

## Hepatitis C adult services commissioning toolkit

# Abbreviations and acronyms

<b>DAAT</b>	Drug and Alcohol Action Team
<b>DH</b>	Department of Health
<b>DNA</b>	Did not attend
<b>HCV</b>	Hepatitis C virus
<b>HCV RNA</b>	Hepatitis C virus ribonucleic acid (indicates active infection with hepatitis C)
<b>HPA</b>	Health Protection Agency
<b>ID</b>	Infectious diseases
<b>IVDU</b>	Intravenous drug user
<b>JSNA</b>	Joint Strategic Needs Assessment
<b>MDT</b>	Multi-disciplinary team
<b>NDTMS</b>	National Drug Treatment Monitoring System
<b>NICE</b>	National Institute for Health and Clinical Excellence
<b>OST</b>	Opioid substitution therapy
<b>PC</b>	Primary Care
<b>SVR</b>	Sustained virological response

## Acknowledgements

HCV Action group is the voice of the hepatitis C professional community bringing together hepatitis C specialists from across the patient pathway with the pharmaceutical industry and patient representatives. We are committed to ensuring that hepatitis C is effectively addressed through prevention, early diagnosis, successful treatment and care by sharing information, raising awareness, training and campaigning.

The development of this document would not have been possible without the expertise of Dr Kenneth Armstrong, Emma Bishton, Jackie Bisley, Lynda Carey, Simon Eayrs, Siobhan Fahey, Dr Daniel Forton, Professor Graham Foster, Joanne Groark, Kate Jack, Dr Euan Lawson, Cathie Railton, Michelle Reilley, Dr Stephen Ryder, Linda Somerville, Hannah Williams and Dr Stephen Willott.

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# Why effective commissioning for hepatitis C is essential

## To reduce under-75 mortality from liver disease

The number of people who die from liver disease in England has risen by 25% in the last decade<sup>1</sup>. This is in contrast to the other major causes of death in this country, which affect fewer people at a later age than ever before, while liver disease affects growing numbers of increasingly younger people<sup>2</sup>.

- ▶ Liver disease causes approximately 2% of all deaths<sup>3</sup>
- ▶ 90% of people who die from liver disease are under 70 years old<sup>4</sup>
- ▶ More than 1-in-10 deaths of people in their 40s are from liver disease<sup>5</sup>
- ▶ People dying from liver disease often have complex end of life care needs and over 70% die in hospital<sup>6</sup>

The NHS and Public Health Outcomes Frameworks both set an ambition for reduction of mortality in people under 75 years from liver disease. The main causes of liver disease are alcohol abuse, obesity and viral hepatitis B and C.

The Office of National Statistics has listed hepatitis C as the only liver disease which is 'amenable', meaning death from hepatitis C can be avoided through good quality healthcare. It also lists hepatitis C and other liver diseases are 'preventable', meaning death can be avoided by public health interventions in the broadest sense<sup>10</sup>. As hepatitis C is curable and as such the only liver disease deemed amenable to intervention, addressing hepatitis C will be crucial in efforts to achieve a reduction in mortality from liver disease.

The inclusion of under-75 mortality rate from liver disease within the Commissioning Outcomes Framework means commissioners at clinical commissioning group level will have a major role to play in ensuring that services are commissioned that focus on the identification of people with, and those at risk of contracting, hepatitis C. Hepatitis C is included within four of the five domains in the NHS Outcomes Framework 2012/13 Technical Appendix<sup>11</sup>.

The Public Health Outcomes Framework shares this outcome on reducing the under-75 mortality rate from liver disease. The working draft of the Guidance to Support the Provision of Healthcare Public Health Advice to Clinical Commissioning Groups for Directors of Public Health highlights in its appendix the importance of protection functions including blood borne virus prevention and case identification for hepatitis C and other blood borne viruses. To reduce the transmission of hepatitis C it is crucial that Directors of Public Health are aware of the importance of screening programmes and education.

Hepatitis C is a blood-borne virus that can lead to cirrhosis, liver cancer and death. The Health Protection Agency estimate that there are around 216,000 hepatitis C positive people in the UK<sup>7</sup>. However, only 85,000 people in England have been ever been diagnosed<sup>8</sup>. Around 27,500 patients in England have received NICE recommended hepatitis C treatment which can cure the virus in about 72% of patients<sup>9</sup>.

## To reduce costs to the NHS

The Health Protection Agency (HPA) predict that in 2020, in England alone, 15,840 individuals will be living with hepatitis C-related cirrhosis or HCC<sup>14</sup> and 4,200 people England would need a liver transplant as a result of hepatitis C by 2020 if action is not taken<sup>15</sup>.

Patients who are treated and cured of the hepatitis C virus are more than four times less likely to be hospitalised, or die for a liver-related reason, than those patients who are not cured<sup>16</sup>.

- ▶ Successful treatment cures patients of hepatitis C
- ▶ Provided patients are cured before cirrhosis, they have a similar life expectancy to the general population<sup>21</sup>
- ▶ Untreated hepatitis C can lead to cirrhosis and liver cancer
- ▶ The cost of a basic antibody dried blood spot hepatitis C test is £15
- ▶ Around 45% of people with hepatitis C have genotypes 2 or 3 and treatment is successful (i.e. the patient is completely cured) in up to 95% of cases. This treatment costs £6,246 according to list prices, but in reality the price is likely to be significantly lower
- ▶ Around 45% of hepatitis C patients have genotype 1. NICE recommends therapies costing £34,890 (by list price) as cost effective. These are likely to be centrally commissioned (this is the current recommendation by the NHS Specialised Commissioning Hepatobiliary Clinical Reference Group)
- ▶ The **annual** cost of care for a person with decompensated cirrhosis is £12,432 and of someone with hepatocellular carcinoma (HCC) is £11,078<sup>4</sup>
- ▶ The HPA estimate that 4,200 liver transplants will be needed for hepatitis C by 2020 if treatment rates do not increase. Every liver transplant costs in excess of £50,000

Only about 3% of people with hepatitis C receive treatment each year<sup>12</sup>. This represents a major health inequality and also a false economy in terms of NHS resources.

