GMHCVS HCV
Teaching and Training for Hepatitis C
Specialist Nurses (2009)

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Executive Summary

Background
There is an increasing demand nationally and locally for HCV Specialist Nurses. Nurses wishing to become HCV specialist nurses come from a variety of nursing backgrounds. This reflects the need to coordinate and standardise training regarding this emerging speciality. Currently, there are no pre- or post-registration courses specifically designed to deliver training for viral hepatitis in nursing.

Aim
The major purpose of this project was to undertake a scoping exercise with nurses who specialise in the treatment of HCV, to discover current training need, to produce recommendations for the development of appropriate training and resources to support the continued growth of the specialism. This report would include an investigation into the availability of appropriate post registration programs based on these recommendations.

Method
Semi-structured interviews were carried out with HCV specialist nurses, within Greater Manchester treatment sites and other treatment sites within the North West to obtain information regarding training need and input into the development of training recommendations. Nurse training colleges across the North West were firstly identified using an internet search engine. Each college was then investigated for the availability of training courses which could meet the training needs identified by the nurses interviewed. Where local gaps were identified this was expanded to locate relevant courses offered nationally.

Results
Interviews with specialist nurses produced a set of agreed training needs and knowledge and skill areas to be developed. There are courses available in the local region to cover the major training needs identified. However, the financial cost and the requirement in terms of nurse time fail to make attending all these courses a viable option.

**Recommendations**

- Training needs to be made available that will develop the following essential skills and knowledge base for HCV Specialist Nurses. The course needs ideally to be situated in Greater Manchester, have close links to each treatment centre and be taught by experts in each area (ideally including local practitioners).
- It is envisaged that the course would run over a number of months (6-9) allowing staff to integrate the training into their work schedule during their introductory period for 1-2 days a week.
- The course needs to be at a level 3 degree level as a minimum.
- Alongside the course new specialist nurses would be expected to undertake work based training in order to complete a competency checklist, undertake a series of visits/day/work placements and register/join local appropriate clinical networks or forums.
- The course needs to be validated, evaluated and accredited.
- Suitable assignments for assessment would depend on each topic theme but ideally would include Observed Structured Clinical Examination (OSCE) when appropriate.

This report including the recommendations has been reviewed and ratified by the lead specialist nurses providing treatment in Greater Manchester.
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Scoping and Mapping of training for Specialist Nurses

1. Background

1.1. Specialist nurses

Over the last few decades there has been a rapid expansion of nursing specialties primarily due to the vast array of skills and complexity of health care delivery that has become a necessity in the modern NHS. Alongside this there is a need to consider clinical career ladders which aim to encourage experienced registered nurses to professionally develop their skills and knowledge base. There has also been a big push by the DH and Colleges to encourage nurses to expand/extend their roles and become experts within their own area of practice, to become independent practitioners.

Along with the rapid proliferation of nursing specialties there has been an equally rapid development of educational provisions offered from a variety of settings. Education institutions and employers need to facilitate the development of programs which are responsive to current needs and, at the same time, are consistent with any emerging trends or needs of the health care system.

1.2. Hepatitis C Specialist Nurses

HCV infection results in the development of chronic liver disease in 80 per cent of patients (National Institute of Health Consensus Development Programme (NIHCDP), 1997). This can vary from mild liver disease to cirrhosis with the possibility of hepatocellular carcinoma. Current treatments can have extremely unpleasant side-effects, some of which have serious implications for the patient's quality of life during this period. It is important that consistent care is provided by a specialist team to monitor for adverse events and to help the patient cope and comply with treatment (Rogers 2003).

At present there are limited published roles /models for the structure of a specialised viral hepatitis nurse. Although Guidelines issued by the Department of Health and the then National Institute for Health and Clinical Excellence (NICE) made it obligatory for a clinical nurse specialist to be
involved with assessing and treating patients with chronic hepatitis C. An All-Party Parliamentary Hepatology Group audit of strategic health authorities' compliance with the 2004 hepatitis C action plan (DoH 2004), found that only 58% of trusts (that responded) in England employed specialist nurses (All-Party Parliamentary Hepatology Group 2006).

1.3. Role of the Hepatitis Specialist Nurse

The Hepatitis Specialist Nurse (HSN) needs to make highly complex clinical decisions based on an in-depth broad expert knowledge base. This will inevitably involve using their judgement to assess the emotional and physical care of the patient in a holistic manner. With a central requisite being the need to be able to act independently within the bounds of their own expertise and code of practice, whilst following guidelines and policies. This role is made more challenging due to the diverse client groups (often with erratic and chaotic lifestyles) and the often unpredictable and large workload.

The demands of the role are high and require that a HSN be able to sustain a high level of concentration have the ability to analyse information and be able to apply theory to practice. This role can often be emotionally demanding as the HSN will be dealing with highly distressing situations and with clients with high levels of emotional distress. It should also be taken into account that the role involves working with a client group that has high mortality and morbidity rate.

The role will need to incorporate the management of patients who may present in varying states of intoxication with unpredictable behaviour which can increase the risk of developing cirrhosis (Poynard, 2002). Therefore health promotion is an important part of patient management as well as being able to deal effectively and safety with the client group.
The major aspects of the HNS role can be found below:

- **Manage/clinical nursing needs of a defined caseload (possibly including outreach services as well as clinics within a hospital base)**
  - Assessment of patients needs, implementation and evaluation of programmes of care
  - Take into account lifestyle, gender, cultural backgrounds
  - Maintain patient records and work within NHS Policy, Guidelines and Procedures including the Nursing and Midwifery Council Standards and Codes.
  - Provide advice and support on the purchasing and commissioning of resources

- **Responsible for providing education initiatives to staff, patients and carers and act as a professional resource to these groups**
  - Empower patients to take responsibility for their health
  - Ensure involvement with patient, family, carers/significant others
  - Establish, co-ordinate and evaluate educational initiatives for other appropriate healthcare staff and monitor their impact
  - Provide specialist education and training

- **Deliver evidence based care and contribute to the development of the evidence base by undertaking education/research/audit where possible.**
  - Promote and disseminate research based practice
  - Initiate and participate in relevant research
  - Audit projects where appropriate to service and practice needs
• Act as an effective change agent integrating information gained from research and audit into clinical practice
  o Promote and support innovation in clinical practice
  o Contribute to strategic issues relating to the speciality

• Provide clinical leadership/expert advice to other nursing staff and members of multidisciplinary teams.
  o Organise own time and that of other staff
  o Act in collaboration and advisory role to senior management

• Deliver prevention /harm reduction agendas (BBV counselling and testing)
  o To train and supervise generic substance misuse care coordinators in giving the test for HCV, including pre- and post-test counselling. Pre- and post-test training (Fahey 2007)
  o Contribute to local immunisation training of substance misuse staff (Fahey 2007)
  o Ensure substance misuse staff understand referral pathways (Fahey 2007)

• Work autonomously

1.4. New hepatitis C Specialist Nurses training
Hepatitis C virus (HCV) is a common cause of liver disease and a major health problem worldwide. Modern treatment strategies can be successful in up to 50-80% of cases, with patients treated in specialist and more general hospital settings. Guidelines issued by the DoH and NICE made it obligatory for a clinical nurse specialist (CNS) to be involved with assessing and treating patients with chronic HCV.

The role of a HSN is to provide an individualised service to patients being referred, managed and treated for chronic hepatitis C, for example by counseling patients after a positive test result and monitoring side effects
during antiviral treatment. There is an increasing demand nationally and locally for HSNs due to the increasing prevalence of this infection and the national and regional targets for its testing and treatment. Nurses wishing to become HSNs come from a variety of nursing backgrounds. This reflects the need to coordinate and standardise training regarding this emerging speciality.

It is imperative that all specialist nurses therefore have access to the same basic background of training to ensure that service delivery and quality of care will be equitable and that there is a trained and able workforce are in place to meet increasing demand. Currently, there are no pre- or post-registration courses specifically designed to deliver training for viral hepatitis in nursing.

1.5. Training Need

Greater Manchester Health Protection Unit (GMHPU), which is a regional arm of the Health Protection Agency, has performed a Health Needs Assessment (HNA) of Hepatitis C services in Greater Manchester (Duffel et al., 2006). The HNA highlighted the need for a more in-depth and focused teaching and training for all professionals working with patients with Hepatitis C (HCV). Likewise the University of Manchester Clinical epidemiology and Public Health Unit have produced Health Care Needs Assessment for Blood Borne Virus prevention in Manchester and a Teaching and training Needs Assessment for HCV which has identified a clear lack of training regarding HCV, HIV and HBV for health care professionals working with at risk groups across Greater Manchester.

Currently specialist nurse training in Greater Manchester consists of informal training sessions provided for specialist nurses as their ‘on job’ training, highlighting the need for an accredited, validated and evaluated course/training.
1.6. What is currently available now

The University of Manchester (Clinical Epidemiology and Public Health Unit) have undertaken a Needs Assessment for HCV Specialist Nurse Training after consultation with Siobhan Fahey (Programme Manager for the Greater Manchester Hepatitis C Strategy). The following relates to the key findings of this report.

Courses/programs that cover aspects of training requirements are offered in a wide variety of settings (including the health care and higher education sectors, pharmaceutical/private bodies and by professional nursing organisations and online. Additionally, courses/programs vary in a number of characteristics including:

- Length
- Method of training
- Balance between clinical/theory components
- Student intake size
- Eligibility criteria; and qualification gained (non-award, award at all levels)

Currently, there are no pre- or post-registration courses specifically designed to deliver training covering a range of aspects required for viral hepatitis in nursing.
2. Aim

2.1. Aims of the project

The major purpose of this project was to undertake a scoping exercise on nurses who specialise in the treatment of HCV, to discover current training need, including HCV and other skill and knowledge requirements for nurses in these roles, with the aim of working to produce recommendations for the development of appropriate training and resources to support the continued growth of the specialism. These recommendations are based on feedback from interviews undertaken with nurses currently specialising in the field of hepatitis treatment, and include an investigation into the availability of appropriate post registration programs based on these recommendations. This should help nurses to facilitate their career development and to enable them to meet the ever changing needs of the health care and the wider community.

The proposed development and implementation a HCV specialist nurse training programme is aimed to ensure quality, consistency and access for all new specialist nurse practitioners working with individuals infected with HCV in Greater Manchester.

