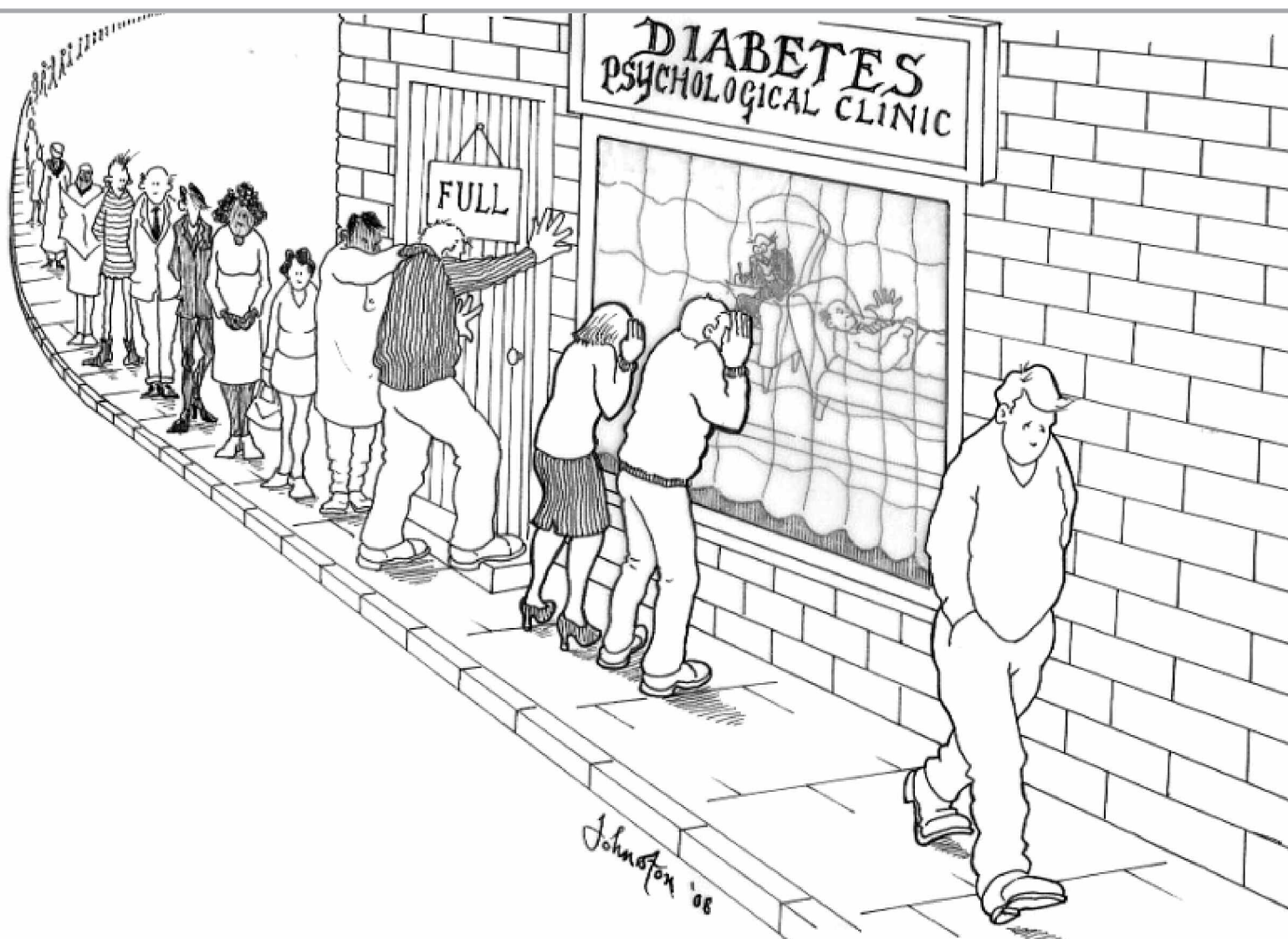


# Minding the gap

The provision of psychological support and care for people with diabetes in the UK

A report from Diabetes UK



# Contents

<b>Foreword</b>	<b>2</b>
<b>Authors, contributors and acknowledgements</b>	<b>4</b>
<b>Executive summary</b>	<b>5</b>
<b>1 Introduction</b>	<b>10</b>
<b>2 Survey methodology</b>	<b>15</b>
<b>3 Findings and comments</b>	<b>18</b>
a) Survey response rates	18
b) Teams and services (general)	19
c) Non-psychological team elements	22
d) Psychological team elements	28
e) Diabetes MDTs: size, perceived skill level, training, psychological focus	38
f) NSF and NICE guidance (quality indicators)	47
g) Perceived gaps in services	55
h) Occupation of responder/effects on answers	57
i) Regions/regional analysis	59
<b>4 Recommendations</b>	<b>64</b>
<b>5 Strengths and weaknesses of the survey</b>	<b>67</b>
<b>Appendices</b>	
<b>A Brief descriptions (psychological professionals)</b>	<b>69</b>
<b>B NSF standards and NICE guidance for diabetes</b>	<b>70</b>
<b>C Part 1 (postal) questionnaire</b>	<b>72</b>
<b>D Part 2 (telephone) structured interview/questionnaire</b>	<b>77</b>
<b>E Introductory email for part two (telephone interviews)</b>	<b>81</b>
<b>References</b>	<b>82</b>

# Foreword

## Prof Richard Holt: Chair of Professional Advisory Council, Diabetes UK

Diabetes is a lifelong condition that now affects more than two million people in the UK, a number which is rising unrelentingly. It is associated with much morbidity and premature mortality, through its microvascular and macrovascular complications.

Diabetes is a complex disease which places high behavioural demands on the person living with the illness on a daily basis. While access to well trained healthcare professionals is a key component of diabetes care, most of the burden of care remains with the individual with diabetes as they live their lives for more than 99% of their time away from contact with their diabetes team. While many people with diabetes cope well with their illness, it is perhaps small wonder that the rates of psychological problems and poor quality of life are much higher in those with diabetes than in the general population.

These psychological issues are important because they have a negative impact on the person's ability to care for their diabetes. Medication adherence may be reduced and in the long term these individuals have poor outcomes. Addressing psychological barriers may dramatically improve glycaemic control as well as quality of life for the person with diabetes.

Education alone is frequently not enough. Merely providing information often does not lead to a change in behaviour and an understanding of a person's health beliefs, with appropriate guidance, may transform glycaemic control and the person's ability to cope with diabetes.

The integral place of psychological care, within an holistic approach to diabetes care, is recognised in the National Service Framework for Diabetes where it states that 'The provision of information, education and psychological support that facilitates self-management is therefore the cornerstone of diabetes care'. Similarly the National Institute of Health and Clinical Excellence states that 'diabetes professionals should ensure they have appropriate skills in the detection and basic management of non-severe psychological disorders in people from different cultural backgrounds....while arranging prompt referral to specialists of those people in whom psychological difficulties continue to interfere significantly with well-being or diabetes self-management'.

Despite this recognition, several studies have suggested that in practice, most diabetes services do not have access to psychological services. Indeed in the recent survey of diabetes consultants, the provision of psychological services was one of the few areas where the responses suggested there had been a significant deterioration since the previous survey in 2000. On this background, the Health Care Delivery Working Group of Diabetes UK, in collaboration with professionals from the Liaison Psychiatry Service within Leeds Partnerships NHS Foundation Trust and the Institute of Psychiatry, King's College London, have performed the first detailed survey of the availability of psychological care for people with diabetes in the UK. The findings make sobering reading; 85% of people with diabetes do not have access to specialist psychological services, and even where a service is available the waiting time to be seen frequently exceeds three months. It is clear that this deficiency is keenly felt by those working in specialist diabetes services.

In order to address the lack of psychological support, detailed information about the deficiencies in service are needed and this report provides these data. It allows individuals working in services to start to develop plans and lobby for an improvement in psychological care.

My thanks must go to those who have worked so hard to create an accurate picture of the state of current diabetes psychological services. This is an invaluable piece of work. If you have had difficulties in accessing psychological support, and even if you have not, I commend this report to you. It should not gather dust but be used to improve your local services by creating the basis for a dialogue with those who commission care.

**Professor Richard IG Holt**

Chairman Professional Advisory Council Diabetes UK

Professor in Diabetes & Endocrinology

Developmental Origins of Health and Disease Division

School of Medicine

University of Southampton

# Authors, contributors and acknowledgements

## Authors and contributors

### **Dr Peter Trigwell**

Consultant in Liaison Psychiatry/Associate Medical Director for Specialist Services  
Department of Liaison Psychiatry, Leeds General Infirmary/Leeds Partnerships NHS Foundation Trust

### **Dr John-Paul Taylor**

Clinical Lecturer in Old Age Psychiatry  
Institute for Aging and Health, Wolfson Research Centre, Newcastle University

### **Dr Khalida Ismail**

Senior Lecturer  
Department of Psychological Medicine, Institute of Psychiatry, King's College London

### **Dr Tim Nicholson**

Research Fellow  
Department of Psychological Medicine, Institute of Psychiatry, King's College London

### **Dr Mustansir Alibhai**

Foundation Year 1 Doctor, St. Mary's Hospital,  
North West Thames Foundation School

### **Ms Charlotte Gosden**

Information Analyst,  
Diabetes UK

### **Mrs Pauline Proud**

(Previously) Health Information Manager, Diabetes UK

### **Mrs Bridget Turner**

Head of Healthcare Policy and Development, Diabetes UK

## Acknowledgements

Members of the Diabetes UK Healthcare Delivery Working Group who gave their comments and made helpful suggestions at an early stage.

David Cavan, Clare Shaban, Yvonne Doherty, David Protheroe, Kay Drury and others for comments on and assistance in piloting the draft questionnaires.

Dr James Johnston (Consultant Psychiatrist in Psychotherapy in Leeds), for the illustration on the cover of this report.

All who responded to the questionnaires and took part in telephone interviews during the survey.

# Executive summary

## Background

Some 2.5 million people in the UK have diabetes and the prevalence is increasing. As the population gets older and obesity levels rise, prevalence will increase further. Already up to 5 per cent of NHS expenditure is spent on diabetes, accounting for over £1 billion per annum.

It is estimated that some 41% of people with diabetes suffer with poor psychological well-being and there is consistent evidence of elevated rates of depression and anxiety disorders. For example, the rate of depression is doubled in people with diabetes compared with controls. Over and above the severe impact of these psychological problems in their own right, the 'costs' of untreated depression in diabetes are high. This is due to its negative impact on diabetes self-care and medication adherence, leading to hyperglycaemia and increased complications and healthcare costs, lost productivity and increased mortality. Other specific psychological conditions such as eating disorders, needle phobias and fear of self-injecting also lead to poor glycaemic control and subsequent complications.

Importantly, treatment for psychological conditions, including depression, has been shown to lead to reduced symptoms and improved glycaemic control, as well as reductions in both psychological distress and the costs of healthcare.

Over the last decade the importance of psychological problems in diabetes, and of effective psychosocial care for people with diabetes, has been repeatedly acknowledged, in the National Service Framework for diabetes, the NICE guidance for diabetes, and in a range of both research projects and policy statements. In addition, the Government White Paper *Our Health, Our Care, Our Say* prioritises health, independence and well-being and the provision of better mental health and emotional support.

Before being able to justify and work towards the development of high quality services to meet the psychological needs of people with diabetes in the UK it is important to identify and describe the nature and level of existing service provision, including to what extent services currently comply with the National Service Framework (NSF) standards and NICE guidelines. This has not previously been assessed.

Several previous surveys and reports have suggested that less than 50% of diabetes services have some 'psychological input', but no real detail is available from any of these surveys as to the nature, type, scope or extent of the services available. In response to this situation the Healthcare Delivery Working Group of Diabetes UK, in collaboration with professionals from the Liaison Psychiatry Service within Leeds Partnerships NHS Foundation Trust and the Institute of Psychiatry, King's College London, decided to carry out a more detailed survey of the availability of psychological care for people with diabetes, in all diabetes services for people of 17 years and older in the UK.

## Method

The survey examined all 464 diabetes services in the UK, using postal questionnaires (response rate 58%) and structured telephone interviews (response rate 80%). The focus was upon 'moderate psychological problems': *difficulties with coping causing significant anxiety or lowered mood, with impaired ability to care for self as a result; includes psychological problems which are diagnosable/classifiable, but can be treated solely through*

*specialist psychological interventions. For example, mild and some moderate cases of depression, anxiety states and obsessive/compulsive disorders.*

## Key Findings

- 1 Only 31.5% of diabetes services state that they have access to specialist psychological service provision, and only 25% can actually name and give contact details for a person providing such a service. When looking in detail at that 25%, only 58.5% of them have dedicated psychological services, as opposed to simply access to local generic services. This amounts to no more than 15% of diabetes services overall. **So, some 85% of people with diabetes in the UK have either no defined access to psychological support and care, or at best only in the form of local generic services.** In those services people with diabetes will be seen by mental health professionals who may have very little or virtually no useful knowledge of diabetes and the particular challenges people face as a result of it.
- 2 In 57.3% of cases, psychological input into diabetes teams is provided by psychologists, and in 17.5% by liaison psychiatrists. **Where psychological services do exist they are provided by a range of disciplines, and there is no clear plan or rationale for developing such services.** If a person's local hospital happens to contain a psychologist or liaison psychiatrist who happens to have a particular interest in diabetes they will be likely to be able to access specialist help when required, but if not they will not. It is not acceptable in a 21st century NHS for such important service provision to be provided, or not provided, on such a basis.
- 3 Responders felt their teams were reasonably skilled in managing the common and relatively simple psychological or self-management issues, such as problems with self-management of diabetic medications and needle phobias, but with increasing psychological or psychosocial complexity there was a significant drop in the perceived skill of teams to manage these issues, such as depression, anxiety, eating disorders/problems, psychosexual problems and drug and alcohol abuse. With regard to what might be considered more difficult psychiatric issues to manage, such as psychosis or suicidal patients, responders felt that these issues would be poorly managed by their teams. **Diabetes teams feel they need help with managing almost all psychological presentations and an opportunity to involve, or refer on to, specialist services for a whole range of conditions.**
- 4 **Many diabetes teams lack some quite basic elements of care relating to psychological needs.** Less than one third have telephone advice available which can provide any form of psychological support, only a little over 10% use any defined screening and assessment tools for psychological problems, and almost 80% of services have no protocols or guidelines for referral of patients with psychological problems of moderate severity. It is precisely the latter commonly occurring problems which were the main focus of this survey and the extent of this gap in the care available to people with diabetes is very concerning.
- 5 Around half of the diabetes services in this survey had referral pathways for the care of patients with what might be considered more severe psychological and psychiatric issues. This is, however, a reflection of the fact that all centres tend to have some form of local psychiatric service provision. Thus, if a patient is suffering with, for example, a Bipolar Affective Disorder they can be referred to the local psychiatric team. But this will be a generic mental health team, in which any specific knowledge or understanding with regard to the particular issues faced by people with diabetes is likely to be at best limited and at worst almost entirely lacking. **Psychiatric services in secondary care increasingly focus upon what has come to be known as 'severe mental illness'. That is, in effect, psychotic conditions. The vast majority of people with diabetes who have significant psychological problems do not suffer with such conditions and need specialist, as opposed to generic, psychological input to help address their specific needs.**



- 6 Where specialist psychological services for people with diabetes do exist, around 90% provide for the 'moderate psychological problems' which were the focus of this survey, and 75% cover the full adult age range. Over 90% offer CBT and around 3/4 offer motivational interviewing. **In teams with a predominant discipline (eg psychology or liaison psychiatry), the discipline did not affect the range of psychological therapies available.** A large majority of those providing specialist psychological input to diabetes teams were 'a member of the diabetes team or had experience with people with diabetes for over 1 year'.
- 7 All of these specialist psychological services for people with diabetes were provided in the general hospital, and none in mental health hospitals. 13.2% also provided input to GP practices. 92.5% stated that their service could see both routine and urgent cases. With regard to the less urgent/routine cases, **only 28.3% of services can see patients within one month of referral and 17% of services declared their waiting time for routine cases to be in excess of three months. Such a delay in receiving psychological help should not be acceptable in any modern healthcare organisation.**
- 8 100% of specialist psychological services for people with diabetes provide direct treatment for patients, ie not just support for the diabetes team in dealing with mental health issues. In addition, over 90% provide education for the diabetes team and the majority some supervision regarding clinical cases. **If the psychological part of the service was provided by psychiatrists it was more likely to be able to see patients urgently than if provided by psychologists, but there was no association between discipline (psychologist versus liaison psychiatrist) and whether or not educational input was provided to the diabetes team.**
- 9 The presence of psychological expert input is associated with:
- an **increase** in the perceived skill level of the diabetes team with regard to managing psychological issues.
  - **more** diabetes team members with some training in psychological approaches.
  - **increased** likelihood of telephone advice systems.
  - **increased** likelihood of protocols considering psychological issues.
  - **increased** likelihood of clear referral pathways.
- 10 **Only 2.6% of services complied with all six psychologically relevant NSF standards/NICE guidance recommendations and 25.8% do not comply with any of them.** The teams want to meet the standards but generally feel:
- that they are unable to do so
  - that they require more training to be able to do so
  - that they require more psychological input to be able to do so.
- 11 **Diabetes MDTs feel they lack, and clearly want, expert psychological input. They specify that such input should be specific to and integrated with their diabetes team.** They also identify a need for education, training and supervision, as well as specialist help with eating disorders and dedicated liaison psychiatry services.
- 12 The varying levels of psychological service/expert provision in the four UK countries are notable, with Northern Ireland having the highest and Wales the lowest level of provision. The low level of psychological provision for people with diabetes in Wales, and the difference between countries, is concerning. **The inequity evident within these findings is clearly unacceptable.**



## Main recommendations (clustered)

### Developing services

- All service developments should be needs-led, and the psychological needs of people with diabetes should be addressed in an organised and planned way, in order to avoid the 'postcode lottery' which clearly exists at present.
- Specialist psychological services need to be able to provide direct clinical care with appropriate psychological therapies and biological treatments (medication) where necessary, as well as clinical supervision, education and training for members of the diabetes multidisciplinary team.
- Expert psychological care for people with diabetes needs to be provided by professionals with specific knowledge and experience in the area of diabetes. This is in order that psychological assessment and treatment will be provided in the context, and with an adequate understanding, of the particular issues faced by people with diabetes. This will be essential for services to be effective. A reliance upon the provision of existing generic local mental health services is not enough.
- Clinical services provided will need to involve a mix of routine and urgent care, the latter being genuinely responsive psychological (including psychiatric) care.
- Psychological services must not be designed in order to only treat people with 'classifiable' psychiatric disorders (eg ICD-10 diagnoses). This is important because what might otherwise be considered 'sub-threshold' psychological problems have a very real impact upon self-care in diabetes, and consequently upon morbidity and mortality, making it essential that they are seen as appropriate for assessment and treatment.
- Experts in psychological care clearly have an important part to play in providing education, training, support and advice on appropriate resources, as well as direct clinical care for patients, but managers and staff of diabetes services need to see psychological support and care as, to an appropriate extent, the business of everyone in the team.
- Specialist psychological services for people with diabetes should be provided across the full age range. Care should be taken to ensure that this includes the provision and development of appropriate psychological services at the stage of transition from children's to adults' services.
- Psychological service provision will need to be improved in both hospital and community settings, whilst taking into account the current shift of diabetes services, in some centres, away from hospitals and into the community.

### Commissioning services

- The Government should match its stated commitment to the emotional well-being of people with diabetes, and its aim to improve access to psychological therapies, by prioritising the investment of further resources specifically for psychological services for people with diabetes.
- The population with diabetes is continuing to grow. As a result, the problem of a lack of psychological care for these people will increase. In this context, the development of psychological services for people with diabetes must be addressed as a matter of urgency.
- The size of provision of any psychological service for people with diabetes should be determined by a combined assessment of need and necessary capacity for:
  - direct clinical care
  - clinical supervision, education and training of the diabetes team.

- Commissioners should require services to demonstrate that they are able to provide effective identification, assessment and treatment of the psychological problems and disorders suffered by their population of people with diabetes.
- Commissioners should require services to rapidly work towards, and to demonstrate, compliance with existing NSF standards and NICE guidelines relevant to the psychological care of people with diabetes.
- Although there are regional variations with regard to the four UK countries, all clearly lack adequate psychological care for their growing populations with diabetes. Commissioners and providers should work together to rectify this.

## Skills and training

- It is crucial that the needs-led approach is a genuine one, assessing need and then matching the skills of the workforce to the needs which are present, as opposed to simply employing any particular psychological professional and assuming that they will have all of the skills necessary.
- One role of psychological input, whether provided by liaison psychiatrists, clinical psychologists or others, should be to improve the whole diabetes team's ability to identify and help people effectively with their psychological needs.
- People with diabetes in the UK should not have to rely for their psychological help and treatment upon the best efforts of people who are not adequately trained, or supported, to carry out that work. Diabetes healthcare professionals should be trained and supported to enable them to deliver emotional and psychological support themselves, at an appropriate level, with the aim of embedding this as an integral part of healthcare professional training for the future.
- Diabetes teams feel they need help with managing psychological presentations, and an opportunity to involve, or refer on to, specialist services for a whole range of conditions. Staff working in diabetes services are specialised and experienced and it is crucial that this declared need is listened to by commissioners and policy makers in order that the psychological needs of people with diabetes might begin to be addressed to any degree of adequacy.

## Tools and guidelines

- At an appropriate stage, with regard to the development of psychological services, consideration should be given to the introduction into diabetes services of appropriate screening tools to improve the recognition of psychological and emotional problems in people with diabetes.
- Guidelines for the management of common psychological problems in diabetes should be made available to all services and patients/carers.
- Clinical care pathways, alongside protocols and guidelines for onward referral of patients with psychological and psychiatric problems, should be available in all centres.

**(Note:** The survey being reported here was of psychological services for people with diabetes and not exclusively interested in any one particular mental health discipline or profession. This is because specialist services helping people with psychological problems are not the exclusive domain of any single discipline or profession. Several types of healthcare professionals may be involved in providing what we have termed, in a generic sense, psychological services for people with diabetes. These could include counsellors, psychologists, liaison psychiatrists, and psychotherapists, but such professionals tend to provide a range of different interventions and treatments, so it is crucial to match **skills** with **need**).

# 1. Introduction

As outlined in the Diabetes UK 2006 State of the Nations report, diabetes is one of the greatest health challenges facing the UK today. Over two million people in the UK are currently living with diabetes and up to half a million more have not as yet had their condition diagnosed<sup>1,2</sup>. The prevalence of diabetes has been increasing over the last nine years, and as the population gets older and obesity levels rise prevalence will increase further<sup>2</sup>. Already up to 5 per cent of NHS expenditure is spent on diabetes, accounting for over £1 billion per annum<sup>3</sup>.

Nation	Prevalence	No. of people
UK	3.5%	2,238,000
England	3.6%	1,891,000
Northern Ireland	3.1%	55,000
Scotland	3.4%	170,000
Wales	4.1%	127,000

Prevalence of diabetes in the UK. 2005/6

Source: *Quality Management & Analysis System (QMAS)*<sup>4</sup>

The incidence of psychological comorbidity and distress in people with diabetes has been increasingly recognised and it has been estimated that some 41% of people with diabetes suffer with poor psychological well-being<sup>5,6</sup>. In particular, there is consistent evidence of elevated rates of depression and anxiety disorders, with a review of 18 controlled studies showing that the rate of depression is doubled in people with diabetes compared with controls<sup>7, 8, 9, 10</sup>. In addition, depression is often undetected, being missed in 30-50% of cases in primary<sup>9</sup> and secondary care<sup>12, 13</sup>. Over and above the severe impact of these psychological problems in their own right, the 'costs' of untreated depression in diabetes are high. This is due to its negative impact on diabetes self-care and medication adherence<sup>14</sup> (despite increased service use), so that depression is associated with hyperglycaemia<sup>15</sup> and a consequent increase in risk of microvascular complications, cardiovascular disease<sup>16</sup>, increased healthcare costs and expenditure<sup>17</sup>, lost productivity (work days)<sup>18</sup>, and increased mortality<sup>19</sup>.

Other specific psychological conditions such as eating disorders can impact significantly on diabetes management, leading to poor glycaemic control and subsequent complications<sup>20, 21, 22</sup>. Needle phobias and fear of self-injecting are also associated with poor glycaemic control and a raised HbA1c<sup>23</sup>.

Importantly, treatment for psychological conditions, including depression, has been shown to lead to reduced symptoms and improved glycaemic control<sup>24, 25, 26, 27, 28</sup>, as well as reductions in both psychological distress<sup>29, 30</sup> and the costs of healthcare<sup>31</sup>.

In the UK the first formal recognition of the need for specialist psychological services for medical patients emerged in 1995 from the joint working group of the Royal College of Physicians and the Royal College of Psychiatrists, who published a document detailing the psychological services needed for general medical

patients<sup>32</sup>. More specifically regarding diabetes, in 2001 a National Service Framework (NSF) for diabetes<sup>33</sup> was published, with psychological care being specified as part of this framework. In addition, NICE guidelines on diabetes (Type 1)<sup>34</sup> were published in 2004 that also highlighted the importance of psychological services being available for people with diabetes.

A national survey of how NSF standards and NICE guidelines have been met in services for children with diabetes was carried out in 2005 which found that in 78% of such services there was no access to psychological service elements in clinics<sup>35</sup>. In contrast, the extent and nature of psychological services for adults with diabetes in the UK, including to what extent they might comply with the NSF standards and NICE guidelines for diabetes, has not previously been assessed.

In addition to the NSF and NICE guidance, over the past several years – largely since 2000 – the importance of psychological problems in diabetes, and of effective psychosocial care for people with diabetes, has been acknowledged in a range of both research projects and policy statements.

In 2000, the Association of British Clinical Diabetologists (ABCD) survey of secondary care services for diabetes in the UK found that only 45% of secondary care services reported the availability of some 'psychological input' for people with diabetes<sup>36</sup>. Similarly, in 2003 the Diabetes UK/Dr Foster survey of diabetes services in primary care organisations found that, across the UK, 50% of primary care services reported having psychologists 'available' to them<sup>37</sup>. Following on from this, in 2005 a further Dr Foster survey of PCTs in England reported that only 30% provided psychological services for adults with diabetes, and that the services provided were general in nature rather than specifically for people with diabetes<sup>38</sup>. In 2006 a similar survey carried out by Diabetes UK reported 64% of PCTs as providing psychological support for adults but unfortunately this figure has decreased to 38% in the equivalent 2007 survey<sup>39, 40</sup>. Of similar concern is the fact that the figure of 45% reported in the ABCD survey of specialist services in 2000, as mentioned above, has also decreased in the latest ABCD survey of services in 2006<sup>41</sup>.