## To reduce health inequalities

Reducing health inequalities is an important improvement area for Public Health England. Hepatitis C disproportionately affects disadvantaged, vulnerable and socially excluded people, particularly homeless people, prisoners and injecting drug users. The incidence of liver cancer is highest in the most deprived population in England<sup>17</sup>. Research in Scotland has found that over 50% of people with hepatitis C are from the lowest socioeconomic quintile and 75% are from the lowest two quintiles<sup>18</sup>. Diagnosing and treating people with hepatitis C will help commissioners in public health and the NHS to deliver their high level outcome to reduce health inequalities.

## To prevent further infections

Prevention is a vital component of an integrated hepatitis C policy. A growing body of evidence suggests that the combination of effective substance-use treatments, support for safe injecting and treatment of hepatitis C in injecting drug users can lower the incidence and prevalence of hepatitis C infection<sup>19,20</sup>.

# How the Toolkit works

## Commissioning for the new Outcomes Frameworks

The aim of the hepatitis C commissioning toolkit is to support commissioners of hepatitis C services to commission for the high level outcomes set out in the new NHS<sup>23</sup> and Public Health Outcomes Frameworks<sup>25</sup>:

### NHS Outcomes Framework

- 1a. Potential years of life lost (PYLL) rate from causes considered amenable to health care
- 1bi and 1bii. Increased life expectancy at age 75, for males and females separately
- 1.3 Mortality rate from liver disease, ages under 75, per 100,000 population

### Public Health Outcomes Framework

- 4.6 Mortality from liver disease
- 4.6i. Age-standardised mortality rate from liver disease for persons aged under 75 per 100,000 population

The toolkit provides commissioners with a strategic overview of the services required to make a difference to hepatitis C patients. It can be used by commissioners working in public health or NHS commissioning and the method can be applied to commissioning specific services or to develop a whole pathway. All examples are exactly that, examples to give an idea of how the tools can be used.

In addition, the toolkit will help to generate the detail required for service specifications and provides important links to areas such as service redesign, care pathways, quality standards, outcome frameworks and performance management.

## Commissioning for hepatitis C in the new system

As hepatitis C will be commissioned across the pathway, it will be essential to engage with colleagues commissioning different parts of the pathway to ensure the integrated commissioning of hepatitis C services. The table opposite (page 5) sets out the expected commissioning structure for hepatitis C and related services.

## The ABC Model

The ABC Commissioning for Outcomes model<sup>22</sup> (figure 1) focuses on developing outcomes that are based on need, evidence, quality and knowledge. It reflects the commissioning cycle (figure 2) and provides the commissioner with a foundation to develop outcomes within a competency framework.

Sections A, B and C focus on deciding on the high-level outcomes for a particular area through assessing need, identifying best practice and relevant evidence and reviewing current practice to identify gaps.

Section D helps the commissioner to develop high level outcomes to act as a driver to improve health. The Outcomes Strategic map gives an overview of the services involved in achieving these desired high-level outcomes.

The Logic Models enable the commissioner to define the type of patients/clients a service will care for (the inputs), what the service will do (the intervention) and what the predicted outputs will be.

	Public Health	NHS	National Commissioning Board	Social Care
Prevention and early diagnosis	<ul style="list-style-type: none"> <li>Alcohol harm reduction</li> <li>Drug harm reduction including OST and needle exchange</li> <li>Viral hepatitis awareness programmes</li> <li>Outreach hepatitis C testing</li> </ul>	<ul style="list-style-type: none"> <li>Hepatitis C testing</li> <li>Hepatitis C treatment (which reduces the prevalent pool; and therefore minimises the risk of onward infection)</li> </ul>	<ul style="list-style-type: none"> <li>Hepatitis C testing in prisons</li> </ul>	<ul style="list-style-type: none"> <li>Drug harm reduction</li> </ul>
Diagnosis and Referral		<ul style="list-style-type: none"> <li>Referral to a specialist</li> <li>Assessments of viral progression where there is a decision not to treat or treatment failed</li> </ul>	<ul style="list-style-type: none"> <li>Diagnosis and referral in prison health services</li> </ul>	
Treatment		<ul style="list-style-type: none"> <li>Viral hepatitis treatment (drugs)</li> <li>Non-routine treatment</li> <li>Alcohol dependency treatment</li> <li>Alcohol interventions</li> <li>Treatment for pre-transplant</li> <li>Cirrhosis</li> <li>Supportive care in the community</li> <li>Access to clinical trials</li> </ul>	<ul style="list-style-type: none"> <li>Treatment of prisoners with hepatitis C</li> <li>Treatment of genotype 1 patients (current recommendation of DH advisory group)</li> <li>Liver transplant</li> </ul>	<ul style="list-style-type: none"> <li>Supportive care during treatment (enabling)</li> </ul>
After care		<ul style="list-style-type: none"> <li>Follow-up treatment</li> <li>Supportive care</li> <li>Back to work services (GP referral)</li> <li>Palliation</li> <li>Long term condition management</li> <li>Advice on self-management</li> <li>Transplant maintenance</li> </ul>		<ul style="list-style-type: none"> <li>Back-to-work services</li> </ul>
End-of-life care		<ul style="list-style-type: none"> <li>Palliation</li> <li>Place of death</li> </ul>		<ul style="list-style-type: none"> <li>End-of-life care</li> </ul>

The Outcomes Filter can be used to identify the numbers of individuals needed at each stage of a pathway or service in order to achieve the desired outcome, or it can be used to identify any issues or problems in a process or patient journey. Where there is significant drop off between stages, it is a helpful way of identifying roadblocks in a particular process. Furthermore, it supports the commissioner to know when and where to intervene in order to improve the process to ensure the desired outcome is met within the agreed timeline.

