FaCe It Hepatitis C Best Practice: Developing a local hepatitis C strategy

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Summary  
Dr Erika Duffell, Consultant in Health Protection at Greater Manchester Health Protection Unit (HPU) led a project on behalf of the local Primary Care Trusts (PCTs) to improve services for the prevention, diagnosis and treatment of hepatitis C in Greater Manchester. A steering group produced a comprehensive needs assessment and evidence-based strategy, which convinced PCT commissioners to invest in services. So far, the programme has led to the development of outreach clinics in local drug services, the recruitment of extra medical and nursing staff to treat patients, new testing methods for drug users and the formation of a local prevention network and research team to improve prevention services.

Aims & Objectives  
The overall aim of the project was to improve local services for people with hepatitis C in the Greater Manchester area. This was achieved through pursuing the following objectives:

- Highlighting the public health importance of tackling hepatitis C  
- Establishing a multi-agency forum dedicated to hepatitis C  
- Providing solutions to reducing prevalence and improving services based on local needs

How was the project carried out?  
While some good work was taking place to combat hepatitis C, it was being carried out by individual organisations that were not working together cohesively. There was no local forum for agencies working towards improving services for patients with hepatitis C, and hepatitis C was not recognised as a significant public health priority in the area. Provision of treatment was only taking place in two hospitals, both of which were having difficulty coping with the increasing demand.
Dr Erika Duffell contacted the PCTs in the Greater Manchester area to begin discussions about what should be done to improve service provision. All parties felt that a solution for Greater Manchester as a whole would be required, and that the PCTs should work together rather than responding to the problem separately so that improvements could be coordinated and provided equitably across the area.

Creating a central hepatitis C steering group
In 2005, a steering group comprised of representatives from the PCTs, drug services, Drug and Alcohol Action Teams (DAATs), hepatology, infectious disease services, virology departments, prison health teams and the Health Protection Agency (HPA) met to discuss what services were already available and what else needed to be done about hepatitis C in the area. Commissioners and PCT Directors of Public Health also attended the meeting.

Dr Duffell liaised with key parties in advance in order to secure the “buy-in” of the separate organisations before the first steering group meeting. Each organisation needed to understand the issues under consideration, the role and remit of the steering group and the overall context to the work.

Preparing the needs assessment
A local needs assessment was commissioned by the Steering Group to identify the services currently being provided and where the gaps lay.

The needs assessment included a review of current service provision, the underlying epidemiology in the area and the associated evidence in the medical literature available at the time. The assessment involved stakeholder interviews and postal questionnaires to key service providers, with views collected from respondents regarding current and future service provision. Comparisons with other areas were also included. The detailed findings were published in a 90-page document.

A core part of the needs assessment involved estimating the prevalence of hepatitis C in the local area, which was difficult due to a lack of reliable local hepatitis C data.
The assessment was compiled prior to the release of the HPA model (Modelling the disease burden due to Hepatitis C - http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1194947357785), which meant that a lot of work went into making epidemiological estimates through the development of a local model.

This model included working out an approximation based on the estimated numbers of “at risk” people, such as injecting drug users, using locally relevant information.

When it came to presenting the needs assessment to commissioners, questions were asked about the epidemiological modelling, and so it proved to be crucial that a robust model for estimating prevalence was used.

**Key findings of the needs assessment**

The assessment indicated there were between 10,000 and 22,000 cases of hepatitis C in Manchester, with the true figure expected to be closer to the higher estimate. Existing figures on the numbers who were receiving treatment or who had received treatment in Greater Manchester at the time indicated that only a small proportion of this total were in the treatment system, and many were still undiagnosed.

Using local data, the assessment also found there were indications of a fourfold increase in the number of acute hospital admissions for chronic or acute hepatitis C since 1996. This data suggested that the overall burden of the disease would continue to rise significantly across Greater Manchester in the absence of appropriate and timely action, adding further rationale to the need to step up action.

The needs assessment called for:

- Increased collaboration between organisations
- Simplified funding arrangements around hepatitis C treatment
- Clarity around different testing methods
- Increased resources for treatment services
- Increased local awareness of hepatitis C
- Clear referral pathways
Developing the strategy
The needs assessment indicated that even in a best-case scenario, Greater Manchester found tackling hepatitis C represented a real challenge. The strategy was divided into four key areas of prevention, testing, treatment and surveillance.

Developing the strategy - Prevention
The strategy recommended that local DAATs, health promotion services and prisons review and strengthen their current primary prevention activities for hepatitis C. Drug users and prisoners were listed as the priority groups for future prevention efforts. The strategy encouraged collaboration between local services and recommended that information sharing regarding good practice around prevention should occur across local organisations.