Other researchers, Hansard (the official record of Parliament), and an All Party Parliamentary Group for Diabetes have all found and noted that people with diabetes want, need and deserve access to emotional and psychological support services<sup>42, 43, 44</sup>. Access to the type of support required remains variable, however, and is generally lacking. The Healthcare Commission Diabetes Patient Survey 2006, in England, reported that access to specialist psychological support was available for only 53% of those requiring it<sup>45</sup>. Similarly, as detailed in their 'State of the Nations' report in 2006, Diabetes UK reported that their Members Survey showed one in every 25 (ie 4%) of responders identifying that they needed specialist psychological support, but only half of these people were able to access this. They also reported that 'most emotional support which is available is provided by clinical professionals whose time and skills may not always be sufficient to meet the complexity of emotional needs'<sup>1</sup>.

## Regarding the comparative picture in the four UK nations:

- in Northern Ireland emotional and psychological support was identified as an area for early action by the 2003 Blueprint for Diabetes Care<sup>46</sup> and the Dr Foster report of services in Northern Ireland in 2005 also reported that three of the four Health and Social Services Boards (HSSBs) listed psychological support for people with diabetes as a priority area<sup>47</sup>. This increased to all four by 2006<sup>1</sup>.
- in Wales evidence from the Audit Commission in 2003 suggested that access to specialist psychological services is a significant problem<sup>48</sup>.
- in Scotland the same can be said of access to clinical psychology services<sup>49</sup>, although the Scottish Diabetes Framework Action Plan 2006 commits to 'improve access to psychological and emotional support for people with diabetes'<sup>50</sup>.
- in England a reduction in service provision can be seen against a wider background of cuts in specialist services and posts reported elsewhere in a survey by Diabetes UK<sup>51</sup>.

## Previous recommendations

Given the background as outlined above it is unsurprising that recommendations for improvements have come from a range of sources.

Diabetes UK included clear statements in the Care Recommendations for 2000 regarding the need for expert psychological input, specifying 'for an average district specialist diabetes care team in a locality with an average prevalence and pattern of diabetes and a typical configuration of diabetes care, at least one psychologist with a special interest in diabetes'<sup>52</sup>. Since then the 2006 Diabetes UK State of the nations report has suggested that 'all people with diabetes should have access to the emotional and psychological support required to come to terms with living with the condition', and pointed out that the Government White Paper Our Health, Our Care, Our Say prioritises health, independence and well-being and the provision of better mental health and emotional support<sup>1</sup>.

In a Joint Position Statement in September 2007 ('Integrated care in the reforming NHS – ensuring access to high quality care for all people with diabetes'), Diabetes UK, the Association of British Clinical Diabetologists and the Primary Care Diabetes Society stated the need for an integrated approach to planning and delivering care across all diabetes services, and that this is likely to produce the best results for people with diabetes. Notwithstanding the fact that the range of issues is different for every individual, the position statement highlighted diet and exercise, treatment-taking, **psychological stress**, and illness and disability as the key areas. It also concluded that it is essential for all people with diabetes, no matter where they live, to have access to the standards of care defined within the national frameworks<sup>51</sup>. In a subsequent paper Diabetes UK has called directly for 'the provision of emotional and psychological support as an integral part of a diabetes care package as a matter of priority'<sup>53</sup>.

## Subsequent actions

Despite the level of interest and concern, little has been done to clarify precisely how best to proceed with regard to developing services. Some centres have interested psychologists or liaison psychiatrists who are active in providing specific services for people with diabetes, but these are not being developed in any organised way across the UK, so that the developments which have taken place have tended to be a result of the interest of a local healthcare professional or professionals. Before being able to justify and work towards the development of high quality services to meet the psychological needs of people with diabetes in the UK, it is important to identify and describe the nature and level of existing service provision.

As mentioned above there have been six national surveys of care services for diabetes over the past several years:

1. In 2000, the Association of British Clinical Diabetologists (ABCD) survey of secondary care services for diabetes in the UK found that 45% of secondary care services reported some 'psychological input'<sup>36</sup>.
2. In 2003 the Diabetes UK/Doctor Foster survey of diabetes services in primary care organisations found that, across the UK, 50% of primary care services had psychologists 'available' to them<sup>37</sup>.
3. In 2005 a further Dr Foster survey reported that only 30% of diabetes services in England provided psychological services for adults with diabetes<sup>38</sup>.
4. In 2006 a Diabetes UK survey reported 64% of PCTs as providing psychological support for adults<sup>39</sup>.
5. Also in 2006, the ABCD survey of secondary care services for diabetes in the UK found the figure for these services reporting the availability of some psychological input for people with diabetes to be lower than their earlier finding of 45% in 2000<sup>41</sup>.
6. The 2007 Diabetes UK survey reports an apparently reduced figure for PCTs providing psychological support for adults of 38%<sup>40</sup>.

*Although these surveys have given an important indication of the lack of skilled psychological input into diabetes services it is impossible to glean from their results any detailed information about what is currently being provided. This is because no real detail is available from any of these surveys as to the nature, style or type, scope or extent of the services available.*

## **This survey**

In response to the aforementioned situation the Healthcare Delivery Working Group of Diabetes UK, in collaboration with professionals from the Liaison Psychiatry Service within Leeds Partnerships NHS Foundation Trust and the Institute of Psychiatry, King's College London, decided to carry out a more detailed survey of the availability of psychological care for people with diabetes in the UK.

**Given the wording of the Diabetes UK Care Recommendations (2000) as cited above, recommending 'at least one psychologist with a special interest in diabetes' for an average district specialist diabetes care team, it is important to make it very clear at this point that the survey being reported here was of psychological services for people with diabetes and not exclusively interested in any one particular mental health discipline or profession. This is because specialist services helping people with psychological problems are not the exclusive domain of any single discipline or profession. Several types of healthcare professionals may be involved in providing what we term, in a generic sense, psychological services for people with diabetes. These include counsellors, psychologists, psychiatrists, and psychotherapists. Such professionals tend to provide a range of different interventions and treatments (a list and descriptions are given in Appendix A).**

The survey aimed to examine all diabetes services in the UK, using appropriate questions to explore the following, in relation to all centres surveyed:

- whether any service element is available which specifically focuses upon psychological needs of people with diabetes
- the nature of such service elements, where they exist
- the discipline/professional group of those providing the service; counsellors, psychologists, liaison psychiatrists, etc
- the level of experience they have regarding diabetes mellitus
- the nature of psychological problems which are provided for
- the style of input and types of therapeutic approaches which are available
- the size and scope of the service; sessions available per week, settings in which it is provided
- accessibility; waiting times, urgent/non urgent elements of the service
- the relationship between those providing any specialist psychological service and the rest of the diabetes care team; whether or not the psychological service element is seen as integral to the diabetes service
- other elements of the service offered, in addition to direct clinical care; liaison with the team, educational elements, case discussion and supervision for members of the diabetes team, etc
- the quality/standard of existing services, as measured in relation to the requirements of the National Service Framework for Diabetes and relevant NICE guidance (as detailed in Appendix B)

- perceived gaps in services/what is felt to be needed
- organisational aspects; management arrangements for those providing the psychological service, whether these are the same as or different from those of the rest of the diabetes team

The survey was carried out during late 2006 and 2007. This report details the methodology and results of the survey, discusses the implications of these and makes recommendations for action.

### Scope of the survey and report/age range

At the time of setting up the survey another group, linked with Diabetes UK, was surveying psychological care within services for children with diabetes. After discussion with that group (the DEPICTED study group based at the Cardiff University<sup>42</sup>), it was decided that our survey would examine services for adults only. That is, for people of 17 years and older.



## 2. Survey methodology

### Developing the survey questionnaire and interview

The aims and areas of focus for the survey were developed by Dr Peter Trigwell of the Leeds Partnerships NHS Foundation Trust Liaison Psychiatry Service, Dr Khalida Ismail's group at the Institute of Psychiatry, King's College London, and the Healthcare Delivery Working Group (HDWG) of Diabetes UK.

The HDWG included representation from:

- People with Type 1 diabetes
- People with Type 2 diabetes
- Diabetes Specialist Nursing
- Dietetics
- Podiatry
- Diabetology
- Paediatrics
- Liaison Psychiatry
- Clinical Psychology
- Diabetes UK Staff

The resulting draft questions and questionnaire formats were also piloted, and amended accordingly, with a small group outside of the HDWG. This group included a Diabetes Specialist Nurse, a Consultant Diabetologist, a Clinical Psychologist, a Diabetes Service Manager, and a Liaison Psychiatrist.

### Structure of the survey

In order to gather adequately detailed information it was necessary for the survey to take place in two parts:

#### Part 1 – postal questionnaire

Basic questions on diabetes team membership – survey questions 1 to 11, focussing on:

- care provided by the 'non-psychological' elements of the team
- ability of the 'non-psychological' elements of the team to help people with psychological problems
- service compliance with the relevant standards and requirements laid out in the NSF for diabetes and NICE guidance for diabetes.

(See Appendix C).

#### Part 2 – structured telephone interviews

Survey questions 12 to 29, focussing on:

- care provided by the 'psychological' elements of the team
- the nature, accessibility, coverage, setting, and organisation of these service elements
- perceived gaps in service provision for emotional, psychological and mental health problems in people with diabetes

(See Appendix D).

## Levels of need

To orientate those completing the questionnaire or giving telephone interviews, and ensure a consistent approach, a schematic detailing levels of psychological problems or needs was developed. Initially this was in the form of a 'pyramid' with five levels, but as a result of the piloting process this was simplified to three levels (as shown in Appendix C).

The three level pyramid was included in the part 1 postal questionnaire and was also sent to telephone interviewees, in an introductory email, at least one week before they were telephoned for the part 2 interview. The exclusive focus of both parts of the survey was **Level 2** (termed 'moderate psychological problems'):

*Difficulties with coping causing significant anxiety or lowered mood, with impaired ability to care for self as a result; includes psychological problems which are diagnosable/classifiable, but can be treated solely through specialist psychological interventions. For example, mild and some moderate cases of depression, anxiety states and obsessive/compulsive disorders.*

## Part 1 of survey: postal questionnaires

Postal questionnaires were sent to all diabetes services in the UK. The list of 464 diabetes services, which included both acute and primary care trusts, was generated from a combination of sources:

- Binleys Directory of NHS Management, 2006<sup>54</sup>.
- The Directory of Diabetes Care, 2006<sup>55</sup>.
- Diabetes UK Internal database of diabetologists, 2006<sup>56</sup>.

All paediatric units and specialist purpose units, ie retinal screening, were excluded.

For most services the postal questionnaire was sent to two contacts, one doctor and one nurse, who were asked in the covering letter to work together to complete it fully. There were some centres which had only a nurse or only a doctor contact. If there were multiple nurse contacts, the survey was sent to the senior nurse (if indicated) or the first on the list. If there were multiple doctors, the first diabetologist on the list or, if none, the first consultant physician on the list or, if none, the most senior doctor.

The postal questionnaire was first sent out in August 2006. Replies were collated until November 2006. A second questionnaire was sent out to all non-responders. If there was still no response this was followed up with telephone calls to the centre concerned to attempt to increase the final response rate.

## Part 2 of survey: telephone interviews

One of the first questions within the part 1 questionnaire asked the responder to identify a key psychological team member, if they have one, and to give contact details including email and telephone numbers. This was to allow the survey team to contact that individual initially by introductory email, with the three level pyramid of psychological problems attached (see Appendix E), and later by telephone to carry out the interview.

Those not responding to emails were sent up to two reminder emails before being telephoned to check that their details were correct and that they were still in post. If the contact details were incorrect (which they were in around half of the cases), or the individual was not in post any longer, the relevant hospital was contacted to ask for the correct details, or for the new post holder, allowing a further contact by email and/or telephone. No upper limit was set for the number of emails or telephone calls that were attempted as it emerged that a lack of, or delay in, response was not associated with being unwilling to participate and was more often a function of the relative time priorities of the individual.

The last question from the telephone interview asked responders to indicate what gaps they felt there were in the service (if any) for people with diabetes who have emotional, psychological or mental health problems.

To quantify the issues covered, research workers (T.N. and J.P.T) identified 16 common themes from the transcripts (issues raised by at least two responders).

## Data

A database, in Microsoft Excel format, was designed for the purpose of collating all of the data from Parts 1 and 2 of the survey.

## Analysis

SPSS (version 15) was used for all statistical analyses. Results/outcomes were examined both graphically and using the Shapiro-Wilk test to establish whether they were approximately normally distributed; the majority of continuous data were non-normal and therefore non-parametric statistical tests were applied, including Mann-Whitney U-tests for group comparisons and Spearman-rank for correlation analysis. Missing values were excluded pairwise.

Categorical data were analysed using chi-squared tests where appropriate. In addition, for determination of the effect of several variables on dichotomous outcomes, saturated log-linear modelling was applied; for analyses considering Multidisciplinary Team (MDT) size effects the MDT size was divided into three groups:

- large (>15 team members)
- medium ( $\geq 9 \leq 15$  team members)
- small (<9 team members).

Results, analysis and comments are detailed in the following section of this report.

## 3. Findings and comments

### a) Survey response rates

#### Findings

Part 1 (postal questionnaires)	Number	%
Questionnaires sent out	464	100
Non-responders	197	42
Responders/included	267	58
No. with an expert provider of psychological services	84	31.5
No. providing contact details for part 2	66	25
Part 2 (telephone interviews)	Number	%
Contacts attempted	66	100
Non-responders	13	20
Responders/interviewed	53	80

#### Comments

The response rate to the part 1 postal questionnaire was 58%. This may be seen as a reasonably good rate but it was somewhat lower than had been hoped for, particularly given the level of importance of this topic area as outlined in the **Introduction** section above, and as acknowledged in the answers provided by those who did respond to the survey. In the part 2 telephone interviews a very good response rate of 80% was achieved.

In order to be able to try to explore reliability the researchers were given an opportunity to 'compare' the results of this survey with those of the most recent ABCD survey<sup>41</sup>. Responders were matched with those who had responded from the same centres in the earlier ABCD survey:

- There was concordance in the responses (ie to the basic question as to whether or not the centre had access to a psychological service) in 81.5% of cases.
- Non-concordance, with the earlier ABCD survey finding that there was such a service but our psychological services survey suggesting that no service exists occurred in 9.6%.
- Non-concordance, with the earlier ABCD survey finding that there was no service but our psychological services survey suggesting that such a service does exist occurred in 8.9%.

The 81.5% concordance between the two surveys may be an indication that the reliability of our survey is reasonable or good, and the differences between the two surveys may reflect changes over time in the provision of psychological services in certain centres.

With regard to the professional grouping of those who were interviewed by telephone for part 2 of the survey, the large majority were either psychologists (N=39, 73.5%) or liaison psychiatrists (N=11, 20.8%) by background. The remaining three were from other specialities.

## b) Teams and services (general)

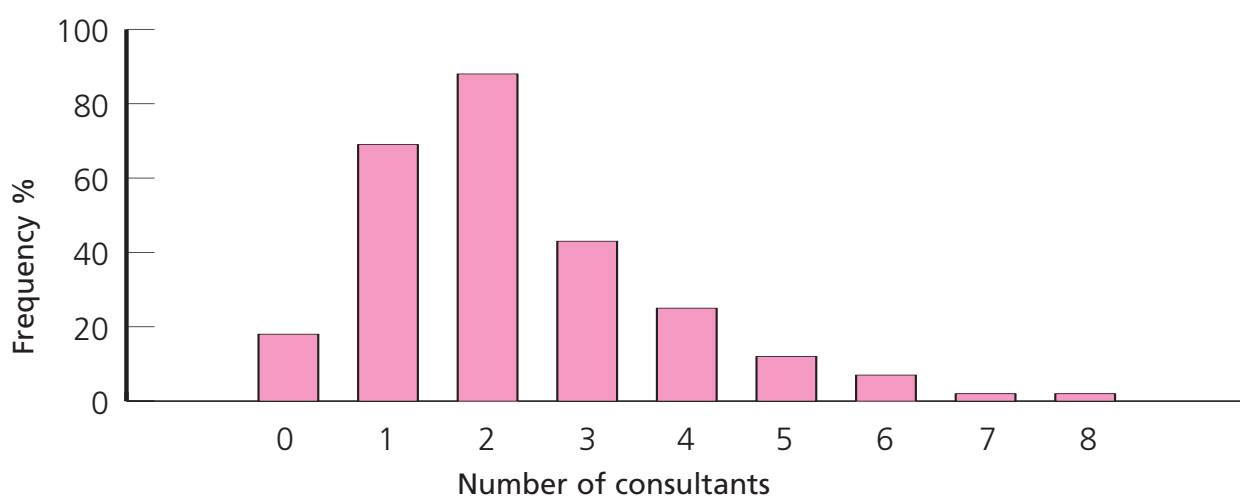
### Findings

#### Multidisciplinary diabetes teams (MDTs)

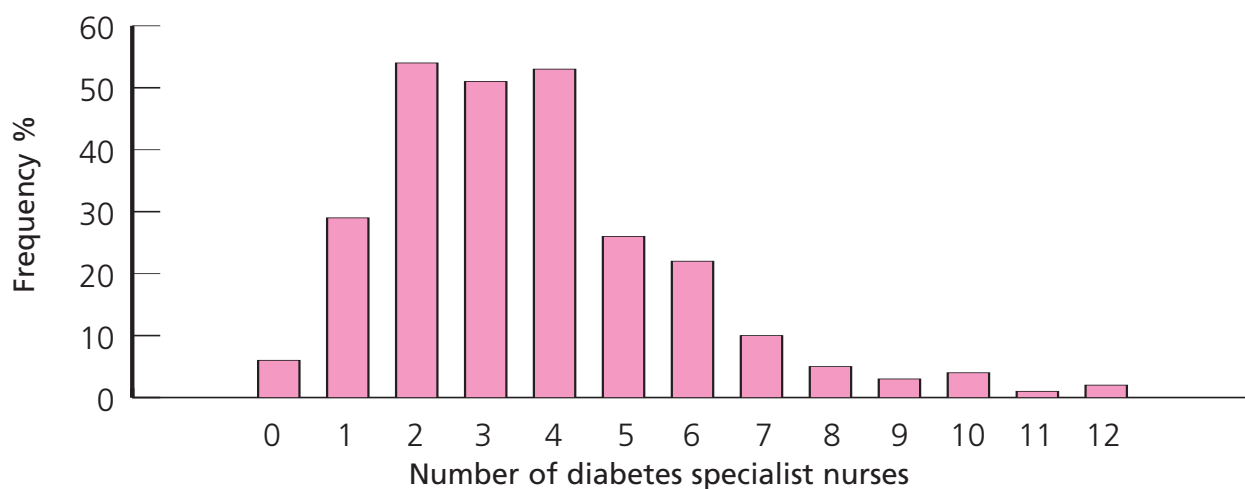
Mean MDT size was 12.7 people (SD 7.1)

Teams were primarily made up of consultant diabetologists and diabetes nurse specialists, although numbers varied considerably between teams.

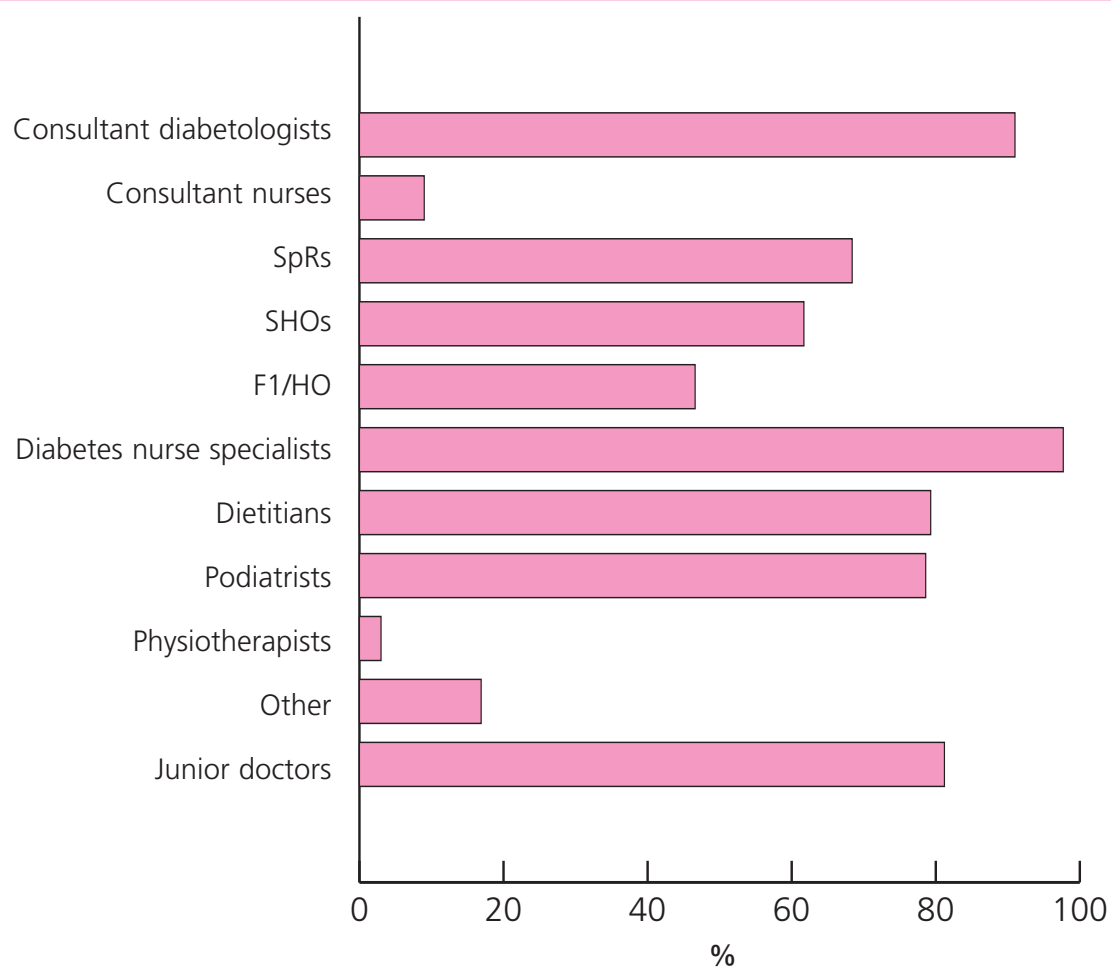
#### Diabetes consultants



#### Diabetes nurse specialists



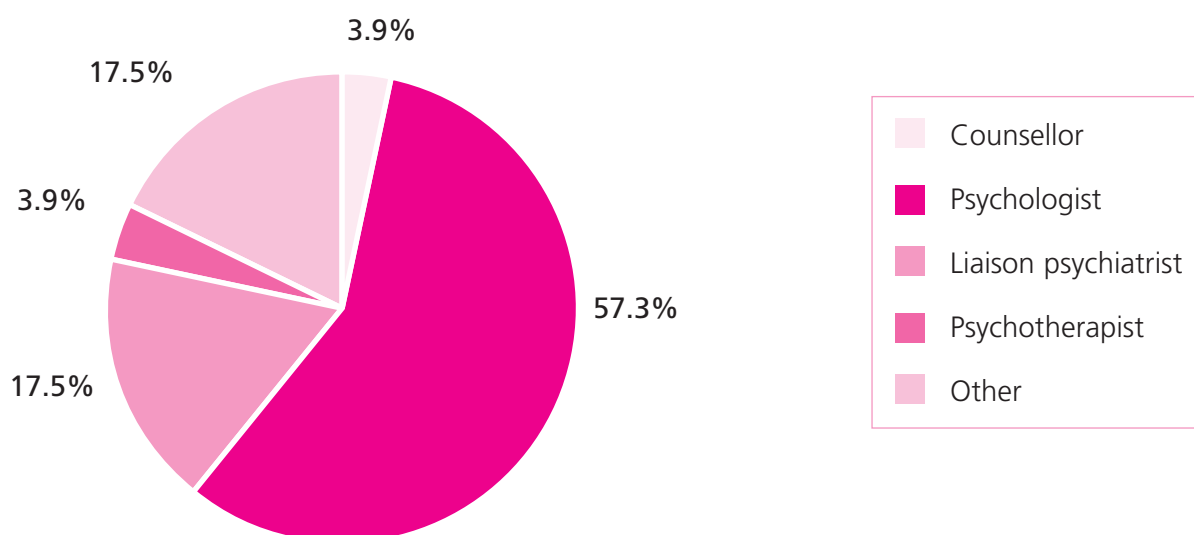
Teams also had a wide range of other healthcare professionals, as shown overleaf (the category 'other' including, for example, midwives, healthcare assistants, GPs, staff grade doctors and pharmacists).



### Psychological service provision/expert psychological input

31.5% of responders stated that their teams had some form of expert psychological input.

In 57.3% of cases this input was provided by psychologists, and in 17.5% by liaison psychiatrists.



'Other' psychological experts (17.5%) included psychiatric nurses trained in CBT as well as psychology students.

In teams with psychological input, there was an inverse correlation between the number of psychologists in a team and the number of liaison psychiatrists ( $\rho$  -0.498  $p < 0.001$ ), psychotherapists ( $\rho$  -0.291  $p = 0.007$ ), and 'other' psychological experts ( $\rho$  -0.348  $p = 0.001$ ).

Similarly the number of liaison psychiatrists inversely correlated with the number of 'other' psychological experts ( $\rho$  -0.265  $p = 0.015$ ).

---

## Comments

Despite the known high prevalence of psychological and emotional problems encountered by people with diabetes, and the acknowledged need and demand for support and care with regard to these problems, **only 31.5% of diabetes services state that they have some form of specialist psychological care available to them.**

The degree of deficit in defined access to specialist psychological services emphasises the serious lack of attention which has been paid by policy makers and those commissioning services, over many years, to the psychological and emotional needs of people with diabetes. A very broad range of professionals are available to address the physical health needs of adults with diabetes in over 450 centres across the UK, but in the large majority of centres provision for their mental health is clearly a different matter.

Where psychological services do exist they are provided by a range of disciplines, including psychologists, liaison psychiatrists, counsellors, psychotherapists and others. Some centres have one type of professional providing the psychological input, others have a different type. This demonstrates the lack of any clear plan or rationale for developing such services. Many such services have developed according to the interest of a local professional or professionals. In other words, if a person's local hospital happens to contain a psychologist, psychiatrist or other who happens to have a particular interest in diabetes they will be likely to be able to access specialist help when required, but if not they will not. It is surely not acceptable in a 21st century NHS for such important service provision to be provided, or not provided, on such a basis. Service developments of all kinds should be needs-led, and the psychological needs of people with diabetes should be addressed in an organised and planned way, in order to avoid the type of 'post code lottery' which clearly exists at present.

Accepting that services should be needs-led, it is important to avoid confusing **title** with **skill**. No single professional group has a monopoly when it comes to providing for the psychological needs of people with diabetes. According to the survey presented here the majority (57.3%) of those providing psychological services for people with diabetes are psychologists. The next largest group is liaison psychiatry – ie general hospital psychiatry – (17.5%). These two groups have different but very much overlapping skills (much more than is the case for psychology and general or community psychiatry). All of the professional groups mentioned here may have a part to play, and it is crucial that any needs-led approach is a genuine one; assessing need and then matching the skills of the workforce to the needs which are present, rather than simply employing one of the previously mentioned professionals and assuming that they will have all the skills necessary. The 'pyramid of need', as shown in Appendix C, is one way to begin to consider and define needs, but those developing services will also need to be clear as to the balance of skills and competencies required to respond to the challenge these needs present.