Section E asks commissioners to think about evaluation of the quality, efficiency and effectiveness of the services commissioned *before* they are commissioned rather than after in order to identify the right information that will be needed in a formal evaluation.

Section F asks for an appropriate dataset to be formulated in order to collect the right information on both patients and services.

**Figure 1. The ABC Commissioning for Outcomes Model**

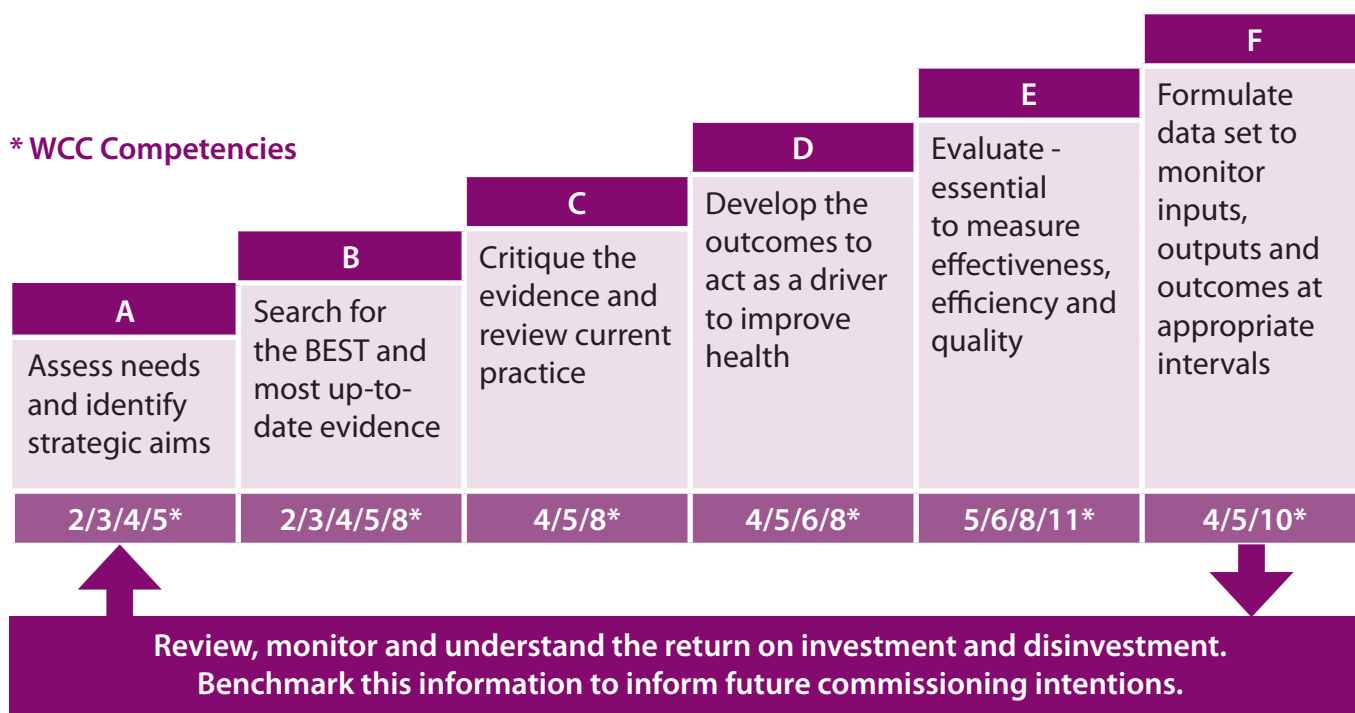
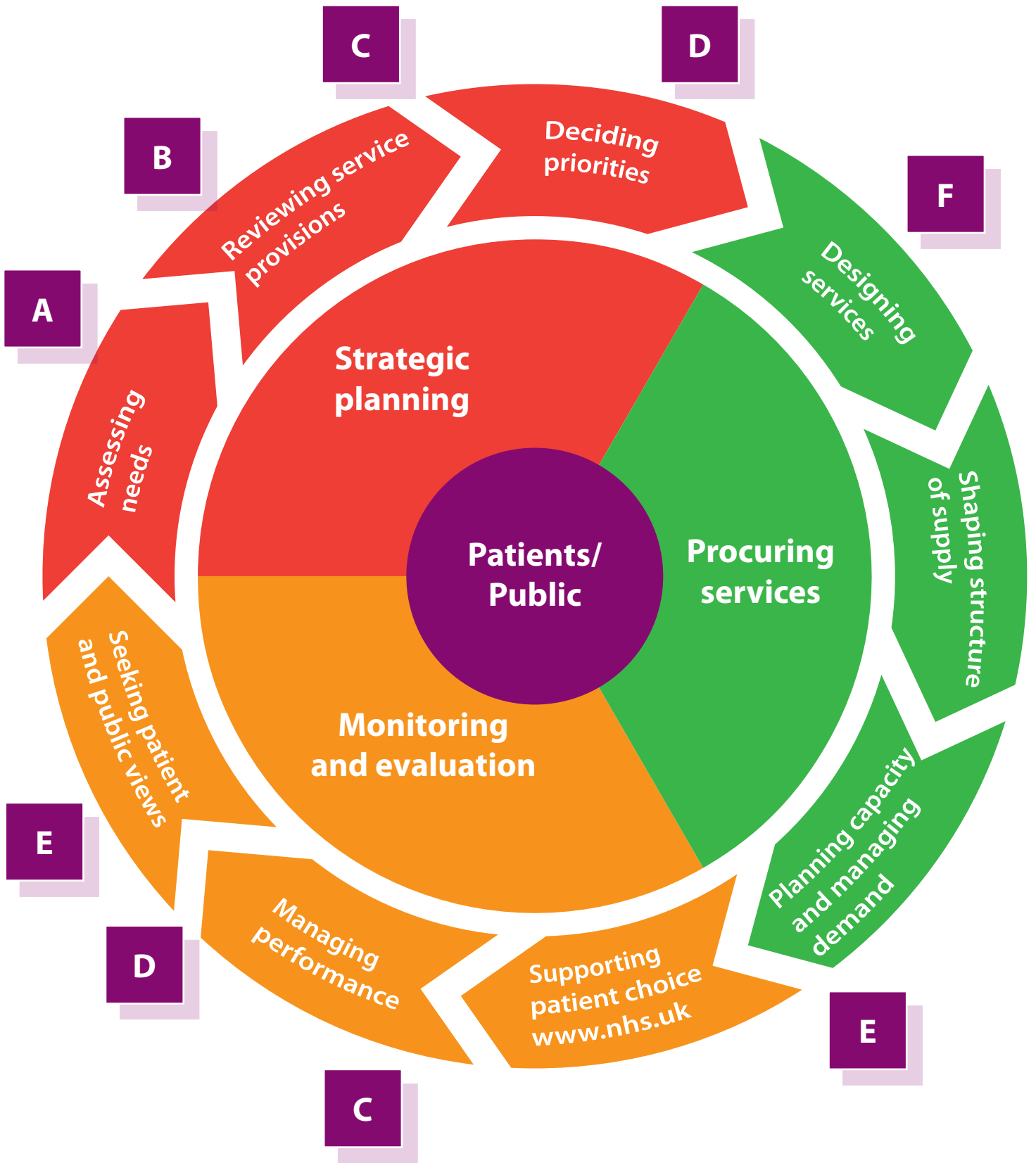