2.2. Aim of training

To produce appropriately qualified and competent hepatitis C specialist nurses

3. Objectives

3.1. Project Objectives

a) To develop a set of training recommendations to facilitate nurse specialism in the field of HCV treatment

b) To assess the quality and quantity of current training offered in post registration specialist nurse education in Greater Manchester.
c) To determine what requirements are unfulfilled in post registration HCV specialist nurse education.

### 3.2. Training Objectives

The proposed development and implementation HCV specialist nurse (HNS) training is to ensure quality, consistency and access for all new specialist nurse practitioners working with individuals infected with HCV in Greater Manchester.

- An HNS who has a good understanding of:
  - Liver including anatomy, physiology and pathology
  - HCV: Epidemiology, natural history, co-infection, host factors, prevention, harm reduction, genotype, virology, HCV management
  - Treatment options: current treatment, dosing, side effects and outcomes. Individualised treatment, viral load relevance of week 4 and week 12. New treatments on the horizon
  - The diverse client group
- An HNS who can undertake venepuncture: (ideally including neck bloods)
- An HNS who can undertake diagnostic tests and interpret results
- An HNS who has enhanced counselling skills in a range of areas
- An HNS who can provide harm reduction
- An HNS who has the management skills necessary to fulfil the role.
- An HNS who can deliver training/education to patients, staff and carers
- An HNS who can manage/clinical nursing needs of a defined caseload (possibly including outreach services as well as clinics within a hospital base)
- An HNS who can deliver evidence based care and contribute to the development of the evidence base by undertaking education / research /audit were possible.
- An HNS who can work autonomously
4. Method

4.1. Scope

No comprehensive database on the provision of specialist post-registration nurse education exists in the UK.

Specialist nurses, working in the field of HCV treatment were identified within Greater Manchester treatment sites (North Manchester General Hospital (NMGH) Manchester Royal Infirmary (MRI)). Other specialist nurses based in the North West were also contacted (Royal Blackburn Hospital (RBH) and Royal Liverpool University Hospital (RLUH)). Nationally Professor Graham Foster at St Barts and the London NHS Trust was also contacted to find out about training provision for HCV.

Identified nurses were contacted via telephone or email to arrange an appointment for interview. It was explained that we were aiming to find out their thoughts and recommendations regarding training requirements for new nurses entering into this specialist field and an insight into their own personal training experiences.

Specialist Nurses were interviewed from:
North Manchester General Hospital (NMGH) – Infectious Disease Department
name, Manchester Royal Infirmary (MRI) – Gastroenterology/Hepatology Department, Royal Blackburn Hospital (RBH) – Gastroenterology Department,
Royal Liverpool University Hospital (RLUH)-Gastroenterology Department
Siobhan Fahey (SF) – Programme Manager for the Hepatitis C Strategy

4.2. Semi-structured interviews

Semi-structured interviews with specialist nurses at each treatment site were agreed where consent had been granted by individual nurses. These were scheduled to last for approximately 30 minutes at the convenience of each nurse/contact. The interviewer asked a series of open ended questions designed to allow the interviewee to freely express their ideas and opinions.
Each semi-structured interview was attended by the interviewer and assistant who took comprehensive notes which were then typed up immediately following the interview. Questioning consisted of a series of open ended questions designed to allow the interviewee to freely express their ideas and opinions. These were followed up by closed questions and prompts if this was felt necessary to aid the interviewee. Where guidance was needed or more in depth detail was required additional questions were included. For example if the interviewee responded ‘yes’ to the question ‘are you a member of any networks or forums?’, this may be followed up with questions such as ‘what networks?’, ‘where do meetings take place’, ‘which professions are these networks aimed at?’.

Questions followed the general form of:

- What training do you feel is required for new nurses?
  - Recommended Courses
  - Ideal Structure of training
  - Length/depth of knowledge
  - Reading/Materials
    - Online sources
    - Day placements in other areas

- What training documentation and structures should be developed in the Workplace?
  - Competency documentation
  - Observation periods
  - Mentor/budding system

- What continued development is required by established specialist nurses?
  - What training have you received?
  - What extended training do you need?

- Are you a member of any networks or forums?
The topics and opinions discussed were summarised into the main themes and topics listed above. Once all nurses were successfully interviewed, this data was aggregated together to develop a common set of recommendations.

4.3. Assessment of current courses

In conjunction with interviewing specialist nurses, the current project has also investigated the availability of nurse training programmes which could meet some of the training needs identified.

4.3.1. Identification of Courses

Primary identification was of training courses locally and regionally, which was then expanded outwards if limited numbers of courses were identified. Nurse training colleges across the North West were firstly identified using an internet search engine. Each college was then investigated for the availability of training courses which could meet the training needs identified by the nurses interviewed. Where local gaps were identified this was expanded to locate relevant courses offered nationally. In some cases nurses referenced specific courses which were not contained within original search parameters, in these cases attempts were made to find similar courses provided more locally. All online courses had previously been identified by the HCV Teaching and Training needs assessment for Greater Manchester (CEPHU University of Manchester).

4.3.2. Relevance of courses

The relevance of courses was assessed using information stored online, in college websites and from direct recommendations from stakeholders and partners. Where an absence of appropriate courses was identified for a particular training area, the research area was expanded to locate relevant courses offered nationally.
The primary colleges investigated included:
University of Cumbria, Department of Nursing Studies, Lancaster
North West Office – Bolton
Lancaster University – Edge Hill campus
Chester College School of Nursing and Midwifery
University of Central Lancashire, Preston
Liverpool John Moore University
Keele University, School of Nursing and Midwifery
University of Salford

Secondary colleges investigated nationally:
Kings College London, School of Nursing and Midwifery
The University of Leeds, School of Nursing and Midwifery
Birmingham City University

Course leaders were contacted where further information was required. The areas of study investigated included courses in: Liver, immunology, management, nurse prescribing, working with drug users, BME, HCV, medical examination, venepuncture, counselling, blood results, pathophysiology, histology HIV, harm reduction, sexual health work, nutrition, drugs (injecting). Where possible each course has been assessed for relevance dependent on course content, length, price, and location.

The recommendations developed from this work are purely based on the information gathered from the educational institutions themselves, and where relevant recommendations have been made by the nurses interviewed. It has not been possible to gain a first hand experiences, through actual participation.

4.3.3. Online recourses
Some additional online resources have been identified through nurse recommendations in interviews and also through work completed previously in phase 1 (HCV Teaching and Training Needs Assessment Greater
Manchester, University of Manchester). Further investigation of the content and value of these resources was completed by visiting the website themselves and through discussion with practice nurses who had actually utilised the sources.

4.3.4. Conferences
Some conferences and other nurse training events were mentioned in discussions with specialist nurses. Attempts were made to obtain details of these training events, such as event programmes and presentations. Discussion with nurses who had attended these events was used to help to determine how effective they were in expanding knowledge and skills regarding HCV treatment.

4.4. Performance Measures
4.4.1. Outcomes
- Development of course/courses within a local nursing collage/ or equivalent to provide evidence based training programme. Validated, evaluated and accredited. Trained and knowledgeable specialist nurses at all grades.
- Development of a fully coordinated and monitored training programme, that will be evaluated to determine user satisfaction, adequacy of teaching materials, delivery, course content and training providers.
- Development of local trainers (ideally specialist nurses) able to deliver training that is locally relevant, evidence based and evaluated.

This report including the recommendations has been reviewed and ratified by the lead specialist nurses providing treatment in Greater Manchester.
5. Results

5.1. Semi-Structured Interviews with specialist nurses
Feedback from each interview produced a series of recommended knowledge and skill competencies to be gained by new nurses which could be classified into the following themes:

Knowledge:
- Liver
- HCV/BBV
- Drug Users
- Ethnic Groups
- Care Pathway
- Harm Reduction

Skills:
- Venepuncture
- Physical Examination/Diagnostics
- Dual Diagnosis/Co-morbidities
- Counselling skills
- Management/Presentation
- Epidemiology
- Other

5.2. Knowledge

5.2.1. Liver
The primary area of need for new nurses entering the field of HCV treatment identified by the specialist nurses interviewed was for an in depth knowledge, understanding, and ability to interpret Liver function tests as recognised by nurses at the RBH, RLUH and MRI. Siobhan Fahey (SF) Programme Manager for the Hepatitis C Strategy also believes that knowledge of hepatology is of importance.
Although knowledge of the anatomy and physiology of the liver was also an area of need identified by some of the nurses, the depth of knowledge required depended on the treatment site contacted and the specialism of the nurses questioned.

Nurses at MRI and RLUH who were specialists in gastroenterology, found this area essential to the role. ‘MRI deals with more advanced liver disease with less interaction and cases of drug users therefore knowledge of the liver is of primary importance’. At NMGH where the HCV clinic is based within the department of infectious diseases ‘drug users are the largest group using the service, they also believed that a basic background in the liver would be helpful, however the depth of this knowledge may not be as great as that required for staff at MRI.

5.2.2. HCV/BBV

All nurses interviewed mentioned the need for training to be provided around HCV, specifically around management and treatment. Nurses from MRI, thought it was necessary to learn of the diagnosis of HCV and treatment options including the treatment of a complex patient, with the nurse from RBH relayed the importance of learning about the drugs used and possible side effects. Nurses from RLUH and NMGH thought it was necessary for new nurses to learn about blood borne viruses in general and about the implications of HIV co infection.

5.2.3. Drug Users

The importance of understanding substance misuse and managing drug users was mentioned by nurses at MRI, NMGH, RBH and SF- Hepatitis C Strategy. The nurse at RBH ‘found the death of a young patient shocking’ (through overdoses), as someone who had little experience working with this patient population before. This makes it clear an understanding of other risk factors relating to the patient population is essential. All nurses interviewed also thought it necessary to gain an understanding of the treatment of drug users currently taking place in a community or primary care setting.
5.2.4. Ethnic Groups
An ethnic and cultural awareness was identified as another important area of knowledge relating to understanding the patient population and risk factors associated with these groups. These were issues identified by nurses at MRI and RBH whose treatment populations are made up of a high proportion of ethnic communities (≠50. Due to the culturally diverse population of Blackburn the nurse at RBH found that the majority of staff have a good knowledge of cultural events and religious practices as well as an awareness that travel to and from Pakistan takes place on a regular basis for certain communities. The Nurse at NMGH also mentioned this as an area of importance but emphasised that their treatment population was predominantly drug users and this was therefore less of an issue than that experienced at sites such as MRI.