1. Needle exchange services were to be made more widely accessible across Greater Manchester for those unable to stop injecting.
2. Outreach services would be provided for vulnerable groups such as homeless drug users and those early in their injecting careers.
3. The strategy also encouraged the continuation of accessible specialist drug treatment centres, as reducing drug use was central to preventing hepatitis C.

Increased public awareness was identified as a key priority.

The strategy also recognised the need to increase healthcare professional awareness of hepatitis C, particularly in the primary care setting. To achieve this, the team proposed that key healthcare professionals should receive education and training about hepatitis C, including its natural history, prevention and infection control, investigation and management. Training was to be offered to other occupational groups within the public, private and voluntary sector - particularly those working with drug users.

The strategy group recognised that local primary care practitioners may need specific training in relation to informed discussions with patients prior to being tested and for patients who test positive. It was proposed that this education could be provided through a variety of methods including the production of clear protocols and care pathways.
Developing the strategy – Testing
The strategy proposed providing hepatitis C testing facilities in a wider range of clinical and community settings across Greater Manchester, such as genitourinary medicine (GUM) clinics, as well as in general practice and other primary care settings.

A revised care pathway was proposed, which would mean patients who tested hepatitis C antibody positive at an initial screening would also have tests to find out whether they had cleared the virus naturally or had chronic infection using samples obtained in the community. The advantage of this would be that only patients currently infected with the virus would be referred into specialist treatment care pathways, which would ensure the most efficient use of the limited resources in the referral centres. It would also be more convenient from the patients’ perspective, and should improve uptake for secondary tests.

In drug service clinics there had sometimes been difficulties in testing patients with a history of injecting drug use, as their veins were often too badly damaged to take blood. Oral fluid testing was sometimes used as an alternative, however it was not considered to be as reliable as blood testing. The strategy suggested developing a method to use dried blood spot screening using samples collected from finger pricks which would provide a better alternative to oral fluid testing for people who are difficult to bleed when initially testing for hepatitis C.

The strategy also reiterated protocols for testing babies born to mothers who have hepatitis C, or who are at an increased risk of having hepatitis C, and recommended adherence to guidelines regarding testing healthcare professionals who had suffered needlestick injuries.

Developing the strategy - treatment
The strategy group felt it was important to acknowledge that people in different settings had different treatment needs. The strategy proposed providing a coordinated service across Greater Manchester in which patients would have the choice of type and locality of centre. Encouraging patient choice would facilitate people with hepatitis C to engage with services and, ultimately, anti-viral treatment.
Resources – tertiary level hospital services
In 2005, the two main treatment centres at Manchester Royal Infirmary (MRI) and North Manchester General Hospital (NMGH) were functioning at maximum capacity for the level of staffing at the time. In order to increase local capacity for treatment, staffing levels at both centres needed to be urgently increased and peripheral centres needed to be developed in other hospitals within Greater Manchester. The two existing centres at Manchester Royal Infirmary and North Manchester General Hospital needed to be appropriately expanded and developed in order to be able to provide services for their local population and patients with complex needs who required tertiary level care, and whose numbers were expected to increase significantly as the epidemic progresses.

Resources – secondary level care at local hospitals and clinics
Local hospitals were to have an increased role in providing care for patients with hepatitis C, with a view that services in Greater Manchester should move towards the ideal model of centralised specialist centres and a number of treatment centres in local hospitals. This development was to require additional allocation of staff and resources for training and setting up the infrastructure needed to deliver the service.

It was recommended that community-based clinics should be established in each of the PCT areas to provide services at a local level. Some areas might need more than one clinic depending on the population need whilst other areas might be able to share resources with neighbouring districts.

The strategy suggested the resources that needed to be allocated in any centre providing hepatitis C treatment would include appropriately trained physicians, specialist nurses and administration staff working in dedicated clinics. In order to provide effective and efficient care, any centre should treat at least 20 patients per year. One nurse specialist should be available for every 50 patients started on treatment each year. This estimate is based on current practice in other centres in the country and national guidance for comparable areas of chronic disease management.

Resources – hard-to-reach groups
In order to provide effective treatment for hard to reach individuals, the strategy recommended the employment of an outreach nurse to deliver treatment services in
a community setting. Community clinics were to be set alongside opportunities for addiction treatment, either through GP practices with experience in managing this group of patients or within local drug services.

**Resources – prisons**

The strategy further recognised the need to provide an effective treatment programme for hepatitis C positive people in prisons. In order to provide an efficient service, the strategy recommended adopting a service provision model used elsewhere in England, which would involve weekly clinics run by a dedicated specialist nurse who would visit the prison. Additionally, the nurse could provide adequate training of the prison health care staff around hepatitis C testing and counselling, patient education and support.

