

EATING DISORDERS A HEALTH NEEDS ASSESSMENT

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SUMMARY OF KEY POINTS

Incidence and prevalence of eating disorders

- It is difficult to accurately quantify the numbers of individuals at risk from or suffering an eating disorder
- Calculating the potential numbers of those with diagnosed conditions is likely to underestimate the total number of people with an eating disorders as up to 50% of disorders are thought to be atypical
- The highest levels of eating disorders are seen in young women, over 20% of 16-24 year old women would be expected to screen positive for a possible eating disorder
- In a single year, 51,000 people would be expected to screen positive for a possible eating disorder in the Derbyshire cluster and require further assessment in primary care
- Over 100 incident cases of both anorexia and bulimia would be expected in the cluster in a single year
- There are a potential 1,200 – 1,800 individuals in the cluster currently suffering from anorexia and over 5,500 suffering from bulimia

Services for eating disorders

- There are a range of services for patients in Derbyshire including specialist community and inpatient services which is in line with NICE guidance
- Services in the community and voluntary sector (CVS) make a substantial contribution to service provision in Derbyshire but receive minimal funding from the PCTs
- Mapping activity data across services is difficult due to the different nature of the services, their overlap and the quality of data available which makes it difficult to understand the total number of individuals supported by services
- It is estimated that over 500 people are supported by the CVS services in the last year. These people will have a wide range of needs, some accessing for information only and some known to specialist services
- The NHS Community Specialist service in Derbyshire saw an average of 46 new patients a year in the last 2 years
- In the last 3 years between 14 and 16 patients a year received care in a specialist inpatient unit
- The rate of admissions to any NHS provider for people with an ED is statistically significantly higher in Derby City than the East Midlands and England
- Across Derbyshire there are 38 admissions per year to any NHS provider for people with an ED. This may represent repeated admissions to specialist services, admissions for acute medical care and possible non-ED related admissions in those with an ED diagnosis.
- Within this HNA it is not possible to assess whether the services are meeting the needs of the individual patients

Health need compared with service provision

- The quality of the data makes it difficult to compare health need with service provision
- The available data suggests that specialist and CVS services support a small proportion of the new cases of ED that might be expected each year
- Inaccurate data, poor identification of EDs and a lack of capacity may all contribute to the discrepancies between estimated numbers of new cases and service provision

1 PURPOSE

This purpose of this eating disorders health needs assessment (HNA) for NHS Derby City and NHS Derbyshire County is to:

- Describe the incidence and prevalence of eating disorders in order to understand the level of need for eating disorder services
- Describe the local services and their activity and identify gaps in the current and planned provision
- Make recommendations to commissioners and providers to ensure services meet the need within Derby City and Derbyshire County

2 BACKGROUND

The term eating disorders describes a range of conditions including anorexia nervosa and bulimia nervosa as well as atypical disorders which do not meet established diagnostic criteria. Eating disorders impact on individuals' mental and physical health and may result in complications such as infertility, osteoporosis and heart failure; and in some cases are fatal.

2.1 Anorexia nervosa

Anorexia nervosa is a syndrome defined by a pre-occupation with body weight in which the individual maintains a low weight and a body mass index (BMI, weight in kgs divided by height in metres squared) below 17.5. Weight loss is usually achieved through the avoidance of foods and in some cases individuals exercise excessively, induce vomiting or use laxatives.

Typically the condition starts with dieting and low weight provides positive reinforcement for individuals. Gradually dieting is progressed and individuals become withdrawn and may suffer from emotional difficulties and become socially isolated; depression is a common co-morbidity. As a result of poor nutrition individuals develop endocrine disorders which become apparent through amenorrhoea in females and a loss of sexual desire in men. In pre-pubertal children growth and puberty are delayed and individuals suffer from muscular weakness and loss of bone density. Diagnosis is made on the basis of history, physical examination and behaviour observation if required.

Anorexia nervosa has a variable course of progression; studies suggest for those who receive treatment approximately 5% die from the condition, 40% recover completely and the remainder develop a chronic disorder (1). Mortality has been estimated to be almost 10 times greater in anorexia nervosa than in the general population, this is three times greater than other psychiatric illnesses (2).

2.2 Bulimia nervosa

Bulimia nervosa is characterised by recurrent episodes of binge eating and compensatory behaviour including vomiting, purging, fasting and exercise. This may occur with or without weight loss. Patients are often distressed and ashamed by their eating and may delay seeking treatment for many years. Depression and anxiety are common co-morbidities and individuals may engage in self-harm or substance misuse.

The majority of sufferers do not receive any help and many suffer chronic or relapsing episodes. Following treatment around half recover, 30% will suffer intermittently and 20% continue with a full form. The mortality rate is uncertain but is presumed to be higher than the general population (2).

2.3 Atypical eating disorders

Atypical eating disorders include those that resemble anorexia nervosa and bulimia nervosa but do not meet the diagnostic criteria (1). Individuals have some concern regarding weight although control of eating appears to be the most important factor. Although these individuals may not have a diagnosed condition it may be as severe and last as long as anorexia nervosa and bulimia nervosa. Atypical eating disorders include the increasingly recognised disorder of binge eating where individuals engage in uncontrolled episodes of eating but do not use compensatory methods as in bulimia.

2.4 Risk factors

It is commonly accepted that as with other mental health conditions the aetiology of eating disorders is complex and multifactorial (1). Studies indicate the eating disorders are more common in individuals where other family members suffer from a disorder. To what degree these associations are due to genetic and environmental causes is unclear. A range of physical risk factors have been suggested including pre-morbid obesity, early feeding difficulties and early menarche but again there is little evidence to substantiate the association. 70% of cases appear to be triggered by 'severe life stresses', most commonly those affecting family and friends.