5.2.5. Harm Reduction
As an element of learning around specific patient populations the majority of nurses feel it is necessary to learn about harm reduction to relay these health messages onto patients, this includes sexual health. Nurses at NMGH reported finding it challenging to communicate sexual health related advice to patients and stated a requirement for training in this subject. The nurse at RBH thought it also necessary to learn how treatment centres can work alongside other services such as drug and alcohol services and develop knowledge around diet and nutrition to reduce the impact of other risk factors on the progression of liver disease. The nurse at MRI also thought it important for new nurses entering the field of HCV treatment to be aware of cultural practices that may put individuals at risk.

5.3. Skills
5.3.1. Venepuncture
Nurses at NMGH and RBH (Manchester treatment services) believe it is important to learn the formal process for taking neck bloods. This is a process that they are currently required to do and expressed that if a new nurse was undertaking independent clinics or clinics in the community then this was truly a vital skill. However, the non Manchester based practitioner (RBH) stated that being based at a hospital there was no need for this skill as the hospital has its own phlebotomists. The Programme Manager for the Hepatitis C Strategy concurred on this point.

5.3.2. Clinical Results
Nurses at MRI and NMGH believe there is a need to develop a good understanding of clinical blood results.

5.3.3. Physical Examinations and Diagnostics
Nurses at MRI and RLUH stated the need for knowledge of general human physiology this was expanded by non Manchester based practitioners to include skills in physical examinations. The nurse at RLUH has set a formal requirement for new staff to attend a clinical diagnostic course to provide a general grounding and abilities in diagnosing other ailments. Nurses from MRI stated that a good grounding in clinical investigations is required.

5.3.4. Mental Health/Psychiatric Illnesses
Concerns were highlighted from NMGH are that new nurses need to learn how to manage patients with co-morbidities and develop skills in dual diagnosis for mental health. SF – Hepatitis C was also keen that new nurses develop higher level assessment skills for psychiatric illness.

5.3.5. Nurse Prescribing
Nurse prescribing was recommended as a useful course by all those interviewed, however, the nurse from RLUH didn’t think this would be necessary for nurses of all levels. No specific courses were recommended in particular, but this is one of the areas covered when investigating the availability of suitable courses at local nursing colleges.
5.3.6. Counselling skills
Skills in communication, counselling and motivation were mentioned by the majority of nurses interviewed including SF – Hepatitis C Strategy. The nurse from the RBH found that more in depth skills are required than that used in general nursing, and mentioned a need to gain skills around pre and post HCV test discussion, having ‘found it difficult to deal with patients who have relapsed or cirrhotic patients, in trying to keep these patients upbeat’. The nurse from MRI also believed counselling skills would be necessary but as a skill for more established nurses to develop.

5.3.7. Management/ Presentation
Other areas of skills and knowledge mentioned, include a need for the development of presentation (NMGH and MRI), and management skills (NMGH).

5.3.8. Epidemiology
The nurse at RBH and SF – Hepatitis C Strategy found that it was important to also develop skills in interpreting data produced in reports. Therefore, a session in epidemiology and reviewing literature may be of use. The nurse at MRI also, thought learning about the prevalence and epidemiology of HCV would be beneficial in understanding the patient population. It was suggested by SF – Hepatitis C Strategy that a new nurse should be able to also carry out research, however this was not a skill mentioned by the nurses interviewed.

5.3.9. Other Areas
The nurse based at MRI recommended the need for skills and knowledge in appraisal and revalidation, pathology, immunology and up to date infection control procedures.

Nurses in NMGH also mentioned a few further points regarding the need for training in behavioural therapies
SF – Hepatitis C Strategy suggested that new nurses learn about virology and pharmacology with some training covering ethics, data collection and computer skills. Another suggestion was that the training structure could vary dependent on whether the new nurses were specialist nurses or consultant nurses. Consultant nurses would complete a nurse practitioner masters.

5.4. Recommended Resources
Drug Company websites were recommended by the nurse at RLUH. A book on gastroenterology was seen as a useful resource. Staff are asked to read up around HCV generally with no formal recommended resources set though information provided by drug companies are generally recommended. Guidelines from BSG, EASL and AASLD were also included in suggested reading.

Roche
http://www.rocheexchange.com/hepatology

Schering Plough
http://www.allabouthepatitis.com/readytolearn/

British Society of Gastroenterology (BSG)
http://www.bsg.org.uk/

European Association for the Study of the Liver
http://www.easl.ch/

American Association for the Study of the Liver Diseases
http://www.aasld.org/

5.5. Work placements/visits
The nurses interviewed were asked about how they saw the training structure for new nurses. For many, this included visits and observational sessions. Nurses at NMGH recommended ‘time out at other locations’. The nurse at RBH, was able to spend 6 months gaining relevant experiences and knowledge before starting her clinic and found that her learning was enhanced through practical experience rather than a sit down course. The visits made included – drug service, criminal justice, substance misuse midwife.

5.5.1. Treatment Sites/Hospitals
The process undertaken at RLUH for new nurses involves work placements with 3 months spent with the liver team, in which trainees learn about liver disease and how to interpret liver function tests and 3 months spent with the infectious disease team to learn about BBV, allowing trainees to ‘gain hands on experience within hepatitis treatment clinics, to learn about the management of hepatitis and possible side effects’.

It was widely accepted by those interviewed that new nurses would benefit from gaining experience of work within the two service centres in the North West (MRI, NMGH), with those working in satellite clinics to schedule 50% of the year working in these centres(SF – Hepatitis C Trust). For staff who work within the two treatment centres it was suggested that, both gain an experience of working in the alternative treatment site (SF – Hepatitis C Trust) in order to gain experience in work with other patient groups and develop an environment to facilitate learning. SF – Hepatitis C Strategy also felt that nurses should gain experience of work on a liver transplant ward in order to gain an understanding of how the disease can progress.

5.5.2. Drug Services
The nurse at RLUH would also recommend other placements in drug and homeless services or GPs with a special interest for smaller treatment centres, who may not gain the variety of patients seen by larger treatment sites. This would help new staff to gain an understanding of the patient pathway as expressed by nurses at RBH and NMGH. SF- Hepatitis C
Strategy believes that new nurses would benefit from sitting with a prescriber within a drugs agency to understand Methadone use.

5.5.3. Other Visits

Other recommended visits included:

- Prisons
- Alcohol Service
- Needle Exchange
- Homeless services
- Laboratory
- Substance Misuse Midwife
- Peer support group

5.6. Observation/Supervision

Within work placements offered to staff at RLUH, staff go through an observational period, observing specialised staff in post followed by time being observed themselves. The nurse at RBH also learnt through observation and clinical supervision. She was clear that it was important not to place a new nurse in a position where they would be forced to deliver treatment alone. The suggestion was that perhaps the development of an appropriate service level agreement (standard) stating that nurses should not treat until a certain criteria has been met.

The nurse at RLUH found that spending time with experienced consultants to gain expert knowledge was beneficial, with nurses at MRI suggesting that case studies provided in practice would aid learning and understanding.

5.7. Competency Document

Nurses at MRI and RBH have worked together to create an induction package for new HCV nurses, consisting of a competency document, recommended training and conferences to attend. The nurse at RLUH also trains new staff through the setting of targets (competencies) during work placements which
are bespoke to the individual being trained, however, she agrees that perhaps a more formal package could be developed for future use. It was generally agreed that a competency document outlining the skills and knowledge framework would be a substantial development in creating more structured training for specialist nurses.

5.8. Networks
A network group was recommended for smaller hospitals and treatments sites to share ideas, opinions and gain advice from other experts in the field. The nurse from RLUH mentioned that there used to be a HCV Network for all hospitals in the North West, which was cancelled due to poor attendance, but suggested that this option could be made more valuable by including educational sessions/study days within the programme. The nurse at RLUH believes that drug companies would be happy to assist in providing treatment and policy updates. The nurse at RBH, currently attends the Manchester forum rather than the East Lancashire forum as this addressed the needs of her client group most effectively.

SF Hepatitis C strategy recommended the Nurse group from the British Liver Trust and stated that eventually a ‘treatment group’ and ‘clinical management team’ would be developed as part of the strategy would could house the ideal network suggested by the nurses interviewed,

5.9. Established Nurse

The continued professional development of established specialist nurses in the field of HCV was also considered.

5.9.1. Higher Level Knowledge: HCV, Liver Disease, Virology
The nurse at RLUH, suggested that nurses should attend regular knowledge update sessions such as study days, providing knowledge and guidance updates on liver disease and HCV.
SF- Hepatitis C Strategy believes that more established nurses should go on to develop higher knowledge levels in virology and to also go on to work towards a Public Health Masters qualification.

5.9.2. Clinical Skills
Established nurses should also develop higher skills in nurse prescribing and clinical diagnostics (RLUH, SF- Hepatitis C Strategy). NMGH, believe that established nurses should begin building on the skills they developed as a new starter and complete advanced courses in blood letting, venepuncture, and blood results.

5.9.3. Management Skills
Management skills were also highlighted as a need for more established nurses as thought by nurses at NMGH. Learning around commissioning and how to develop a service are skills were identified as important areas of learning by nurses at MRI and RBH. The nurse at RBH, found that she knew little about the implications of effective commissioning before setting up the clinic at RBH. This nurse along with nurses at MRI also believe it is important to learn about the completion of risk assessments as the service also extends outside of the clinic environment. i.e. self administering patients and the role of practice nurses including lone working.

5.9.4. Communication Skills
It is expected that once nurses are established within their specialist posts that the learning they have gained through their experiences will prove to be a vital resource for new staff entering the field. As such it may be expected of these individuals to build on their presentation skills to provide teaching not only to staff based within their own departments but also to effectively communicate to larger audiences within conferences (SF – Hepatitis C Strategy).
5.10. **Recommended Courses – Identified by Nurses Interviewed**

As part of questioning around the training requirements of new specialist nurses, those interviewed were asked to recommend courses they had attended themselves or encouraged colleagues to attend.

The nurse interviewed at RLUH has made it a formal requirement that all new nurses entering the specialism should attend the following courses, Clinical Examination and Clinical Diagnostics (see below) at Liverpool John Moore University to gain an understanding of all systems of the body and to ensure that nurses are able to recognise and refer patients for other health problems at point of contact.

