Health Service in England & Devolved Administrations.
England & Devolved Administrations: Shared Activities.

All receive advice from:

- Advisory group on Hepatitis;
- Joint Committee on Vaccination & Immunisation;
- Expert Advisory Group on AIDS;
- Advisory Committee on Dangerous Pathogens.
England & Devolved Administrations: Shared Activities.

**AGH, JCVI, EAGA, ACDP** provide advice to Ministers of Health through the Chief Medical Officers of England, Scotland, Wales and Northern Ireland.

Executives decide whether or not to act on this advice against the background of other health and national priorities.
Health Protection Agency (England) and Health Protection Scotland.

- Coordinate collection of epidemiological data on control of:
  - infectious diseases;
  - chemical hazards;
  - radiation hazards.
Decision Making Process on Hepatitis Prevention.

- Health Protection Agency provide data on changing incidence of HAV, HBV, and HCV in UK;
- Advisory Group on Hepatitis receive this data and provide advice on control of these infections to Chief Medical Officer who advises ministers on actions required.
- Joint Committee on Vaccination and Immunisation deliver advice on national vaccination programs.
Provision of Health Care for CHB & CHC patients.

- NICE recommend cost effective therapies which must be made available within 3 months of recommendation;
- Primary Care Trusts must commission care for their patients from GPs or hospitals at standard tariff;
- Care is delivered by managed clinical networks in hepatology;
- Strategic Health Authority and Health Care Commission audit results and volume of care.
Factors Influencing Decisions.

- Severity of infection under consideration
- Health economics (cost effectiveness)
  - cost per life saved;
  - cost per QALY gained;
- Effect on effectiveness of other vaccination programs (perceived and actual side effects of new vaccine to be added to vaccination program).
- Implications for society outside health issues.
Can the UK Control Viral Hepatitis?

- **Hepatitis A**: public health issues and use of effective vaccine in high risk groups.
- Hepatitis B
- Hepatitis C
- Hepatitis E
Can the UK Control Viral Hepatitis?

- **Hepatitis A**
- **Hepatitis B**
- **Hepatitis C**
- Hepatitis E

Chronic liver disease:
- prevention measures;
- vaccines;
- effective treatment.
Deaths from chronic liver disease are increasing in UK!

- CLD is 5th most important cause of death in UK;
- MR from first 4 (IHD; cancer; CVA; Chronic lung disease) are falling
- BUT MR from liver disease is still increasing!
Main causes of chronic liver disease in UK.

• 4% of UK population have abnormal LFTs:
  - Alcohol related steato-hepatitis;
  - Obesity related steato-hepatitis;
  - Chronic hepatitis C;
  - Chronic hepatitis B
Why is MR from CLD increasing? Can we modify the natural history of the infection?
Alcohol Consumption is increasing.

- Males: 20% increase in units per week over last 10 years;
- Females: 50% increase in units per week over last 10 years.
Obesity is increasing.

- 15-20% of population are overweight or obese and this increasing;
- Obesity is associated with metabolic syndrome and steato-hepatitis which can progress to cirrhosis.
Why is MR from CLD increasing: contribution of CHB.

- Prevalence of hepatitis B is *probably* increasing:
  - 250 cases of CHB established as a result of infection acquired in the UK;
  - 7000 cases imported as established CHB as a result of immigration from high prevalence areas of the world;
  - 30% of patients with CHB will die of cirrhosis or HCC.
Why is MR from CLD increasing: contribution of CHC.

- Prevalence of hepatitis C in UK is *probably* increasing:
  - prevalence in IV drug users is high and increasing;
  - high prevalence in immigrant groups from countries with poor health care (Eastern Europe).
Factors are interactive in producing CLD.

• Hepatitis C is more rapidly progressive with:
  - alcohol;
  - steato-hepatitis (obesity).
Can we control MR from CHB?

- Prevalence of hepatitis B is *probably* increasing:
  - 250 cases of CHB established as a result of infection acquired in the UK (*preventable by UK vaccination*);
  - 7000 cases imported as established CHB as a result of immigration from high prevalence areas of the world (*not preventable by UK vaccination*);
Can the UK Control Viral Hepatitis?

- Hepatitis A
- Hepatitis B
- **Hepatitis C**: no vaccine therefore we rely on prevention (needle exchange schemes) and identification and treatment of existing cases.
- Hepatitis E
Death from liver disease can be reduced by treatment of primary cause!

- **Hepatitis B**: MR halved by long term suppressive anti-viral therapy (costs around £6k per yr);
- **Hepatitis C**: is cured in 55% of those treated (costs around £12k per course);
- **NASH and ASH**: treatable by life-style changes;
- **HCC**: local ablation gives 50% 5 year survival (untreated dead in 6 mths).
How can we deliver these interventions?

Need Action Plans for:

- CHB
- CHC
National Strategy for Hepatitis C

• Increase public awareness of hepatitis C;
• Increase professional awareness;
• Strengthen the services for prevention (including needle exchange);
• Strengthen services for diagnosis and treatment.
Improving Services for People with Hepatitis C

• Increased testing for hepatitis C (target);
• Establish managed clinical networks for those positive for anti-HCV to deliver co-ordinated pathways of care;
Managed Clinical Networks in Hepatology (Service Specification by BASL).