3 INCIDENCE AND PREVALENCE OF EATING DISORDERS

3.1 Epidemiological evidence

There is a lack of epidemiological evidence describing eating disorders which makes quantifying the health burden difficult. It is recognised that, due to their nature, these conditions are under-detected in the general population. Many studies have focused on particular groups such as female athletes or are confined to particular settings, such as health care settings, making them less generalisable. The incidence of eating disorders has been observed to have been increasing over the last century although there is no evidence to determine whether these increases are a result of a true increase in incidence or an increase in presentation and detection. The best data comes from a review study conducted in 2003 (3).

3.1.1 Anorexia nervosa

In the general population the incidence (number of new cases) of anorexia varies across the sexes with rates of 19 per 100,000 females per year and 2 per 100,000 males per year (3). Incidence varies greatly across age groups and has been found to be up to 51 per 100,000 females aged 13-19 per year. The incidence of anorexia is thought to vary across cultures and be rare in black populations, but there is a lack of evidence to support this. As incidence rates are typically derived from health care services they will grossly underestimate the true incidence of the condition in the population. The prevalence of anorexia is typically thought to be approximately 0.3% in young females.

3.1.2 Bulimia nervosa

The prevalence of bulimia has been less well studied but is thought to be 1% for young females and 0.1% for young males. Estimations of incidence suggest 12.2 cases per 100,000 people per year in the UK but are limited due to non-specific coding prior to 2007 (3).

3.1.3 Atypical eating disorders

The incidence and prevalence of atypical eating disorders is thought to be higher than those of bulimia but due to their heterogeneous nature they have not been widely studied and no published estimations were identified. It is estimated that around 50% of community eating disorders may be classified as atypical (1). This suggests that any figures derived by applying local population data to estimates of the incidence and prevalence of anorexia and bulimia will severely underestimate the total number of individuals with eating disorders.

3.1.4 Estimating local health needs

By applying incidence and prevalence estimates to our local populations we can obtain estimates of the expected number of cases locally. As discussed above there is a lack of strong evidence describing the epidemiology of eating disorders which makes quantifying the health burden difficult and subject to uncertainty, particularly in the smaller populations of the clinical commissioning groups, as such these figures must be interpreted with caution.

This HNA has used a number of sources to estimate the burden of eating disorders locally in an attempt to describe the broad spectrum of the conditions. The prevalence of possible eating disorders using screening tools (described in section 3.2) indicates the numbers of people who may come into contact with primary care, and incidence and prevalence of diagnosed eating disorders data (section 3.3) indicates the numbers that may be expected to require specialist services.

3.2 Prevalence of possible eating disorders

The standard assessment for eating disorders as recommended by NICE (4) is carried out in two stages; a screening approach to identify those who may be at risk and then further assessment of these potential cases. Estimating the number of people who may be at risk of an eating disorder provides an indication of the number of individuals who would require further assessment.

NICE recommend the use of the SCOFF screening tool (sick, control, one stone, fat and food; see Appendix A for tool) to assess the presence of a possible eating disorder. This tool is also used to estimate the prevalence of possible eating disorders as part of the UK's Adult Psychiatric Morbidity Survey (APMS) (5).

Data from the APMS survey (displayed in figure 1) confirm the higher risk of potential eating disorders in young females, with up to 20% of this population screening positive, although this survey is restricted to adults it does not give an indication of risk in younger teenagers. The risk of eating disorders declines with increasing age, particularly in females. These data also highlight that a quarter of all of those who screen positive for a possible eating disorder are male.

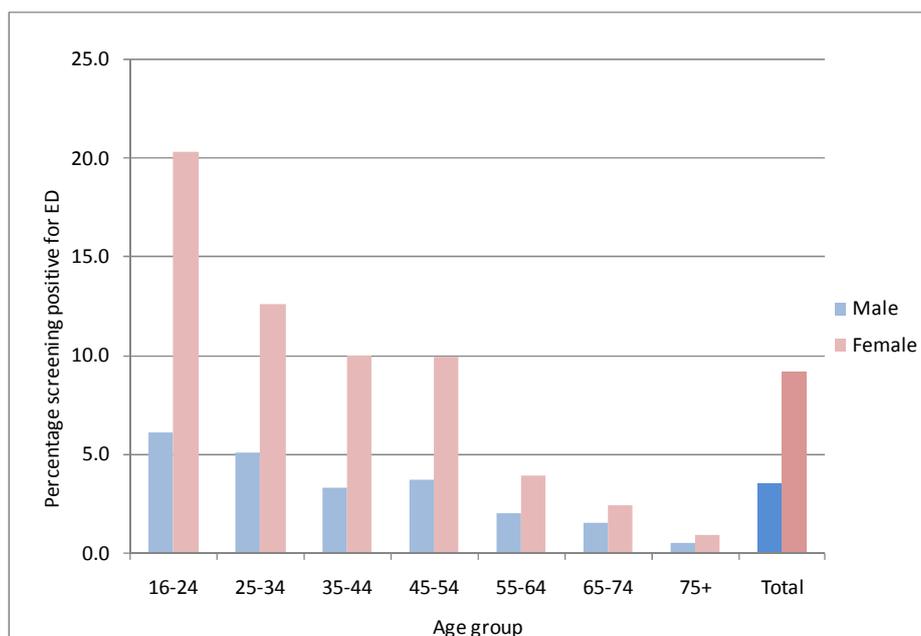


Figure 1. Percentage of the population by age and sex that screen positive for an eating disorder in one year
Source: APMS 2007

Applying these percentages to our local population it is possible to obtain an indication of the total numbers of individuals who would be expected to screen positive for an eating disorder in one year; these figures are presented in table 1. In line with NICE guidance, individuals who screen positive for an eating disorder should go under further assessment including a more detailed history, physical assessment and laboratory investigations. Unfortunately there is no data available that indicate the proportion of those who screen positive who then go on to receive a confirmed diagnosis of an eating disorder and / or who require further assessment and treatment by specialist services.