**5.10.1. Clinical Examination**

Clinical examination, certificate in professional development – This certificate is a programme from the post qualification framework in the faculty of health and applied social sciences, aimed at enhancing clinical examination skills for nurses working in primary and secondary care. The course runs over one 15 week semester, requiring weekly attendance of 2 hours, offering 10 credits. [http://www.ljmu.ac.uk/courses/cpd/76403.htm](http://www.ljmu.ac.uk/courses/cpd/76403.htm)

**5.10.2. Clinical Diagnostics**

Clinical diagnostics certificate in professional development – This course is designed for experienced healthcare professionals who wish to develop their knowledge of clinical diagnostics, who may have already completed the physical examination course. The course runs over 12 weeks and requires weekly attendance of 2 hours. 20 students per intake, offering 10 credits. [http://www.ljmu.ac.uk/courses/cpd/76402.htm](http://www.ljmu.ac.uk/courses/cpd/76402.htm)

The nurse at RBH found that having a broad experience was beneficial in aiding the diagnosis of other health issues which may become apparent while a patient is in treatment.
5.10.3. Liver

Due to the focus on the liver, nurses from MRI were very keen on a number of courses currently taking place at Leeds University. The courses currently running include: Liver Pathophysiology level 2 and level 3 courses. The courses introduce the anatomy and physiology of the liver, assessing liver function, including symptoms of liver disease. There are also sessions on histology, nutrition and pharmacology. The course runs on Tuesday afternoons for 11 weeks, starting on the 1-4th September. The course is assessed via a 2500 work essay and costs £300 to complete (level 2).

The course Acute and Chronic Liver Disorders- principles of care, is a 10 credit, level 3 module which looks into a number of diseases, covering the effects of alcohol, HCV, genetic, paracetamol, including health education and health promotion. Evaluating current research and new therapeutic developments in relation to liver disease, and the implication of technological advances have upon care delivery. The course runs over 11 weeks, from January to May. The assessment consists of a two assessment essay of 2500 words. The course includes an informative package for service user and powerpoints with notes. The cost of the course is £600. Nurses at MRI and NMGH speak very highly of these courses and would love to attend, but unfortunately the cost of the course makes it inaccessible for these staff.

5.10.4. Drug Companies

Drug companies were recommended as useful sources of information and training specifically around HCV by all the nurses interviewed. Unfortunately the drug companies are selective in who attends the training. NMGH reported that they are usually excluded from training offers from Scherring Plough.

Nurses from MRI strongly recommended attending the training ran by Scherring Plough – National Nurse Training in Viral Hepatitis. This training was RCN accredited and free to those invited. Topics included in the course were, epidemiology and prevention, anatomy and physiology of the liver, diagnosis: the practicalities, treatment options, case studies in practice, setting up and running a nurse led clinic, risk management and legal issues,
understanding and managing drug users and presentation skills. Details of future conferences can be found at www.healthcare-events.co.uk. The nurse at MRI found the training to be specifically designed for New Hepatitis Nurses, within 18 months of starting though the next training session will be split up into two streams – one for more experienced nurses and the other for new starters.

Roche was also mentioned as a resource by nurses at RLUH and RBH offering a good background in HCV. Unfortunately it is unclear which resource these nurses are referring to. However, after some research completed it appears that the mainliners conference, sponsored by Roche could be the relevant source, offering level 1- educational workshops in conjunction with level 2 professional workshops. Workshops were previously run as a series of paired half day workshops across the UK, running as morning and afternoon session at two difference levels. Places were free. The nurse interviewed at RBH suggested that a 3 or 4 day course starting at a basic level such as this, working up to higher understanding over later sessions in the week would be useful for new nurses entering the specialism as well as other professionals in a related profession.

NMGH, previously used Masterclass plus (http://www.masterclassplus.co.uk/), an online e-learning approach to professional learning sponsored by Roche, for nurses, midwives, health visitors and other health care professionals to meet their PREP/CPD requirements and have the opportunity to obtain university credits without the need to attend a university. These courses are currently being updated and are due to start running again in September. The programme previously ran if participants register and complete Stage 3 (minimum 140 hrs) they could potentially gain from 15 to 30 credits towards a degree or diploma at the University of Greenwich. There were two courses that cover HCV both with similar content Hepatitis C: Improving care pathways and The Hepatitis C virus: tackling the problem in Stages 1 and 2. Specialist nurses from NMGH have undertaken these courses as ‘there is no alternative’ but found that some of the information is not directly relevant to the local area and they ‘prefer face-to-face’ learning.
**Table 1. Summary- Nurse Recommendations**

<table>
<thead>
<tr>
<th>Treatment Site</th>
<th>New Nurses</th>
<th>Established Nurses</th>
<th>Courses</th>
<th>Resources</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRI</td>
<td>Prevalence and epidemiology, Diagnosis, Treatment Options, Patient perspective, Nurse prescribing, Risk management and legal issues, understanding and managing drug users, presentation skills, treating drug users, appraisal and revalidation, ethnic and cultural awareness, Clinical blood results, clinical investigations, Pathology, Physiology, Immunology</td>
<td>Training events, service improvement</td>
<td>Leeds Liver courses, Schering Plough-National Nurse Training in Viral Hepatitis</td>
<td>Drug Companies</td>
<td>drug services, prisons, other departments, hospitals</td>
</tr>
<tr>
<td>NMGH</td>
<td>HCV, HIV co-infection, Ethnic awareness, venepuncture, Basic liver, Nurse prescribing, Drugs and drug use, Harm reduction, Dual diagnosis, Co-morbidity, Patient Pathway</td>
<td>Advance skills in blood letting, venepuncture, blood results</td>
<td>Online Masterclass Courses. Schering Plough do not included nurses from NMGH in training offers</td>
<td>Mainliners, Hep C trust</td>
<td>drug services, prisons, other departments, hospitals</td>
</tr>
<tr>
<td>RBH</td>
<td>Physical examination, Clinical diagnostic, Liver disease/liver function tests, BBV, HCV effects of treatment, epidemiology and literature</td>
<td>Risk assessments, commissioning, setting up a clinic, diet and nutritional advice, study days-drug companies</td>
<td>Roche, Schering Plough</td>
<td>Drug Companies</td>
<td>drug services, criminal justice, substance misuse midwife, service centres (MRI, NMGH)</td>
</tr>
<tr>
<td>RLUH</td>
<td>Liver function, blood test, HCV treatment, pre and post test discussion</td>
<td>Nurse prescribing, study days-liver disease, clinical diagnostics</td>
<td>Physical examination course, clinical diagnostic course</td>
<td>BSG, EASL, AASLD, Gastroenterology book, Drug companies</td>
<td>Gastroenterology, Infectious Diseases, Smaller sites should visit - drug and homeless services, GPs with a special interest</td>
</tr>
<tr>
<td>Nurse Grade</td>
<td>Training need summarised by nursing grade according to recommendations of the nurses interviewed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Harms Reduction</td>
<td>7</td>
<td>Basic Liver Interpretation of Liver Function Tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Harms Reduction</td>
<td>6</td>
<td>Harms Reduction</td>
<td>5</td>
<td>Basic Liver Interpretation of Liver Function Tests</td>
</tr>
<tr>
<td>6</td>
<td>Harms Reduction</td>
<td>5</td>
<td>Basic Liver Interpretation of Liver Function Tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Harms Reduction</td>
<td>4</td>
<td>Basic Liver Interpretation of Liver Function Tests</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This interview process has identified that at present there is no systematic programme of training for any specialist nurses entering the field of HCV treatment, with a lack of training currently available for all HSNs.

Although each nurse was interviewed separately, it rapidly became apparent that a series of consistent themes/messages formed the basis of the results; a requirement for training and preferences for future training developments. A summary of the opinions and recommendations made by each nurse interviewed can be found in Table 1.

Utilising the feedback from nurse interviews has enabled the creation of a summary Table 2, which divides the training topics and resources identified through nurse interviews into training recommendations by nurse grade. With more basic knowledge and underlying skills to be developed by nurses of grades 4 and 5 with continued development and advancement in these skills for nurses in higher grades. The important aspect is that there is continued learning for all nursing grades with recommended resources available and support if further information is required.

The recommendations and suggestions made by the nurses interviewed can be summarised into the following subject and skill areas:

**New nurses**
- Basic Liver anatomy and pathophysiology
- HCV Knowledge
- Clinical Examination/Diagnostic Skills/Venepuncture/Blood Results
- Structured visits and placements within treatment sites: MRI (Gastroenterology), NMGH (Infectious Disease)
- Visit to drug services – possible visits necessary to prison sites, high ethnic minority centres, prisons. Learn about the care pathway.

**Further Skills**
- Presentation
- Management
- Counselling Skills

**Established Nurse**
Regular knowledge update sessions – study days (Covering additional skills, nutrition, basic counselling etc)

Nurse Prescribing

7. Part 2. Relevant Courses

Currently, courses/programs are offered in a wide variety of settings (including the health care and higher education sectors and by professional nursing organisations). Additionally, courses/programs vary in a number of characteristics including:

- length;
- mode of offering;
- balance between clinical/theory components;
- student intake size;
- eligibility criteria; and
- qualification gained (non-award, award at all levels).

7.1. Liver

Knowledge regarding the anatomy and pathophysiology of the liver was an area of need recognised by all nurses at various levels.

In addition to the Liver courses run by The University of Leeds (see section 6.12.5). A further three courses have also been found.

7.1.1. The University of Salford

The University of Salford runs a course, Liver, Hepatobiliary and Pancreas, this is a single module as part of a Masters course, offering 30 credits, run part time over one semester, unfortunately the entry requirements allows for only specialist registrars in the field of Gastroenterology to enter the course.

http://www.salford.ac.uk/course-finder/course/1608

7.1.2. Kings College London
Kings College London deliver a Level 5 and Level 6 course on the Liver which is aimed at practitioners from a range of clinical settings. This course focuses predominantly on patients with chronic liver disease but also has one day which is dedicated to Viral Hepatitis, looking at treatment, testing and patient knowledge. The cost of the course is £845 for the 15 credit module. Further details can be found online.