The Network will need:

- **Expert clinicians** who are experienced in the diagnosis (including liver biopsy) and management of viral hepatitis and complications;
- **Hepatitis nurses** able to deliver anti-viral therapy;
- **Access to accredited virology laboratory** for confirmatory anti-HCV, qualitative and quantitative HCV-RNA and HCV genotyping (basis for determining duration of therapy);
- **Access to liver pathology** for grading and staging (basis for NICE Recommended therapy);
- **Access to radiology** for diagnosis and monitoring of cirrhotic patients for liver cancer.
Managed Clinical Networks:

Service might cover population of approximately 1-2 million (equivalent to average Strategic Health Authority)
Managed Clinical Networks: Hepatology Based (1).

Delivery of hepatitis C services as part of an integrated Hepatology Service (see www.doh.gov.uk/specialist service definitions/index.htm for Definition of Hepatology Service)
Managed Clinical Networks: Hepatology Based (2).

Definition of Hepatology Service:
• Anti-viral services for hepatitis B and C;
• Liver cancer services;
• Complications of liver disease
• Liver surgery.

NB All of these are necessary for management of spectrum of hepatitis C cases.
Managed Clinical Networks: Service Finance, Developments and Quality Control.

- Formal links with strategic commissioning;
- Formal links with health improvement program;
- Evidence based development program (NICE update on therapy eg Pegylated interferon);
- Audit of results and volume of service
Managed Clinical Networks are essential for audit and research.

Managed clinical Networks should be linked nationwide for:

- further clinical trials within CRC (British Liver Disease Research Network).
Current Centres (1)

- Q01 Norfolk, Suffolk, Cambridge: Alexander (H)
- Q02 Bedfordshire and Herts: Jain (GI)
- Q03 Essex: ???
- Q04 London NW: Thomas (H) & Main (ID)
- Q05 London Central: Dusheiko (H), Naoumov (H)
- Q06 London NE: Alsted (GI); new hepatologist;
- Q07 London SE: Norris (H), Burt (GI)
- Q08 London SW: Forton (H), ..........
- Q09 Northumberland: Bassendine (H); C Day (H)
- Q10 Durham and Tees Valley: (ID)

(Identified in Soton/ Basl survey)
Current Centres (2).

• Q11 NE Yorks and Lincoln: Smithson (H), Moss (ID)
• Q12 W Yorks: Davies (H), Milborn (H)
• Q13 Cumbria and Lancs:
• Q14 Manchester: ? (H)
• Q15 Cheshire and Mersey: Lombard (H), Gilmore (H), Beeching (ID).
• Q16 Thames Valley: Collier (H), Chapman (H)
• Q17 Hampshire & IoW: Rosenberg (H)
• Q18 Kent & Medway:
• Q19 Surrey & Sussex: Carno (H), Ireland (GI)
• Q20 Avon, Glos, Wilt: Barry (H), Brown (H),
Current Centres (3).

- Q21 SW Peninsula: Cramp (H)
- Q22 Somerset & Dorset: Winwood (H)
- Q23 S Yorks: McKendrick (ID); Gleeson (H),
- Q24 Trent: Ryder (H), Finch (ID)
- Q25 Leicestershire: Wiselka (ID)
- Q26 Shrop & Staff: new hepatologist
- Q27 Birmingham: Mutimer (H); new hepatologist
- Q28 Coventry, Warwick
Provision of Health Care for CHB & CHC patients.

- NICE recommend cost effective therapies which must be made available within 3 months of recommendation;
- Primary Care Trusts must commission care for their patients from GPs or hospitals at standard tariff;
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What Do We Need!

• **Scoping study** of above centres to determine adequacy of resources and service provision;

• **Identification of Lead Commissioner for Hepatology Networks** within each Sector or Strategic Health Authority to advise PCTs

• **Allocation of ring fenced funds for hepatology**

• **Review the effects of the National Strategy for Hepatitis C in 5 years time**.
Why hepatology networks?

Current problems:

• **Hepatitis B**: (200,000 cases increasing by 7000 per year through immigration; number identified and treated unknown); NICE Rx Q4 2005;

• **Hepatitis C**: (200,000 cases and only 20% diagnosed and 1-2% treated);

• **Alcohol induced liver disease**: (CMO report – MR increasing in young people);

• **NASH & NAFLD**: obesity related liver disease increasing.

• **Primary liver cancer**: HCC and CC both increasing.

Note: Alcohol, obesity and hepatitis interact adversely
Age Standardised MR from CLD in Different Countries.

Age Standardised Mortality from Chronic Liver Disease. Selected countries. Latest available year

Rate per 100,000 population

Source: WHO, EuroStat
Figures standardised to European Standard Population

New Zealand, Norway, Australia, Netherlands, Sweden, Canada, Japan, Switzerland, UK, E&W, USA, Spain, France, Italy, Greece, Portugal, Latvia, Denmark, Poland, Finland, France, Czech Republic, Germany, Austria, Lithuania, Croatia, Greece, Hungary, Austria, Georgia, Estonia, Romania, Hungary, Kyrgyzstan.
Can the UK control Hepatitis?

- Universal vaccination against hepatitis A and B is not cost effective at current pricing!
- Importation of chronic hepatitis B will be solved when the world wide neonatal vaccination programs are fully effective;
- Hepatitis C is increasingly the result of IV drug use and this is the challenge for WHO and the UK.