

DERBYSHIRE COUNTY COUNCIL

MEETING WITH CABINET MEMBER, HEALTH AND COMMUNITIES

25 April 2017

Report of the Director of Public Health

CHESTERFIELD PATHWAY FOR THE EARLY DETECTION OF LIVER DISEASE USING TRANSIENT ELASTOGRAPHY (FIBROSCAN)

1. Purpose of the Report

To seek approval from the Cabinet Member, Health and Communities to make a grant payment of £20,000 to Chesterfield Royal Hospital NHS Foundation Trust towards the cost of a twelve month project to screen individuals at risk of liver disease, in hospital and community substance misuse service settings in the Chesterfield area, to provide the early identification of such disease and to offer early intervention.

2. Information and Analysis

Over the last fifty years, while the rates of premature mortality in the UK due to cardiovascular disease, respiratory disease, stroke and cancer have fallen, liver disease mortality rates have continued to rise. Between 2001 and 2012 the number of people who died with an underlying cause of liver disease in England increased by 40% from 7,841 to 10,948. In 2014, there were 230 deaths with an underlying cause of liver disease in Derbyshire and 73 in Derby. In Derbyshire, 66% of these deaths were deemed as premature, i.e. individuals under 75 years of age.

The vast majority (90% to 95%) of liver disease is preventable and relates to just three risk factors: excessive alcohol consumption; obesity; and viral hepatitis. Chesterfield local authority area has the highest rate of alcohol specific hospital admissions in Derbyshire and is significantly higher than the overall rate for England.

The development of liver disease is generally gradual, with a progression through stages of fibrosis (scarring) to compensated cirrhosis, in which the liver shows significant structural change, but continues the majority of its function. The disease then progresses to decompensated cirrhosis, when the liver is unable to function normally, with a risk of complications, including impaired kidney function, the development of varices, clotting disorders, fluid accumulation and impaired cognitive function.

Individuals with liver disease below the threshold of decompensated cirrhosis, may not show significant symptoms. As consequence, liver disease may be diagnosed in its later stages, when it may be too late for effective treatment.

The aim of this project is to improve early detection of liver disease, allowing early intervention, which can slow, halt or even reverse disease progression. The project is an extension of the East Midlands Academic Health Science Network's (EMAHSN) *Scarred Liver Project*, led by Professor Neil Guha of the University of Nottingham. The initial phase of the project, established in 2013, screened a primary care population in Nottingham. Participants were selected by risk factors (hazardous alcohol use and type 2 diabetes) and screened using liver function tests and transient elastography, a non-invasive diagnostic test, which uses ultrasound to determine the level of scarring in the liver. This replaces the traditional diagnostic method of liver biopsy, which is costly, invasive and has mortality and morbidity risks. Of 2,022 patients identified as being at risk, 230 patients had signs of significant liver disease and 26 new cases of cirrhosis were identified. A second phase of the project focussed on obesity and alcohol risk factors among an inner-city GP practice population in Leicester. Of the 4,150 practice population, 1,320 were deemed at risk and 720 patients underwent testing. 83 patients showed signs of significant liver damage and 13 were diagnosed with cirrhosis.

The Chesterfield project would contribute data to the *Scarred Liver Project* and explore the effectiveness of this approach locally. The project will be hosted by Chesterfield Royal Hospital NHS Foundation Trust (CRHFT), who would employ and line manage a specialist nurse to deliver the clinical interventions. The Hospital Liaison Team (which has an assessment and liaison role in relation to mental health and substance misuse) would offer training, support and supervision of the nursing post.

The transient elastography diagnostic device (FibroscanTM) will be loaned free by EMAHSN for twelve months and will include technical support.

The primary target population for this diagnostic pathway will be CRHFT patients who are identified with high levels of alcohol intake, but will also include patients with other risk factors for the development of liver disease, including type 2 diabetes, obesity (subject to technical specification of the loaned Fibroscanner) and viral hepatitis. The pathway would also include patients of the Hartington Unit (inpatient facility for residents of Chesterfield and North Derbyshire with acute

mental health needs) and individuals accessing the substance misuse service in Chesterfield. Other settings, including primary care, may be explored, depending on capacity.

In addition to delivering diagnostic testing, the specialist nurse would also be trained to deliver brief motivational enhancement interventions, which can impact on risk behaviour. Referral pathways will be established in respect of liver disease, substance misuse and obesity.

The project will commence in Spring 2017, with a duration of 12 months. A project steering group will be established, which will include Public Health Substance Misuse Commissioning Team representation. North Derbyshire Clinical Commissioning Group would also support the project in regard to data collection and analysis.

3. Financial considerations:

The principle costs associated with this project are the employment costs for a full-time Band 6 nurse. For the year 2017/18 this equates to £40,000 (mid-point, including on-costs). This cost will be met by a grant payment of £20,000 from the Council, a match-funded payment of £20,000 from EMAHSN. Any additional costs, such as travel, will be met by CRHFT.

The Council's contribution will be met from the Section 256 reserve, which was generated in April 2013 by agreement between NHS Derbyshire County Primary Care Trust and the Council. The agreement allowed accumulated underspends on the PCT substance misuse budget to be carried forward to make targeted investments in non-recurrent initiatives.

The Fibroscan equipment and technical support will be provided free of charge by EMAHSN.

4. Legal considerations

The Council's standard grant agreement shall be used to set out the terms and conditions for which the grant is made, which provides for clawback of funding in certain circumstances and shall also provide that the Council is not liable for any employment liabilities.

5. Social Value considerations

The project will create one new full-time temporary nursing post in Derbyshire, with 50% of the employment costs met by an out of area organisation.

6. Other considerations

In preparing this report the relevance of the following factors has been considered: prevention of crime and disorder, equality of opportunity, human rights, human resources, environmental, health, property and transport considerations.

7. Background papers

Cabinet Member paper 15 July 2014: Substance misuse S256 budget expenditure.

8. Key Decision

No

9 Call-in:

Is it required that call-in be waived for any decision on this report? No

10. Officer's recommendation:

That the Cabinet Member, Health and Communities approves the award of a grant £20,000 to Chesterfield Royal Hospital NHS Foundation Trust towards the cost of a twelve month project to screen individuals at risk of liver disease, in hospital and community substance misuse service settings in the Chesterfield area, to provide the early identification of liver disease.

Dean Wallace
Director of Public Health