7.1.3. Birmingham City University
There is one module in Clinical Hepatology Practice, currently running from Birmingham City University. The course is run twice a year over one semester for adult and paediatric nurses, with occasional HCV nurses in attendance. The course is based on the N15 principles of hepatology and liver transplantation and involves clinical practice with a set of competencies to complete. The course is aimed at experienced hepatology practitioners to enhance their knowledge, understanding and expertise in the holistic care of patients with hepatological conditions and provide opportunities for participants to reflect on current developments and formulate strategies to improve and progress care management and delivery. The course also has the ability to be adapted for distance learning. Further details can be found on the website
http://www.bcu.ac.uk/courses/health/lbr/cpd/healthcare-gastro-hepatology

7.1.4. Summary
There are few courses currently provided around the liver nationally and no courses provided locally. The courses provided by Leeds University have been highly recommended by staff based at MRI. The courses based at Kings College London which incorporates a full day on viral hepatitis could also prove to be a valuable resource. However the location could be problematic. The course provided by Birmingham City University may be too focused on providing care for patients with hepatological conditions rather than on the liver itself. It is acknowledged that a locally provided course is required, such as a 2 day liver course could be developed by one of the local nursing colleges to meet this need. In conjunction with structured visits and work placements within Gastroenterology to learn about the liver, impact of liver disease and liver function tests, which could have a more practical application of knowledge.
<table>
<thead>
<tr>
<th>University</th>
<th>Course</th>
<th>Duration</th>
<th>Fees</th>
<th>Audience</th>
<th>Content</th>
<th>Credits</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salford</td>
<td>Liver, Hepatobiliary and Pancreas – single module MSc</td>
<td>Part time over 1 semester, (more than 3 months up to and including 1 year)</td>
<td></td>
<td>Specialist Registrars in Gastroenterology</td>
<td>Apply theoretical knowledge to practical gastroenterology in the area of the liver, hepatobiliary system and pancreas</td>
<td>30 credits</td>
<td>Phone: 08452340184, Email: <a href="mailto:fhsc@salford.ac.uk">fhsc@salford.ac.uk</a></td>
</tr>
<tr>
<td>Leeds</td>
<td>Liver Pathophysiology, Levels 2 and 3</td>
<td>One Semester</td>
<td>£300</td>
<td>Range of health care specialists-certified evidence of ability to study at correct level</td>
<td>Anatomy and Physiology of the Liver and Biliary System, Pathophysiology, Patient care, Management of Symptoms, Investigations</td>
<td>10 credits</td>
<td>Email: <a href="mailto:m.clayton@leeds.ac.uk">m.clayton@leeds.ac.uk</a></td>
</tr>
<tr>
<td>Leeds</td>
<td>Management of Acute and Chronic Liver Disorders</td>
<td>One Semester</td>
<td>£600</td>
<td>Must have a professional healthcare registration</td>
<td>Needs of patient and family in a range of liver disorders, intervention and care delivery, current research and therapeutic developments.</td>
<td>10 credits</td>
<td>Email: <a href="mailto:m.clayton@leeds.ac.uk">m.clayton@leeds.ac.uk</a></td>
</tr>
<tr>
<td>Birmingham City</td>
<td>Clinical Hepatology Practice</td>
<td>One Semester</td>
<td></td>
<td>Adult and Paediatric Nurses</td>
<td>Principles of hepatology and liver transplantation. Care and care management. Clinical practice with competencies</td>
<td></td>
<td><a href="mailto:ann-marie.dodson@bcu.ac.uk">ann-marie.dodson@bcu.ac.uk</a> 0121 331 7106</td>
</tr>
<tr>
<td>Kings College-London</td>
<td>Liver Course Level 5 and 6</td>
<td>6 weeks</td>
<td>£845</td>
<td>Practitioners</td>
<td>Liver function tests, endoscopic therapy, Chronic liver disease, acute liver failure, transplantation and hepatobiliary</td>
<td>15 credits</td>
<td>Phone: 020 7848 3625, Email <a href="mailto:lynda.greenslade@kcl.ac.uk">lynda.greenslade@kcl.ac.uk</a></td>
</tr>
</tbody>
</table>

Table 3. Summary of Liver courses identified
7.2. HCV/BBV

HCV management and treatment is a key area of knowledge identified by all nurses interviewed. There is a clear gap in current courses provided specifically for this purpose. The nurse at RLUH expressed a wish that such a course could be developed to provide a uniform approach to treatment across the North West. However, there are some courses currently provided which may meet some of the needs identified.

The University of Central Lancashire provides a course ‘Management of Individuals Affected by Blood Borne Viruses (HIV and Hepatitis)’. This course consists of a maximum of six theory days delivered over a fourteen week semester, which is completed both on site and online. The course includes: Epidemiology of HIV and Hepatitis, virology, disease progression, case management of clients, pharmacology and HIV/Hepatitis treatments, health promotion and prevention strategies, professional ethical and legal issues, principles of teaching and presentation skills to individuals and groups. The course is worth 20 credits and can be completed at a Level 3 or Level 4. The content of this course clearly addresses a number of the needs expressed by nurses interviewed not only regarding HCV but also presentation skills and professional issues which must be faced as well as prevention strategies.

Liverpool John Moore University provide a MSc in Virology, which contains a 12 credit module in Viral Hepatitis, which can be completed as a distance learning course. [http://www.ljmu.ac.uk/virology/info.html](http://www.ljmu.ac.uk/virology/info.html). The module includes hepatitis virus diversity, epidemiology, acute and chronic hepatitis, long-term effects; general laboratory parameters, pathology and development of disease; Hepatitis C Virus (HCV); sexual and vertical transmission of hepatitis, neonatal hepatitis and effects of co-infections; differential diagnosis and monitoring of hepatitis infections; management of chronic infections. In addition to covering Hepatitis B, and E. This course is primarily aimed at laboratory based staff though lab experience is not a necessity. The course may therefore be appropriate for nurses of a higher level to build on current knowledge.

The primary source of information currently accessed is that provided by drug companies as discussed previously along with Masterclass plus, an online company, sponsored by Roche which offers online courses. These courses were recommended by nurses at NMGH and RBH. However, the courses are currently being updated and will be available
from September. There are courses included within this training package which provide training around HCV and co-morbidities.

7.2.1. Summary

The Online Masterclass Plus courses are a recommended resource, although currently unavailable, once updated these appear to offer in depth and relevant training at a reasonable cost. The UCLAN course also covers a wide range of subject areas which were identified as a need by the specialist nurses interviewed and could also be a suitable course for new starters to attend. In line with the recommendations made by the nurses interviewed – established nurses should work at maintaining knowledge levels through literature, online resources and organised study updates.
<table>
<thead>
<tr>
<th>University</th>
<th>Course</th>
<th>Duration</th>
<th>Fees</th>
<th>Audience</th>
<th>Content</th>
<th>Credits</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Central Lancashire</td>
<td>Cert Management of individuals affected by blood borne viruses (HIV and Hepatitis) Level 3 and Level 4</td>
<td>A max. of six theory days delivered over a fourteen week semester onsite and online</td>
<td>students who work with individuals affected by Blood Bourne Viruses</td>
<td>theoretical knowledge and contemporary care and management and to develop their skills in the dissemination</td>
<td>20 credits</td>
<td>Tel: 01772 892400 Email: <a href="mailto:enquiries@uclan.ac.uk">enquiries@uclan.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td>Liverpool John Moore</td>
<td>Viral Hepatitis module part of Virology MSc</td>
<td>One semester</td>
<td>Primarily aimed at lab based staff</td>
<td>Hepatitis, lab parameters, pathology, development of the disease, transmission</td>
<td>12 credits</td>
<td>Tel: (+44) (0)151 231 2045 Email: <a href="mailto:h.b.smalley@livjm.ac.uk">h.b.smalley@livjm.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td>Online</td>
<td>Masterclass HEPATITIS C: IMPROVING CARE PATHWAYS Level 3</td>
<td>35 hours</td>
<td>Stage 1 and 2 - free of charge Stage 3 - £145 - £225</td>
<td>Qualified nurse working in relevant field with a minimum of 3 years post registration experience</td>
<td>Stage 1 anatomy and physiology, HCV infection, diagnosis, and treatment Stage 2 case histories of patients, patient care pathways, services Stage 3 treatments, local audit programmes, social care clinical networks</td>
<td>30 credits</td>
<td>Lee Scott</td>
</tr>
<tr>
<td>Online</td>
<td>Masterclass THE HEPATITIS C VIRUS: TACKLING THE PROBLEM Level 2</td>
<td>35 hours</td>
<td>Stage 1 and 2 - free of charge Stage 3 - £145 - £225</td>
<td>qualified nurses and midwives</td>
<td>Stage 1 liver anatomy and physiology; the hepatitis C virus; risk factors, disease progression; testing, management, prevention and risk reduction... Stage 2 case studies and workshops Stage 3 Government strategies, prevention, psychosocial impact, treatment and testing</td>
<td>30 credits</td>
<td></td>
</tr>
<tr>
<td>Online</td>
<td>Masterclass CARE OF PEOPLE WITH HIV INFECTION: ANTIRETROVIRAL SIDE EFFECTS Level 3</td>
<td>35 hours</td>
<td>Stage 1 and 2 - free of charge Stage 3 - £145 - £225</td>
<td>for nurses, pharmacists and dieticians</td>
<td>Stage 1 Anti-retroviral side effects, pathophysiological, psychosocial and clinical consequences Stage 2 Patient workshops</td>
<td>240 credits (levels 1and 2) 15-30 credits (level 3)</td>
<td></td>
</tr>
<tr>
<td>Online</td>
<td>Masterclass HEPATITIS C: MANAGING PATIENTS WITH CO-MORBIDITIES Level 3</td>
<td>35 hours</td>
<td>Stage 1 and 2 - free of charge Stage 3 - £145 - £225</td>
<td>health or social care professional s involved with hepatitis C patients/clients.</td>
<td>Stage 1 hepatitis C and co-morbidities. Stage 2 workshop case studies Stage 3 diagnosis, significance of genotype and gender, drug treatment regimens, clinical problems</td>
<td>30 credits</td>
<td></td>
</tr>
</tbody>
</table>
Online | Masterclass | HEPATITIS B INFECTION: MEETING THE CHALLENGE Level 3 | 35 hours | Stage 1 and 2 – free of charge | Stage 3 - £145 - £225 | for health or social care professionals | introduction to hepatitis B infection; chronic HBV infection, treatment; management. case studies | 15 credits |

Online | Masterclass | HEPATITIS C: MANAGING PATIENTS WITH ADDICTIVE BEHAVIOURS | 35 hours | Stage 1 and 2 – free of charge | Stage 3 - £145 - £225 | health or social care professionals | the management of adults with addictive behaviours who are at risk of hepatitis C infection or who have the infection. | 30 credits |

<table>
<thead>
<tr>
<th>University</th>
<th>Course Details</th>
<th>Duration</th>
<th>Fees</th>
<th>Audience</th>
<th>Content</th>
<th>Credit</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Manchester</td>
<td>Developing Professional Practice in</td>
<td>Part time, one day a week</td>
<td>£700</td>
<td>qualified health/social care</td>
<td>examine their own and societies attitudes to</td>
<td>20 credits</td>
<td>Phone: (0) 161 275 4740</td>
</tr>
</tbody>
</table>

Table 4. HCV related courses

7.3. Drug Users

The importance of understanding and managing drug users was highlighted by the majority of nurses interviewed. At present there are a number of courses which could provide valuable information regarding work with this group, see Table 5.