**Developing the strategy - surveillance**

In order to monitor the ongoing success of the initiatives, as well as to provide a clearer picture on how many people in the area had been tested, the strategy group proposed the development of a web-based integrated hepatitis C database. This would bridge community and hospital care, and would enable patients to move seamlessly through the care pathway.

**Implementing the strategy**

In August 2006, the needs assessment and strategy were presented to PCT Directors of Public Health and commissioners. The level of detail provided in the needs assessment, as well as the clarity of the strategy, provided a strong business case for funding for the project.

In early 2007, the funding was agreed, and it was decided that money should be provided based on an incremental model. An initial £1.4m was provided by PCTs in the area, with an agreement for further funding when targets relating to prevention, testing, treatment and surveillance were reached. The funding would be provided in eight increments. The strategy group will need to ensure targets are met before it will be possible to progress to the next level of funding.

In order to progress the strategy, the group proposed to recruit a programme manager working across services and in Greater Manchester who could facilitate the effective development of services in accordance with the recommendations outlined
The strategy group proposed to continue to meet on a thrice-yearly basis to oversee and monitor developments, and agreed to report back to the Greater Manchester Directors of Public Health and DAATs on a yearly basis. A project group was also set up to oversee the work of the programme manager and oversee the work of the task and finish sub groups.

What was achieved?

Prevention

Since the strategy was agreed, a sub-delivery group has been formed to improve prevention. This includes representatives from various organisations including needle exchanges and DAATs in the area. In 2007, a conference was held in Manchester for all local stakeholders with an interest in preventing hepatitis C to discuss what each organisation is doing and identify areas for future work and collaboration.

Funding has also been allocated to a research project at the University of Manchester, which is providing a detailed evaluation of existing prevention services in the area, and is looking to find where the gaps in the services are, what can be improved and what the research needs are in this area.

Treatment

The programme has opened five additional outreach treatment points for hepatitis C in Greater Manchester. This includes four clinics in drug treatment centres, and one in a prison setting, ensuring treatment is now more readily available. Clinicians in the area have actively driven forward the outreach model, and are providing a crucial bridge between their colleagues in clinical settings and hard-to-reach patient groups on a daily basis.

Some of the funding has been used to pay for specialist community nurses, who now work in the new community treatment settings. The appointment of a nurse has also meant clinicians have more time to train others in the treatment and management of hepatitis C, meaning a larger workforce is now working directly with patients.

The project has also facilitated joined up work with the university, and has led to the introduction of education courses in hepatitis for professionals working in this area.
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Testing
The local virology laboratory have developed a method of dried blood spot testing which is expected to help raise diagnosis figures in the region. This new method is currently being piloted in a key area prior to being rolled out more widely.

Key Learnings
1. “Detailed Research”
Although time consuming, the team considers that the volume of work in Greater Manchester, in terms of preparing a detailed needs assessment and strategy was crucial to getting the work off the ground.

2. “Seek advice”
Dr Duffell believes there is merit in seeking the help of a mentor who has been involved in similar work in the past, and who may be able to offer advice and reassurance as the project progresses. Dr Duffell is grateful for the guidance and support of Dr Fortune Ncube from the HPA’s Centre for Infections at Colindale for sharing the results of a similar needs assessment he had undertaken in Surrey.

3. “Involve senior figures from the start”
The backing of authority figures, such as the Directors of Public Health at the PCTs is crucial to the success of the project, so Dr Duffell recommends securing their buy-in as early as possible in the project.

4. “Handpick your team”
And finally, a lot of the success in steering the project through from identifying a public health problem to implementing an action plan involves getting the right skills mix. As Dr Duffell states:

“There are a number of important skills required in taking on a project of this nature. It is important that one of the key people involved has a background in public health. This will help with analysing epidemiological data and having the skills to undertake evaluation of local services. But having colleagues who share enthusiasm for the project is essential in ensuring work is progressed. A further reality is that every individual and organisation has its own needs and interests. Demonstrating the direct impact of the issue to them and promoting the benefits of collaboration, is
essential to ensuring you build a team of supporters who not only help you get work off the ground, but stay with you to ensure the job gets done.”

**Future Work**
The work taking place in Greater Manchester is ongoing. In line with the incremental model of funding agreed by the PCTs, the aim is to increase the numbers treated to 400 each year. Some aspects of the strategy have yet to be completed, for example, while blood spot screening is now being piloted, it is yet to be unveiled across the wider area.

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