Figure 2. The Commissioning Cycle



# A

**Assess the need required to support people with hepatitis C and for the development of hepatitis C services in your area.**

## Questions to consider:

- ▶ Has the 'need' been clearly identified?  
Has hepatitis C been included or addressed through the JSNA process and do you understand the needs of your population who are infected and affected by hepatitis C?
- ▶ Do you understand the geographical patterns of hepatitis C or the needs of certain groups or communities with hepatitis C e.g. South Asian community or current and former drug users?
- ▶ Do you have data on the prevalence and incidence of the disease, the numbers of people with a positive test for hepatitis C against the numbers treated? Refer to the Health Protection Agency modelling tool: <http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HepatitisC/EpidemiologicalData/> and also to data from your local drug treatment centre.
- ▶ Has there been any disease burden modelling done in your area (e.g. an understanding of local figures for consultations, planned and un-planned admissions, cost of care and cost of treatment etc.)? Also is there an understanding of the implications of not treating people?
- ▶ Have the 'costs of care' been estimated for individuals embarking on and receiving the full cost of treatment based on NICE recommended therapy and NICE price estimates?
- ▶ What will make the biggest contribution to achieving the strategic aims of your organisation in treating and managing hepatitis C (e.g. reducing potential life years lost)?
- ▶ What impact will developing hepatitis C services have on reducing health inequalities?
- ▶ How does the development of hepatitis C services contribute to the achievement of targets of agreed importance (i.e. reduction in mortality rate in under 75 years of age for people with liver disease)?

## Notes



# B

## Best evidence for the prevention, testing, treatment and management of people with hepatitis C

Consider best evidence, for example, NICE guidance:

- ▶ NICE public health guidance 18. Needle and syringe programmes: providing people who inject drugs with injecting equipment.
- ▶ Technology Appraisal Guidance 75. Interferon alfa (pegylated and non-pegylated) and ribavirin for the treatment for chronic hepatitis C.
- ▶ NICE technology appraisal guidance 106. Peginterferon alfa and ribavirin for the treatment of mild chronic hepatitis C.
- ▶ NICE technology appraisal guidance 200. Peginterferon alfa and ribavirin for the treatment of chronic hepatitis C (part review of technology appraisal guidance 75 and 106).
- ▶ NICE technology appraisal guidance 252. Telaprevir for the treatment of genotype 1 chronic hepatitis C.
- ▶ NICE technology appraisal guidance 253. Boceprevir for the treatment of genotype 1 chronic hepatitis C.
- ▶ *NICE guidance in progress, due to report in Winter 2012. Hepatitis B and C – ways to promote and offer testing to people at risk of infection.*

Notes

# B

# C

## Review current practice

### Consider the following questions and actions when reviewing services:

- ▶ Do you know where the provision of care is and where the gaps are?
- ▶ Review the take up of local services and what steps can be taken to increase it (e.g. high DNA rates if treatment is a distance away could be ameliorated by bringing outreach treatment locally, or incorporating some support worker/volunteer support in the treatment pathway).
- ▶ Do you know what works well (locally and from the evidence)?
- ▶ How effective are the clinical networks in hepatitis C (e.g. can patients be directly referred to the hospital service from the drug and alcohol services commissioned by the DAAT?)?
- ▶ How informative is your original dataset? How can HPA, DAAT, hospital and pharmacy information help you?
- ▶ Has the provider achieved the desired inputs, outputs and outcomes outlined in service specifications?
- ▶ Do you fully understand the costs attributed to each service?
- ▶ What can you learn from the stakeholders/users of the services? Can you identify risks and reflect on learning from positive feedback and complaints?
- ▶ What are the perspectives from the health professionals working with people with hepatitis C?
- ▶ How does current practice compare with the best evidence and recognised pathways of care (i.e. Map of Medicine)?
- ▶ Has your organisation carried out any internal or external audits?