Liverpool John Moore University also offer an MSc/PGDip in Drug Use and Addiction, which as an entire master’s course was deemed too in depth for the knowledge requirements specified by the nurses interviewed. The remaining courses have the potential to provide some valuable information. The UCLAN course covers dual diagnosis, which was an area nurses at NMGH felt should be covered. The course also includes motivational interviewing and cognitive behavioural approaches, which may address some of the issues discussed by the RBH nurse regarding the maintenance of motivation in cirrhotic or relapsed patients. The Level 6 and 7 courses in substance misuse at Edge Hill also discuss the relationship between drug use and HCV.

7.3.1. Summary

These courses may be helpful for nurses which deal predominantly with drug using populations such as NMGH. However, the opinions and experiences expressed by the nurse based at RBH suggest that a practical session actual spent with the patient group within a drug service may provide the most valuable experience.
<table>
<thead>
<tr>
<th>University/Location</th>
<th>Program Description</th>
<th>Duration/Cost</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Central Lancashire (Preston)</td>
<td>Dual diagnosis: substance misuse and mental health co-morbidity. Part-time one semester. Substance misuse in those with mental health difficulties. Detection, screening treatment and relapse harm minimization, motivational interviewing, cognitive behavioural approaches and pharmacological management.</td>
<td></td>
<td>Phone: 017728938 36 Email: <a href="mailto:bduhealth@uclan.ac.uk">bduhealth@uclan.ac.uk</a></td>
</tr>
<tr>
<td>Keele</td>
<td>Adolescent Addiction studies. Six day unaccredited short course. Wide range of professionals. Substance misuse or dependence problems in adolescence.</td>
<td></td>
<td>Phone: (01782 73) 4002 Email: <a href="mailto:postgrad@keele.ac.uk">postgrad@keele.ac.uk</a></td>
</tr>
<tr>
<td>Edge Hill</td>
<td>Substance Misuse – certificate level 4. 1 module. £150 all grades of staff and disciplines. Knowledge of all drugs and substances of misuse, Law, Ethics. Routes of use and impact of the drug on the user and society, policies and guidance.</td>
<td>15 credits</td>
<td>Phone: 0161 237 2416</td>
</tr>
<tr>
<td>Edge Hill</td>
<td>Assessment of Substance Misuse – certificate level 4. £150 all grades of staff and disciplines. Drug treatment Models and theories of addiction, policies and guidance.</td>
<td>15 credits</td>
<td>Phone: 0161 237 2416</td>
</tr>
<tr>
<td>Edge Hill</td>
<td>Substance Misuse level 6. 10 weeks, for half a day per week. £295 Teachers, doctors, nurses, social workers and allied health professionals. Alcohol and substance misuse, Dual diagnosis, Detoxifications, Motivational interviewing, Ethics and morality. Addiction theories Drugs/alcohol/social issues/personality issues and hepatitis B and C.</td>
<td>15 credits</td>
<td>Phone: 0161 237 2416</td>
</tr>
<tr>
<td>Edge Hill</td>
<td>Substance Misuse-Level 7. 10 weeks, for half a day per week. £530 Teachers, doctors, nurses, social workers and allied health professionals. Alcohol and substance misuse, Dual diagnosis, Detoxifications, Motivational interviewing, Ethics and morality. Addiction theories Drugs/alcohol/social issues/personality issues and hepatitis B and C.</td>
<td>20 credits</td>
<td>Phone: 0161 237 2416</td>
</tr>
<tr>
<td>LJMU</td>
<td>Drug Use and Addiction MSc. 2 years MSc part time, one day per week. 1 year PgDip, one day. Drug problems and drug policy (30 credits) Drugs research methodology (30 credits) Psychopharmacology and drug. 180 credits</td>
<td></td>
<td>Phone: 015123140 48 Email: <a href="mailto:s.c.woods@livjm.ac.uk">s.c.woods@livjm.ac.uk</a> (Sally)</td>
</tr>
</tbody>
</table>
Table 5. Drug use, substance misuse courses
* Courses have also been identified nationally, only those delivered locally are shown in the above table.

7.4. Ethnic Groups

Knowledge around the patient population was highlighted by all nurses interviewed.

The University of Manchester currently offer a course module ‘Ethnic Minorities in Britain’, offering 20 credits and run over one semester. The course aims to situate the experience of ethnic minorities in Britain in historical, social and political contexts, to consider the role of religion in the construction of ethnic minority identity, to challenge assumptions (your own and others’) about ethnic minorities and their identities and to develop analytical skills in a variety of written and oral contexts.

As discussed by the nurses interviewed, localised knowledge of the treatment population is important. This knowledge may only be available from staff within each centre. The suggestion from the interview held with the nurse at RBH was that an information pack be provided for new starters which could include local festivals and other religious or cultural practice, which could address the risk factors associated with this population.

7.4.1. Summary

There is a clear gap in training provision relating to work with ethnic minority groups, with no relevant courses currently available, there is room for a local nursing college to develop a training package to include advice relating to work with ethnic minority groups and risk factors for HCV.

7.5. Clinical and Diagnostic Skills

Clinical Diagnostic Skills and Examinations skills were identified as skill areas all specialist nurses are required to develop. The University of Bolton was also found to provide a
course in Clinical Examination skills in addition to the two courses provided for Liverpool John Moore University.


This course is provided for all health professionals who may be required to carry out clinical examinations of adult patients. Students should already possess a good understanding of anatomy, physiology and pathology. The course is delivered on a part time basis over one semester.

7.5.1. Summary

Although the LJMU courses have been recommended by the nurse at RLUH, the Clinical Examination course in Bolton could provide a more local solution which has the potential to address both clinical examinations and diagnostics.

<table>
<thead>
<tr>
<th>University</th>
<th>Course</th>
<th>Duration</th>
<th>Audience</th>
<th>Content</th>
<th>Credits</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>LJMU</td>
<td>Clinical Diagnostics – Masters Level</td>
<td>12 weeks</td>
<td>Healthcare practitioner</td>
<td>interpret physiological and clinical data.</td>
<td></td>
<td>Rosie McCarthy - Senior Lecturer Tel: 0151 231 4113 Email: <a href="mailto:R.Mccarthy@ljmu.ac.uk">R.Mccarthy@ljmu.ac.uk</a></td>
</tr>
<tr>
<td>LJMU</td>
<td>Clinical Examination</td>
<td>15 weeks</td>
<td>Healthcare practitioner</td>
<td>enhance clinical skill development. structured work based learning to consolidate emerging clinical skills.</td>
<td></td>
<td>Susan Baker - Senior Lecturer Tel: 0151 231 4096 Email: <a href="mailto:S.C.Baker@ljmu.ac.uk">S.C.Baker@ljmu.ac.uk</a></td>
</tr>
<tr>
<td>Bolton</td>
<td>Clinical Examination Advance Diploma CPD</td>
<td>Part time one semester</td>
<td>Healthcare practitioner</td>
<td>interpret findings that specifically relate to the cardiovascular system; the nervous system; the abdomen; the genitourinary systems; the ears, nose and throat; the muscular skeletal system; integument system and the suddenly-taken-ill.</td>
<td>20 credits at Level HE6</td>
<td></td>
</tr>
</tbody>
</table>

Table 6. Clinical Examination and Diagnostic Courses
7.6. Venepuncture

Skills in venepuncture at a basic level for new nurses (level 4 and 5) and more advanced for nurses of a level 6 and 7 were also identified as necessary requirements for new nurses starting in the field of HCV.

The University of Central Lancashire hold a course in the Asymptomatic Screening in Sexually transmitted infections and HIV for contraceptive practitioners. The course includes venepuncture, theory and practices along with epidemiology and pathological implications of STI's and HIV. This course is held part time over one semester. The variety of the course content in relation to sexual health may prove interesting for some nurses, however a more specific course surrounding venepuncture could be more preferable. See table 7

A series of online courses regarding phlebotomy have been found, which consist of a 1 to 2 day course. Details of these courses can be found in Table 7.

7.6.1. Summary

The online courses either provide practical guidance through visiting trainees in the workplace or trainees are asked to work under the guidance of a qualified practitioner. These online courses all appear to provide an affordable option which can be completed within 1-2 days.

<table>
<thead>
<tr>
<th>University</th>
<th>Course</th>
<th>Duration</th>
<th>Fees</th>
<th>Content</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCLAN</td>
<td>Cert Asymptomatic Screening in sexually transmitted infections and HIV for contraceptive practitioners</td>
<td>Part time over one semester</td>
<td></td>
<td>Venepuncture: theory and practice Epidemiology and pathological implications of STI's and HIV Principles of asymptomatic STI and HIV screening in practice and subsequent client management</td>
<td>Phone: (0)1772 201201 Email: <a href="mailto:cenuquiries@uclan.ac.uk">cenuquiries@uclan.ac.uk</a></td>
</tr>
</tbody>
</table>

| Course Duration Fees Web Address |
|-------------------------------|------------------|------------------|
| Basic/advanced accredited phlebotomy training | 1 day | £150 - £225 | [http://www.coursesplus.co.uk/directory/provider-1254.php](http://www.coursesplus.co.uk/directory/provider-1254.php) |
| Phlebotomy (Venepuncture) | 1 day | £142.60 | [http://www.mkupdate.co.uk/coursedetails.php?ID=94](http://www.mkupdate.co.uk/coursedetails.php?ID=94) |
| Venepuncture and Cannulation | 1 day | | [http://www.pduk.net/coursefinder.php?gid=2&cid=87](http://www.pduk.net/coursefinder.php?gid=2&cid=87) |
| Phlebotomy, Cannulation and IV Administration Essentials | 2 days | | [http://www.pduk.net/coursefinder.php?gid=2&cid=87](http://www.pduk.net/coursefinder.php?gid=2&cid=87) |
| Venepuncture, Cannulation and IV Therapy | 1 day | | [http://www.pduk.net/coursefinder.php?gid=2&cid=87](http://www.pduk.net/coursefinder.php?gid=2&cid=87) |
7.7. Counselling Skills

It was identified that nurses working within HCV treatment, require more advanced counselling skills than provided by general nurse training. Edge Hill University provide a foundation in counselling skills at a level 5, which is a single module at a cost of £255. The course covers a person centred approach and the use of body language in communicating. For further details http://info.edgehill.ac.uk/EHU_eprospectus/Health/module.asp?id=53#study.