## c) Non-psychological team elements

### Findings

#### Coverage of psychological care issues

Less than one third (29.2%) of diabetes teams had telephone advice systems which provided any form of psychological support.

The majority of teams (79.4%) did not have any protocols or guidelines for referral of patients with psychological problems of moderate severity.

Around half (48.7%) had referral pathways to specialist care for patients with more severe mental illness.

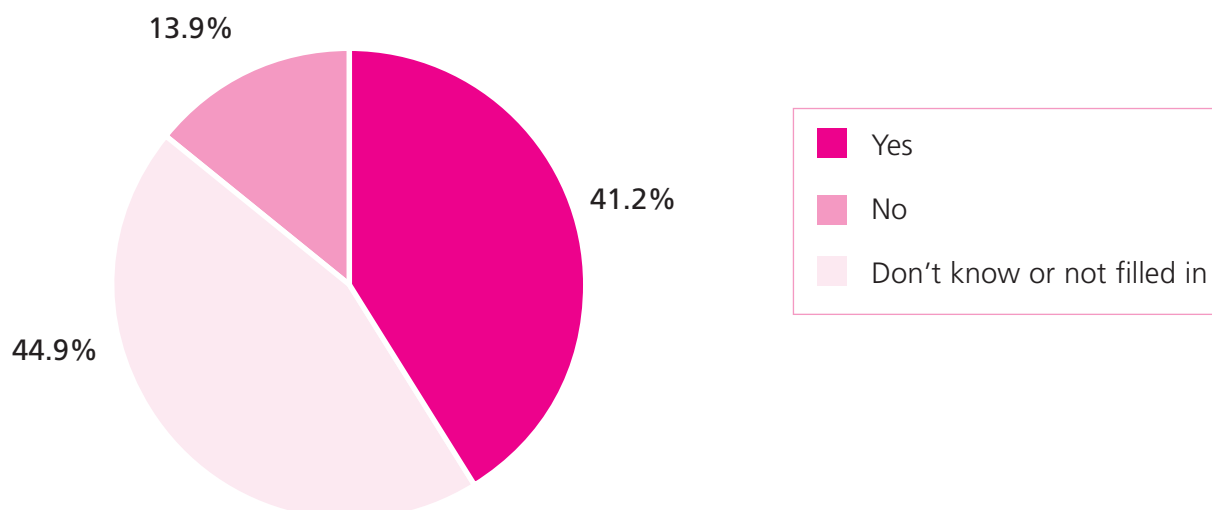
Approximately one in ten teams (11.6%) had defined screening and assessment tools for psychological problems.

	Yes	No	Don't know or not filled in
<b>Telephone advice</b>	29.2%	65.5%	5.2%
<b>Protocol and guidelines</b>	14.6%	79.4%	6.0%
<b>Adequate referral pathway</b>	48.7%	38.6%	12.7%
<b>Screening and assessment tools</b>	11.6%	81.3%	7.1%

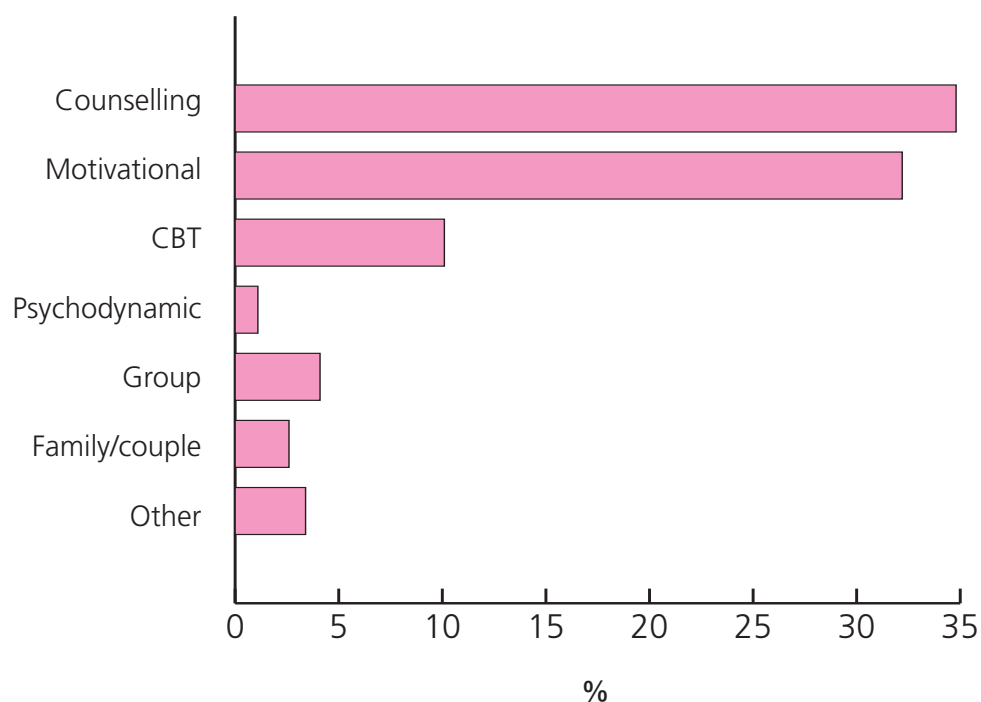
#### Training in psychological therapies

41.2% of diabetes teams had at least one 'non-psychological' team member who had received training in psychological therapy. The majority of training appeared to be in counselling and motivational interviewing techniques.

#### Proportion of teams with at least one 'non-psychological' member trained in psychological methods



### Proportion of teams with 'non-psychological' person with training in psychological therapies



### Guidelines for the management of common diabetic issues

Most teams did not have guidelines for the management of common diabetic issues.

	Had general guidelines
<b>Self-management</b>	34.8%
<b>Recurrent DKA</b>	35.2%
<b>Low BMI</b>	11.6%
<b>Eating disorder</b>	12.0%
<b>Morbid obesity</b>	25.8%

Considering only those teams which did have guidelines for the above, a minority of these had guidelines which explicitly considered psychological issues.

	Had guidelines which considered psychological issues
<b>Self-management</b>	36.6%
<b>Recurrent DKA</b>	36.2%
<b>Low BMI</b>	54.8%
<b>Eating disorder</b>	65.6%
<b>Morbid obesity</b>	46.4%

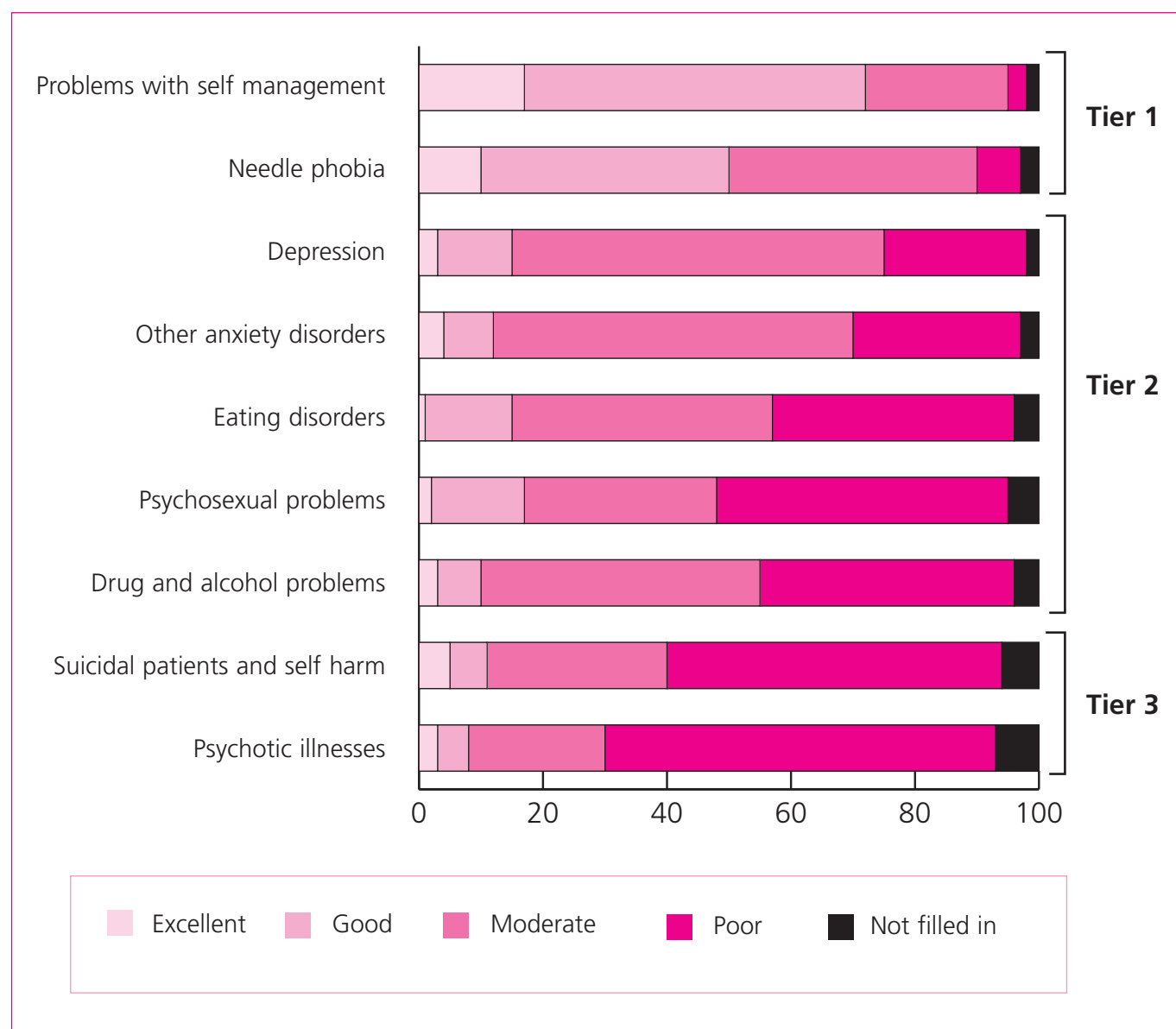
## Perceived skill level of 'non-psychological' members of diabetes teams in managing psychological issues

Responders felt their teams were reasonably skilled in managing the common and relatively simple psychological or self management issues, such as problems with self-management of diabetic medications and needle phobias.

With increasing psychological or psychosocial complexity, there was a significant drop in the perceived skill of teams to manage these issues, such as depression, anxiety, eating disorders/problems, psychosexual problems and drug and alcohol abuse; ie responders felt that their teams were less well equipped to manage.

With regard to what might be considered more difficult psychiatric issues, such as psychosis or suicidal patients, responders felt that these issues would be poorly managed by their teams.

Teams which were confident for lower level problems tended to also be more confident in managing more complex issues.



To carry out statistical analysis regarding how confident responders were that their teams were able to manage the various psychological problems listed, the psychological issues encountered by diabetes teams were divided into **three tiers**. This division was based on likely increasing severity/complexity:

**Tier 1:** self management and needle phobia

**Tier 2:** depression, anxiety disorders, eating disorders, psychosexual issues, and substance misuse/alcohol

**Tier 3:** suicidality and psychosis

Analysis of results showed that in terms of perceived skill in managing psychological issues, there were statistically significant differences between the different tiers of psychological problems (Kendall W. test  $\chi(2)=330.7$ ,  $N=259$ ,  $p<0.001$ ).

Post hoc testing (accounting for multiple comparisons) demonstrated responders felt better able to deal with tier 1 problems versus tier 2 (Wilcoxon Signed Rank test,  $N=263$ ,  $p<0.001$ ), tier 1 problems versus tier 3 (Wilcoxon Signed Rank test,  $N=259$ ,  $p<0.001$ ) and, similarly, tier 2 problems versus tier 3 (Wilcoxon Signed Rank test,  $N=259$ ,  $p<0.001$ ).

There was also a clear correlation between perceived skill levels regarding dealing with the different tiers of psychological problems in individual teams.

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
<b>Tier 1 (Spearman Rho)</b>	---	0.46**	0.25**
<b>Tier 2 (Spearman Rho)</b>	0.46**	---	0.62**
<b>Tier 3 (Spearman Rho)</b>	0.25**	0.62**	---

\*\* Correlation is significant at the 0.01 level (2-tailed).

## Skill levels of doctors

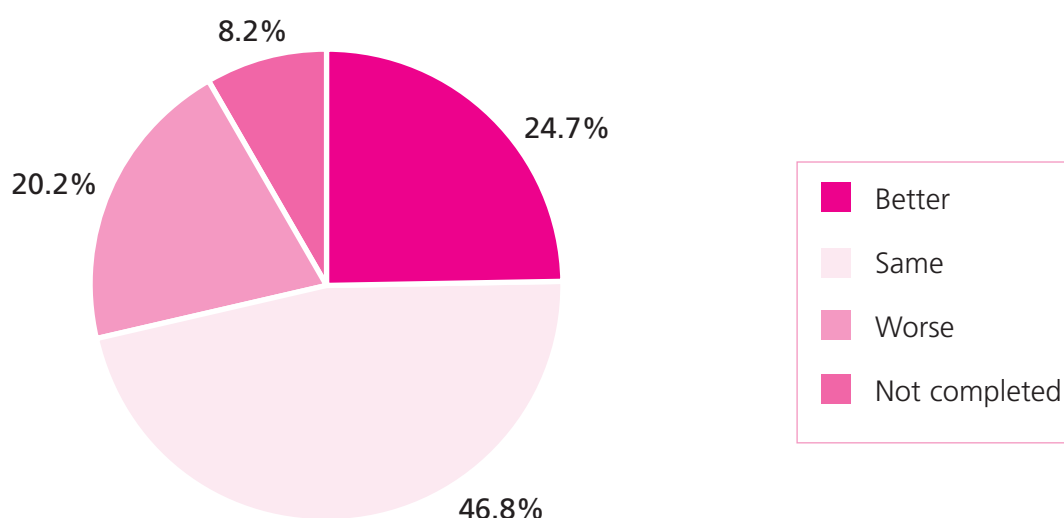
Responders to the survey rated their perceived doctor's skill levels in dealing with psychological issues in comparison to that of an experienced GP (in line with the statement on the desirability of this in the NICE guidance on diabetes).

46.8% of responders rated their doctors as being equally as competent as an experienced GP in managing psychological issues.

20.2% rated their doctors as less competent than an experienced GP.

24.7% rated their doctors as more competent than an experienced GP.

## Perceived doctor skill level compared to experienced GP



### Comments

#### Coverage of psychological care issues

Given the lack of specialist psychological input available it is not surprising that many diabetes teams also lack some elements of care relating to psychological needs which might be considered quite basic. Less than one third have telephone advice available which can provide any form of psychological support, only a little over 10% use any defined screening and assessment tools for psychological problems, and almost 80% of services have no protocols or guidelines for referral of patients with psychological problems of moderate severity. It is precisely the latter commonly occurring problems which were the main focus of this survey (as per level two of the pyramid of need depicted in Appendix C) and, in the opinion of the authors of this report, the extent of this gap in the care available to people with diabetes is very concerning.

The situation with regard to what might be considered more severe psychological and psychiatric issues (as per level three of the pyramid of need in Appendix C) appears to be somewhat better. Around half of the diabetes services in this survey had referral pathways for the care of patients with such problems. This is, however, almost certainly simply a reflection of the fact that all centres tend to have some form of local psychiatric service provision. Thus, if a patient is suffering with, for example, a Bipolar Affective Disorder they can be referred to the local psychiatric team. But this will be a generic mental health team, in which any specific knowledge or understanding with regard to the particular issues faced by people with diabetes is likely to be at best limited and at worst almost entirely lacking. Staff from such teams can, of course, respond to the psychiatric condition or mental illness in question, but when problems exist at the more moderate but also more common level two the lack of specific expertise around diabetes will prevent those same teams from being able to help.

Psychiatric services in secondary care increasingly focus upon what has come to be known as 'severe mental illness'. That is, in effect, psychotic conditions. The vast majority of people with diabetes who have significant psychological problems do not suffer from such conditions and need specialist, as opposed to generic, psychological input to help address their specific needs. In common with many medical specialities, generic psychiatric teams will tend to screen for classifiable (psychiatric) syndromes, which have to achieve a specified level of severity or duration to be able to receive the diagnosis. They will not tend to become involved actively in the care of a patient whose symptoms are such that their condition is 'subthreshold',

but this is not an adequate or appropriate response in a person who also suffers with diabetes. The reason is that the subthreshold condition, whether it is depression, an eating disorder, or an anxiety state, etc, will have a negative impact upon self-care, physical health outcome, and ultimately mortality, associated with the diabetes. As a result, liaison psychiatrists', and psychologists', thresholds to become actively involved in treating patients suffering combined diabetes and psychological problems are, by necessity, set at a lower level.

Coming back to the general lack of specialist psychological input available, an optimistic view might be that this allows for the possibility of some relatively easy but important gains to be made. For example, the fact that only a little over 10% of diabetes services use any defined screening and assessment tools for psychological problems. This ought to be relatively easily remedied. There are of course cost implications when introducing any new tools into clinical practice, but these need not be large and staff can be trained to use simple screening tools quite easily in order to begin to recognise when their patients may be suffering significant degrees of depression and/or anxiety, so that there may at least be a possibility of helping them within the existing diabetes team or local psychological/psychiatric services as appropriate. Existing diabetes NSF standards and NICE guidelines require this.

An important ethical consideration is, of course, that screening should only ever take place for conditions for which treatment would then be available, so that the introduction of screening would need to occur in parallel with an organised approach to ensuring and developing services.

### **Training in psychological therapies**

The proportion of (non-psychological) staff in diabetes teams who were reported to have training in psychological therapy was quite large (41.2%). This was mainly in counselling or motivational interviewing, but the proportion does beg the question as to what was meant by 'training'. This was open to interpretation by responders who, although senior members of the team, may not be entirely familiar with the training background of all of their staff. Unfortunately, the survey methodology does not allow an examination or confident clarification of this. The questionnaire did not ask about the nature or extent of the training or whether or not it was to the level of achieving a qualification or accreditation, etc. Despite this, it must be seen as very positive that a large minority of these staff had received some form of education and perhaps instruction in the use of psychological techniques. This suggests an enthusiasm and interest from staff regarding psychological and emotional issues which, in light of our clinical experience, comes as no surprise to the survey authors. Any further clarification of this area would require further research.

### **Guidelines for the management of common diabetic issues**

There appears to be a general lack of availability of guidelines within diabetes services for the management of common diabetic issues, particularly with regard to the psychological problems or conditions experienced by people with diabetes. Again, this requires to be addressed for services to become compliant with the existing national standards and guidelines.

### **Perceived skill level of 'non-psychological' members of diabetes teams in managing psychological issues**

The pattern of perceived skill level for (non-psychological) team members when managing psychological problems or conditions is perhaps predictable. Teams feel better able to deal with lower level and less complex problems than with the more complex and severe psychological and psychiatric presentations. It is clear from the survey results, however, that diabetes teams feel they need help with managing almost all psychological presentations, and an opportunity to involve, or refer on to, specialist services for a whole range of conditions. Staff working in diabetes services are specialised and experienced and it is crucial that this declared need is listened to by commissioners and policy makers in order that the psychological needs of people with diabetes might begin to be addressed to any degree of adequacy.

## Skill level of doctors

The NICE guidance on diabetes suggests that 'for physicians a degree of competence in managing depression and psychological issues (in diabetes) at least matching that of an experienced GP is clearly desirable'. Although it is obviously very subjective, the survey attempted to address this by asking non-medical team members to rate their perception of the skill levels of the doctors working with them. On this comparison a total of 71.5% of responders rated their doctors as the same or better than an experienced GP. This could be seen as encouraging but it still leaves over one fifth feeling that their diabetologists'/team doctors' skills were less than an average GP. There are many possible reasons for this finding, and probably a whole range of confounders perhaps even including team dynamics and relationships, but the findings do suggest a need to consider ongoing training in psychological issues. This would concord with the overall perception by the responder teams that they require more such training.

## d) Psychological team elements

### Findings

66 centres (25%) identified and gave details of an expert provider of psychological services, of which 53 (80%) were interviewed by telephone.

### Specific psychological services at pyramid level two and adult age range covered

90.6% of responders stated that the psychological elements of their service provided support for level two psychological problems (pyramid level two moderate; see Appendix C).

The majority (75.3%) covered the full adult age range.

18.8% covered just working adults (17-64 years of age) and 1.9% stated that their service only provided psychological support to the over 65s.

### Types of psychological disciplines available

The proportions of teams offering various psychological therapies:

Counselling	Motivational interviewing	CBT	Psychodynamic therapy	Group	Family therapy	Other therapy
71.7%	77.4%	92.5%	28.3%	41.5%	64.2%	35.8%

- Over 90% of psychological services available offered CBT.
- Unexpectedly the range of therapies offered was inversely correlated with the range of specialities (eg. psychology, liaison psychiatry) (Spearman rho -0.29, p=0.03), indicating that the more specialities/disciplines involved the less the range of therapies being provided.
- There was no significant association between the range of therapies and whether the specialist psychological team was unidisciplinary or multidisciplinary.
- In addition, in teams with a predominant discipline (eg psychology, liaison), the discipline did not affect the range of psychological therapies available.
- The range of therapies did not significantly correlate with waiting times or the absolute number of psychological experts.



## Sessions provided

In terms of those who provided the psychological service input into diabetes teams, individual psychological experts provided a median sessional input of 2.0 (range 0.25 to 11 sessions).

Per team with psychological input, the median total sessional input was 2.5 (range 0.25 to 11 sessions).

Per Person	Counsellors	Psychologists	Liaison psychiatrists	Psychotherapists	Other
<b>Median sessions worked per week</b>	3	2	0.75	2	0.75
<b>Lowest</b>	2	0.25	0.25	0.25	0.25
<b>Highest</b>	9	11	5	7	5

The total number of sessions offered correlated with the total number of psychological experts in a given team (Spearman rho: 0.31,  $p=0.02$ ) and the range of therapies (eg CBT, psychotherapy; Spearman rho: 0.40,  $p<0.01$ ), but not the range of disciplines (e.g. psychology, liaison psychiatry etc; Spearman rho: 0.01,  $p=0.97$ ).

In addition, the number of sessions did not correlate with shorter waiting times (Spearman rho: -0.04,  $p=0.80$ ).

The number of psychological expert staff involved in the telephone responder's team ranged from 1 to 7 staff (median=2).

	Counsellors	Psychologists	Liaison psychiatrists	Psychotherapists	Other
<b>1</b>	2.9%	24.6%	10.1%	5.8%	13.0%
<b>2</b>	0.0%	21.7%	5.8%	1.4%	0.0%
<b>2 or more</b>	1.4%	8.7%	1.4%	0.0%	2.9%

The number of psychological expert disciplines correlated with the absolute number of psychological experts (Spearman rho: 0.62,  $p<0.001$ ) and with shorter waiting times (Spearman rho: -0.35,  $p<0.01$ ).

In teams with a psychological discipline present the median number of staff of that discipline is shown overleaf:

	Counsellors	Psychologists	Liaison psychiatrists	Psychotherapists	Psychiatric nurse	Other
<b>Median staff number</b>	1	2	1	1	1	1

	Counsellors	Psychologists	Liaison psychiatrists	Psychotherapists	Psychiatric nurse	Other
<b>Of teams with at least one person from a psychological discipline</b>	4.3%	55.1%	17.4%	7.2%	15.9%	4.3%

### Level of experience

A large majority of those providing psychological input to diabetes teams were 'a member of the diabetes team or had experience with people with diabetes for over one year'.

The answers given regarding frequency of clinical contact with people with diabetes are not useful, as the related questions were placed together with the question about being a member of the team/having experience with people with diabetes for over one year, thus mixing two very different concepts (see comments below).

<b>Contact and level of experience</b>	
Member of the diabetes team or had experience with people with diabetes for over one year	79.7%
Frequently deal with people with diabetes	5.8%
Regular contact with people with diabetes	5.8%
Occasional contact with people with diabetes	8.7%
Very occasionally contact with people with diabetes	0.0%

## Involvement of psychological services

A number of questions addressed the involvement of psychological service elements with people with diabetes.

Questions	Dedicated	Generic
<b>Are the services dedicated for people with diabetes or are they simply generic services?</b>	58.5%	41.5%
<b>Do those providing the psychological service work with the diabetes services as dedicated members of the team?</b>	67.9%	32.1%

Questions	Yes	No
<b>Do they clinically treat patients?</b>	100.0%	0.0%
<b>Do they provide education for non psychological members of the diabetes team?</b>	90.6%	9.4%
<b>Do they provide clinical supervision for non psychological members of the diabetes team?</b>	52.8%	47.2%

## Provision of diabetes services

In terms of location, psychological services were provided in the general hospital (100%).

No services were provided in mental health hospitals.

13.2% of responders stated that their psychological service also provided input to GP practices.

9.4% described additional input in the form of attending diabetes outpatients and home visits.

## Provider organisation

In terms of the organisation which provided the psychological services, this was usually the acute trust (56.6%).

A minority of responders indicated that their service was provided by more than one organisation (21.1%).

	Primary Care Organisation	Acute Trust	Mental Health Trust	Other
<b>Yes</b>	30.2%	56.6%	30.2%	3.8%
<b>No</b>	67.9%	41.5%	67.9%	94.3%
<b>Don't Know</b>	1.9%	1.9%	1.9%	1.9%

Number of organisations providing psychological service	
1	78.8%
2	19.2%
3	1.9%

### Urgency, waiting times and limits to service

92.5% stated that their service could see both routine and urgent cases. Of these, 41.5% stated that urgent cases could be seen on the same day.

7.5% of responders indicated that their service was only available for routine cases.

Only 28.3% could see routine patients within 1 month of referral.

Waiting times for routine cases	
< 1 month	28.3%
Between 1 and 2 months	35.8%
Between 2 and 3 months	18.9%
More than 3 months	17.0%

92.5% of responders stated that there was no limit on how long the service and/or clinician could continue to provide psychological treatment.

For the remaining 7.5% of responders the limits on duration of therapy were that up to six weeks or 20 sessions could be provided.

Note: There was an inverse correlation between the absolute number of psychological experts providing input and the waiting time (Spearman rho: -0.35,  $p < 0.01$ ).

If the psychological part of the service was provided by psychiatrists it was more likely to be able to see patients urgently than if provided by psychologists ( $\text{ChiSq}(1)=8.01$ ,  $p=0.006$ ).

Also, all psychological services provided by psychiatrists could see patients without limits, whereas in 10.3% of services provided by psychologists there were limits to the duration of involvement, although this was not a statistically significant difference ( $\text{ChiSq}(1)=1.23$ ,  $p=0.56$ ).

### Provision of education and supervision to the non-psychological team members

Overall there was no association between discipline (psychologist versus liaison psychiatrist) and whether or not educational input was provided to the diabetes team ( $\text{ChiSq}(1)=0.023$   $p=1.00$ ).