	PCT Cluster	PCTs		CCGs				
		Derby City	Derbyshire County	Erewash	Hardwick Health	High Peak	North Derbyshire	Southern Derbyshire
Male	14,100	4,400	9,700	1,400	1,400	800	3,100	7,400
Female	36,900	11,400	25,600	3,600	3,700	2,100	8,000	19,500
Total	51,000	15,700	35,300	4,900	5,100	3,000	11,100	26,900

Table 1. Numbers of individuals aged 16+ that would be expected to screen positive for an eating disorder in one year, rounded to the nearest 100

Source: APMS 2007 & NHS Derby City

3.3 Incidence and prevalence of diagnosed eating disorders

3.3.1 Incidence

Incident cases describe the number of new cases that can be expected within a defined period of time. Incidence estimates are derived from patients known to healthcare services and thus a likely to better represent the number of more severe cases that require treatment rather than the total number of individuals with a diagnosed eating disorder. Table 2 contains the estimated number of incident cases of anorexia and bulimia that may be expected in one year by applying incidence rates identified in the epidemiological evidence base to local population figures.

PCT Cluster	Registered Population		Anorexia Expected cases / year			Bulimia Expected cases / year
	Males	Females	Males	Females	Total	Total
	506,481	505,396	11	97	108	124
NHS Derby City	150,561	146,165	4	28	32	37
NHS Derbyshire County	355,920	359,231	8	69	77	88
Erewash CCG	48,525	48,281	1	10	11	12
Hardwick Health CCG	50,986	51,453	2	10	12	13
High Peak CCG	29,841	29,792	1	6	7	8
North Derbyshire CCG	112,899	115,086	3	22	25	28
Southern Derbyshire CCG	264,230	260,784	6	50	56	65

Table 2. Expected annual incidence of anorexia and bulimia, all ages

Source: NHS Derby City & Hoek (2003). Expected cases based on incident estimates of 2/100,000 cases of anorexia in males and 19/100,000 in females and 12.2 cases of bulimia (male and female combined)

As can be seen some of these figures are small and therefore subject to variation; this variation will be further affected by other factors affecting the incidence of cases, such as population age structure that are not taken into consideration in these estimates.

Incidence rates are not readily available by age and sex so it is not possible to break down these figures into these groups however estimates are available for younger females and are presented in table 3. These data indicate that even though anorexia is most common in this group the actual number of cases that can be expected in a single year remains small.

PCT Cluster	Registered Population	Anorexia
	Females 13-19 yo	Expected incident cases / year
	42,311	22
NHS Derby City	13,012	7
NHS Derbyshire County	29,299	15
Erewash CCG	4,032	3
Hardwick Health CCG	4,304	3
High Peak CCG	2,471	2
North Derbyshire CCG	9,053	5
Southern Derbyshire CCG	22,451	12

Table 3. Expected annual incidence of anorexia in females aged 13-19 years

Source: NHS Derby City & Hoek (2003). Expected cases based on incident estimates of 51/100,000 cases of anorexia in females aged 13-19 years.

3.3.2 Prevalence

Prevalence describes the total number of individuals who have an eating disorder at a particular time. This is an important measure for eating disorders as their chronicity means that for every individual with a new diagnosis (incidence) there are likely to be many more individuals living with a condition who may require treatment.

PCT Cluster	Registered Population		Anorexia Expected prevalent cases			Bulimia Expected prevalent cases		
	Males	Females	Total			Males	Females	Total
	506,481	505,396	1,210	to	1,820	510	5,050	5,560
NHS Derby City	150,561	146,165	360	to	530	150	1,460	1,610
NHS Derbyshire County	355,920	359,231	860	to	1,290	360	3,590	3,950
Erewash CCG	48,525	48,281	120	to	170	50	480	530
Hardwick Health CCG	50,986	51,453	120	to	180	50	510	570
High Peak CCG	29,841	29,792	70	to	110	30	300	330
North Derbyshire CCG	112,899	115,086	270	to	410	110	1,150	1,260
Southern Derbyshire CCG	264,230	260,784	630	to	950	260	2,610	2,870

Table 4. Expected prevalence of anorexia and bulimia, all ages, rounded to the nearest 10.

Source: Source: NHS Derby City & Hoek (2003). Prevalent cases based on estimates of 0.12-0.18% for anorexia and for bulimia 0.1% in males and 1% in females

Comparison of the estimates of the incidence of anorexia and bulimia suggests that for every one new case of anorexia in a single year there are likely to be a further 15 individuals who are living with the condition. For bulimia for every one new case there is likely to be a further 50 conditions who have the condition.

Key points section 3 – Incidence and prevalence of eating disorders

- It is difficult to accurately quantify the numbers of individuals at risk from or suffering an eating disorder
- Calculating the potential numbers of those with diagnosed conditions is likely to underestimate the total number of people with an eating disorders as up to 50% of disorders are thought to be atypical
- The highest levels of eating disorders are seen in young women, over 20% of 16-24 year old women would be expected to screen positive for a possible eating disorder
- In a single year, 51,000 people would be expected to screen positive for a possible eating disorder in the Derbyshire cluster and require further assessment in primary care
- Over 100 incident cases of both anorexia and bulimia would be expected in the cluster in a single year
- There are a potential 1,200 – 1,800 individuals in the cluster currently suffering from anorexia and over 5,500 suffering from bulimia

4 SERVICES FOR EATING DISORDERS

4.1 Policy context and evidence base for eating disorder

Due to the multifaceted nature of both the causes and consequences of eating disorders their treatment can be equally complex.