## Notes



# D

## Develop outcomes to act as a driver to improve health

### Examples of high-level outcomes are:

- ▶ Reduction in mortality rate in under 75 years of age for people with hepatitis C
- ▶ Reduction in health inequalities
- ▶ Increase in public awareness of hepatitis C
- ▶ Increase in prevention of hepatitis C
- ▶ Reduction in liver cancer and transplantation
- ▶ Reduction in decompensated cirrhosis and hospital admissions
- ▶ Increase in screening and testing of hepatitis C to improve early diagnosis
- ▶ Increase in the treatment and management of patients with hepatitis C
- ▶ Increase in the percentage of patients achieving SVR (i.e. clearing the virus)

Each service will have more process and outcome measures that are not indicated here – see the Logic Model as an example.

## Notes



# E

## Evaluation

**To evaluate the service, consider the collection of data in the following format:**

1. Pre-implementation (ensure you have the right data set and it is agreed before starting)
2. Implementation (ensure that data set is being collected, reported and reviewed continuously)
3. Post-implementation (identify an appropriate time to evaluate the service/programme)

**Minimum areas for evaluation should be:**

- Effectiveness (the outcomes)
- Efficiency (productivity – numbers of patients/clients seen including drop-out rates etc.)
- Quality (patient safety, patient experience and satisfaction, effectiveness [linked to the outcome domains])

**Effectiveness / outcomes – see section D**

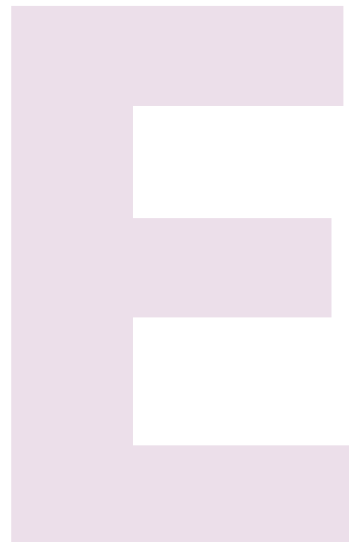
**Efficiency – examples below**

- Number of people identified through case finding (at all sites excluding prison)
- Number of people tested (at all sites excluding prison)
- Number of people identified through case finding in prison
- Number of people tested in prison
- Number of people referred to MDT treatment service
- Numbers of patients seen in MDT treatment service
- Number of people commenced on treatment
- Number of people completing treatment
- Percentage of people achieving SVR
- Number of emergency admissions of people with hep C with complications
- Number of emergency readmissions of people with hep C with complications

**Quality – examples below**

- Patient satisfaction questionnaire
- Is the service following NICE guidelines?
- Are staff up to date with hepatitis C guidelines and competencies?
- Is testing performed in an approved laboratory?

## Notes



# F

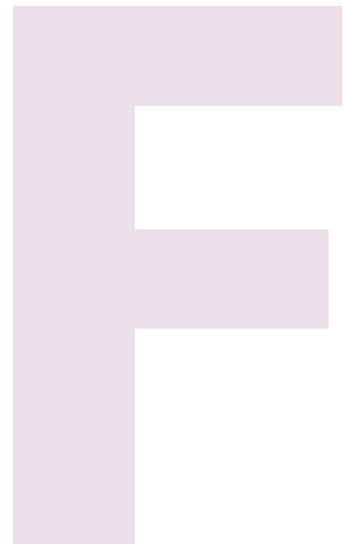
## Formulate an appropriate data set

**Data is key to driving improvements in care. It is essential that there is an appropriate data collection system built into the commissioning and procurement of services. To prevent duplication of data consider the following questions:**

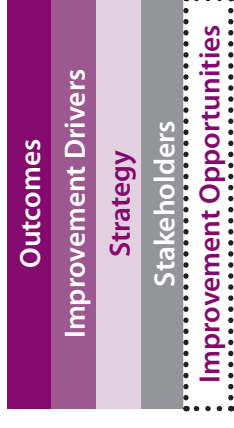
- ▶ What providers are involved in providing the different sets of data?
- ▶ What levers do you have to negotiate the information flow (e.g. will this or is this in a service specification or contract)?
- ▶ What data recording tools do the provider or providers have already (e.g. NDTMS data)?
- ▶ What data is provided to the commissioning organisation already?

The outcomes highlighted in section 'D' and in section 'E' are essential to collect and databases should be set-up to collect these outcomes as well as the process and outcome measures identified for each service.