The results tend to suggest that psychiatrist interviewees may tend to provide less supervision ( $\text{ChiSq}(1)=3.46$   $p=0.09$ ), although this was not a statistically significant difference.

## Training of the non-psychological team members

While there was a suggestion that psychiatrist interviewees came from teams which had less MDT training in psychological skills, this was not a statistically significant difference (ChiSq(1)=3.58 p=0.10; OR 1.11, 95% CI 0.25, 0.06).

The presence of psychological expert input significantly increased the probability that MDT members had training in Motivational Interviewing and in CBT:

	ChiSq(1)	p-value
<b>Motivational Interviewing</b>	9.97	0.005
<b>CBT</b>	4.20	0.05

## Psychological staff and membership within the diabetes team

With regard to being a member of the MDT or not, this had no significant effect on:

- team skill level in managing psychological problems
- rating of team doctor skill in managing psychological problems
- psychological training for non-psychological team members.

With regard to whether service was specific to diabetes team or a generic service this had no effect on:

- team skill level in managing psychological problems
- psychological training for non-psychological team members.

However there was a suggestion that it did influence doctor skill:

- Doctor skill was rated lower if the service was generic as opposed to specific (Spearman rho:0.32, p=0.02, N=54).

## Availability of clinical supervision by psychological experts

With regard to this, there were no significant associations with:

- rating of team doctor skill in managing psychological problems
- psychological training for non-psychological team members
- team skill level in managing psychological problems.

## Unidisciplinary versus multidisciplinary psychological input and professional groupings

In this analysis of the 84 teams with psychological expert input, which were the subject of telephone interviews, two factors were considered:

- 1) whether the psychological contribution was unidisciplinary or multidisciplinary
- 2) the professional grouping of the psychological part of the team (psychologists, liaison psychiatrists, counsellors/psychotherapists/others).

- 14 of these teams (16.7%) were multidisciplinary and 70 (83.3%) involved just one discipline.
- Of those from a unidisciplinary background, 51 (60.7%) were from grouping 'psychologists', 8 (9.5%) were from grouping 'liaison psychiatrists' and 11 (13.1%) were from the grouping 'counsellors/psychotherapists/others'.

#### Effect of unidisciplinary versus multidisciplinary models on Part 1 variables:

- There was no significant effect on team skill in managing psychological issues.
- There was no significant effect on perceived doctor skill level.
- There was no significant effect on amount of training of non-psychological members.
- As expected there was a difference in terms of total psychological people in a team such that multidisciplinary teams had more people (Mann-Whitney U test,  $N=84$ ,  $Z=5.23$ ,  $p<0.001$ ).

#### Effect of professional grouping of psychological input on Part 1 variables:

- There was no significant effect on team skill in managing psychological issues.
- There was no significant effect on doctor skill level.
- There was no significant effect on the amount of training of non-psychological members.

#### Effect of unidisciplinary versus multidisciplinary models on Part 2 variables:

- There was a suggestion that this had an effect on whether psychological experts were members of MDT i.e. unidisciplinary psychological experts tended to be more likely to be MDT members ( $\text{ChiSq}(1)=4.04$ ,  $n=29$ ,  $p=0.07$ ).
- There was a significant association between unidisciplinary versus multidisciplinary models on whether psychological input was specific to diabetes or generic; multidisciplinary teams tended to be providing more generic input ( $\text{ChiSq}(1)=5.11$ ,  $n=29$ ,  $p=0.02$ ).
- There was also a significant difference between unidisciplinary versus multidisciplinary models regarding whether the psychological experts provided clinical supervision; multidisciplinary teams tended to provide less clinical supervision ( $\text{ChiSq}(1)=4.46$ ,  $n=29$ ,  $p=0.04$ ).

#### Effect of professional grouping of psychological input on Part 2 variables:

- There was no significant effect on whether psychological experts were members of MDT.
- There was no significant effect on whether psychological input was specific to diabetes team or simply generic.
- There was no significant effect on the presence or absence of clinical supervision of MDT by the psychological expert(s).

---

#### Comments

Perhaps the most important and striking result from this survey is that **only 31.5% of responding UK services stated that they had any psychological expert(s) in or associated with their multidisciplinary diabetes team.** Previous surveys have pointed to the lack of psychological service availability, but have asked very few and very simple questions, in effect being no more than "Do you have psychological services in your area for people with diabetes?". Even those surveys, allowing such a broad interpretation of what would constitute the availability of a service, have tended to find that over 50% of centres declare that they do not have access to such services. This is the first time a national survey has taken place with any real level of detail in the questions asked, and the finding that less than one third of diabetes services have any defined access to psychological expertise for their patients is very concerning indeed.

Regarding the nature of the specialist psychological services which are available, just over 90% provide for the type of psychological problems which are the particular focus of this survey (ie level two of the pyramid of need, as shown in Appendix C):

*'Difficulties with coping causing significant anxiety or lowered mood, with impaired ability to care for self as a result; includes psychological problems which are diagnosable/classifiable, but can be treated solely through specialist psychological interventions. For example, mild and some moderate cases of depression, anxiety states and obsessive/compulsive disorders'.*

Such problems are clearly seen as core business for psychological services helping people with diabetes.

It was encouraging to find that just over 75% of these services cover the full adult age range, ie. 17 years of age and upwards but with no upper age limit. Given the importance of providing services on a fair and equitable basis, avoiding age (or any other) discrimination, it is good to see that those providing specialist psychological services for people with diabetes are trying to follow this approach.

In line with the general emphasis within various NICE guidance, and the current push within the Department of Health's 'Improving Access to Psychological Therapies' (IAPT) programme, over 90% of the services were found to offer Cognitive Behavioural Therapy (CBT). Interestingly, with regard to the range of therapies offered, this was no greater in multidisciplinary than in unidisciplinary psychological teams, nor did the predominant psychological discipline affect the range of psychological therapies available. This was the case whether the predominant professional group was psychology or liaison psychiatry, which tends to suggest an overlap in what these groups provide. The results also show that motivational interviewing is the second most common therapeutic approach provided, followed by counselling and then family and group therapy.

Having said all of that, there is an additional way to interpret this element of the survey results. The proportions of teams offering various psychological therapies is shown below, with large proportions for almost all of the therapies about which the survey enquired:

<b>Counselling</b>	<b>Motivational interviewing</b>	<b>CBT</b>	<b>Psychodynamic therapy</b>	<b>Group</b>	<b>Family therapy</b>	<b>Other therapy</b>
71.7%	77.4%	92.5%	28.3%	41.5%	64.2%	35.8%

This strongly suggests that the answers, from many responders, refer to local generic services rather than services specifically for people with diabetes. Thus, while the range of therapies available appears very broad, which is a positive point, in many or most cases these services are not likely to be provided by therapists with any significant level of expertise regarding the specific range of issues faced by people with diabetes.

Also on the subject of access to services, the median total sessional input from psychological experts into diabetes teams was 2.5 sessions (half-days) per week. The total number of sessions provided did not correlate with the range (number) of psychological disciplines. The number of psychological disciplines, but not the absolute number of sessions provided did, however, correlate with shorter waiting times. This is difficult to interpret as such a correlation will be very much influenced by planning of services and the extent to which the psychological provision is, or is not, matched to need and demand.

One aim of the survey was to explore the level of experience of psychological experts with regard to working with diabetes ie, to look at the important issue of whether or not those providing psychological support and care for people with diabetes actually have a particular knowledge of/experience of working



with diabetes. This is necessary for them to be able to understand their patients issues in the context of coping with the condition of diabetes, and what that means for people with diabetes on a day-to-day basis. Unfortunately the question which was intended to explore this could not do so (see question 17, appendix D). That single question mixed two very different concepts, ie the level of experience and the frequency of clinical contact with people with diabetes. Little or nothing can be drawn from the answers to the frequency questions. It is useful to know, however, that of those individual psychological experts providing input to diabetes teams who were interviewed in part 2 of the survey process, a majority stated that they were 'a member of the diabetes team or had experience with people with diabetes for over 1 year'.

It would appear that a majority of the psychological services which are provided are in the form of sessions specifically available for the diabetes service/people with diabetes, given that 58.5% are seen as dedicated for this purpose as compared with 41.5% which are described as 'generic' local services. The concern regarding generic services is that the mental health professionals seeing people with diabetes in that context will lack the necessary knowledge regarding the particular issues which arise in relation to this condition and the management of both diabetes and mental health problems at the same time. This situation is very concerning and bears being spelt out again here; only 31.5% of diabetes centres apparently have access to specialist psychological service provision, but only 25% can actually name and give contact details for a person providing such a service. When looking in detail at that 25%, only 58.5% of them have dedicated psychological services, as opposed to simply access to local generic services. This amounts to no more than 15% of diabetes services overall. **So, some 85% of people with diabetes in the UK have either no defined access to psychological support and care, or at best only in the form of local generic services in which they will be seen by mental health professionals who may have very little or virtually no useful knowledge of their condition and the particular challenges they face as a result of it.**

On a more positive note, where psychological services do exist for people with diabetes 100% provide direct treatment for patients, ie not just support for the diabetes team in dealing with mental health issues. In addition, over 90% provide education for the diabetes team and the majority some supervision regarding clinical cases. The results also suggest that both psychologists and liaison psychiatrists tend to provide both education and supervision (case discussion, etc) for diabetes team members with regard to cases involving psychological/emotional problems. It may be that psychologists are providing more of this than liaison psychiatrists, although this difference does not reach statistical significance and it is not possible from this survey to tell whether there is a consequent difference in the amount of provision of direct clinical care to patients by the liaison psychiatry group.

All services identified provide care within the general hospital setting, and a small number (13%) also provide services into GP practices. With the move towards increasing community provision of diabetes services this split is likely to shift, and it will be important to ensure that such a shift of setting for general diabetes care is matched by a shift in setting for provision of psychological services in a planned and coordinated way.

There was a significant amount of variation in terms of the type of organisation providing psychological services. These were mainly Acute (general hospital) Trusts but with Primary Care and Mental Health Trusts also being identified as doing this. The nature of the provider organisation should of course be seen as much less important than the nature of the care being provided, although any efforts to ensure equitable access to services across the UK will need to be clear as to where responsibility for this lies in any particular geographical area.

Regarding responsiveness of psychological services, 92.5% declared an ability to see both routine and urgent cases, although only 41.5% of those including urgent response could see patients on the same day as referral. This is actually very concerning as it suggests that not much more than one third of people with diabetes in the UK will have access to specialist psychological care on a genuinely urgent (same day) basis

when it is required. Also, with regard to the less urgent/routine cases, only 28.3% of services can see such patients within one month of referral. Considering the current target of seeing all patients within 13 weeks of referral, for the psychological services in this survey this would appear to be the norm in 83%, as 17% of services declared their waiting time for routine cases to be in excess of three months. Such a delay in receiving psychological help should not be acceptable in any modern healthcare organisation. The finding that more psychological experts providing input is associated with significantly lower waiting times is perhaps predictable but should not be ignored.

It is the case that in some services, perhaps particularly those which exclusively provide psychological therapies, there may be a limit as to how long therapy can be provided for to a particular individual, or how many sessions any particular patient may have access to. This can also be concerning, as people's problems may not be able to be adequately addressed within six weeks, or 20 sessions, despite the system trying to set such a limit. Thankfully, such limit setting was only found to be the case in 7.5% of services in this survey.

Regarding unidisciplinary versus multidisciplinary psychological input and professional groupings, two factors were considered in this analysis:

1) Whether the psychological contribution was unidisciplinary or multidisciplinary. Of the 84 teams with psychological expert input, 70 (83.3%) involved just one discipline. For those with experience of general hospital psychological services this picture will be entirely as expected. Unfortunately, the history of the creation and development of such services within the UK has tended to be determined almost entirely by the interest in any particular centre of a local healthcare professional or professionals. In other words, whether or not people with any particular physical condition will have access to expert psychological help is not dependent upon need, or even demand, for such services but whether or not a local professional happens to be interested enough, and to have the energy, enthusiasm and time (ie therefore resources) to set something up. This has been the case in the past but is not an appropriate basis for service provision going forward. Those who have taken the initiative to provide services at all are to be congratulated, but across the healthcare system we see enormous variation and inconsistency in service provision, with consequent inequity of access. Recent initiatives, perhaps most notably the Darzi NHS Next Stage Review<sup>57</sup>, have focussed attention upon the need to provide a basic level of care to all in the UK, and to move away from the current 'postcode lottery' situation, of which psychological care in general hospitals and for people with physical health conditions, including diabetes, is unfortunately a good example.

Knowledge of this background should be helpful in understanding why so many of the psychological services which do exist for people with diabetes are unidisciplinary. Given the various types and levels of psychological need in people with diabetes, as illustrated in the pyramid of need used as a basis for this survey, it does not make sense to try to provide for them via the single discipline of psychology. The various psychological expert groups do provide services which have very significant similarities and areas of overlap, but they are not the same. Future service developments in this area should be based upon an initial understanding of the level and type of need and demand. This should always be the starting point for the design and delivery of services to provide the best type of care to address those needs by those professionals best placed to do so, not relying upon the particular areas of interest of local professionals. If an appropriate approach was taken it would be highly unlikely, at least in a centre of any reasonable size, that a unidisciplinary psychological service would be best, unless the single discipline concerned could be shown to have all of the necessary skills and abilities to provide for the local need. Those managing and developing diabetes services will need to be, or become, aware of the various relevant skills and competencies in the mental health field, in order to avoid incorrect assumptions as to what can be provided by any single professional group.

2) The effect of professional grouping with regard to psychological input. This had no significantly differential effect upon teams' perceived skill in managing psychological issues or perceived doctor skill level, amount of training of non-psychological members, or the presence or absence of clinical

supervision of the diabetes MDT by the psychological expert(s). In other words, whether the psychological expert was a psychologist or a liaison psychiatrist by background the associations with regard to these variables was the same. This information is helpful in that it shows that regardless of the discipline the MDT can be educated/trained/upskilled, which is good news, but the appropriate type and amount of psychological input would still need to be matched to the type and amount of clinical need within the population being served.

A final comment is necessary regarding the significant difference between unidisciplinary and multidisciplinary psychological models in relation to whether or not the psychological experts provided clinical supervision to the diabetes team. Multidisciplinary psychological teams tended to provide less clinical supervision. This may reflect the fact that multidisciplinary psychological teams are more likely than unidisciplinary teams to be local generic mental health services, so including more disciplines but providing a service which is not integrated or particularly meaningfully linked with the diabetes team.

## e) Diabetes MDTs: size, perceived skill level, training, psychological focus

### Findings

The largest diabetes team had 39 people; the smallest had just one person.

Teams with at least one ‘psychological’ person associated with them appeared to be larger in size (‘psychological expert present’ median team size=13.5, ‘psychological absent’ median team size=10.3; Mann-Whitney U test 5774.5, N=266, Z=-3.21 p=0.001).

For categorical analyses, MDT teams were grouped into three sizes:

- large (>15 team members)
- medium (≥9 ≤15 team members)
- small (<9 team members).

Larger teams had significantly more likelihood of having a psychological person attached to their service (Pearson chi square 9.93, df=2, p=0.007).

	Small	Medium	Large
<b>% of teams with at least one ‘psychological’ person present</b>	20.7%	32.6%	43.0%

There was a highly significant association between the size of the diabetes MDT and the number of psychological experts in the team (Spearman rho: 0.22 p<0.001). This relationship held true even when just considering those teams who had at least one psychological team member (Spearman rho: 0.24, N=84, p=0.03).

As noted earlier, responders were asked to rate the ability of their teams in managing psychological issues and for analysis, the psychological issues were divided into three tiers of increasing severity/complexity (tier 1 to 3).

### Tier 1

Problems with self-management of diabetes  
Needle phobia

### Tier 2

Depression  
Other anxiety disorders

Eating disorders/problems  
Psychosexual problems  
Drug and alcohol problems

### Tier 3

Suicidal patients and self-harm  
Psychotic illnesses

With regard to how skilled the responders felt their teams were in managing tier 2 and 3 psychological issues, skill levels were rated as significantly higher if that team had at least one psychological team member compared with teams having no such psychological input. There was no difference between teams with expert psychological input and those without in how skilled respondents felt their teams were in managing tier 1 psychological issues.

	Tier 1	Tier 2	Tier 3
<b>Mann-Whitney U</b>	6670.5	5942	5329
<b>Z</b>	1.44	2.55	3.56
<b>Effect size (r)</b>	0.09	0.16	0.22
<b>p-value</b>	0.15	0.01	<0.001

Overall, however, there did not appear to be any significant correlation between MDT size and how confident responders were regarding their teams ability to manage tier 1, 2 or 3 psychological problems (Spearman's rho: tier 1, -0.06, N=263, p=0.30; tier 2, -0.11, N=262, p=0.09; tier 3, -0.10, N=258, p=0.10).

When looking at whether or not psychological input had an influence, there was no correlation between MDT size and perceived skill level in managing tier 1 to 3 problems if there was no psychological input into the team.

In contrast, for teams with psychological input there was a suggestion that larger teams with psychological input did have greater perceived skill level in managing tier 1 to 2.

<b>Spearman rho</b>	Tier 1	Tier 2	Tier 3
<b>Psychological absent</b>	0.05	0.004	0.11
<b>Psychological present</b>	0.27*	0.24*	0.03

Spearman rho for correlation of MDT size with team perceived skill level in managing psychological issues.  
\* significant to 0.05 level.

Looking specifically at teams with psychological input, the total number of psychological members of the team did not significantly correlate with the teams perceived skill level in managing any of the issues from tier 1 to 3.

There was a clear correlation between how people rated their doctor skill level and the team's perceived skill at managing tier 1 to 3 if their team did not have a psychological expert i.e. the lower the skill rating for the doctors, the lower the team's skill rating for managing psychological issues.

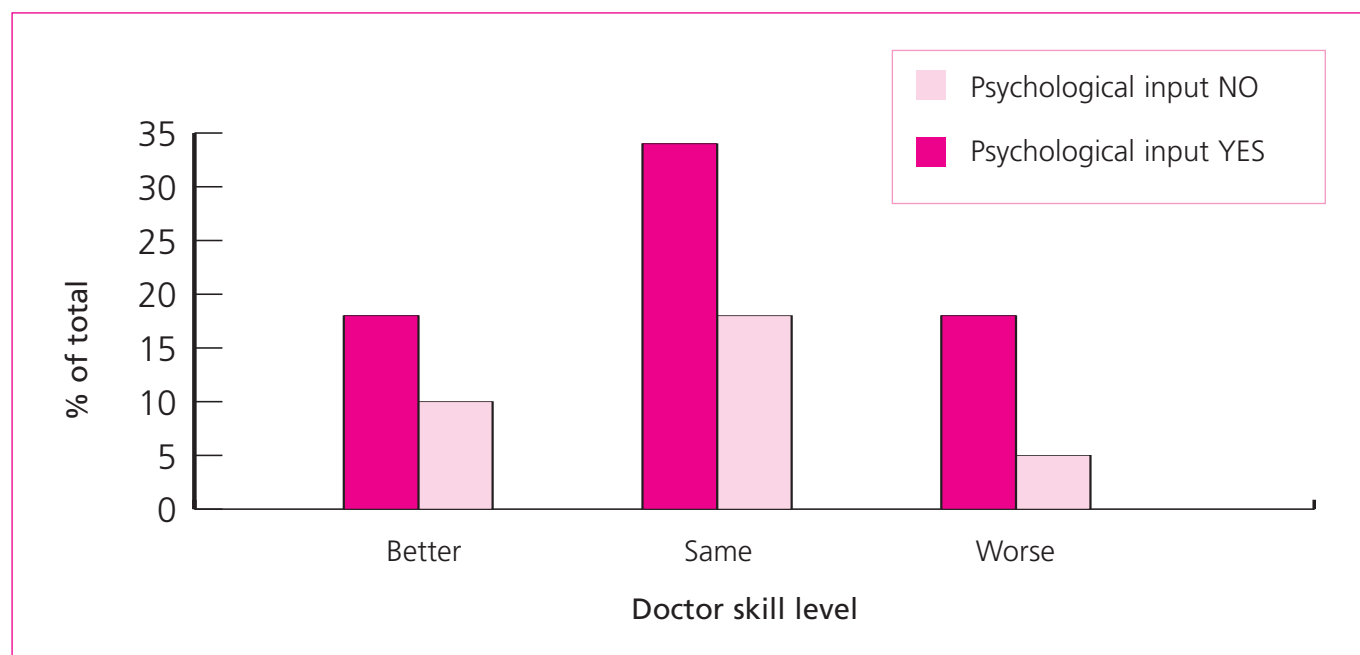
If a team did have a psychological presence, however, there did not appear to be any correlation between the skill level of the doctor and team skill level in managing psychological problems from tiers 1 to 2, although there was a correlation with tier 3 issues.

Spearman rho	Tier 1	Tier 2	Tier 3
Psychological absent	0.26**	0.38**	0.30**
Psychological present	0.03	0.19	0.25*

Spearman rho for correlation of doctor skill level with team perceived skill level in managing psychological issues. \* significant to 0.05 level. \*\* significant to 0.01 level.

Considering those teams which were included in the telephone interviews, if the psychological service was generic, as opposed to specific to the diabetes service, doctor skill was rated lower ( $p=0.02$ ).

Overall, looking at whether psychological expert input was associated with differences in how responders rated their doctor skill level, there did not appear to be any significant association ( $\text{ChiSq}(2)=4.14$ ,  $p=0.12$ ).



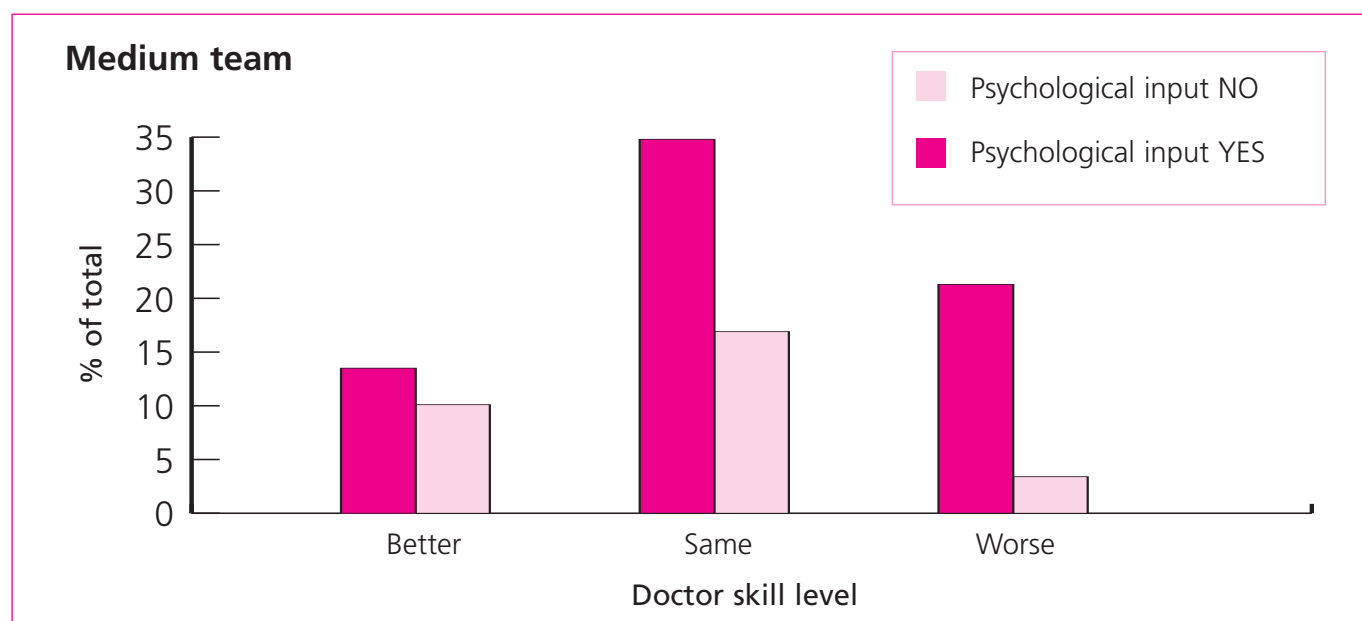
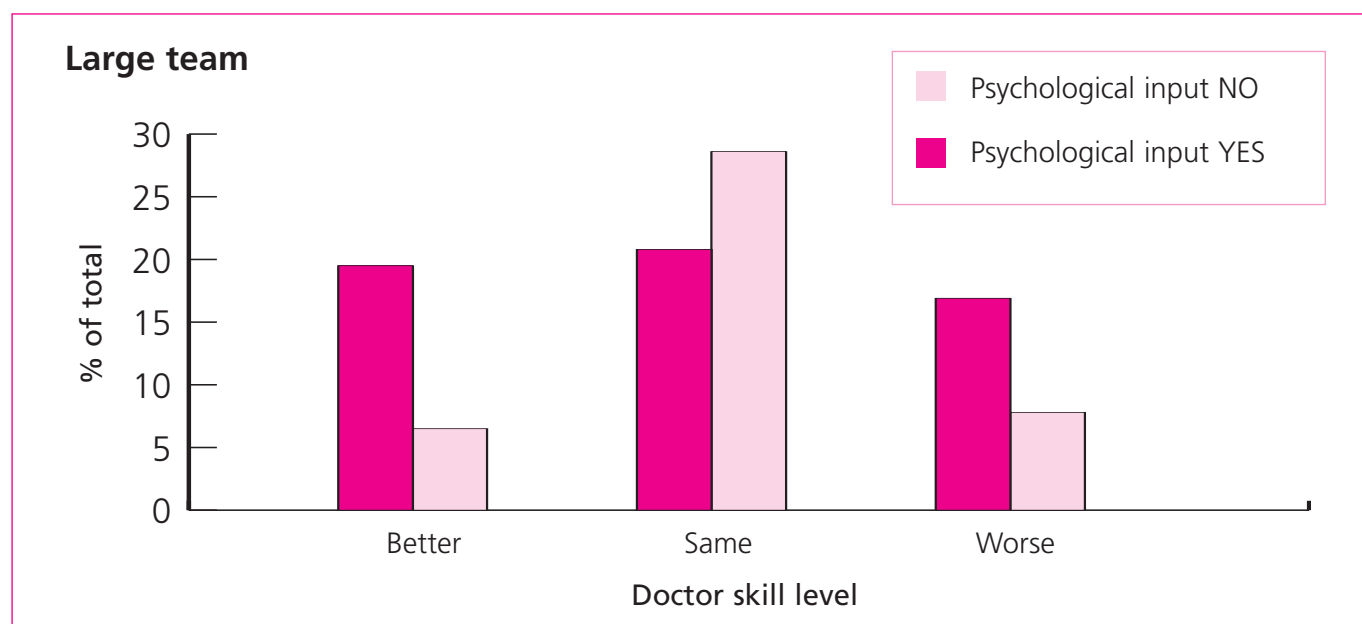
However, this may have been the result of confounding effects of MDT size. To clarify this, if the skill level of team doctors in managing psychological issues in comparison to a skilled GP was influenced by MDT size and the presence/absence of psychological expert input, a log linear analysis was carried out. (Log-linear analysis is an extension of chi-square testing that makes it possible to carry out a statistical analysis involving more than two variables (in this case MDT size, doctor skill level and psychological input presence/absence) and to see whether or not there is a relationship or interaction between them.)