In 2004 the National Collaborating Centre for Mental Health undertook a comprehensive review of the literature of the treatment of eating disorders in order to inform the NICE clinical guideline (6)(4).

The guideline considers a number of key elements which are summarised in the figure below. It emphasises the need for effective and consistent screening and identification, co-ordination of care and treatment interventions tailored to the individual and, where necessary, their family and carers. A role for three tiers of service is identified: primary care and non-mental health settings, specialist out-patient (community) and specialist inpatient.

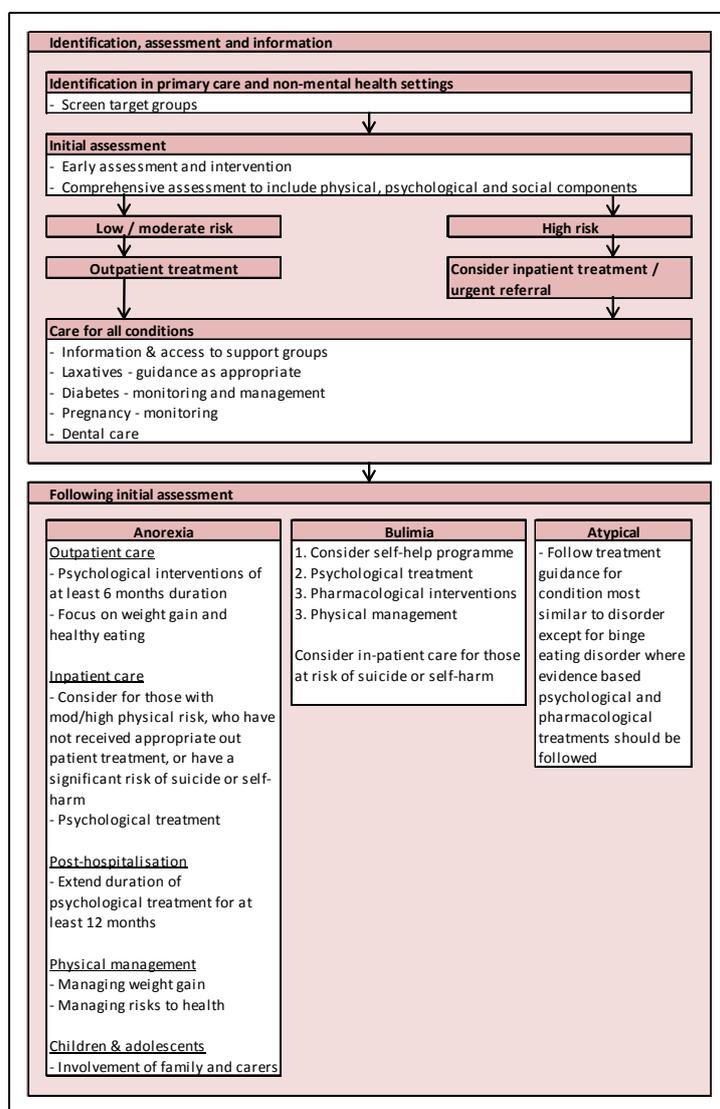


Figure 2. Key points from NICE guidelines for the treatment and management of eating disorders

4.2 NHS and local authority funded services in the Derbyshire cluster

4.2.1 Current and proposed service provision

In Derby City and Derbyshire County individuals with eating disorders are managed by a range of different services dependent on the severity of their condition, personal and carer choice and clinical need. These services range from non-specialist primary care to specialist inpatient services and are depicted in figure 3 and described below. Individuals frequently move between services depending on the support that they require at that time.