## Notes



# Outcomes strategic map for hepatitis C services





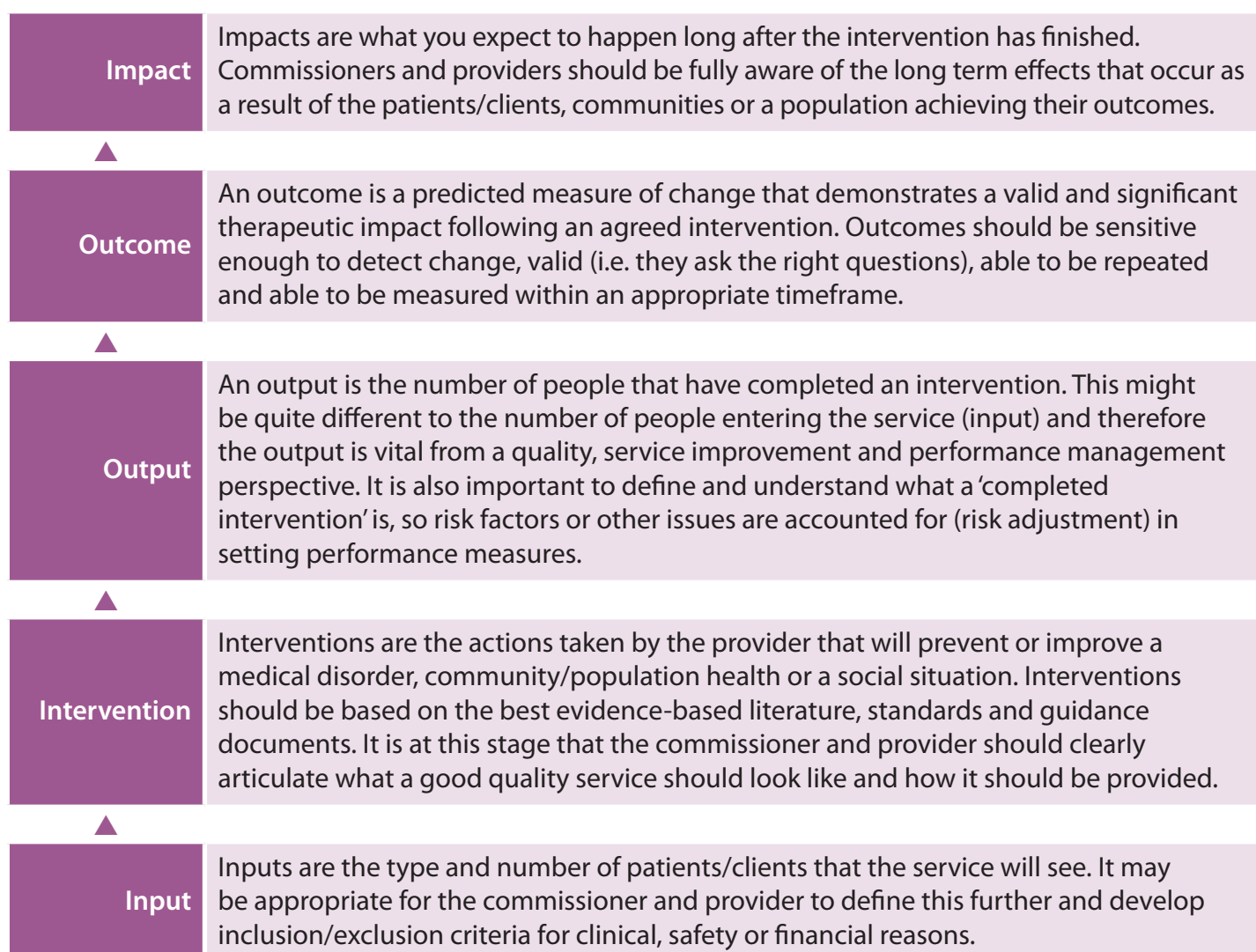
# Logic Model examples for hepatitis C

The Logic Model was originally designed by The Kellogg Foundation to help with programme planning, implementation and dissemination of results. The foundation believes that the model and its processes facilitate thinking, planning and communication about programme objectives and actual accomplishments. The logic model can also be a useful tool in evaluation.

This model has been adopted and simplified to fit within a clinical commissioning context. When commissioning a service it is important not only to understand and define the type of patients/clients a service will care for (input), but also what that service will do (intervention) and what the predicted outcomes will be. From a performance management perspective the commissioner will want to know the outputs of the service and the long-term impacts of the intervention. This adaptation of the logic model fulfils the needs of the commissioner and supports them to write a service specification.

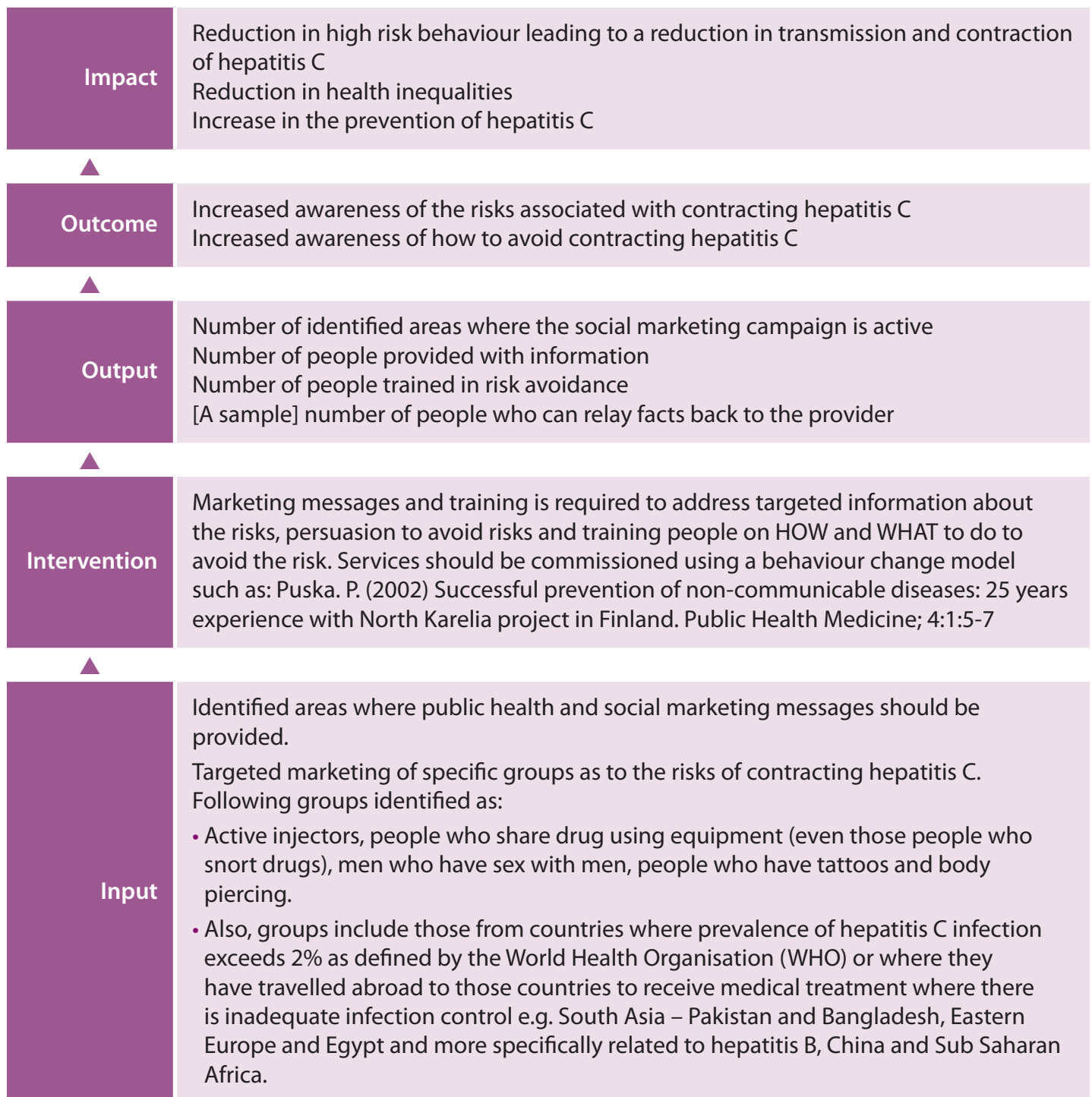
The logic model is divided into five sections – Inputs, Interventions, Outputs, Outcomes and Impacts and a definition of each section is given below.