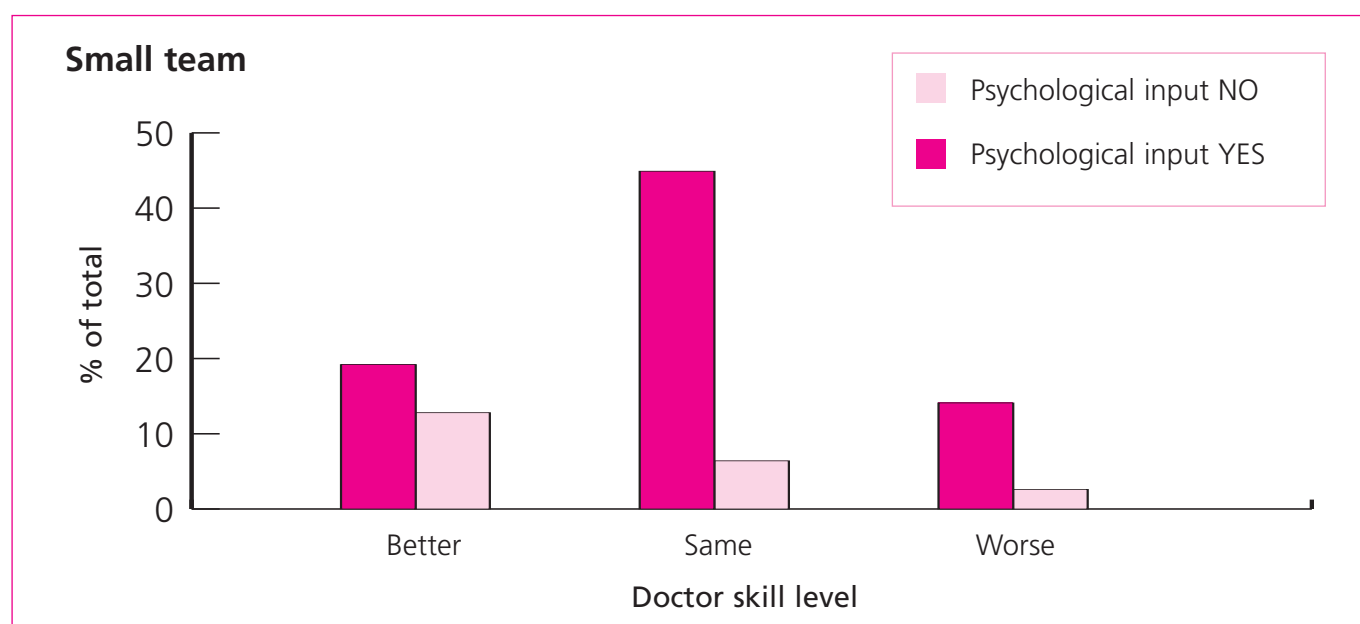
This analysis suggested that the highest order interaction (psychological input presence/absence x skill level x MDT size; model likelihood ratio  $\text{ChiSq}(1)=0$ ,  $p=1.0$ ) was highly significant ( $\text{ChiSq}(4)=13.52$ ,  $p<0.001$ ). To break down this effect, separate chi square tests were performed on the variables of doctor skill and psychological expert input separately for different sized teams.

For small and large teams there was a significant association between psychological expert presence and doctor skill (small teams:  $\text{ChiSq}(2)=7.20$ ,  $p=0.03$ . large teams:  $\text{ChiSq}(2)=7.10$ ,  $p=0.03$ ) although no significant association for medium sized teams ( $\text{ChiSq}(2)=4.57$ ,  $p=0.10$ ).

This relationship is demonstrated graphically below. Looking specifically at small teams odds ratios indicated that the presence of psychological expert input was associated with better perceived doctor skill compared to same doctor skill (c.f. GPs) (OR and 95% CI 4.67, 1.36 – 16.00, ChiSq(1)=6.55, p=0.02) but not worse (OR and 95% CI 3.66, 0.67 – 20.19, ChiSq(1)=2.40, p=0.16).

Looking at large teams odds ratios indicated that the presence of psychological expert input was associated with an increased likelihood that the team's doctor skill level was perceived to be the same as a GP rather than better (OR and 95% CI 0.24, 0.07 – 0.80, ChiSq (1)=5.70, p=0.03); although it was not associated with a significantly lower skill level (ie worse than GP: OR and 95% CI 2.98, 0.93 – 9.52, ChiSq (1)=3.51, p=0.09).





Graphs showing different MDT sized teams looking at the rating of doctor skill level in comparison to GP in teams with and without expert psychological input. Y axis relates to the proportion of the total number of responders from a particular team size and their choice of doctor skill level. A confounding factor may be the strong correlation between larger diabetes teams and the number of junior doctors (Spearman's rho: 0.78, N=266,  $p<0.001$ ) who empirically may be deemed to be less skilled than an experienced GP in managing psychological issues. However there was no significant correlation between the number of junior doctors on a team and the skill level of the doctors in managing psychological issues in either teams with (Spearman's rho: 0.18, N=77,  $p=0.12$ ) or without psychological input (Spearman's rho: 0.03, N=167,  $p<0.001$ ).

Overall there did not appear to be an association between doctor skill level and the total number of psychological people in the team across the dataset (rho -0.08, N=245,  $p=0.22$ ).

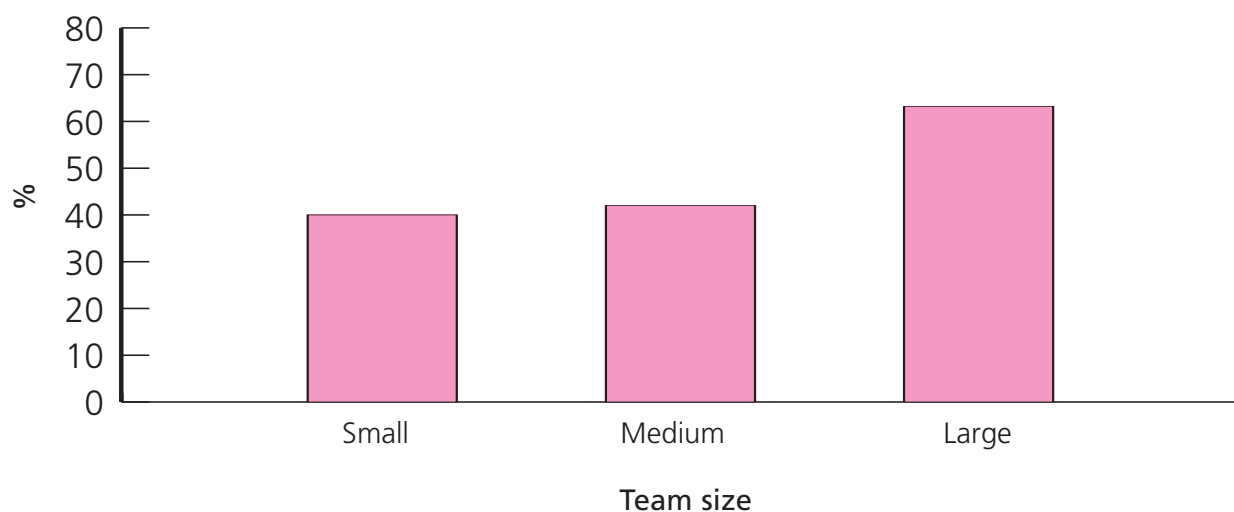
However when looking specifically at teams which had some form of psychological input, there was a significant inverse correlation between doctor skill level and total psychological number – such that teams with more psychological input appeared to rate their doctor skill level in managing psychological issues lower (rho: 0.34, N=77,  $p=0.002$ ).

Nevertheless, when looking specifically at the ratio of psychological people to MDT size, in teams with psychological input, there was no association between the ratio and doctor skill level (rho=-0.013, N=77,  $p=0.91$ ).

As stated previously, it is established that the presence/input of a psychologically trained person is positively related to the size of the MDT. Therefore to examine whether the presence of 'psychological' team members has an effect on whether or not 'non-psychological' team members have had psychological therapeutic training, a log linear analysis was carried out to determine interaction between these factors.

A saturated log linear model indicated that there was a non-significant three way interaction between training, psychological presence and MDT size (small, medium and large) with a likelihood ratio for the model of  $\text{ChiSq}(4)=4.46$ ,  $p=0.347$ . With regard to two-way interactions, the model suggested that there were highly significant interactions between MDT size and training  $\text{ChiSq}(2)=9.61$ ,  $p<0.01$  as well as psychological input and training  $\text{ChiSq}(2)=14.31$ ,  $p<0.01$ .

### Percentage of teams with psychological training



Large teams had more people with psychological training in comparison to medium sized teams ( $\text{ChiSq}(1)=6.69$ ,  $p=0.01$ , OR (95% CI)=2.38, 1.23 – 4.61) and small teams ( $\text{ChiSq}(1)=7.94$ ,  $p<0.01$ , OR (95% CI)=2.58, 1.33 – 5.02).

There were no significant differences in training between small and medium sized teams ( $\text{ChiSq}(1)=0.07$ ,  $p=0.87$ , OR (95% CI)=1.09, 0.58 – 2.03).

### Proportion of teams with training in psychological therapies



Expert psychological input appeared to increase the likelihood that teams had someone with training in psychological therapies ( $\text{ChiSq}(1)=14.16$ ,  $p<0.001$ , OR(95% CI)=2.99, 1.67 – 5.34). However the number of psychological experts in a team did not influence whether or not teams had at least one person with training in psychological techniques (Spearman rho:-0.05,  $N=73$ ,  $p=0.67$ ).



In the questionnaire, questions addressed whether or not teams had telephone advice systems, protocols and screening and assessment tools which considered psychological care issues. In addition, responders were asked to comment on whether they felt there was an adequate referral pathway for people with more severe psychological/psychiatric problems to specialist services.

**Telephone advice;** the presence of psychological expert was associated with an increased likelihood of the presence of telephone advice systems ( $p=0.001$ , or with 95% CI: 2.69, 1.53 – 4.74).

**Protocols which considered psychological issues;** log-linear analysis suggested that there was a three-way interaction between the presence of expert psychological input, MDT size and the presence of psychological protocols ( $p=0.073$ ). Interpretation of this observation suggested that psychological input was associated with a markedly increased likelihood of having protocols considering psychological issues for both small ( $p=0.045$ , OR with 95% CI: 3.50, 1.11-11.10) and medium to large teams ( $p<0.001$ , OR with 95% CI: 16.13, 4.55 – 57.80) with the suggestion that for medium to large teams this effect was enhanced.

**Referral pathways;** the presence of psychological expert input was also associated with an increased likelihood of clear referral pathways ( $p<0.001$ , OR with 95% CI: 3.77, 2.02 – 7.02).

**Screening tools which considered psychological issues;** there was no significant association between psychological expert input ( $p=0.09$ ) and the presence or absence of screening tools.

**Guidelines with a psychological component;** the probability of teams having self-management and recurrent DKA guidelines with a psychological component was significantly increased if there was expert psychological input ( $p=0.02$ , OR with 95% confidence intervals: a. self-management 2.62, 1.24 – 5.47, b. recurrent DKA 2.46, 1.18 – 5.11).

---

## Comments

As detailed above, the size of diabetes teams was analysed with regard to psychological input and the interaction between these two main variables. There was a range of findings, the main ones being:

- **Larger teams are more likely to have psychological input.**

This is not simply an obvious finding that adding a psychological team member increases the size of the team. Larger teams, even when considering teams with at least one psychological team member, have more such members. There are many reasons why this might be the case. It might perhaps be a result of more effective lobbying by larger teams to secure psychological input. Alternatively, psychological experts may become involved initially in research and other activities which are more likely to take place in large teaching centres, which are also likely to serve larger populations and thus have larger teams. Whatever the reasons, this finding highlights the existing inequalities in service provision when it comes to the psychological needs of people with diabetes. Access to such help should be available for all people with diabetes in the UK, not simply those who happen to live in an area served, for whatever reason, by a relatively large number of diabetes healthcare professionals.

- **The presence of a 'psychological' team member is associated with a significant increase in the perceived skill level of the diabetes MDT with regard to managing psychological issues. It is also clear that this effect is associated with the presence of the psychological team member, not the increased size of the team.**

This is a very important finding. If we accept that diabetes MDT staff will be reasonably well able to judge their own competence in managing psychological issues, and that the range of psychological and emotional needs of people with diabetes requires all MDT staff to be competent to identify and respond to these needs at an appropriate level, the perceived skill level/confidence these staff have in this area is crucial. For optimal benefit, psychological expert input into diabetes teams, where it exists, needs to

provide a combination of consultation (seeing patients) and education/training/upskilling of MDT staff. The role of psychological input should, in part, be to raise the profile of the psychological needs of people with diabetes and improve the whole team's ability to identify and help effectively with such needs. This finding is evidence that the involvement of a psychological team member does indeed bring with it this added value for the team and their patients.

- **Although having psychological expert input brings this benefit, additional or more psychological team members being involved does not necessarily significantly add to the team's perceived skill level in helping their patients with their psychological problems.**

This finding strongly supports the assertion that to provide high quality care which takes account of and addresses the psychological needs of their patients, all diabetes MDTs in the UK need some defined psychological expert input. It does not, however, help us to calculate what amount of psychological input a particular team should have. This would need to be calculated centre by centre and team by team. Important factors to consider would include the size and particular characteristics of the population with diabetes served by the team, the size and components of the team itself, and the level of psychological need present. In order to adequately inform effective planning and service development such calculations must consider both the educational and training needs of the diabetes team and the level of need and demand with regard to the patients who will need to be seen for direct therapeutic input from the team's psychological expert or experts.

(It remains a possibility on this point that causality is in the opposite direction, ie that teams which are more confident with regard to psychological issues may be more aware of their importance and so more likely to employ psychological staff. This seems an unlikely explanation for this finding, but strictly speaking it is not possible to be sure as to the possible causality behind this association due to our survey being cross-sectional in nature.)

- **If there is no psychological team member the team's perceived skill level/confidence is associated with their perception of the skill level of their doctor(s) in dealing with psychological problems, but when there is a psychological team member present this association disappears.**

This would seem to suggest that there is a degree of reliance or dependence by the non-medical team members on the team doctors with regard to managing psychological issues. This is unsurprising given that all doctors are trained, at least to some degree, with regard to psychological issues, having had to pass their psychiatry finals exams in order to graduate from medical school. Most physicians would probably agree, however, that such training, at least until very recently, has tended to be general in nature and not to focus to any significant extent upon the psychological needs of medical patients or those suffering particular physical health problems. Even though the non-medical members of the team may have a significant degree of understanding and skill when it comes to recognising and helping with their patients' psychological issues, it seems the team may look to their doctors to provide expertise in this area. The problem with this is that the medical members of the team may not, for the reasons just outlined, feel they are in a position to provide such expertise. The team is likely to have an awareness of this, either before or even perhaps more so after the addition of expert psychological input. The main burden of providing such expertise will switch to the psychological expert(s), very reasonably, when such input becomes available. This all accords with a sense that those teams without expert psychological input persevere and do their very best for their patients' psychological needs despite a relative lack of skills which only resolves when appropriate expert help becomes available. With the greatest of respect to all members of diabetes MDTs, people with diabetes in the UK should not have to rely for their psychological help and treatment upon the best efforts of people who are not adequately trained, or supported, to carry out that work.

- **In small teams, the doctor's skill level in dealing with psychological problems is more likely to be rated better than an experienced GP when a psychological team member is present, but in larger teams the presence of a psychological team member is associated with this rating being more likely to be 'the same' as an experienced GP rather than better.**

It is possible that this finding may reflect the passing over of responsibility for psychological care from the

physician(s) to the psychological expert when they become available, or merely a transfer of expectation in line with the earlier point (immediately above). Alternatively, small teams which have specific psychological expert input may have that, in part, due to the interest of particularly psychologically minded physician(s), or the beneficial effect upon the physician's (and perhaps other MDT members') psychological skill levels may be greater in small teams and, up to a point, relatively 'diluted' in larger teams. Whatever the reason, although it is of course reasonable for the main responsibility of providing psychological education, training and direct therapeutic input to pass over to the psychological expert when they become involved, it must not be forgotten that, especially given the various levels of need encountered in this area of healthcare, the psychological needs of people with diabetes should remain to an appropriate extent the concern and the business of all in the MDT.

There was also a suggestion, although not reaching statistical significance, that if the psychological service was generic as opposed to specific, doctor skill was rated lower. This is a predictable finding. One effect of specific psychological expert input into a diabetes MDT, as opposed to simply the option of being able to refer patients to local generic psychological services, would be expected to be a raising of the skill level of all members of the diabetes MDT with regard to psychological issues, including the doctor(s).

- **Teams with psychological expert input have more non-psychological staff with some training in psychological approaches than teams without psychological expert input.**

Again, a crucial finding. The basic premise which lead to the carrying out of this survey was that the level of psychological need in people with diabetes would justify increased provision of care, and that such care should probably be in the form of expert psychological input. But this view can only be justified if the involvement of expert psychological staff is found to add value for people with diabetes and improve their care. With regard to direct clinical care by psychological professionals this is reasonably easy to argue as we know there is a high level of psychological morbidity in people with diabetes (as outlined in the introduction to this report) and we also know, from research which has been carried out, that treatment for psychological disorders, eg depression, in the presence of diabetes is effective. However, evidence is still required that input from psychological experts can improve care by educating/training/upskilling the 'non-psychological' members of the diabetes MDT. Although this is a cross-sectional survey with the consequent limitations regarding drawing any conclusions as to causality, this finding may suggest that psychological team members, be they psychologists or liaison psychiatrists, either provide such training or influence MDT members to become trained, or perhaps both.

- **Larger teams also have more non-psychological staff with some training in psychological approaches than smaller teams.**

It is difficult to be clear as to the nature of this finding. It may provide more evidence of the benefit of psychological team members, as larger teams are more likely to include such staff, but we cannot be sure as to whether this is what it shows or whether there are other reasons why larger teams may tend to have more training for their staff, eg increased effectiveness of demand for training by staff or increased availability of training if in a teaching centre, etc. Larger teams also tend to have more skill base diversification, and therefore an increased probability that someone has psychological skill training.

- **The presence of psychological expert input is associated with:**

- **increased likelihood of telephone advice systems**
- **increased likelihood of protocols considering psychological issues**
- **increased likelihood of clear referral pathways.**

All of these findings may provide further support for the benefit for patients, due to improved quality of services, of having a psychological member of the diabetes MDT. They suggest, in turn, that such a presence may have a beneficial effect upon access to the service, the ability of staff to respond to their psychological needs in an appropriate and organised way, and the likelihood that, if required, people with diabetes will be referred on to an appropriate expert/service for needs at a level of greater severity and/or complexity. All are crucial and these findings suggest that all are improved or better along with the presence of expert psychological input to the diabetes MDT.

- **The presence of psychological expert input is not associated with an increased likelihood of the presence of screening tools.**

This is an interesting finding. It may have been expected that screening tools would be used more if psychological expert staff were involved, but this does not seem to be the case. It may be that the education/training/upskilling of non-psychological MDT members is happening without recourse to the introduction of screening tools, or there may be some resistance to the use of such tools in services which tend to be hard-pressed and possibly may see such developments as increasing staff workloads. Whatever the reason, this finding would suggest a need for further investigation and consideration, especially as the use of screening tools for psychological issues in people with diabetes does have some evidence as to benefit<sup>58</sup>.

## f) NSF and NICE guidance (quality indicators)

### Findings

The relevant two NSF standards and four NICE guidance recommendations (ie a total of six standards/recommendations) were detailed in the survey questionnaire as follows:

1. **NSF Standard 3:** that there should be 'person centred care' which includes counselling and behaviour change support skills.
2. **NSF Standard 12:** that there should be 'regular surveillance for, and effective management of depression'.
3. **NICE:** 'Multidisciplinary teams (MDTs) should be alert to the development or presence of clinical or subclinical depression and/or anxiety, especially if there are problems with self management'.
4. **NICE:** diabetes professionals should be 'Able to detect and basically manage non-severe psychological disorders in people from different cultural backgrounds'.
5. **NICE:** diabetes professionals should be 'Familiar with counselling techniques and drug therapy, while arranging prompt referral to specialists, especially if there is significant interference with well-being or diabetes self-management'.
6. **NICE:** diabetes professionals should be 'Alert to eating disorders and insulin dose manipulation if there is either poor glucose control, low BMI or overconcern with body shape and weight. Early, and occasionally urgent, referral to local eating disorders services should be considered'.

### Compliance with NSF standards and NICE guidelines:

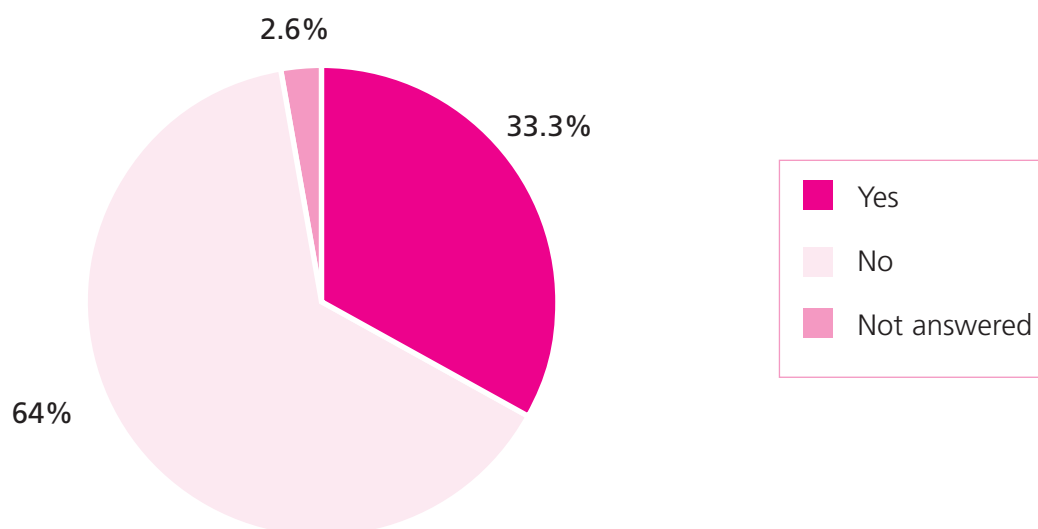
- The majority of responders felt that the standards and guidelines as detailed are necessary.
- Despite this recognition of the importance of psychological issues, 64% of centres did not comply with three or more of the six standards/recommendations.
- Only 2.6% of centres complied with all six standards/recommendations.
- 25.8% did not comply with any of the standards/recommendations.
- In those diabetes teams which did not feel they were able to meet NSF Standards 3 or 12, only a minority felt they were taking steps towards being able to meet them.
- For the NICE guidelines, the majority felt they would benefit from more training to meet the various recommendations.

## National Service Framework standards in more detail:

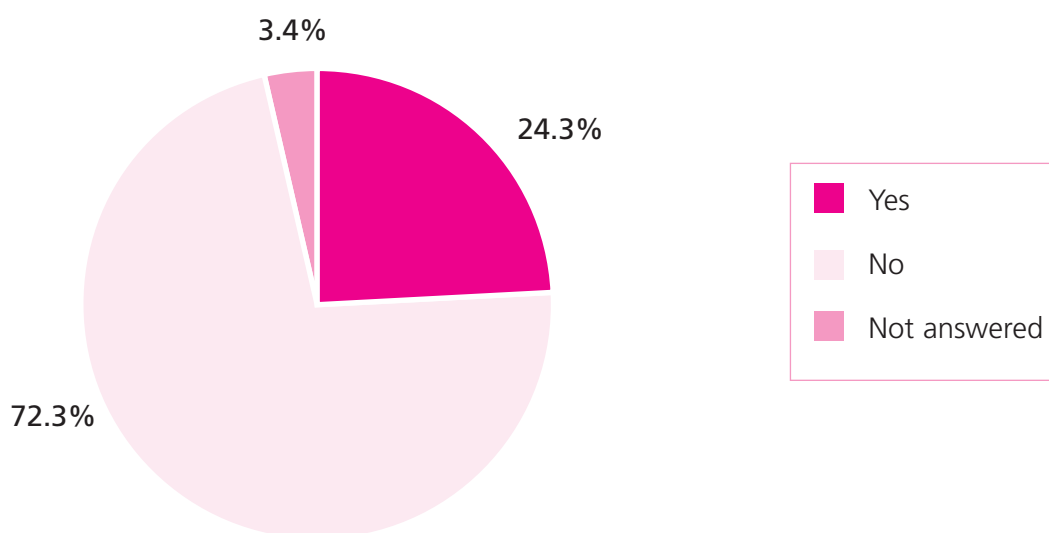
- Standard 3 requires provision of 'person centred care' which includes counselling and behaviour change support skills. 97.0% of responders felt that this was necessary (1.9% did not agree, and 1.1% did not answer this question).
- Similarly 89.5% of responders agreed with Standard 12 of the NSF; that there should be 'regular surveillance for, and effective management of depression' (8.2% did not agree, and 2.2% did not answer this question).

With regard to Standard 3 and Standard 12, it was asked whether the diabetes team provide services which meet these standards. More than two thirds of teams felt they were unable to meet these standards:

### Standard 3: Does the service provide this?



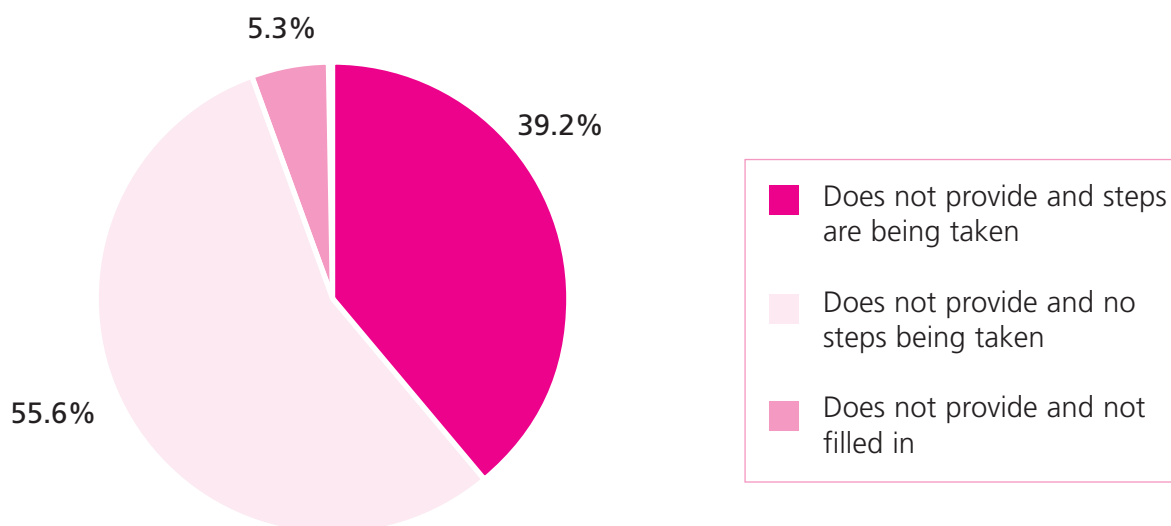
### Standard 12: Does the service provide this?