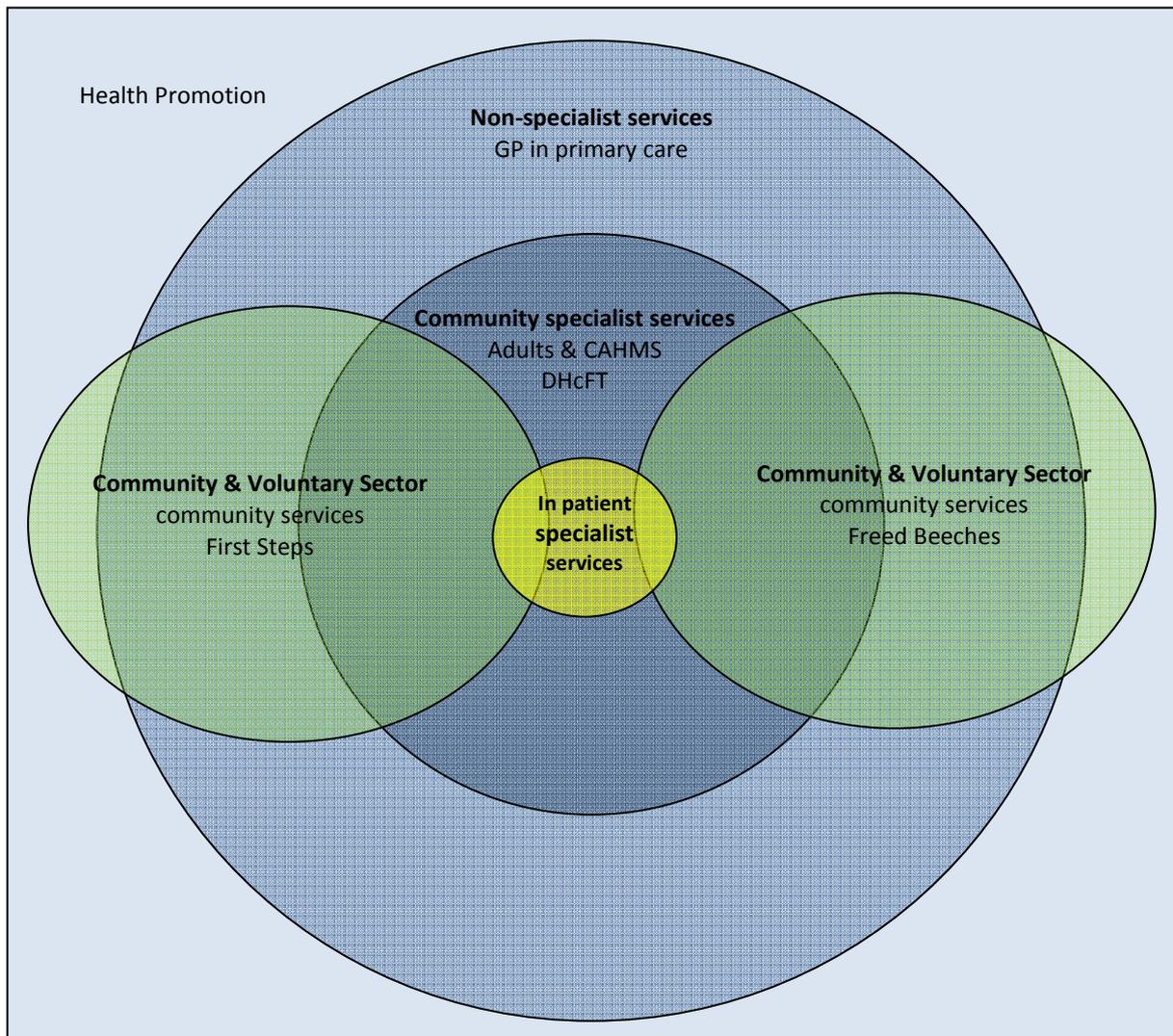


Figure 3. Representation of NHS and local authority funded services for eating disorders in Derby City and Derbyshire County

4.2.1.1 Specialist services

The East Midlands PCTs, including the Derbyshire cluster, have agreed a hub-and-spoke model for the delivery of specialist eating disorders services with one inpatient service forming the hub and community-based services in each area forming the spokes. The specification for these services has been developed at a regional level utilising national guidance including NICE and work in the commissioning network.

Inpatient services

There are 14 NHS inpatient beds in the region (in Leicester). In addition beds are available in areas surrounding the East Midlands including Sheffield, these may be accessed if there is a lack of capacity in Leicester or based on a patient's place of residence or choice. The specialist community service in Derbyshire links closely with the inpatient service to support individual patients and co-ordinate their care.

Community services

Across Derbyshire community specialist services for adults are delivered by Derbyshire Healthcare Foundation Trust (DHcFT). The service was established in 2007 employs two nurses and a psychologist. Historically the community service in Derbyshire has received the lowest investment in services compared to other East Midlands PCTs, consequently the capacity of this service is limited and has not always been able to respond to the need of current and new patients. Further evaluation is required to audit the provision of this current service against the recommendations within NICE guidance.

In 2011 a further £160k funding was agreed by the cluster to increase the capacity of the community specialist service including a new dietician post and support to non-specialist inpatient care as identified in the MARSIPAN guidance. The increase in funding will bring investment in line with the other East Midlands PCTs and is modelled to deliver in-year savings due to a reduction in the length and frequency of inpatient admissions. However, the service specification has yet to be agreed between the PCT cluster and DHcFT in part due to differences in the new East Midland's community service specification and the previously agreed business plan for the service.

Support for under-16s is provided through CAMHS services, liaising with the specialist adult service, community and voluntary sector (CVS) services and accessing inpatient care as required.

4.2.1.2 Community and Voluntary Services

First Steps

Based in Derby City First Steps provide support to people throughout Derbyshire but predominately those living in the city and south of the county. Established by carers in 2004, First Steps offer support to individuals with eating difficulties and their parents, partners and families. The service provides a range of support including support groups, mentoring and befriending, training and development for volunteers and healthcare workers, and community awareness raising events. Referrals are accepted from a range of sources including self-referral, and health and social care professionals. The service is highly regarded by sufferers, families, carers, and health and social care professionals. The service relies on charitable donations for the majority of its funding. Historically the service has received no recurrent funding from either the PCTs or local authorities but has received some small grant funding although this does not reflect the work that the service undertakes. The service informally operates as a step-up and step-down service to specialist NHS services offering sufferers and carers additional support. The service had previously received £40k from a local authority grant to provide a CAHMS support worker to support service links although as a result of budgetary reviews this funding has been withdrawn in 2011.

First Steps provide training to a range of healthcare professionals and this is well regarded; in 2011/12 the service received a £14k grant from the PCT to support this training provision.

Freed Beeches

Freed Beeches provides advice and support for sufferers, families and carers in the north of the County accepting self-referrals as well as those from health and social care professionals. The service is based in Worksop, Nottinghamshire with NHS Derbyshire County providing £30k annual funding to the service as an associate of NHS Nottinghamshire County who is the lead commissioner. The service provides structured counselling for sufferers and is integrated within Nottinghamshire Healthcare Foundation Trust; for Derbyshire patients, where necessary, the service liaises with DHcFT.

4.3 Service activity

4.3.1 Community and Voluntary Sector

In the financial year 2010-11 First Steps supported 480 individuals in a wide range of services from basic brief support to a large number of more intense services.