## The Logic Model

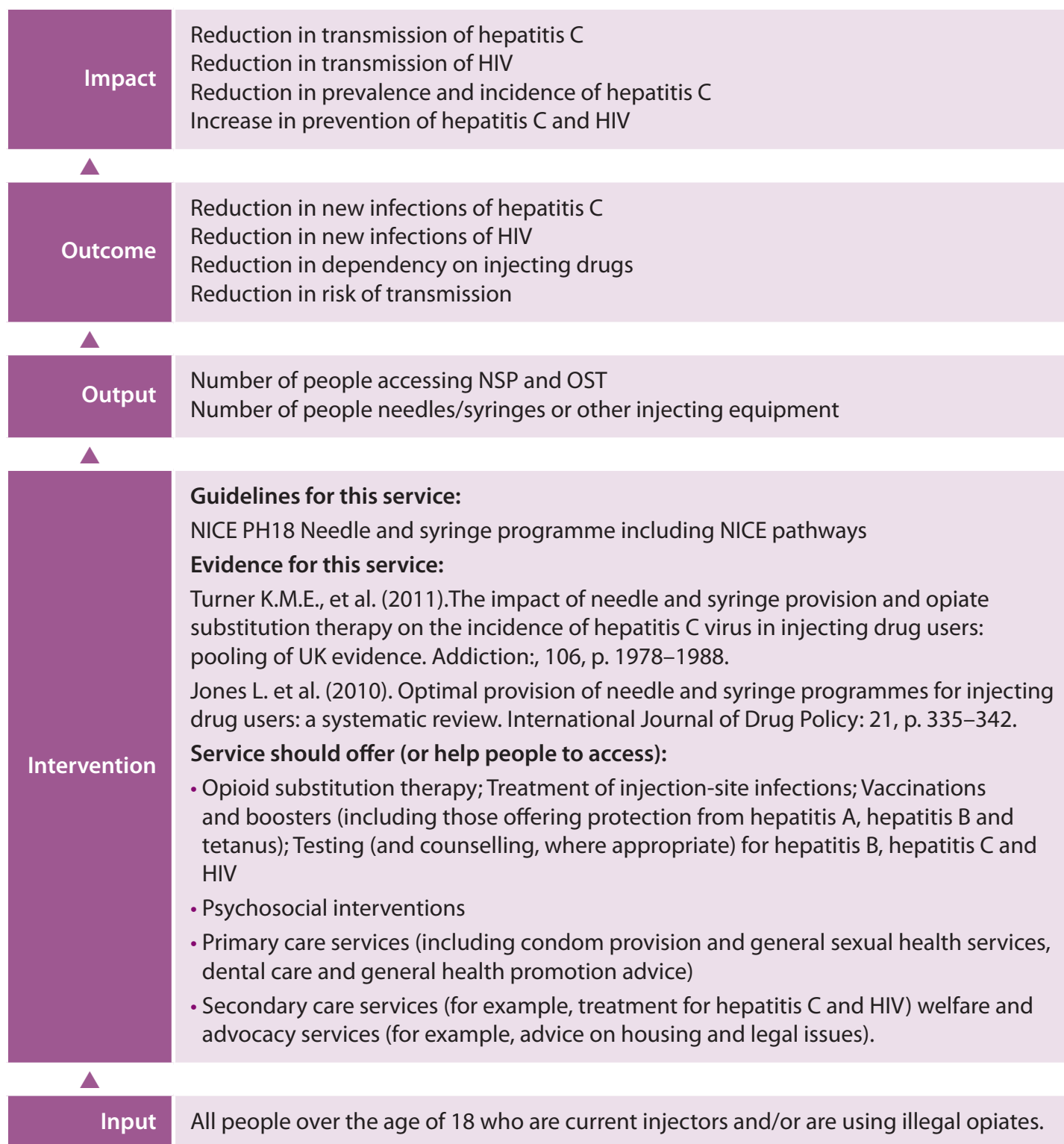


Overleaf (pages 16–18) are three examples of the logic model that relate to hepatitis C services. They are not expected to be comprehensive but are there to provide the key information that is required prior to the development of a service specification.