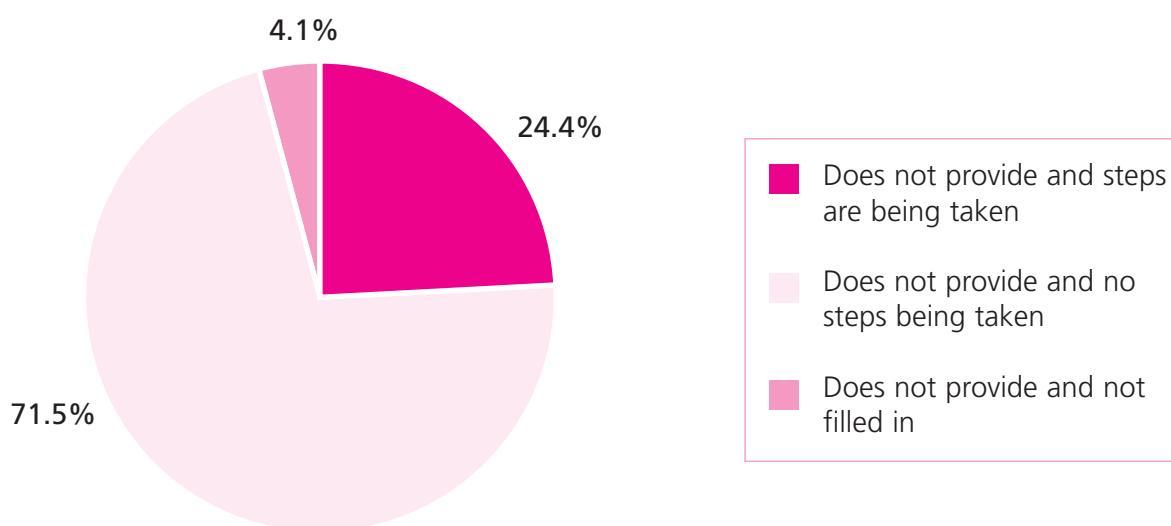
There was a correlation between the ability of teams to meet Standard 3 and Standard 12 (Spearman rho: 0.34, N=254, p<0.001).

In those diabetes teams which did not feel they were able to meet Standard 3 or Standard 12, only a minority felt they were taking steps towards being able to meet these standards:

### Standard 3



### Standard 12



NICE guidelines in more detail:

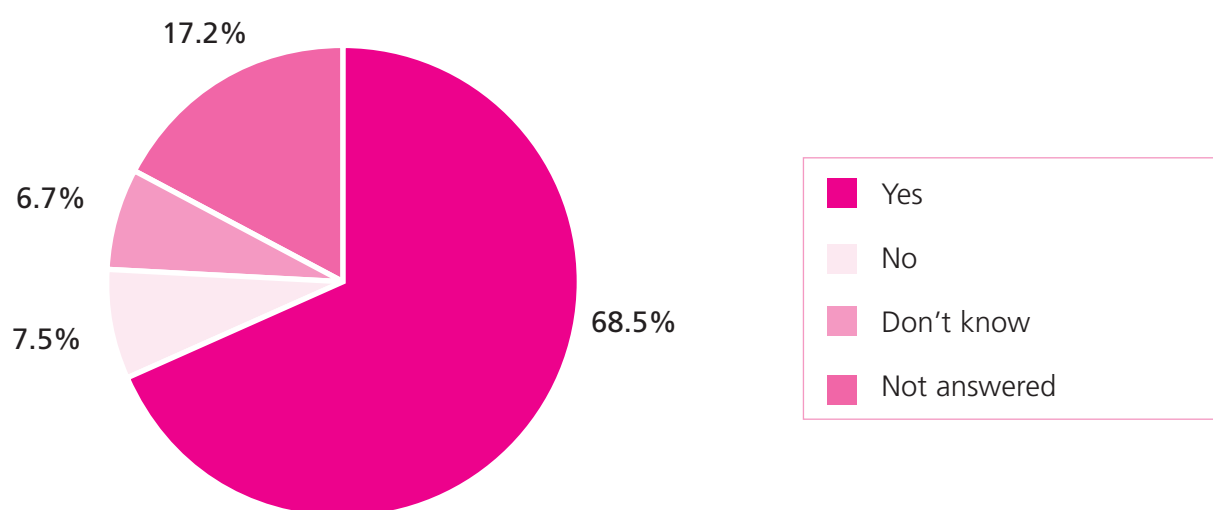
#### i) Depression and anxiety

The NICE guidelines state that 'multidisciplinary teams (MDTs) should be alert to the development or presence of clinical or subclinical depression and/or anxiety, especially if there are problems with self management'.

- The overwhelming majority (98.5%) of responders agreed with this statement (disagreeing 0.7%, not completed 0.8 %).
- However, only a minority (24.0%) of diabetes teams felt that they provided a service which adequately met this standard.
- The majority of teams either felt they did not (56.6%) or were uncertain (17.6%) as to whether or not they met the guidance recommendation (1.8% of responders did not complete this question).

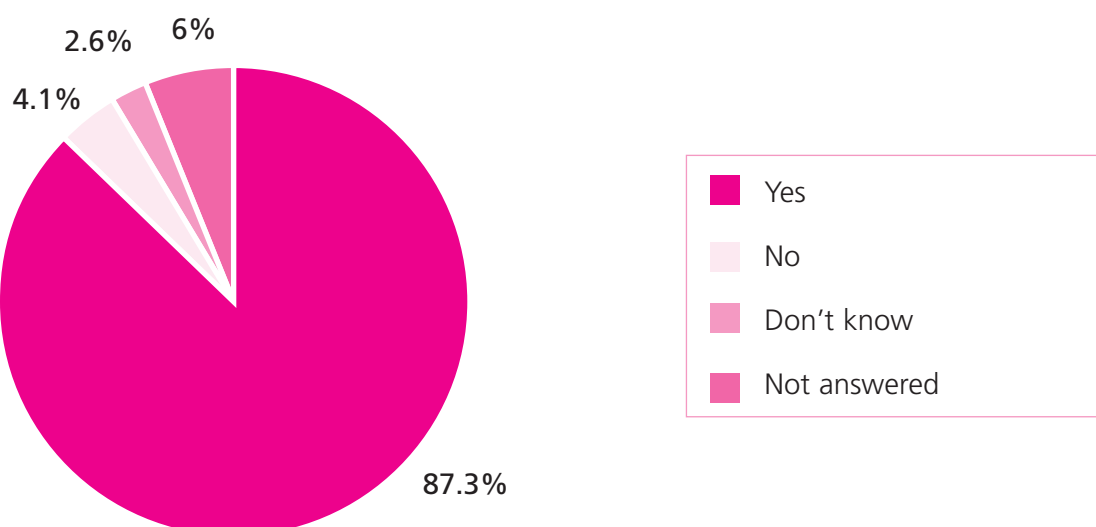
Of those teams who felt they did not adequately meet this standard the majority felt that they required more training for dealing with the detection of depression and anxiety.

### More training needed re: depression and anxiety



In addition, the majority of responders felt that their teams would benefit from more psychological input:

### More psychological staff needed



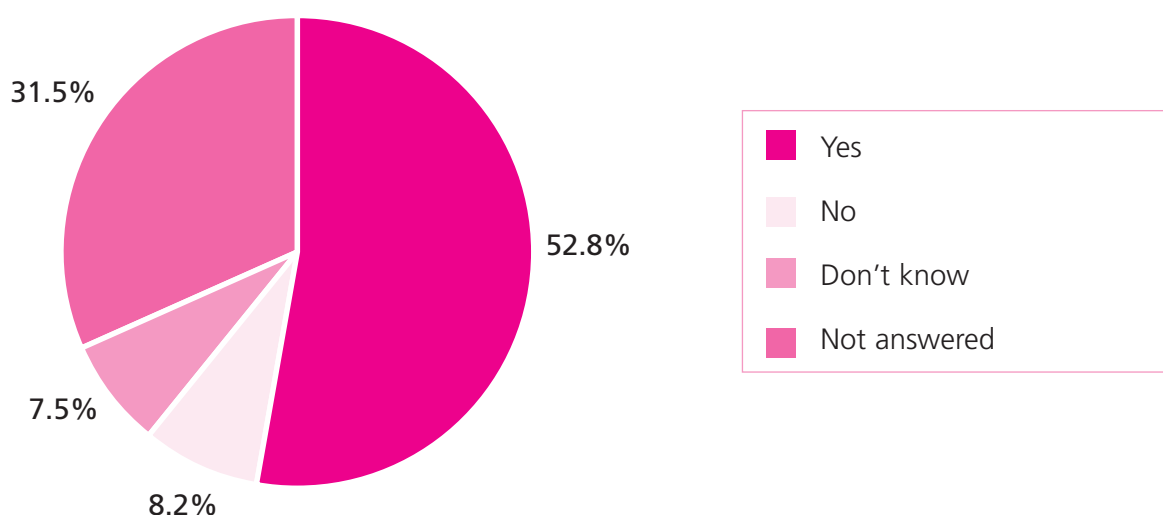
## ii) Management of non-severe psychological problems

The NICE guidelines state that diabetes professionals should be 'Able to detect and basically manage non-severe psychological disorders in people from different cultural backgrounds'.

- Again, the overwhelming majority (94.0%) of responders agreed with this.
- However, only 37.4% of responders felt that their teams would be able to provide this.
- 41.2% felt that they could not and 18.4% were not sure (3.0% did not complete).

Of those teams who felt they did not adequately meet this standard the majority felt that they required more training for the management of psychological problems:

### More training needed re: non-severe psychological problems



## iii) Counselling techniques and drug therapy

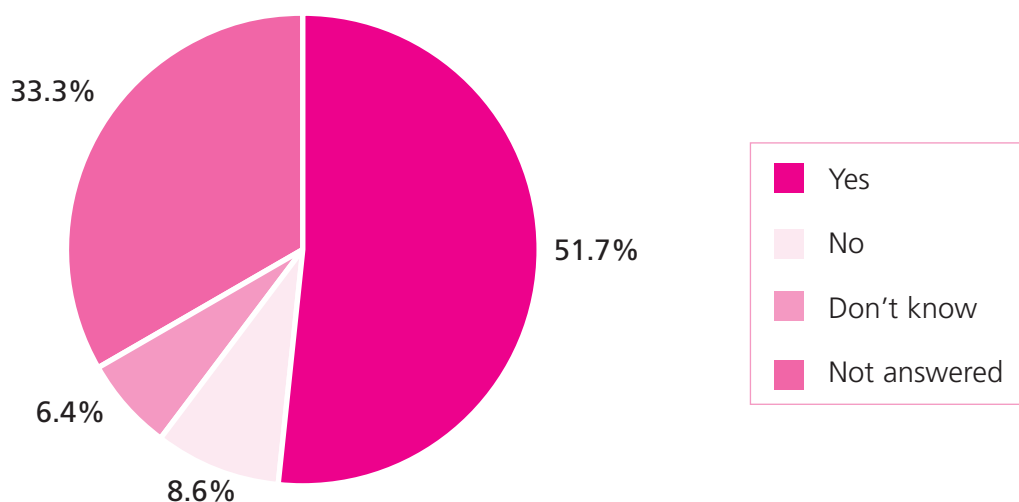
The NICE guidelines state that diabetes professionals should be 'Familiar with counselling techniques and drug therapy, while arranging prompt referral to specialists, especially if there is significant interference with well-being or diabetes self-management'.

- Similar to the other NICE guidelines, 92.2% agreed with this standard (5.2% did not and 2.6% were uncertain).
- 37.8% of responders felt that their teams met this standard.
- 44.2% did not (14.2% were not sure and 3.7% did not complete the question).

Of those teams who felt they did not adequately meet this standard the majority felt that their staff would benefit from training in counselling and drug therapies:



### More training needed re: counselling and drug therapy

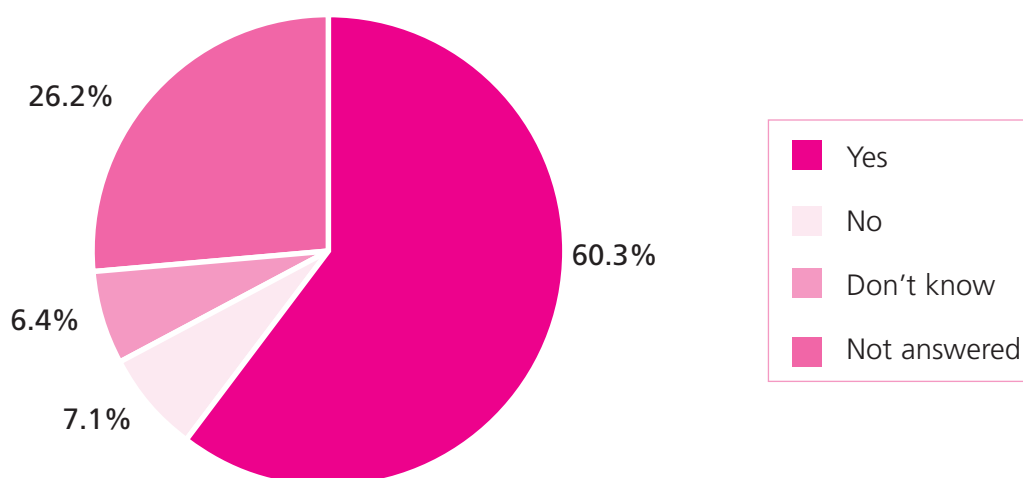


#### iv) Awareness of eating disorders

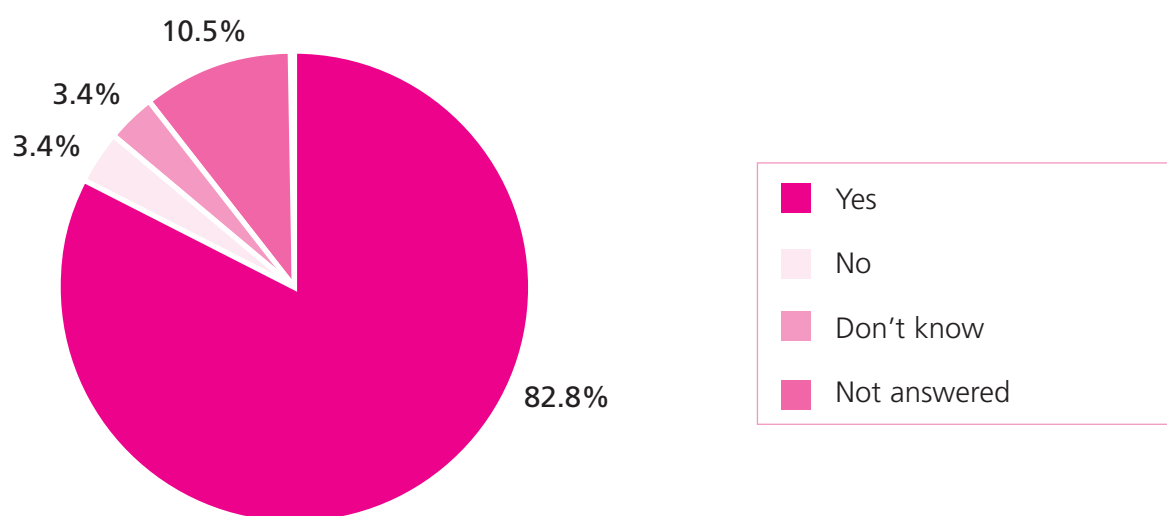
NICE guidelines suggest that diabetes teams should be 'Alert to eating disorders and insulin dose manipulation if there is either poor glucose control, low BMI or overconcern with body shape and weight. Early, and occasionally urgent, referral to local eating disorders services should be considered'.

- 98.5% of responders agreed that this was necessary (1.5% did not complete this question).
- However, only 35.2% of responders felt that their MDT currently provide for this adequately.
- 47.6% felt they could not, and 14.2% did not know (3.0% did not answer this question).

### More training needed re: eating disorders



## More psychological staff needed



## Possible effect of the presence of expert psychological input on compliance with NSF standards and NICE guidance

### NSF Standard 3:

Compliance with this standard was better in teams which had psychological input (Chi Sq(1)=6.69 p=0.01).

### NSF Standard 12

Compliance with this standard was no better in teams which had psychological input than teams which did not (Chi Sq(1)=2.62 p=0.12).

### NICE guidance

	ChiSq(1)	p-value
1) Depression/anxiety	2.55	0.12
2) Non-severe psychological problems	0.33	0.58
3) Counselling and drug therapy	9.55	0.002
4) Eating disorders	3.67	0.07

The table above relates to the findings that:

- for elements 1) Depression and Anxiety and 2) Management of non-severe psychological problems, compliance with NICE guidance was no better in teams which had psychological input than in teams which did not.
- for element 3) Counselling techniques and drug therapy, there was a clear and statistically significant positive benefit to having psychological expert input.
- for element 4) Awareness of eating disorders, there was a possibly (although not statistically) significant positive benefit to having psychological expert input.

(Note: for this analysis of responses to questions about meeting the standards, responders who stated they did not comply or didn't know were combined, and responders who did not answer the question were excluded.)

## Comments

The main finding in this part of the survey is that although the vast majority of services believe the psychologically relevant NSF standards and NICE guidance to be necessary, compliance with these standards and this guidance is very low. The teams want to meet the standards but generally feel:

- that they are unable to do so
- that they require more training to be able to do so
- that they require more psychological input to be able to do so.

Despite this, at the time of the survey only a minority (39.2% for NSF Standard 3 and 24.4% for Standard 12) felt they were taking any steps to address this in relation to the NSF standards.

National guidance or standard	Agreement that the guidelines are necessary	Currently meet the guidelines	Actively addressing any deficit	Requirements, identified by MDTs, to meet guidance/ standards
<b>NSF Standard 3:</b> Counselling/behaviour change support skills	97%	64%	39.2%	Not asked
<b>NSF Standard 12:</b> depression surveillance and management	89.5%	72%	24.4%	Not asked
<b>NICE 1:</b> Alert to depression/anxiety	98.5%	24%	Not asked	MDT training: 68% Psychol. staff: 87%
<b>NICE 2:</b> Detect and manage non-severe psychological problems across cultures	94%	37%	Not asked	MDT training: 53%
<b>NICE 3:</b> Familiar with counselling and psychiatric medication	92%	38%	Not asked	MDT training: 52%
<b>NICE 4:</b> Alert to eating disorders	99%	35%	Not asked	MDT training: 60% Psychol. staff: 83%

Compliance with the various standards and recommendations ranged from 24 to 72%, but overall **only 2.6% of services felt they were complying with all 6 of the relevant NSF standards and NICE guidance recommendations and 25.8% do not comply with any of them.** The various findings in this survey of a lack of compliance are very concerning, for people with diabetes but also for those suffering a whole range of other conditions to which NSF standards and NICE guidance have been applied, as there is currently no reason to believe that the situation is any better in those other areas. One possible, and obvious, interpretation of these findings is that commissioners of diabetes services are either ignorant of, or ignoring, the standards and guidelines which exist. They are clearly not consistently commissioning high quality services in such a way that ensures compliance, despite the fact that they would seem to be required to do so.

The analysis has indicated that with regard to at least 1 of the NSF standards and 2 of the NICE guideline requirements the presence or absence of psychological expert input into the team was not associated with any significant difference in relation to how well responders felt they met the standards. Thus, although there are apparent benefits in having expert psychological input into teams providing care to people with diabetes, the simple presence of such input does not necessarily lead to improved compliance with these particular standards and points of guidance. Considering the way in which the standards and guidance are structured, this is perhaps not surprising. In order for teams and services to be compliant the diabetes team as a whole needs to be aware of the requirements and develop a clear action plan to address any shortfall in performance. Psychological experts have an obvious and important part to play in providing education, training, and advice on appropriate resources, as well as direct clinical care, but managers and staff of diabetes services need to see psychological support and care as, to an appropriate extent, the business of everyone in the team.

## g) Perceived gaps in services

### Findings

The last question in part 2 of the survey (telephone interviews) asked responders to indicate what gaps they thought there were in their service, if any, for people with diabetes who have emotional, psychological or mental health problems. To try to quantify the issues covered, research workers (T.N. and J.P.T) identified 16 common themes from the transcripts; ie all issues raised by at least two responders. These are listed below in order of importance; ie the proportion of responders who indicated that each was an issue.

The three most common themes raised were:

- a need for increased resource allocation for psychological services to diabetes
- a need for specific services for children and adolescents
- a need for the provision of diabetes specific psychological services/integrated service provision.

With regard to the commonest concern expressed by responders, that there was insufficient resource allocation for the provision of psychological services for diabetes, there was no correlation between this view and the number of psychological sessions provided to that service (Spearman rho -0.01,  $p=0.95$ ) or the average waiting time (Spearman rho 0.21,  $N=53$ ,  $p=0.13$ ). However, there was a significant inverse correlation between the demand for more resources and the number of psychological experts in a team (Spearman rho -0.33,  $N=53$ ,  $p=0.02$ ).

<b>Main themes:</b>	<b>Identified by:</b>
More resource allocation for psychological services to diabetes	81.1%
Specific services for child and adolescent needed	41.5%
Provision of diabetes specific service/dedicated member of team/integrated service provision	39.6%
More education/training/supervision for diabetes team	34.0%
Eating disorders service	20.8%
Prompts available to diabetologists to stimulate recognition and early referral and intervention	17.0%
More basic level support required (eg. counselling for needs at level 1 – see Appendix C)	15.1%
Dedicated liaison psychiatry services	15.1%
Structured approach from 1st contact	13.2%
More psychoeducation to people with diabetes	13.2%
Family or group work	9.4%
Specific services for Type 2 diabetes	7.5%
Broaden medical model	3.8%
Application of NICE guidance	3.8%
Sexual health problems	3.8%

<b>Other (suggestions by individuals):</b>	<b>35.8%</b>
Need resources for older people and those diagnosed the longest	1.9%
Peer support initiatives	1.9%
Weight management and dietitians	1.9%
More community involvement	1.9%
Like to have some people attached with psychotherapy experience	1.9%
Social services involvement and increase resources for those with DKA as 'self harm'	1.9%
Lack of integration of services	1.9%
Specific services for adults needed	1.9%
Ethnic minorities	1.9%
Application of NICE guidance	1.9%
Drugs and alcohol comorbidity – needs specific identification and service provision	1.9%
Specific help for phobias (especially needles)	1.9%

## Comments

The proportion of those giving comments who identified a need for more resources for psychological service provision for people with diabetes is, at 81%, very high indeed. It might be argued that the obvious premise of this survey, and therefore the content of both the questionnaire and the semi-structure telephone interview process, would have made this likely, but the fact that such a very high proportion, without prompting, stated this need should not be ignored.

Diabetes MDTs feel they lack, and clearly want, expert psychological input, and specify that such input should be specific to and integrated with their diabetes team. They also identify a need for education, training and supervision, as well as specialist help with eating disorders and dedicated liaison psychiatry services.

The presence of expert psychological input is associated with improved quality of diabetes services and people with diabetes all deserve to benefit from the availability of such service provision.

## h) Occupation/professional grouping of responder/effects on answers

### Findings

#### Does responder occupation influence how the subjective questions were answered in the survey?

Responder occupation/background may influence how subjective questions were answered in the survey and thus could bias outcome. Given that 98.0% of responders to the part 1 questionnaire were classed as having either a medical or nursing background, for this analysis occupation was divided into **doctors** and **nurses**.

Responder occupation did not influence how they rated their team's ability to manage different psychological issues (tier 1, Mann-Whitney U-test 6784, N=238,  $p=0.57$ ,  $r=0.04$ ; tier 2, Mann-Whitney U-test 6768.5, N=237,  $p=0.63$ ,  $r=0.03$ ; tier 3, Mann-Whitney U-test 6641, N=233,  $p=0.76$ ,  $r=0.02$ ).

Similarly responder occupation did not significantly affect how responders rated their doctors in terms of skill levels in managing psychological problems in comparison to an experienced GP (Mann-Whitney U-test 5733.5,  $p=0.38$ ,  $r=0.06$ ).

#### With regard to NSF standards:

- The overwhelming majority of responders agreed with the Standard 3; however there was more disagreement with Standard 12 and the majority of these responders were doctors (12.8% of doctors disagreed compared to 3.4% of nurses;  $\chi^2(1)=7.03$ ,  $p<0.01$ , OR and 95% CI: 4.19, 1.35 – 13.04). In the doctor responder group, the presence or absence of psychological expert input did not appear to influence agreement/disagreement with Standard 12 ( $\chi^2(1)=0.08$ ,  $p=1.00$ ).
- Responder occupation also did not significantly influence whether or not responders felt their teams were taking appropriate steps (if not already done so) with implementing the NSF standards (NSF 3:  $\chi^2(1)=0.22$ ,  $p=0.74$ , OR and 95% CI: 1.17, 0.61 – 2.22. NSF 12:  $\chi^2(1)=1.72$ ,  $p=0.19$ , OR and 95% CI: 1.57, 0.80 – 3.07).

#### With regard to NICE guidelines:

- The overwhelming majority of responders, regardless of occupational group, felt that MDTs should be alert to depression and anxiety, and that they should be alert to eating disorders.
- Regarding the statement that 'diabetes teams should be able to detect and basically manage non-severe psychological disorders in people from different cultural backgrounds', there was somewhat less agreement overall with this but responder occupation did not significantly bias the proportion of people

agreeing/disagreeing with it ( $\chi^2(1)=0.40$ ,  $p=0.75$ , for disagreement and being a doctor, OR and 95% CI: 0.66, 0.18 – 2.40).

- Regarding whether or not 'MDTs should be familiar with counselling techniques and drug therapy for psychological disorders, while arranging prompt referral to specialists', agreement overall was again somewhat less than for the earlier statements, around depression/anxiety and eating disorders, but also responder occupation did significantly bias the proportion of people agreeing/disagreeing with this statement ( $\chi^2(1)=6.60$ ,  $p=0.02$ , for disagreement and being a doctor, OR and 95% CI: 5.97, 1.29 – 27.55).

With regard to more training for diabetes professionals in achieving NICE guidelines, there was a tendency for doctor responders to disagree, compared to nurse responders, that more training was required for the management of depression and anxiety and counselling and drug therapy for psychological disorders. In the table below, responder occupation and influence of this on agreement/disagreement with more training being required to meet NICE guidelines is shown. Odds ratio (OR) – odds of doctors versus odds of nurses who disagree with more training. Pearson co-efficient calculated on comparison between those agreeing and those disagreeing.