The number of contacts by Freed Beeches for Derbyshire cluster patients has steadily increased over recent years. Although the number of individuals supported is not known assuming an average of 14 contacts per client (in line with the contracted activity) it can be estimated that around 18 patients were supported in 2009-10 increasing to 54 in 2010-11. Although this activity is small in relation to that delivered by First Steps it remains an important contribution to the overall service provision.

The figures above represent the total number of individuals known to these services in one year; data is not available to indicate the number of new contacts in this time.

4.3.2 Community specialist services

Currently services are contracted on a 'per contact' basis rather than 'per individual'. This makes it difficult to interpret the available activity data for the purpose of a health needs assessment.

In the two-year period April 2009 – March 2011 the Derbyshire Community service saw 92 new patients from the Derbyshire cluster (an average of 46 a year), as well as providing ongoing treatment for existing and new service users (over 2000 contacts in total).

Patients from the Derbyshire cluster were also managed by community services in Leicestershire, Nottinghamshire, Staffordshire and Sheffield. The number of new patients see by these services in the same time frame is not available however the total number of contacts is small and therefore this activity is of minimal importance in determining how well services are meeting health need compared to the activity of the Derbyshire services (less than 200 annual contacts for all services).

4.3.3 Inpatient services

4.3.3.1 Rates of admissions

These data represent admissions to both acute medical care and specialist services which have included coding for an eating disorder. Figure 4 presents the directly standardised rates of admissions for any eating disorder and anorexia in Derbyshire County and Derby City PCTs, the East Midlands and England from 2008/09 to quarter 3 2010/11. The directly standardised rates are standardised for population age and sex structure which means areas can be directly compared.

The data below indicate that in this period admissions for any eating disorder and anorexia in NHS Derby City were statistically significantly higher than in the East Midlands and England. The admission rates for NHS Derbyshire County did not significantly differ from those of the East Midlands.

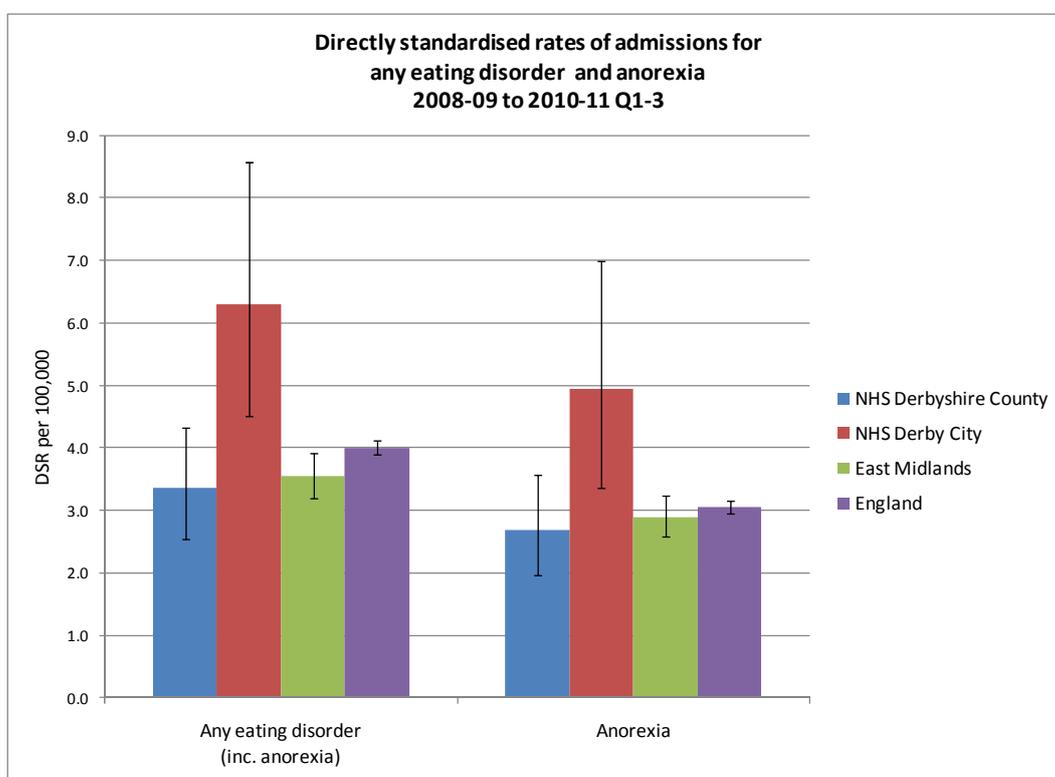


Figure 4. Directly standardised rates of admission for any eating disorder and anorexia 2008/09 to 2010/11 Q1-3 for NHS Derby City, NHS Derbyshire County, East Midlands and England

Source: Hospital Episode Statistics

Admission by age group

Presented in figure 5 are the crude rates of admission by age and sex in each area. The age and sex patterns in Derby City and Derbyshire County broadly follow what would be expected from the epidemiological evidence and the rates of East Midlands and England, i.e. a higher rate in females and young teenagers.

In Derby City the rates of admission for 16-17 year old males and 13-15 year old females appear to be considerably higher than in other areas suggesting it may be admissions in these groups that contribute to the City's higher rate of overall admissions. However, it is not possible to determine whether these differences are statistically significant or clinically important as due to the small number of total admissions these data are not available; the apparently stark differences may be due to only one or two admissions.