There are also a number of courses available online which could provide useful help and advice.

Counselling Level 2 and 3, UK Open College- £269
http://www.ukopencollege.co.uk/human-understanding-counselling-c-9_41.html

Advanced Counselling Course, £248

Counselling Diploma Course, £165
http://www.opencollege.info/counsellingcourse.html

7.7.1. Summary

There appears to be few basic counselling courses currently offered by local nursing colleges. Although courses in table 5 illustrate that motivational interviewing and cognitive therapy is currently incorporated within many of the courses run around substance misuse. There are also some courses provided online. However, the value of an online course in learning for such a practical skill is questionable. There appears to be little provided around counselling in general and pre and post test counselling for HCV. The recommendation is that local teaching colleges could provide a one or two day course to provide some basic counselling techniques with specific reference to work with HCV patients and pre and post test counselling.
7.8. Nurse Prescribing

Nurses of a higher level (level 6 and 7) were recommended to complete a qualification in non-medical prescribing. Table 8 contains a wide selection of nurse prescribing courses currently available in the North West, which can all be completed within 12 to 26 weeks.

7.8.1. Summary

All courses appear to offer a similar structure. Attendance is recommended for any nurse of a level 6 of above working within HCV treatment. The course currently running at The University of Bolton appears to offer a course which is comparable in content to other courses on offer in a convenient location.

<table>
<thead>
<tr>
<th>University</th>
<th>Course</th>
<th>Duration</th>
<th>Content</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liverpool John Moors</td>
<td>CPD Non Medical Prescribing</td>
<td>16 weeks</td>
<td>Prescribing policy, psychology, prescribing in public health</td>
<td>Donal Deehan – Senior Lecturer Tel: 0151 231 4307 Email: <a href="mailto:d.deehan@ljmu.ac.uk">d.deehan@ljmu.ac.uk</a></td>
</tr>
<tr>
<td>University of Central Lancashire (UCLAN)</td>
<td>Non-medical prescribing V300)</td>
<td>26 weeks</td>
<td>experienced practitioners who wish to enhance their clinical practice</td>
<td>Phone: (0)1772 201 201 Email: <a href="mailto:cenquiries@uclan.ac.uk">cenquiries@uclan.ac.uk</a></td>
</tr>
<tr>
<td>University of Bolton</td>
<td>Non-medical Prescribing for Nurses</td>
<td>13 or 26 weeks</td>
<td>Two core modules: Professional Aspects of Prescribing (10 credits) and Prescribing in Partnership (10 credits)</td>
<td>Tel: 01204 903903 Email: <a href="mailto:enquiries@bolton.ac.uk">enquiries@bolton.ac.uk</a></td>
</tr>
</tbody>
</table>
| Liverpool John Moors                 | Certificate in Professional Development     | 16 weeks | 1. A 15 credit module on the principles of prescribing  
2. A 15 credit module on clinical pharmacology related to prescribing  
3. A 15 credit module practice of prescribing | Donal Deehan Tel: 0151 231 4307 Email: d.deehan@ljmu.ac.uk |
| Leeds                                | Non-medical prescribing                     |          | Prescribing policy, psychology, prescribing in public health | Tel: 0113 812 3113 Email: course-enquiries@leedsmet.ac.uk |

Table 8. Nurse prescribing courses
7.9. Other related courses in areas identified by specialist nurses

7.9.1. Immunology

<table>
<thead>
<tr>
<th>University</th>
<th>Course</th>
<th>Duration</th>
<th>Content</th>
<th>Credits</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Central Lancashire (Preston)</td>
<td>UniCert Advanced Practice in the care and management of individuals affected by HIV</td>
<td>Fourteen weeks (part-time)</td>
<td>Virology and impact on the immune system Aetiology of HIV infection including disease</td>
<td>Phone: 01772893814 Email: <a href="mailto:jwflannigan@uclan.ac.uk">jwflannigan@uclan.ac.uk</a> (Jason Flannigan – Course Leader)</td>
<td></td>
</tr>
<tr>
<td>Bolton</td>
<td>The biological basis of disease and therapeutics. Level 6</td>
<td>Part time, one semester</td>
<td>Disease development Interaction of drugs infection, immune response, the potential for autoimmune disease Malignancy and benign tissue growth</td>
<td>Phone: 01204903749 Email: <a href="mailto:j.e.howarth@bolton.ac.uk">j.e.howarth@bolton.ac.uk</a> (Jane Howarth)</td>
<td></td>
</tr>
<tr>
<td>Lancaster University</td>
<td>Immunology – Emerging Therapeutics – Level 7</td>
<td>One day a week for 5 weeks</td>
<td>Human immune system</td>
<td>Phone: 01524593318</td>
<td></td>
</tr>
</tbody>
</table>

Table 9. Immunology courses

7.9.2. Management

<table>
<thead>
<tr>
<th>University</th>
<th>Course</th>
<th>Duration</th>
<th>Fees</th>
<th>Content</th>
<th>Credit s</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manchester Met</td>
<td>CP3d Modular Route</td>
<td>Flexible, depends on the unit(s) studied</td>
<td>£150 per 10 credits £205 per 10 credits</td>
<td>Communicable disease control Contemporary issues in nursing Leadership and communication Management</td>
<td>Level 5, 6 or Masters</td>
<td>Phone: 01612476969 Email: courses.mmu.ac.uk Website: <a href="http://www.mmu.ac.uk/courses">www.mmu.ac.uk/courses</a></td>
</tr>
<tr>
<td>Leeds</td>
<td>Leadership in health and social care- Level 5</td>
<td>3 days</td>
<td>Free of charge for NHS employees</td>
<td>Managing and Leadership in Health and social care</td>
<td>15 credits</td>
<td>Dr Ian GS Holt (module manager) Phone: 01133431275 Email: <a href="mailto:i.holt@leeds.ac.uk">i.holt@leeds.ac.uk</a></td>
</tr>
</tbody>
</table>

Table 10. Management and leadership courses

7.9.3. Sexual Health
Sexual Health was an area of need expressed by nurses based at NMGH. The majority of courses shown in table 11 deliver in depth information around current recommendations, sexual health services, testing for sexual transmitted diseases and treatment. Which although useful, provide too much in depth information which in general goes beyond the role of a HCV specialist nurse. A short course focusing on purely the communication of sexual health information with the specific patient groups is advised. This could perhaps be incorporated within regular HCV updates and study days.

<table>
<thead>
<tr>
<th>University</th>
<th>Course</th>
<th>Duration</th>
<th>Fees</th>
<th>Content</th>
<th>Credits</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolton</td>
<td>Sexual Health Level 5 diploma</td>
<td>Part-time 12 weeks</td>
<td>effective communication with the service user and members of the multidisciplinary team health, safety. Effective management of the service user’s sexual health care within the multidisciplinary sexual health service. Utilising current sexual health strategies promotion and protection of the health and well-being of service users</td>
<td>20 credits</td>
<td>Phone: 01204903903 Email: <a href="mailto:enquiries@bolton.ac.uk">enquiries@bolton.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td>University of Central Lancashire (Preston)</td>
<td>Cert Asymptomatic Screening in sexually transmitted infections and HIV for contraceptive practitioners – Level 3</td>
<td>Part time over one semester</td>
<td>Venepuncture: theory and practice Epidemiology and pathological implications of STI’s and HIV Principles of asymptomatic STI and HIV screening in practice and subsequent client management Partner notification process Communication and engagement in sexual health practice Developing health education/promotion strategies Political, sociological, professional, legal and ethical issues within sexual health Sexual health service development: nurse led provision</td>
<td>20 credits</td>
<td>Phone: 01772893814 Email: <a href="mailto:jwflannigan@uclan.ac.uk">jwflannigan@uclan.ac.uk</a> (Jason Flannigan – Course Leader)</td>
<td></td>
</tr>
<tr>
<td>University of Central Lancashire (Preston)</td>
<td>Cert Management of individuals affected by sexually transmitted infections- Level 3 and 4</td>
<td>A max. of six theory days delivered over a fourteen week semester onsite and online</td>
<td>Epidemiology of sexually transmitted infections History taking Assessment, diagnosis, treatment and management of sexually transmitted infections Dermatology in sexual health Identification of the special needs of different client groups and working with</td>
<td>20 credits</td>
<td>Phone: 01772893814 Email: <a href="mailto:jwflannigan@uclan.ac.uk">jwflannigan@uclan.ac.uk</a> (Jason Flannigan – Course Leader)</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Details</td>
<td>Credits</td>
<td>Contact</td>
<td></td>
<td></td>
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<tr>
<td>--------</td>
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<td>---------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Liverpool</strong></td>
<td>Advancing skills in contraception and reproductive sexual healthcare for nurses and midwives - Level 2 and 3</td>
<td>15 weeks part time</td>
<td>30 credits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phone: 01512318148 Email: <a href="mailto:s.martinl@ljmu.ac.uk">s.martinl@ljmu.ac.uk</a> (Susan Martin – Programme Leader)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Edge Hill</strong></td>
<td>Promoting Sexual Health - Level 6</td>
<td>Free of charge</td>
<td>15 credits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Phone: 0161 237 2416</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
methods and impact of contracting a sexually transmitted infection including psychosocial issues issues specific to gender and human life-cycle
Promotion of positive sexual health within vulnerable groups
Health promotion strategies, including screening
Service development
Seminar presentation

Table 11. Sexual Health Courses

7.9.4. Nutrition
Although an element of knowledge around nutrition would be beneficial for nurses in providing advice and care to patients with HCV it is felt that the level of knowledge in a full BSc course is not necessary. The recommendation would be to complete a short session with a nutritionalist, who can provide tailored advice to nurses treating HCV, including educational documentation.