More training for:	Odds Ratio (95% CI)	$\chi^2(1)$	p-value
Being alert to depression and anxiety	3.37 (1.12 – 9.79)	5.45	0.03
Management of non-severe (level 1) psychological problems in people from different cultural backgrounds	2.97 (1.06 – 8.31)	4.59	0.03
Eating disorders in diabetes	2.08 (0.73 – 5.91)	1.93	0.20
Counselling and drug therapies for psychological disorders	5.11 (1.62 – 16.18)	8.97	<0.01

- With regard to being alert to depression and anxiety in diabetes patients, only 2 responders (<1%) disagreed with this statement.
- The proportions of responders who agreed/disagreed with whether or not they felt that their MDT could manage mild psychological problems from people with different cultural backgrounds was also not influenced by the responder occupation ( $\chi^2(1)=2.42$ ,  $p=0.14$ , OR, for disagreement and doctor, 95% CI: 0.63, 0.35 – 1.13).

## Comments

There were very few effects upon responses to the various questions in the survey in relation to whether the responder was a doctor or a nurse. The only points of note are:

**With regard to NSF standards**, although the overwhelming majority of responders agreed with the relevance of both Standards 3 and 12, there was more disagreement with Standard 12 and the majority of the disagreeing responders were doctors (12.8% of doctors disagreed compared to 3.4% of nurses). Standard 12 reads: 'Detection & management of long-term complications – If patients require multi-agency support they should receive: Integrated Health and Social care, and, regular surveillance for, and effective management of depression'. It is difficult to interpret this finding, given that there are two very distinct elements to this standard and we have no way of knowing which element or elements this minority of responders may have disagreed with.

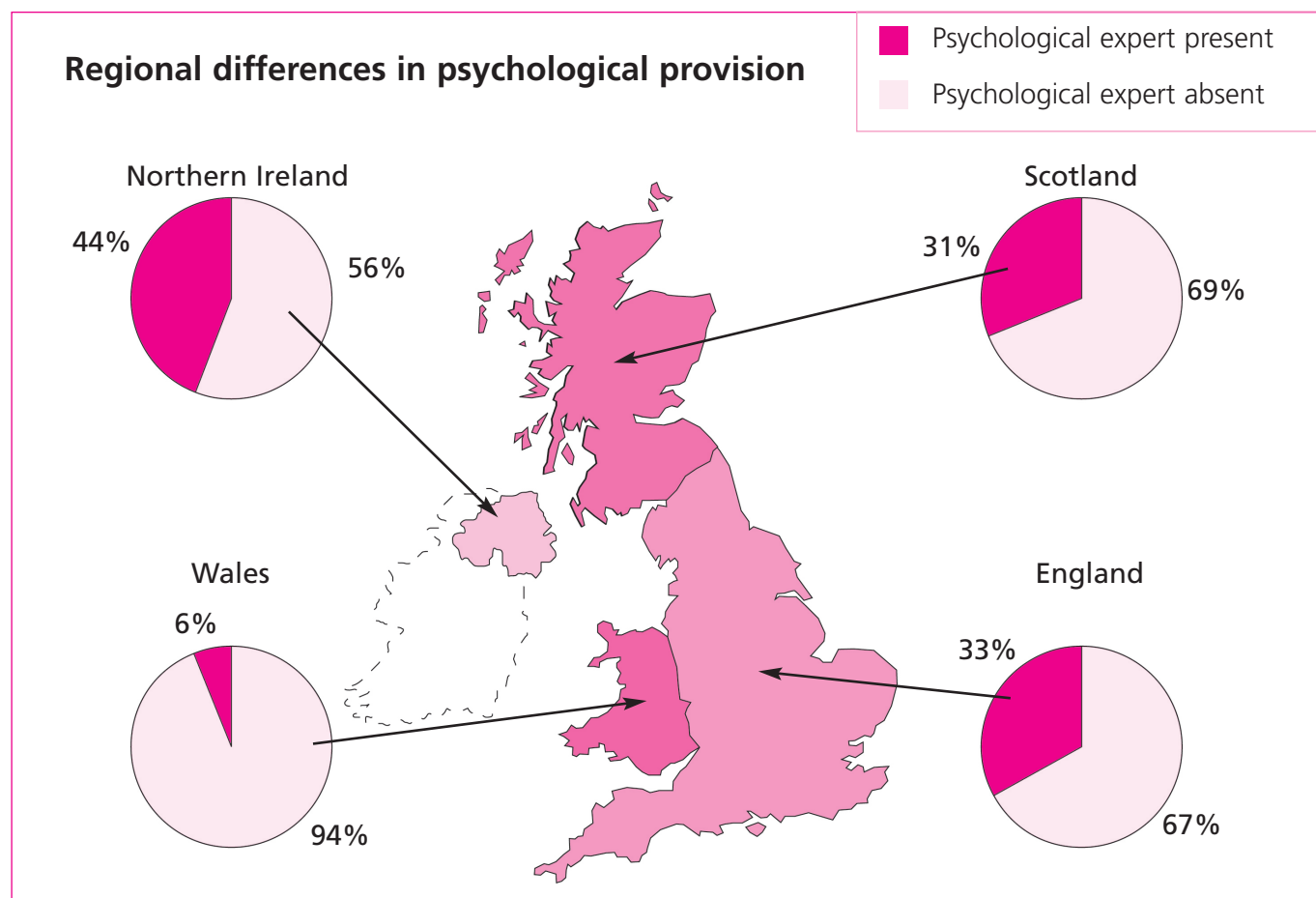
**With regard to NICE guidelines**, the responder being a doctor also made it significantly more likely that the statement 'MDTs should be familiar with counselling techniques and drug therapy for psychological disorders, while arranging prompt referral to specialists' would be disagreed with than if the responder was a nurse. This finding is also difficult to interpret, although given the wording of the statement it is possible that the disagreement, where it occurred, may have been influenced by views regarding non-medical prescribing within MDTs. Alternatively, it may reflect doctors being less likely to see 'softer' skills such as counselling as part of their, or the diabetes MDT's, remit. Having said that, it is important not to lose sight of the fact that over 90% of the responders overall agreed with the statement.

Perhaps the main point of note is that, whether doctors or nurses, members of diabetes MDTs responding to this survey, demonstrated a great deal of concordance with regard to their views on the subject of psychological need and service provision.

## i) Regions/regional analysis

### Findings

For the analysis of regional results, responders were divided into the nations of England, Scotland, Wales and Northern Ireland. Two responders were from the Channel Islands; for meaningful comparison these were excluded from further analyses.





With regard to whether or not there was a national difference in psychological expert provision, the analysis is displayed below:

			Nation			
			England	Scotland	Wales	Northern Ireland
Psychological expert presence	NO	Number	137	18	15	10
		% of services within nation	67.5%	69.2%	93.8%	55.6%
Psychological expert presence	YES	Number	66	8	1	8
		% of services within nation	32.5%	30.8%	6.3%	44.4%

There were statistically significant differences in psychological provision between Wales and England ( $\chi^2(1) = 4.82$ ,  $N=219$ ,  $p=0.02$ ).

There were also statistically significant differences in psychological provision between Wales and Northern Ireland ( $\chi^2(1) = 6.35$ ,  $N=34$ ,  $p=0.02$ ).

In contrast, Kruskal Wallis tests found no evidence of any statistically significant national differences in terms of MDT size, perceived skill level in managing psychological issues (tiers 1 to 3), or total number of psychological experts in a team.

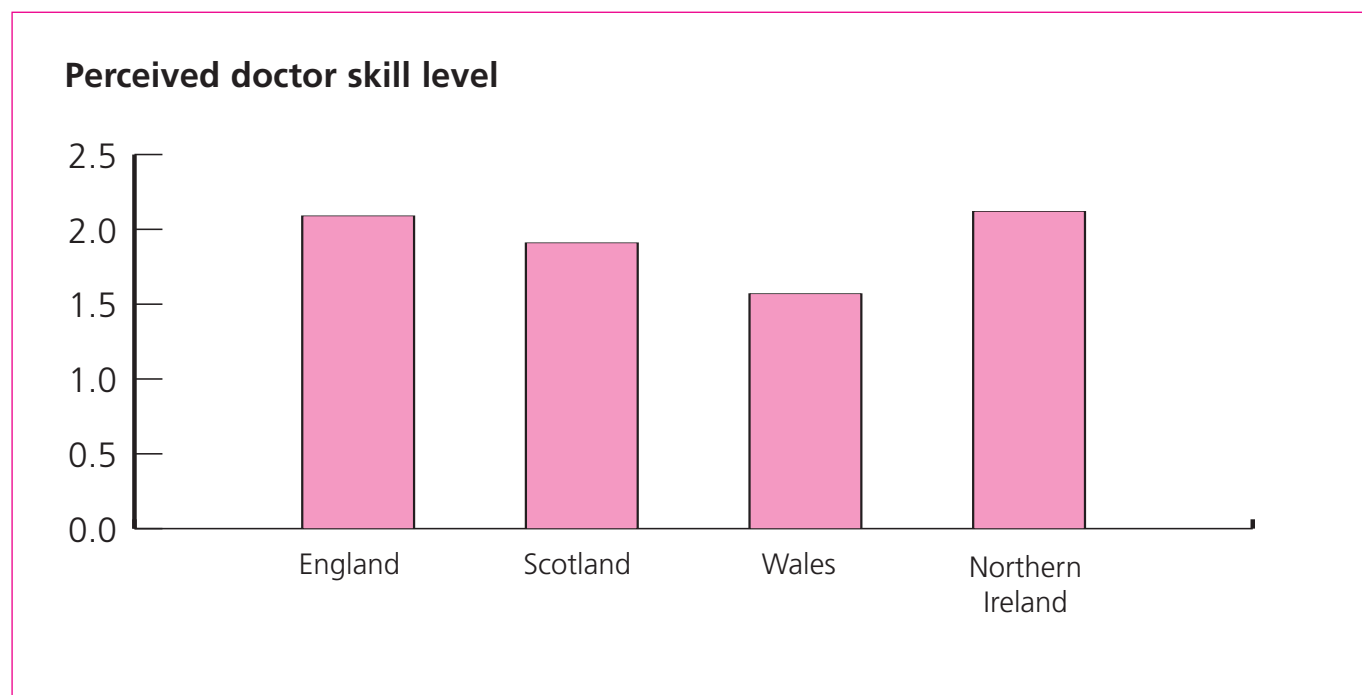
	England	Scotland	Wales	Northern Ireland
MDT size (median)	12	9.5	11	11

However, there was a statistically significant national difference in how responders rated their doctor's skill level ( $p=0.02$ ):

	Tier 1	Tier 2	Tier 3	total psych no.	total MDT	doctor skill
Chi-Square	2.68	1.81	2.09	3.24	6.37	9.41
df	3	3	3	3	3	3
Exact Sig.	.	.	.	.	.	.023

A Kruskal Wallis test

This is shown graphically below (Skill of 1 = worse than GP, 2 = same as GP, 3 = better than GP)



To examine this, post-hoc Mann-Whitney U tests were performed:

Doctor skill	Mann-Whitney U	P value
Northern Ireland versus England	1571	1.00
Northern Ireland versus Scotland	161.5	0.39
Northern Ireland versus Wales	72	0.006
England versus Scotland	1840	0.22
England versus Wales	909	0.005
Scotland versus Wales	129	0.09

Thus, Welsh responders tended to rate their doctor skill levels somewhat lower than their English and Northern Irish counterparts. There is a suggestion that this may also be the case for Scotland although this does not reach statistical significance.

Continuing the analysis by region (country) of the UK, there were no significant national differences with regard to:

- the amount of psychological training that 'non-psychological' members of the MDT have
- the coverage of psychological care issues (telephone advice systems, protocols, screening tools and defined referral pathways)
- agreement/disagreement with NSF Standards 3 and 12
- implementation with NSF Standards 3 and 12 in teams who did not meet them

- agreement/disagreement with NICE recommendation that MDTs should be alert to depression and anxiety (however, disagreement rates were so low that statistical analysis is probably meaningless)
- agreement/disagreement with NICE recommendation that diabetes teams should provide psychological support for low-level psychological problems
- agreement/disagreement with the NICE recommendation that teams should be 'familiar with counselling techniques and drug therapy, while arranging prompt referral to specialists, especially if there is significant interference with well-being or diabetes self-management'
- questions concerning more training for the management of 1) depression and anxiety 2) non-psychological issues in people with different cultural backgrounds 3) drugs and counselling 4) eating disorders
- questions about guidelines which considered psychological issues (self-management, recurrent DKA, low BMI, eating disorder, and morbid obesity).

Finally, however, there were statistically significant national differences with regard to agreement/disagreement with the NICE recommendation that diabetes professionals should be 'able to detect and basically manage non-severe psychological disorders in people from different cultural backgrounds':

- While only a small proportion of responders disagreed with this statement, a disproportionate number appeared to come from Wales ( $\chi^2(3)=23.94$ ,  $N=262$ ,  $p=0.001$ )
- The differences were most marked between Wales and England ( $\chi^2(1)=22.03$ ,  $N=218$ ,  $p=0.001$ ) and Wales and Northern Ireland ( $\chi^2(1)=6.60$ ,  $N=34$ ,  $p=0.02$ ).

---

## Comments

The varying levels of psychological service/expert provision in the four UK countries are notable, with Northern Ireland having the highest and Wales the lowest level of provision. The picture in Northern Ireland may be better than that in the other three countries for several reasons. Work has been going on there for some years which has placed a clear emphasis upon psychological well-being and the need to develop psychological services – to a greater degree than has been seen to date in the other countries. This has included acknowledgement of the lack of access to psychological support within both specialist services and the community<sup>59</sup>, work to raise the profile of mental health issues in people with diabetes<sup>60</sup>, and high level policy statements which have recognised that mental health is central to achieving a good quality of life and that emotional and psychological support need to be improved as a key priority<sup>46, 61</sup>. Thus Northern Ireland is, despite the deficits which still exist in service provision there, somewhat ahead of the other UK countries. Action already taken there may provide useful learning points for all UK countries in taking forward the development of psychological services for people with diabetes.

Skill levels of doctors in diabetes teams in Scotland and Wales were rated, by those responding to the survey, as lower than those in England and Northern Ireland. This reached statistical significance when comparing England or Northern Ireland with Wales. The question asked, in line with the wording of part 13 of the NICE guidance for diabetes, was 'For physicians a degree of competence in managing depression and psychological issues at least matching that of an experienced GP is clearly desirable'. In view of the inclusion of this statement in the guidance the survey needed to ask this question of responders, who rated their team's doctors against the statement, but responses are subjective and the validity, reliability and meaning of these results, if any, may be open to question.

The low level of psychological provision for people with diabetes in Wales, and the difference between countries, most strikingly Northern Ireland and Wales (44.4% versus 6.3%), is concerning. The obvious and extreme inequity evident within these findings is clearly unacceptable and should be addressed as a matter of urgency.

Finally, when considering other possible variations across the UK, there were no significant national differences across the various question areas, apart from with regard to agreement/disagreement with the NICE recommendation that diabetes professionals should be 'able to detect and basically manage non-severe psychological disorders in people from different cultural backgrounds'. While only a small proportion of responders disagreed with this statement, a significantly higher proportion was seen in services in Wales.

## 4. Recommendations

1. Despite the known high prevalence of psychological and emotional problems encountered by people with diabetes, their association with adverse outcomes due to impact upon glycaemic control, and the acknowledged need and demand for support and care with regard to these problems, only 31.5% of diabetes services have some form of specialist psychological care available to them. The variations seen regarding the nature of the services demonstrates the current lack of any clear plan or rationale for developing such services. **All service developments should be needs-led, and the psychological needs of people with diabetes should be addressed in an organised and planned way, in order to avoid the 'postcode lottery' which clearly exists at present.**
2. **It is crucial that the needs-led approach is a genuine one; assessing need and then matching the skills of the workforce to the needs which are present** (as opposed to simply employing any particular psychological professional and assuming that they will have all of the skills necessary (see page 66).
3. The provision of a psychological expert team member is associated with a significant increase in the perceived skill level of the diabetes MDT with regard to managing psychological issues. **One role of psychological input, whether provided by liaison psychiatrists, clinical psychologists or others, should be to improve the whole MDT's ability to identify and help effectively with such needs.**
4. People with diabetes in the UK should not have to rely for their psychological help and treatment upon the best efforts of people who are not adequately trained, or supported, to carry out that work. **Diabetes healthcare professionals should be trained and supported to enable them to deliver emotional and psychological support themselves, at an appropriate level, with the aim of embedding this as an integral part of healthcare professional training for the future.**
5. **Specialist psychological services need to be able to provide direct clinical care with appropriate psychological therapies and biological treatments (medication) where necessary, as well as clinical supervision, education and training for members of the diabetes multidisciplinary team.**
6. **The size of provision of any psychological service for people with diabetes should be determined by a combined assessment of need and necessary capacity for:**
  - a) direct clinical care
  - b) clinical supervision, education and training of the diabetes MDT.
7. Experts in psychological care clearly have an important part to play in providing education, training, support and advice on appropriate resources, as well as direct clinical care for patients, but **managers and staff of diabetes services need to see psychological support and care as, to an appropriate extent, the business of everyone in the team.**
8. Diabetes teams feel they need help with managing psychological presentations, and an opportunity to involve, or refer on to, specialist services for a whole range of conditions. **Staff working in**

diabetes services are specialised and experienced and it is crucial that this declared need is listened to by commissioners and policy makers in order that the psychological needs of people with diabetes might begin to be addressed to any degree of adequacy.

9. Guidelines for the management of common psychological problems in diabetes should be made available to all services and patients/carers.
10. Clinical care pathways, alongside protocols and guidelines for onward referral of patients with psychological and psychiatric problems, should be available in all centres.
11. At an appropriate stage, with regard to the development of psychological services, consideration should be given to the introduction into diabetes services of appropriate screening tools to improve the recognition of psychological and emotional problems in people with diabetes.
12. Around 85% of people with diabetes in the UK have either no defined access to psychological support and care, or at best only in the form of local generic services in which they will be seen by mental health professionals who may have very little or virtually no useful knowledge of their condition and the particular challenges they face as a result of it. **Expert psychological care for people with diabetes needs to be provided by professionals with specific knowledge and experience in the area of diabetes. This is in order that psychological assessment and treatment will be provided in the context, and with an adequate understanding, of the particular issues faced by people with diabetes.**  
This will be essential for services to be effective. A reliance upon the provision of existing generic local mental health services is not enough.
13. Commissioners should require services to demonstrate that they are able to provide effective identification, assessment and treatment of the psychological problems and disorders suffered by their population of people with diabetes.
14. Only 2.6% of services felt that they were complying with all six of the relevant NSF standards and NICE guidance recommendations and 25.8% do not comply with any of them. **Commissioners should require services to rapidly work towards, and to demonstrate, compliance with existing NSF standards and NICE guidelines relevant to the psychological care of people with diabetes.**
15. Specialist psychological services for people with diabetes should be provided across the full age range. Care should be taken to ensure that this includes the provision and development of appropriate psychological services at the stage of transition from children's to adults' services.
16. Psychological service provision will need to be improved in both hospital and community settings, whilst taking into account the current shift of diabetes services, in some centres, away from hospitals and into the community.
17. Clinical services provided will need to involve a mix of routine and urgent care, the latter being genuinely responsive psychological (including psychiatric) care.
18. Psychological services must not be designed in order to only treat people with 'classifiable' psychiatric disorders (eg ICD-10 diagnoses 62). This is important because what might otherwise be considered 'sub-threshold' psychological problems have a very real impact upon self-care in diabetes, and consequently upon morbidity and mortality, making it essential that they are seen as appropriate for assessment and treatment.

19. Although there are regional variations, with regard to the four UK countries, all clearly require improved provision of psychological care for people with diabetes. It is possible that the approach in some (most notably Northern Ireland) may help others (most notably Wales and Scotland) in deciding how best to redress the current inequity in service provision. **All of the four UK countries clearly lack adequate psychological care for their growing populations with diabetes. Commissioners and providers should work together to rectify this.**
20. The population with diabetes is continuing to grow. As a result, the problem of a lack of psychological care for these people will increase. In this context, **the development of psychological services for people with diabetes must be addressed as a matter of urgency. A plan of action, with clear and necessarily challenging timeline, should be drawn up and taken forward without delay.**
21. **The Government should match its stated commitment to the emotional well-being of people with diabetes, and its aim to improve access to psychological therapies, by prioritising the investment of further resources specifically for psychological services for people with diabetes.**
22. **To ensure ultimate success the necessary work may be best steered by a combined Department of Health/Diabetes UK project group.**

(\*The survey being reported here was of **psychological services** for people with diabetes and not exclusively interested in any one particular mental health discipline or profession. This is because specialist services helping people with psychological problems are not the exclusive domain of any single discipline or profession. Several types of healthcare professionals may be involved in providing what we have termed, in a generic sense, **psychological services** for people with diabetes. These could include counsellors, psychologists, liaison psychiatrists, and psychotherapists, but such professionals tend to provide a range of different interventions and treatments, so it is crucial to match skills with need).

## 5. Strengths and weaknesses of this survey

### Strengths

- Coverage: all diabetes services in the UK were included in the survey and contacted.
- This was the first ever detailed examination of psychological service provision for adults with diabetes in the UK.
- As a result, it provides a 'baseline' against which to measure future service developments and changes.
- The survey had no upper age limit.
- The survey was designed to have 2 parts in order to establish a full picture, to include the perspectives of both diabetes service clinicians and psychological experts.
- Development of the survey methodology included input from people with diabetes, diabetes MDT members and psychological experts, plus piloting with a range of healthcare professionals.
- The response rate to part 2 (structured telephone interviews) was high at 80%.
- A relatively large number of variables were examined, allowing for a comprehensive examination of psychological services.
- It accords well with the position of several national bodies and statements calling for the prioritisation of psychological and emotional well-being, including the 'Darzi Review' ethos of equity of access to services and 'No physical health without mental health'.
- In line with this it reinforces the importance of psychological input into services and highlights the current 'postcode lottery' regarding differences in access.
- The results provide information which can help to inform future service development.
- It also provides a framework for the study of, and possibly a template for consequent reports on, the provision of psychological care for people with other long-term physical conditions.

### Weaknesses

- Perhaps in part 1 (postal questionnaires) a relatively low response rate, although 58% compares quite well with a number of other national reports and studies.
- It is possible that the answers provided by the responders may have been inaccurate, in that they may not have been fully aware of the nature of the psychological services available, and their views may not have been representative of the whole diabetes team.
- Some of the survey was 'subjective', eg when asking about perceived skill levels of team members and what gaps exist in local service provision.
- Answers to the questions which aimed to look directly at specialist psychological services for people with diabetes versus local generic mental health services suggest a possible degree of confusion between the two on the part of some responders. However the effect of this on the survey results, if any, would be to create an over-estimate as to the current provision of specialist psychological services for people with diabetes.



- Apart from at the design stage, the survey did not involve patients/service users or carers, as it was exclusively aimed at healthcare professionals.
- The survey addressed service provision for adults only – although some concerns were expressed regarding services for children when responders were asked what gaps they felt existed in psychological services for people with diabetes. (A different survey has been carried out for children's services<sup>42</sup>).

## Appendix A: Brief descriptions of the professionals who carry out specialist psychological work

1. **Counsellor:** a healthcare professional educated to certificate standard or above in client-centred counselling.
2. **Clinical psychologist:** an individual with a Psychology Degree who has received additional training in, and provides, specific psychological (psychotherapeutic) interventions.
3. **Health psychologist:** an individual with a Psychology Degree who has received additional training in the psychology of health and illness, and may provide a service to support the work of other healthcare professionals/teams, by assisting with psychological and systems issues which arise for and within those healthcare professionals and teams.
4. **General psychiatrist:** a Medical Doctor who has received additional training in diagnosing and treating mental health problems, including the delivery of biological, psychological (psychotherapeutic) and social assessments and treatments.
5. **Liaison psychiatrist:** a Medical Doctor who has received training as a general psychiatrist but, in addition, specific training regarding working in a general hospital setting and with people who have a mixture of significant physical and psychological conditions/disorders. Liaison Psychiatrists specialise in the interface between physical and psychological problems, using a biopsychosocial approach.
6. **Psychotherapist:** For the purposes of this paper, the term 'psychotherapist' refers to a psychiatrist or psychologist who has had specialist training in, and is particularly employed to deliver, psychological (psychotherapeutic) interventions (psychotherapy).

(Clinical psychologists, psychotherapists and some general and liaison psychiatrists have training enabling them to deliver specialist psychological/psychotherapeutic interventions, such as cognitive behavioural therapy, cognitive analytical therapy, interpersonal therapy, psychodynamic psychotherapy or group (systems) therapeutic approaches).

# Appendix B: NSF for diabetes and NICE guidance for diabetes (CG15) (psychological elements)

## NSF for diabetes

### Standard 3: Empowering people with diabetes

**Rationale for negative impact of psychological problems:** Psychological problems are more common in diabetes. Strategies are needed to deal with the psychological consequences of diabetes: it can lead to poor psychological adjustment, self-blame/denial and barriers to effective self-management. It can also cause low self-esteem, which can lead to resistance and depression. The provision of information, education and psychological support that facilitates self-management are the cornerstones of diabetes care.

**What is needed:** Structured education to increase psychological well-being. Needs to be tailored to the individual and include skills-based approaches to education.

Implications for service planning:

- NHS needs to develop, review and audit: behavioural change programmes.
- NHS will need to ensure service providers have the attitudes, skills and knowledge to provide person-centred care, including communication, counselling and behaviour change support skills (to be reviewed and recommended by 'Long term Conditions Care group Workforce Team' – DoH)

### Standard 12: Detection and management of long term complications

If patients require multi-agency support they should receive:

- Integrated Health and Social care.
- Regular surveillance for, and effective management of depression

---

## NICE guidance for diabetes

### 13 Management of special situations

#### 13.5 Psychological problems

##### **Evidence statements:**

Mood is strongly, positively associated with glycaemic control. Depression is probably at least twice as prevalent in DM as controls. Injection anxiety (and 'fear of blood and injury') is associated with poorer glycaemic control.

**Consideration:** For physicians a degree of competence in managing depression and psychological issues at least matching that of an experienced GP is clearly desirable.

##### **Recommendations:**

- MDTs should be alert to the development or presence of clinical or sub-clinical depression and/or anxiety, in particular where someone reports or appears to be having difficulties with self-management.
- Diabetes professionals should be:
  1. able to detect and basically manage non-severe psychological disorders in people from different cultural backgrounds.

2. familiar with counselling techniques and drug therapy, while arranging prompt referral to specialists, especially if significant interference with well-being or diabetes self-management.
- Special management techniques or treatment for non-severe psychological illness should not commonly be used, except where diabetes-related arterial complications give rise to special precautions over drug therapy.

## Eating disorders

**Evidence statements:** Eating disorders (especially dose manipulation, and to a lesser degree bulimia) are common in diabetes and interfere with self-management. Eating disorders can have serious short-term and long-term impacts, sometimes fatal.

### Recommendations:

1. MDTs should be alert to bulimia nervosa, anorexia nervosa and insulin dose manipulation if there is:
  - overconcern with body shape and weight
  - low BMI
  - poor blood glucose control.
2. Early (and occasionally urgent) referral to local eating disorders services should be considered.
3. Provision of high-quality professional team support at regular intervals with regard to counselling about lifestyle issues and particularly nutritional behaviour should be made to all adults with Type 1 diabetes from the time of diagnosis.