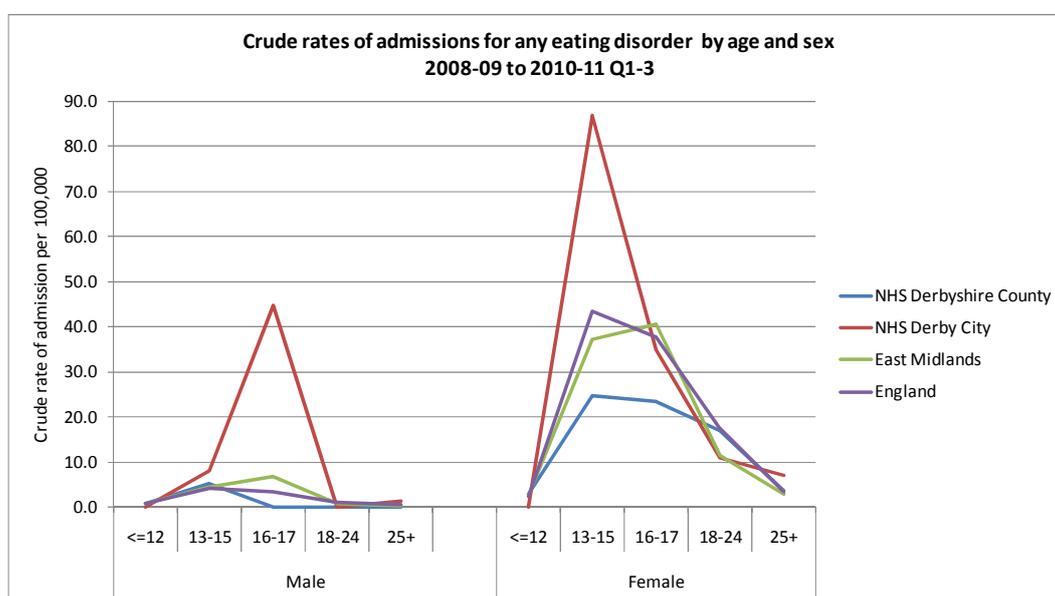


Figure 5. Crude rates of admission for any eating disorder (inc. anorexia) by age and sex
Source: Hospital episode statistics

4.3.3.2 Numbers of admissions

The total numbers of admissions (to acute and specialist care) in this period for each area are presented in table 5 below. The actual number of admissions for each PCT in this 2¾ year period remains relatively small with a total of 62 and 41 admissions in the County and City respectively, an annual average of 23 and 15 admissions. It should be noted that these counts are *per admission* rather than *per person* and as such any individual may be included more than once if they have had multiple admissions.

	2008/09-2010/11 (Qrt1-3)							
	Any eating disorder (inc. anorexia)			Anorexia			Percentage of admissions due to anorexia	
	n	DSR	95% CI	n	DSR	95% CI	%	95% CI
NHS Derbyshire County	62	3.36	(2.55 , 4.33)	50	2.69	(1.98 , 3.57)	80.6%	(80.6% , 80.6%)
NHS Derby City	41	6.30	(4.50 , 8.56)	32	4.94	(3.36 , 7.00)	78.0%	(78.0% , 78.0%)
East Midlands	401	3.54	(3.20 , 3.91)	327	2.90	(2.59 , 3.24)	81.5%	(81.5% , 81.5%)
England	5353	4.00	(3.89 , 4.11)	4064	3.06	(2.96 , 3.15)	75.9%	(75.9% , 75.9%)

Table 5. Numbers and directly standardised rates of admissions for any eating disorder and anorexia from 2008/09 – 2010/11 Q1-3

Source. Hospital Episode Statistics

Despite the higher rates of admission in Derby City (shown in figure 4) than East Midlands and England the actual number of admissions remain small. This suggests that a modest reduction in admissions would bring the rate in the City down in line with the County, East Midlands and England.

The proportion of all admissions that are due to anorexia is statistically significantly greater in Derby City and Derbyshire County than the East Midlands and England with over 80% of all eating disorder admissions locally being due to anorexia compared with 78.0% and 75.9% for East Midlands and England respectively (interestingly East Midlands also has a greater proportion of admissions for anorexia than England). However, again due to the small numbers, although these differences are statistically significant they may not be clinically so, as a change in the number of admissions for anorexia by just one or two would bring the local proportions down in line with regional and national rates.

Admission to ED specialist inpatient services

From March 2009 to date 25 patients were funded to receive care from a specialist inpatient unit with between 14 and 16 patients funded each year. Four patients have received inpatient care in all three years, 10 in two years and 11 in only one year (data from MH Commissioning team).

It is not possible to directly compare the data regarding all hospital admissions to that of specialist inpatient services as they originate from different sources and the time period for this data varies. However, these data suggest that in just under three years there are approximately four admissions for every one individual admitted to a specialist unit. This number of admissions may be due to repeat admissions to specialist units or admissions to acute settings. The general admission data may also include non-ED related admissions in persons with an ED diagnosis and potentially admissions of individuals not known to services.

Perhaps more important than the number of admissions for these patients is their length of stay. Although these data are available due to the nature of the specialist services it is not possible to use it to help understand the health need of this patient group as many patients who have an apparent long length of stay receive a step-down service with their care being provided in the community.

4.4 Discussion

Across the Derbyshire cluster there are a range of services which cater for individuals with an ED at varying levels of need and severity. Due to the deliberate overlapping nature of the ED services (illustrated in figure 3) and the quality of the data available it is not possible to definitively calculate the numbers of individuals supported by one or more of the ED services in Derbyshire. Data supplied to the PCTs regarding service activity is focused on the number of contacts rather than the number of individuals supported which increases the difficulty in estimating the number of patients who benefit from these services. To ensure that the range of services offered are meeting the needs of those who access them it is recommended that an in-depth service evaluation is conducted assessing the provision of services against NICE guidance and service level agreements.