7.10. National Training Providers
Professor Graham Foster was asked about the training provided for specialist nurses and consultants at Barts and the London NHS Trust. The trust don’t have a formal training programme but instead treatment units hold weekly antiviral MDT meetings with nurses and consultant colleagues, ‘allowing everyone to learn from real life patients, which is always the best approach’.

<table>
<thead>
<tr>
<th>Name</th>
<th>Region</th>
<th>Cost</th>
<th>Accredited</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainliners; Level 2 Hepatitis C Training Peer educator training Introduction to Hepatitis C Hepatitis C Awareness Level 1 Hepatitis C Training Peer Outreach</td>
<td>England- some are in London only across UK 1 day training courses Each Scheduled once a year in London Also provides tailored training courses around blood borne viruses</td>
<td>£100-200</td>
<td></td>
<td>Specific HCV training</td>
</tr>
<tr>
<td>HIT</td>
<td>England-Liverpool and London Numerous training courses for drug based workers 1 day training</td>
<td>£140-250</td>
<td>DANOS</td>
<td>Covered in safer injecting practice.</td>
</tr>
<tr>
<td>Tepee Training Ltd</td>
<td>England/Wales ‘in house’ Custom designed training in substance misuse</td>
<td>Variable</td>
<td>DANOS</td>
<td>blood borne viruses</td>
</tr>
<tr>
<td>C-level</td>
<td>Scotland-Glasgow</td>
<td>£50</td>
<td></td>
<td>Specific HCV</td>
</tr>
</tbody>
</table>
### Table 12. National training providers

<table>
<thead>
<tr>
<th>STRADA</th>
<th>Scotland – University of Glasgow</th>
<th>£120/module</th>
<th>As part of a BBV Course.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Supplies</td>
<td>England – Various 1 or 2 day courses Birmingham, Glasgow, London A range of 7 courses</td>
<td>£100-200</td>
<td>Harm reduction</td>
</tr>
<tr>
<td>National Nurse training in Viral Hepatitis</td>
<td>Organised by Schering Plough Location variable Details of future conferences can be found at <a href="http://www.healthcare-events.co.uk">www.healthcare-events.co.uk</a></td>
<td>Free</td>
<td>RCN accredited</td>
</tr>
</tbody>
</table>

#### 7.11. International Providers

There are a plethora of international courses for all levels of training and education around HCV with the majority been from the USA. To assess each of these is beyond the scope of this study but a few examples are listed below:

  New York City of Health and mental Hygiene

- [http://www.healthyarkansas.com/services/C_Training/edu/default.htm](http://www.healthyarkansas.com/services/C_Training/edu/default.htm)
  Primary care physicians, nurses, infectious disease specialists, public health professionals. Health care professionals

  Nurse education in USA

  The Hep C University, Hep C University is an educational website designed for providers seeking to learn the latest information on the treatment of hepatitis C. Using this site, treatment providers receive expert mentoring through the innovative HCV This website includes a Fellows Programs.

#### 8. Gaps in training available

There are courses available in the local region to cover the major training needs identified. However, the financial cost and the requirement in terms of nurse time fail to make attending all these courses a viable option.
Where possible it would be advisable for nurses to attend other services to gain experience in working with and witnessing work with other treatment groups, and learning through example when it comes to HCV treatment.

Although there are courses available which do cover HCV such as the UCLAN course, these courses do no specifically focus on HCV. A lack of HCV treatment, training advice has been expressed by the nurses interviewed. The online Masterclass sponsored by the drug companies provides more specific advice, however this cannot compensate for hands on teaching. The development of a competency document which could introduce the combination of distance learning courses, working alongside structured visits to other treatment sites and services, with support from colleagues could provide a more realistic option.

9. Development of future courses

The development of a locally lead post registration nursing course specifically around hepatitis C treatment is an idea which could be explored more thoroughly. The Head of Manchester School of Nursing, and the Adult Nursing Directorate Manager at Salford School of Nursing were contacted to gain information regarding the possible length of a post registration nursing course on hepatitis C treatment and the number of places which could potentially be offered. In response to the length of a proposed training programme both responded that the length of any course would be heavily dependent on content of the course and that the intake for such a course would be ‘variable’, Salford School of nursing stated that for them they would require a minimum intake of 15 students.

Discussions with the Hepatitis C Specialist Nurse based at MRI revealed that a need for a post-registration nursing course in gastroenterology has been recognised. This is an area currently being considered for development at Manchester School of Nursing. We have met with the Lecturer currently looking into the development of this course to discuss whether a course in hepatitis C treatment could be established to run alongside.

10. Recommendations for Training

10.1. Recommendations for Training for all New Specialist Nurses HCV

Training needs to be made available that will develop the following essential skills and knowledge base for HCV specialist Nurses. The course need ideally to be situated in
Greater Manchester, have close links to each treatment centre and be taught by experts in each area (ideally including local practitioners). The course needs to be updated regularly to take into account the rapid changes that are occurring in this field. Ideally the course should contain be locally relevant with regards to referral/care pathways. The course would ideally be delivered face-to-face as a preferred method although some aspects could perhaps be taught using a blended learning/online approach. It is envisaged that the course would run over a number a months (6-9) allowing staff to integrate the training into their work schedule during their introductory period for 1-2 days a week. The course needs to be at a level 3 degree level as a minimum. Alongside the course new specialist nurses would also be expected to undertake work based training in order to complete a competency checklist, undertake a series of visits/day/work placements and register/join local appropriate clinical networks or forums. The course needs to be validated, evaluated and accredited. Suitable assignments for assessment would depend on each topic theme but ideally would include Observed Structured Clinical Examination (OSCE) when appropriate.

10.2. Curriculum for New HCV Specialist Nurses

- Liver: Basic liver anatomy and physiology and pathology- consequences for health and related conditions
- HCV: Epidemiology, natural history, co-infection, host factors, prevention, harm reduction, genotype, virology, HCV management
- Treatment options: current treatment, dosing, side effects and outcomes. Individualised treatment, viral load relevance of week 4 and week 12. New treatments on the horizon
- Venepuncture: (ideally including neck bloods)
- Diagnostics: practicalities and physical examination including who to test and which blood tests to request, signs and symptoms of disease progression
- Interpretation of clinical blood test results regarding liver function, HCV and other BBVs
- Counselling skills; development of skills (including pre and post HCV test counselling, sexual health, dealing with sensitive personal issues, cognitive behaviour)
- Case studies in practice
- Understanding the client group
- Drug Users; managing drug users, substance misuse behaviour, what is injected and how, management of substance misuse, treatment within this group
- Dual diagnosis; mental health issues/substance misuse, assessment and intervention skills
- Ethnic Groups; ethnic and cultural awareness. Specific risk practices

- Harm Reduction: effective communication of sexual health related advice to patients, including coordinated work with drug and alcohol services and health promotion advice around diet and nutrition to reduce the impact on the progression of liver disease.
- Care Pathway: Nurses to gain an understanding of the patient pathway. Local referral pathways
- Management: setting up and the running of a nurse led clinic, commissioning process- outreach clinics and treatment in the community, reducing DNAs -practical solutions, clinical networks
- Risk management, legal issues and ethics
- Staff management
- Presentation skills: educational role within referral pathways

10.3. Competency document
A major development in creating more structured training for specialist nurses will be the development of a competency document which will outline the skills and knowledge framework required. This should include recommended resources (websites, journals) and visits within other related services, designated period of observation, assessments that are required and the level of competence required prior to the treatment of patients /running of clinic unsupervised. There is currently a locally developed competency document which may be suitable for this purpose.

Competency assessment in the workplace should be by accredited trainers through a variety of methods including:

- multiple source feedback,
- work based discussion,
- direct observation of practice
- structured assessment of components of daily public health practice.
Assessment may take place in a real life situation or in a simulated environment. As training progresses nurses will be expected to demonstrate the maintenance of performance in increasingly varied, challenging situations. Therefore learning outcomes will need to be demonstrated and assessed more than once to confirm progression. At the end of training period, knowledge, understanding, skills and competences need to be integrated and the new specialist nurse needs to show that they can function in clinical situations. This performance should be robust under pressure, and be able to withstand the demands of increasing responsibility of the post.

The course and competency document need to be accredited by the Nursing and Midwifery Council (www.nmc-uk.org)

10.4. Recommended Visits/Work placements
Ideally new nurses would benefit from spending time gaining experiences in other related services to enhance understanding of the patient population and care pathway. This would take the form of structured visits or work placements with:

- Drug Services
- Needle exchange
- Prisons
- Alcohol service
- Liver transplant ward
- Voluntary services
- Peer support group
- Substance Misuse Midwife
- Other treatment services apart from their primary base (different local treatment centres have differing client groups)

10.5. Recommendations for Training for Specialist Nurses HCV
The continued professional development of established specialist nurses in the field of HCV is also of importance and little training is available for this option. Due to the nature of HCV specialist nurses (nurses may reside in an Infectious disease or Gastroenterology /Hepatology department) more in depth options will be required to give the HCV specialist nurse the level of knowledge required within their situation/role. From the scoping of requirements the following recommendations are suggested

- attend regular attendance at study days/conferences to update knowledge
• develop higher skills in nurse prescribing (accredited course)
• clinical diagnostics (medical examination skills)
• building on the skills advanced courses in blood letting and blood results.
• Gastroenterology based nurses—require a more in depth study of the liver.
• ID based nurses—require a more in depth understanding of the implications of HIV co-infection.
• Management skills
• Clinical Teaching skills
• Research skills/understanding literature/evidence base
• Effective commissioning

It is also envisaged that current HCV specialist nurses may wish to attend certain aspects of any HCV specialist nurse course that is commissioned and ideally be provided with more in depth options (higher level) of certain aspects.

10.6. Network/Forum membership
Greater Manchester has a formal network for specialist nurses (newly formed 2009). It is also envisaged that a clinical forum/network will also be developed for nurses and consultants which will meet twice a year. Nurses should ideally join with the British Liver trust (nurse group).

10.7. Protected training time/resources for all HCV nurses
Ideally protected time for training should be incorporated into contracts or all nurses to ensure that they have the opportunity to progress in their chosen specialist field. Details of required training/competency and work based visits/placements should also be incorporated into future service level agreements. This should also detail required elements for further and advanced training to ensure that fully trained practitioners have clearly defined professional development plans and opportunities. (Nursing and Midwifery Council (NMC) notification of practice form nurses must tick a box that states: I have completed 35 hours of learning activity relevant to my practice in the last three years.)

11. References


National Institute of Health Consensus Development Programme (NIHCDP), 1997
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