# Appendix C: Part 1 (postal) questionnaire

## National UK survey of psychological services for people with diabetes

### Introduction

The **pyramid of psychological problems**, shown below, is intended to be helpful as you complete this questionnaire. The focus of the questions is mainly upon services to help people with psychological and emotional problems at level 2.

Also, healthcare professionals are divided, for simplicity only, into two categories; '**Non-psychological**' (diabetologists, diabetes nurses, podiatrists, etc) and '**Psychological**' (counsellors, psychologists, liaison psychiatrists, etc). This is important because **the questionnaire is in two parts**:

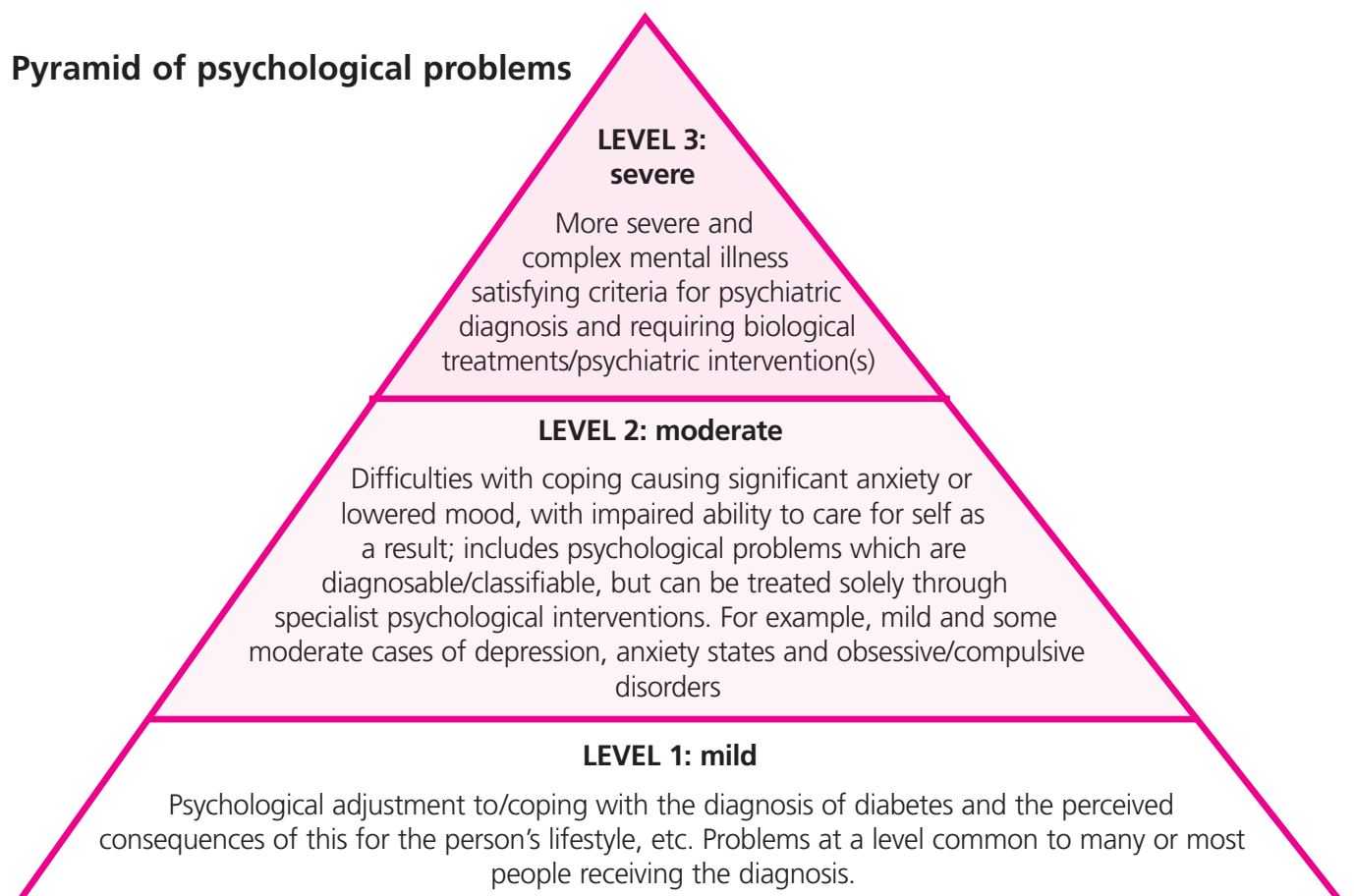
### Part 1

Psychological care provided from within the '**non-psychological**' elements of the diabetes team

### Part 2

Specialist psychological services for people with diabetes, ie provided by '**psychological**' staff

### Pyramid of psychological problems



## About you and your team

Name: .....

Title: .....

Contact number: .....

Email address: .....

What is the name of your organisation? .....

And your postcode?: .....

### How many of the following do you have in or associated with your multidisciplinary team?

'Non-psychological'	Number
Consultant diabetologists	
Consultant nurses	
SpRs	
SHOs	
PRHOs	

	Number
Diabetes nurse specialists	
Dietitians	
Podiatrists	
Physiotherapists	
Other (specify) _____	

### Which of the following do you have in or associated with your multidisciplinary team?

**(Note:** "in or associated with" should be taken to mean that these individuals have allocated time available specifically for patients of the diabetes service)

'Psychological'	Name	Telephone no.	Email address
Counsellor			
Psychologist			
Liaison psychiatrist			
Psychotherapist			
Other*			
(*Please describe)			

**It is VERY IMPORTANT that you fill in the name, telephone number and email address of at least one psychological member, if you have one, as we need to contact that person by email and telephone for the second part of the survey.**

## Part 1) The questions in this part all refer to:

### Psychological care provided from within the 'non-psychological' elements of the diabetes team

---

#### 1) For your diabetes patients do you have:

---

a telephone advice system providing psychological support?

Yes ☐ No ☐ Don't know ☐

protocols or guidelines for referral to psychological services for patients at level 2?

Yes ☐ No ☐ Don't know ☐

adequate referral route to psychiatric services for patients at level 3?

Yes ☐ No ☐ Don't know ☐

---

#### 2) Screening tools

---

Are any screening/assessment tools for psychological well-being used by your 'non-psychological' team members?

Yes ☐ No ☐ Don't know ☐

---

#### 3) Training in psychological problems

---

Has anyone in your 'non-psychological' team had any training in identifying and managing psychological problems?

Yes ☐ No ☐ Don't know ☐

If yes do these include training in:

counselling Yes ☐ No ☐ Don't know ☐

motivational interviewing Yes ☐ No ☐ Don't know ☐

cognitive behavioural therapy Yes ☐ No ☐ Don't know ☐

psychodynamic psychotherapy Yes ☐ No ☐ Don't know ☐

group therapy Yes ☐ No ☐ Don't know ☐

family or couple therapy Yes ☐ No ☐ Don't know ☐

other \* Yes ☐ No ☐ Don't know ☐

\*Please list:

---

---

---

---

#### 4) Guidelines

---

Do you have clinical management guidelines for the following?

IF YES, do they consider psychological issues?

a) Difficulties with self-management  
(eg persistently high HbA1C >10%)

Yes ☐ No ☐

Yes ☐ No ☐

b) Recurrent DKA

Yes ☐ No ☐

Yes ☐ No ☐

c) Low BMI

Yes ☐ No ☐

Yes ☐ No ☐

d) Eating disorders (bingeing, Bulimia, Anorexia)

Yes ☐ No ☐

Yes ☐ No ☐

e) Morbid obesity

Yes ☐ No ☐

Yes ☐ No ☐

---

#### 5) Below is a list of psychological problems which may be faced by patients with diabetes. Please rate how well you think your 'non-psychological' team is able to deal with the following:

---

	excellent	good	moderate	poor
Problems with self-management of diabetes (adherence/compliance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Needle phobia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other anxiety disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eating disorders/problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drug and alcohol problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychotic illnesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychosexual problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suicidal patients and self-harm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Service provision issues raised by the National Service Framework (NSF) for diabetes:

---

#### 6) Standard 3 requires provision of 'person centred care' which includes counselling and behaviour change support skills

---

Do you agree that this is necessary?

Yes ☐ No ☐

Does your service currently provide this?

Yes ☐ No ☐

If not, are you currently taking steps to provide this?

Yes ☐ No ☐

---

#### 7) Standard 12 requires 'regular surveillance for, and effective management of depression'

---

Do you agree that this is necessary?

Yes ☐ No ☐

Does your service currently provide this?

Yes ☐ No ☐

If not, are you currently taking steps to provide this?

Yes ☐ No ☐



## Issues raised by recommendations within the NICE guidelines for diabetes:

---

### 8) 'Multidisciplinary teams (MDTs) should be alert to the development or presence of clinical or subclinical depression and/or anxiety, especially if there are problems with self management'.

---

Do you agree that this is necessary?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Does your MDT currently provide for this adequately?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>
If not, do you think more training of the MDT is required?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>
Do you think more psychological staff are required?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>

---

### 9) Diabetes professionals should be:

---

#### a. 'Able to detect and basically manage non-severe (level 1) psychological disorders in people from different cultural backgrounds'.

Do you agree that this is necessary?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Can your diabetes professionals currently do this?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>
If not, do you think more training of your staff is required to do this?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>

#### b. 'Familiar with counselling techniques and drug therapy, while arranging prompt referral to specialists, especially if there is significant interference with well-being or diabetes self-management'.

Do you agree that this is necessary?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Can your diabetes professionals currently do this?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>
If not, do you think more training of your staff is required to do this?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>

---

### 10) 'Alert to eating disorders and insulin dose manipulation if there is either poor glucose control, low BMI or overconcern with body shape and weight. Early, and occasionally urgent, referral to local eating disorders services should be considered'.

---

Do you agree that this is necessary?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Does your MDT currently provide for this adequately?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>
If not, do you think more training of the MDT is required to do this?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>
Do you think more psychological staff are required?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Don't know <input type="checkbox"/>

---

### 11) When dealing with psychological issues, how do the skills of the doctors in your team compare with those of an experienced GP?

---

Better ☐ Same ☐ Worse ☐

---

## Appendix D: Part 2 (telephone) structured interview/questionnaire

### Part 2) The questions in this part all refer to:

**Specialist psychological services for people with diabetes, ie provided by 'psychological' staff**

---

**12) In your area, are specific psychological services provided for people with diabetes who have psychological problems at level 2 of the pyramid?**

---

Yes ☐ No ☐

---

**13) If yes, please define the age groups that specialist psychological services are provided for (tick all that apply)**

---

Ages 17-64 ☐ Age 65+ ☐ Both ☐

---

**14) What elements of psychological help are available for people with diabetes with level 2 psychological problems? (tick all that apply)**

---

Counselling	<input type="checkbox"/>
Motivational interviewing	<input type="checkbox"/>
Cognitive behavioural therapy	<input type="checkbox"/>
Psychodynamic therapy	<input type="checkbox"/>
Group therapy	<input type="checkbox"/>
Family or couple therapy	<input type="checkbox"/>
Other (please specify):	<input type="text"/>

---

**15) Who provides these services specifically for people with diabetes, and how many are there of each discipline?**

---

	1	2	3	3+
Counsellors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychologists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liaison psychiatrists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychotherapists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please state)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**16) Of these services, how many sessions (half days) are available per week or, if less than one per week, how many per month?**

	per week	per month
Counsellors		
Psychologists		
Liaison psychiatrists		
Psychotherapists		
Other (please state below)		

**17) What level of experience do the people who provide these services have in treating 'people with diabetes' (PWD)?**

	See PWD very occasionally	See PWD occasionally	See PWD on a fairly regular basis	See PWD frequently	Have been a member of a diabetes team or work with PWD for over a year
Counsellors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychologists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liaison psychiatrists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychotherapists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please state below)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**18) Do those providing the psychological service work with the diabetes services(s) as dedicated members of the team?**

Yes ☐ No ☐

**19) Are these services dedicated for people with diabetes or are they simply local generic services, which can be referred to? (please tick one below)**

Specific service for diabetes ☐ Local generic services ☐

**20) Do the psychology/psychiatry/counselling staff clinically treat\* the patients referred to them? (\* as distinct from providing advice, supervision, case discussion or other interventions which focus on supporting the 'non-psychological' members of the diabetes team in their work)**

Yes ☐ No ☐

---

**21) Do the staff provide education/training for other healthcare professionals working with people with diabetes?**

---

Yes ☐ No ☐

---

**22) Do they provide clinical supervision for other healthcare professionals working with people with diabetes?**

---

Yes ☐ No ☐

---

**23) Where are these specialist psychological services provided? (tick all that apply)**

---

GP practice(s) ☐

General hospital ☐

Mental health unit ☐

Other ☐

(Please specify below)

---

**24) Are services available for routine cases, urgent cases or both? (tick one box only)**

---

Routine ☐

Urgent ☐

Both ☐

---

**25) What is the average waiting time for routine referrals to these services? (tick one box only)**

---

Up to one month ☐

1 to 2 months ☐

2 to 3 months ☐

More than 3 months ☐

---

**26) Are urgent referrals seen straight away?**

---

Yes ☐ No ☐

---

**27) Is there a limit as to how long the service and/or clinician can continue to provide treatment to each person they see?**

---

Yes ☐ No ☐

If yes, please specify how long in weeks ..... weeks

---

28) What organisation provides these psychological services?

PCT ☐

Acute Trust ☐

Mental Health Trust 

Other (please specify)

**29) Finally, in your opinion what gaps are there in services for people with diabetes who have emotional, psychological or mental health problems?**

End:  
(Finish by thanking the person for taking part in this survey)

## Appendix E: Introductory email for Part 2 (telephone interviews)

### National survey of psychological services for people with diabetes

Dear

Diabetes UK is carrying out an important survey. We are trying to find out what services are available in the UK to help people with diabetes with the emotional and psychological problems which they may experience.

In order to support future development of services we need to know:

- what services exist and where
- the nature of those services.

The first part of the survey has already happened. It was a questionnaire which was sent to a colleague of yours. One of the questions asked whether there are any specialist psychological service elements for people with diabetes in your locality. Your name and contact details were given in response to this. As a result you will be receiving a telephone call to ask you a few questions about psychological services for people with diabetes in your area.

This email contact is simply to let you know that you will be contacted by phone, and we hope very much that you are happy for this to occur. We do appreciate that surveys make extra demands on your time and that there are numerous such demands. Because of this we have made the telephone interview brief, and your help with this would be very much appreciated.

The attached 'pyramid of psychological problems' may seem quite simplistic but it is just to help explain the kind of services we are trying to find out about (ie at level 2 of the pyramid).

You don't need to do anything now, simply await our call.

Diabetes UK will analyse the results of the survey and report on findings – and these will be made available on the Diabetes UK website.

**Thank you very much, in advance, for your help with this important survey.**

# References

- 1 Diabetes UK. *Diabetes: State of the Nations 2006: progress made in delivering the national service frameworks – a report from Diabetes UK*. 2007.
- 2 York and Humber Public Health Observatory/National Diabetes Support Team. *Diabetes Key Facts*. March 2006.
- 3 Wanless, D. *Securing Our Health: Taking a Long-Term View – Final Report*. London. HM Treasury. 2002.
- 4 Information Centre Quality Outcomes Framework Data 2005/06. Diabetes Indicators [http://www.ic.nhs.uk/servicesnew/qof06/spreadsheets/ICfolder\\_view](http://www.ic.nhs.uk/servicesnew/qof06/spreadsheets/ICfolder_view) (2006)
- 5 Mayou R, Peveler R, Davies B, Mann J and Fairburn C. Psychiatric morbidity in young adults with insulin-dependent diabetes mellitus. *Psychological Medicine* 1991; **21**: 639-645.
- 6 Peyrot M, Rubin RR, Lauritzen T, Snoek FJ, Matthews DR, Skovlund SE. Psychosocial problems and barriers to improved diabetes management: results of the Cross-National Diabetes Attitude, Wishes and Needs (DAWN) Study. *Diabetic Medicine*. 2005; **22**: 1379-1385.
- 7 Gavard JA, Lustman PJ, Clouse RE. Prevalence of depression in adults with diabetes: an epidemiological evaluation. *Diabetes Care* 1993; **16(8)**: 1167-78.
- 8 Anderson RJ, Freedland K, Clouse RE, Lustman PJ. The prevalence of comorbid depression in adults with diabetes: a meta-analysis. *Diabetes Care* 2001; **24**:1069 –78.
- 9 Ali S, Stone A, Peters L, Davies MJ, Khunti K. The prevalence of co-morbid depression in adults with Type 2 diabetes: a systematic review and meta-analysis. *Diabetic Medicine* 2006; **23**:1165–73.
- 10 Das-Munshi J, Stewart R, Ismail K, Bebbington PE, Jenkins R, Prince MJ. Diabetes, common mental disorders and disability: findings from the UK National Psychiatric Morbidity Survey. *Psychosomatic Medicine*. 2007; **69(6)**: 543-50.
- 11 Turner H, Peveler R. Treatment delivery and guidelines in primary care. *British Medical Bulletin* 2001; **57**:193-206.
- 12 Lustman PJ, Harper GW. Non-psychiatric physicians' identification and treatment of depression in patients with diabetes. *Comprehensive Psychiatry*.1987; **28(1)**: 22-7.
- 13 Penn JV, Boland R, McCartney JR, Kohn R, Mulvey T. Recognition and treatment of depressive disorders by internal medicine attendings and housestaff. *General Hospital Psychiatry* 1997; **19**: 179-184.
- 14 Gonzalez JS, Safren SA, Cagliero E, Wexler DJ, Delahanty L, Wittenberg E, Blais MA, Meigs JB, Grant RW. Depression, Self-Care, and Medication Adherence in Type 2 Diabetes: relationships across the full range of symptom severity. *Diabetes Care*. 2007; **30**: 2222-2227.

- 15 Lustman PJ, Anderson RJ, Freedland KE, De Groot M, Carney RM, Clouse RE. Depression and poor glycemic control: a meta-analytic review of the literature. *Diabetes Care* 2000; **23**: 934-942.
- 16 De Groot M, Anderson R, Freedland DK, Clouse RE, Lustman PJ. Association of depression and diabetes complications: a meta-analysis. *Psychosomatic Medicine* 2001; **63**: 619-630.
- 17 Egede LE and Zheng D. Independent factors associated with major depressive disorder in a national sample of individuals with diabetes. *Diabetes Care* 2003; **26**: 104-111.
- 18 Egede LE. Major depression in individuals with chronic medical disorders: prevalence, correlates and association with health resource utilization, lost productivity and function disability. *General Hospital Psychiatry* 2007; **29(5)**: 409-16.
- 19 Katon WJ, Rutter C, Simon G, Lin EH, Ciechanowski P, Kinder L, Young B, Von Korff M. The association of comorbid depression with mortality in patients with Type 2 diabetes. *Diabetes Care* 2005; **28(11)**: 2668-72.
- 20 Fairburn CG, Peveler RC, Davies B, Mann JI, Mayou RA. Eating disorders in young adults with insulin dependent diabetes mellitus: a controlled study. *British Medical Journal* 1991; **303**: 17-20.
- 21 Peveler RC, Fairburn CG, Boller I, Dunger D. Eating disorders in adolescents with IDDM. A controlled study. *Diabetes Care* 1992; **15(10)**: 1356-1360.
- 22 Rydall A, Rodin G, Olmsted MP, Devenyi RG, Daneman D. Disordered eating behaviour and microvascular complications in young women with insulin-dependent diabetes mellitus. *New England Journal of Medicine* 1997; **336**: 1849-1854.
- 23 Berlin I, Bisslerbe JC, Eiber R, Balssa N, Sachon C, Bosquet F, Grimaldi A. Phobic symptoms, particularly the fear of blood and injury, are associated with poor glycemic control in type 1 diabetic adults. *Diabetes Care* 1997; **20**: 176-178.
- 24 Goodnick PJ, Henry JH, Buki VM. Treatment of depression in patients with diabetes mellitus. *Journal of Clinical Psychiatry* 1995; **56**: 128-136.
- 25 Goodnick PJ, Kumar A, Henry JH, Buki VMV, Goldberg RB. Sertraline in coexisting major depression and diabetes mellitus. *Psychopharmacology Bulletin* 1997; **33(2)**: 261-264.
- 26 Lustman PJ, Griffith LS, Freedland KE, et al. Cognitive behavior therapy for depression in type 2 diabetes mellitus: a randomised, controlled trial. *Annals of Internal Medicine*. 1998. **129(8)**: 613-621.
- 27 Lustman PJ, Freedland KE, Griffith LS, Clouse RE. Fluoxetine for depression in diabetes: a randomised, double-blind, placebo-controlled trial. *Diabetes Care* 2000. **23**: 618-623.
- 28 Lustman PJ and Clouse, RE. Depression in diabetic patients: the relationship between mood and glycemic control. *Journal of Diabetes and its Complications* 2005; **19(2)**: 113-122.
- 29 Ismail K, Winkley K, Rabe-Hesketh S. Systematic review and meta-analysis of randomised controlled trials of psychological interventions to improve glycaemic control in patients with type 2 diabetes. *Lancet* 2004; **363**: 1589-1597.
- 30 Winkley K, Ismail K, Landau S, Eisler I. Psychological interventions to improve glycaemic control in patients with type 1 diabetes: systematic review and meta-analysis of randomised controlled trials. *British Medical Journal* 2006; **333(7558)**: 65.



- 31 Simon GE, Katon WJ, Lin EHB, Rutter C, Manning WG, Von Korff M, Ciechanowski P, Ludman EJ, Young BA. Cost-effectiveness of systematic depression treatment among people with diabetes mellitus. *Archives of General Psychiatry* 2007; **64**: 65-72.
- 32 Dawson AM, et al. Royal College of Physicians and Royal College of Psychiatrists. The Psychological Care of Medical Patients: recognition of need and service provision (RCPsych CR35). Royal College of Physicians and Royal College of Psychiatrists: London. 1995.
- 33 National Service Framework for Diabetes: Standards. Health Service Circular (HSC 2001/026), Department of Health. <http://www.doh.gov.uk/nsf/diabetes.htm>.
- 34 National Institute for Health and Clinical Excellence CG15: Type 1 diabetes in children, young people and adults. NICE Guideline. 2004.
- 35 Edge JA, Swift PG, Turner, B, Anderson W. Diabetes Services in the UK: fourth national survey. Are we meeting NSF standards and NICE guidelines? *Archives of Disease in Childhood*. 2005; **90**:1005-1009.
- 36 Association of British Clinical Diabetologists (ABCD) survey of secondary care services for diabetes in the UK, 2000. 1. Methods and major findings, *Diabetic Medicine* 2002; **19**: 327-333.
- 37 Diabetes UK and Dr Foster: *Your Local Care. Diabetes services in England* 2003. Diabetes UK.
- 38 Dr Foster and Diabetes UK. *Your Local Care. Diabetes services in England* 2005. Diabetes UK.
- 39 Diabetes UK: *PCT progress survey, access to healthcare services at a glance* 2006. Diabetes UK.
- 40 Diabetes UK: *PCT progress survey, access to healthcare services at a glance* 2007. Diabetes UK.
- 41 Winocour PH, Gosden C, Walton C, Nagi D, Turner B, Williams R, James J, Holt RIG. Association of British Clinical Diabetologists (ABCD) and Diabetes UK survey of specialist diabetes services in the UK, 2006.1. The consultant physician perspective. *Diabetic Medicine* 2008; **25**: 643-650.
- 42 Talking Diabetes: a survey of psychological and psychiatric support in UK paediatric diabetes services – data collected as part of the DEPICTED study. Cardiff University 2006.
- 43 Hansard Society (2005). Diabetes Dialogue on-line consultation.
- 44 Diabetes UK and All Party Parliamentary Group for Diabetes (2005) Diabetes State of Nations 2005.
- 45 Healthcare Commission: *National Survey of People with Diabetes*. Healthcare Commission 2007.
- 46 Report of the Northern Ireland Task Force on diabetes. A blueprint for diabetes care in Northern Ireland in the 21st Century. Clinical Resource Efficiency Support Team (CREST) and Diabetes UK 2003.
- 47 Dr Foster and Diabetes UK 2005. *Your local care. Diabetes services in Northern Ireland*. Diabetes UK.
- 48 National Diabetes Audit: key findings about the quality of care for people with diabetes in England incorporating registrations from Wales 2004/05. NHS Information Centre and National Clinical Audit Support Programme 2006.
- 49 Review of Psychology Provision to Adults and Children with diabetes in Scotland: a report to the Psychology working group for Scottish Diabetes Group, 2006.

- 50 Diabetes Action Plan. Scottish Diabetes Framework. Scottish Executive: Edinburgh 2006.
- 51 Joint Position Statement: Integrated care in the reforming NHS – ensuring access to high quality care for all people with diabetes. Diabetes UK, the Association of British Clinical Diabetologists (ABCD) and the Primary Care Diabetes Society (PCDS) 2007.
- 52 Diabetes UK Care Recommendations 2000. Diabetes UK.
- 53 *Prioritising emotional wellbeing*. Diabetes UK position statement, Nov 2007.
- 54 Binleys Directory of NHS Management, Vol 14, No 3. Essex: Beechwood House Publishing Ltd 2006.
- 55 The Directory of Diabetes Care. CMA Medical Data. Loughborough: CMA Medical Data, 2006.
- 56 Internal database of diabetologists (2006) Diabetes UK.
- 57 Professor the Lord Darzi of Denham. *High Quality Care For All: NHS Next Stage Review, Final Report*. Department of Health: London. June 2008.
- 58 Pignone MP, Gaynes BN, Rushton JL, Mills Burchell C, Orleans CT, Mulrow CD, Lohr KN. Screening for Depression in Adults: a summary of the evidence for the U.S. Preventive Services Task Force. *Annals of Internal Medicine* 2002; **136**: 765-776.
- 59 Developing psychological support for adults with diabetes mellitus in Northern Ireland: a consultation document. DHSSPS, Clinical Psychology Specialty Advisory Committee 2003.
- 60 Mental Health and Diabetes, Challenges for the Future, Joint Report Diabetes UK Northern Ireland and Action Mental Health, February 2006.
- 61 Investing for Health. Ministerial Group on Public health (MGPH) 2002.
- 62 World Health Organisation. *The ICD-10 Classification of Mental and Behavioural Disorders: clinical descriptions and diagnostic guidelines*. World Health Organisation: Geneva. 1992.

# Notes

# Notes

# Notes



**The charity for people with diabetes**

Macleod House, 10 Parkway, London NW1 7AA

**Telephone** 020 7424 1000 **Fax** 020 7424 1001

**Email** [info@diabetes.org.uk](mailto:info@diabetes.org.uk) **Website** [www.diabetes.org.uk](http://www.diabetes.org.uk)

A charity registered in England and Wales (no. 215199)

and in Scotland (no. SC039136). © Diabetes UK 2008