Key points section 4 – Services for eating disorders

- There are a range of services for patients in Derbyshire including specialist community and inpatient services which is in line with NICE guidance
- Services in the CVS make a substantial contribution to service provision in Derbyshire but receive minimal funding from the PCTs
- Mapping activity data across services is difficult due to the different nature of the services, their overlap and the quality of data available which makes it difficult to understand the total number of individuals supported by services
- It is estimated that over 500 people are supported by the CVS services in the last year. These people will have a wide range of needs, some accessing for information only and some known to specialist services
- The NHS Community Specialist service in Derbyshire saw an average of 46 new patients a year in the last 2 years
- In the last 3 years between 14 and 16 patients a year received care in a specialist inpatient unit
- The rate of admissions to any NHS provider for people with an ED is statistically significantly higher in Derby City than the East Midlands and England
- Across Derbyshire there are 38 admissions per year to any NHS provider for people with an ED. This may represent repeated admissions to specialist services, admissions for acute medical care and possible non-ED related admissions in those with an ED diagnosis.
- Within this HNA it is not possible to assess whether the services are meeting the needs of the individual patients

5 HEALTH NEED COMPARED WITH SERVICE PROVISION

Data derived from epidemiological evidence suggests that in the Derbyshire cluster there will be around 230 new cases of anorexia and bulimia each year (see table 2) as well as potentially the same number of atypical eating disorders. The epidemiological evidence typically comes from studies of health service data so it might be expected that these are seen in Derbyshire's services. On average the specialist community service in Derbyshire has seen 46 new patients in the last two years, a figure much below the estimated 230-plus new cases. However, individuals are also supported by services provided by CVS services although it is not known how many individuals are seen for the first time each year and so it is not possible to understand what proportion of the new cases in Derbyshire these services support. Although these data not being available for this HNA it would be expected that a substantial number of the 500 individuals these services support each year are new clients.

5.1 Discussion

Uncertainty exists over the true number of expected cases of ED that would present to services in a single year due to the weakness of the epidemiological evidence. However, as the estimates within this HNA are based on the best evidence available it is still important to consider mechanisms to further investigate and address the discrepancy between expected cases each year and those seen by services in Derbyshire.

Even with a substantial number of new cases being seen by CVS services the total number of new cases seen in services across Derbyshire is still likely to be much below the total number of new cases expected in a single year. This disparity between health care need and service provision may be due to one or more of the following:

- Inaccurate estimations from epidemiological evidence of new cases each year
- A lack of public and professional awareness to be able to identify potential disorders
- A lack of screening and identification of new cases in primary care
- A lack of capacity within the services

All of these factors can be investigated further through evaluation, audit and monitoring of referrals and waiting lists and potential gaps in services identified and addressed.

Key points section 5 –Health need compared with service provision

- The quality of the data makes it difficult to compare health need with service provision
- The available data suggests that specialist and CVS services support a small proportion of the new cases of ED that might be expected each year
- Inaccurate data, poor identification of EDs and a lack of capacity may all contribute to the discrepancies between estimated numbers of new cases and service provision

6 CONSIDERATIONS AND RECOMMENDATIONS

6.1 For commissioners

It is recommended that commissioners

- Ensure that the activity of the CVS services is maintained by providing adequate recurrent funding
- Expedite the agreement of the revised service specification of the Specialist Community service provided by DHcFT following the agreed increase in funding to allow further capacity
- Consider the role of public and professional awareness and screening in primary care in identifying ED and referring to specialist services

6.2 For further research

A full evaluation of the ED services within Derbyshire was outside the scope of this HNA. As such the Eating Disorders Service Review group may wish to consider:

- Further evaluation of the NHS services against NICE guidance and other ED service guidelines including the role of primary care in the screening and identification of ED.
- Reviewing the support offered to those individuals aged under-16 including through transition to adult services.

Appendix A. The SCOFF tool

The SCOFF questions*

1. Do you make yourself Sick because you feel uncomfortably full?
2. Do you worry you have lost Control over how much you eat?
3. Have you recently lost more than One stone in a 3 month period?
4. Do you believe yourself to be Fat when others say you are too thin?
5. Would you say that Food dominates your life?

*One point for every “yes”; a score of ≥ 2 indicates a likely case of anorexia nervosa or bulimia

Appendix B. References

1. Treasure J, Claudino AM, Zucker N. Eating disorders. *The Lancet*. 2010 Feb 13;375(9714):583–93.
2. Arcelus J, Mitchell AJ, Wales J, Nielsen S. Mortality rates in patients with anorexia nervosa and other eating disorders. A meta-analysis of 36 studies. *Arch. Gen. Psychiatry*. 2011 Jul;68(7):724–31.
3. Hoek HW. Incidence, prevalence and mortality of anorexia nervosa and other eating disorders. *Curr Opin Psychiatry*. 2006 Jul;19(4):389–94.
4. National Institute for Health and Clinical Excellence. Eating Disorders. Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa, and related eating disorders [Internet]. 2004 [cited 2011 Sep 1]; Available from: <http://www.nice.org.uk/nicemedia/live/10932/29218/29218.pdf>
5. The NHS Information Centre for health and social care. Adult psychiatric morbidity in England, 2007 [Internet]. 2009 [cited 2011 Sep 1]; Available from: <http://www.ic.nhs.uk/webfiles/publications/mental%20health/other%20mental%20health%20publications/Adult%20psychiatric%20morbidity%2007/APMS%2007%20%28FINAL%29%20Standard.pdf>
6. National Collaborating Centre for Mental Health. Eating Disorders. Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa, and related eating disorders [Internet]. 2004 [cited 2010 Sep 1]; Available from: <http://www.nice.org.uk/nicemedia/live/10932/29220/29220.pdf>