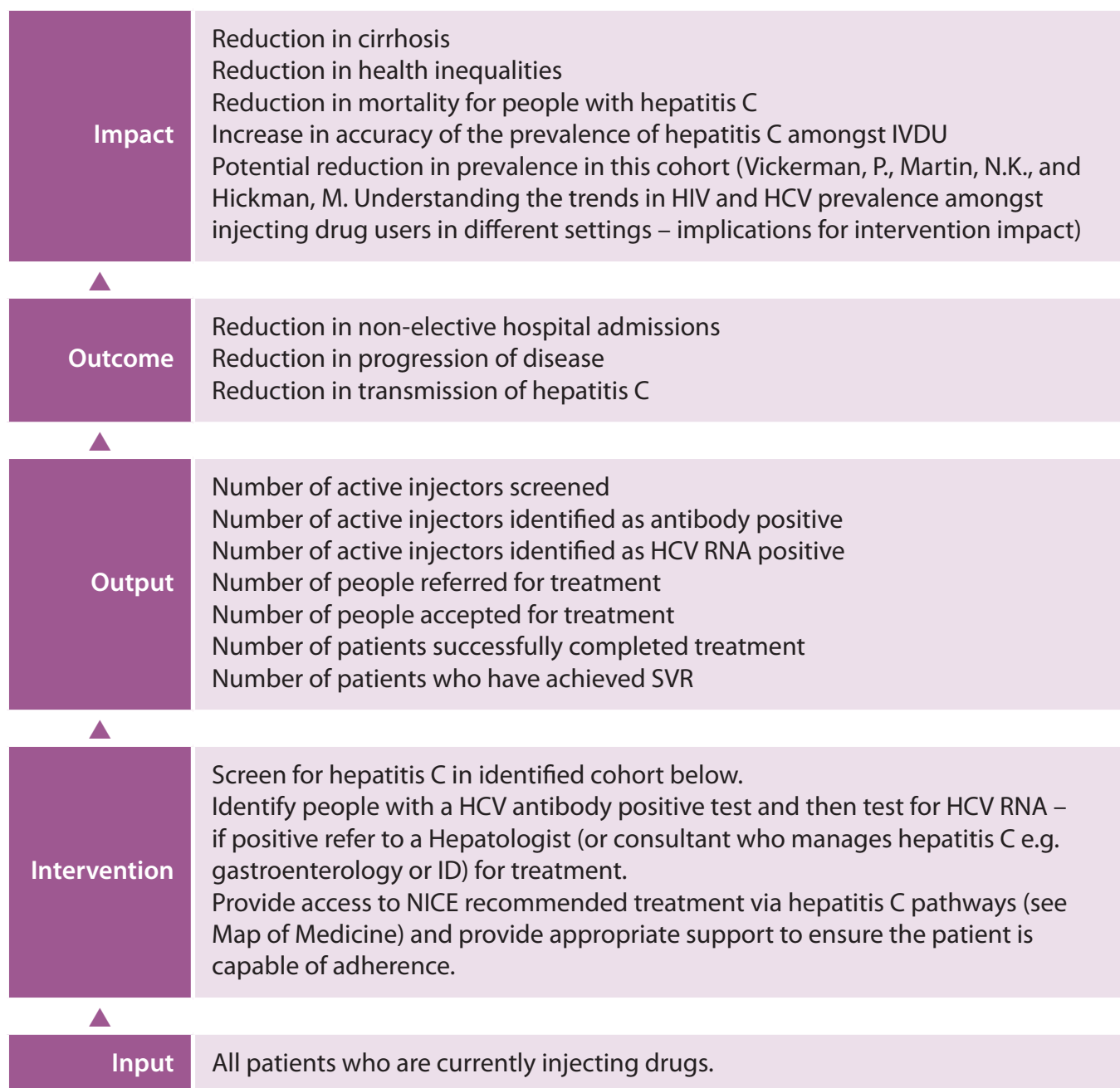
# Public Health and Social Marketing messages - reducing the risk of contracting hepatitis C



# Needle and Syringe Programme (NSP) and Opioid Substitute Therapy (OST)



## Screening and Treatment of active injectors



# Outcomes filter for hepatitis C services

Using an Outcomes Filter to assess both treatment and cure rates

Number and % change

1. Number of patients identified from case finding exercise?	
2. Number of patients contacted?	
3. Number of patients tested?	
4. Number of patients who tested positive for hepatitis C?	
5. Number of patients referred to an MDT Service?	
6. Number of patients seen by the MDT service?	
7. Number of patients offered treatment?	
8. Number of patients commenced on treatment?	
9. Of those commenced on treatment – how many patients completed the treatment regime?	
10. Number of patients who have cleared the virus?	

# References

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- <sup>4</sup> Data from the Health Protection Agency
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- <sup>7</sup> Hepatitis C in the UK 2012. London: Health Protection Agency, Colindale July 2012, p.7
- <sup>8</sup> Hepatitis C in the UK 2011. London: Health Protection Agency, Colindale July 2011, p.7
- <sup>9</sup> Hepatitis C in the UK 2012. London: Health Protection Agency, Colindale July 2012, p.10
- <sup>10</sup> Definition of avoidable mortality, April 2012, Office for National Statistics <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-262418>
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- <sup>26</sup> <http://www.nice.org.uk/usingguidance/sharedlearningimplementingniceguidance/examplesofimplementation/eximpresults.jsp?o=384>

# Notes

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