

Clinical Review of the Impacts of Hepatitis C: Short Life Working Group Report for the Scottish Government

Informing Decision Making on Awards for People, without Advanced Hepatitis C (HCV) Disease, who were Infected with Hepatitis C through NHS Blood Transfusion/Treatment with Blood Products, and for their Widows, Widowers, Civil Partners or Long-term Partners

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Clinical Review of the Impacts of Hepatitis C

1. Background

In mid-2017, the Scottish Government asked Professor David Goldberg, Health Protection Scotland, to establish and preside over an expert group to assess the health and wellbeing of individuals, chronically infected with the hepatitis C virus (previously often known as Skipton “Stage One”) in Scotland through NHS blood transfusion/treatment with blood products, who had not progressed to advanced hepatitis C (previously often known as Skipton Fund “Stage Two”).

In April 2017 all i) living individuals who acquired HCV infection and/or HIV infection through blood transfusion/blood products and ii) widows/widowers/civil partners and other long-term partners of the deceased, who had received “ex-gratia” payments from the Scottish Government or UK Government Department of Health through the Skipton Fund or any of the four other UK wide funds who were identified as ‘Scottish’ beneficiaries, transferred to a new Scottish Scheme – the Scottish Infected Blood Support Scheme (SIBSS), run by NHS National Services Scotland (NSS).

As at March 2018 there were 510 beneficiaries of the scheme (table 1). One hundred and fifty (150) had, or were widows/widowers/partners of deceased individuals who had progressed to, advanced hepatitis C (cirrhosis/hepatocellular carcinoma/B Cell lymphoma/liver transplant); these are defined as advanced hepatitis C (HCV) beneficiaries. Three hundred and twenty eight (328) had, or were widows/widowers/partners of deceased individuals who had not progressed to, advanced Hepatitis C (chronic infection and no evidence of advanced hepatitis C); these are defined as chronic HCV beneficiaries. An additional 32 had HIV or were co-infected with HCV and HIV or were widows/widowers/partners of deceased individuals in those categories (1).

All chronic and advanced HCV beneficiaries have received lump sum payments and advanced HCV individuals receive an annual payment. Beneficiaries with chronic HCV do not receive this annual payment; they are, however, eligible for Support and Assistance grants.

A UK Review (2010) of the Support Available to Infected Individuals with Hepatitis C and/or HIV by NHS-supplied Blood Transfusion or Blood Products and their Dependents acknowledged that i) advanced HCV has a substantial impact on life expectancy and causes a substantially reduced (and deteriorating) quality of life and ii) chronic HCV is associated with a demonstrable loss in quality of life (2).

Patient representatives of individuals infected through blood transfusion/treatment with blood products have argued that there is inequity regarding annual payments because the current arrangements do not take into account the broader impacts of

hepatitis C on health and wellbeing among individuals with chronic hepatitis C – impacts which can be harder to quantify in clinical terms. It is in this context that a clinical review of the impacts of hepatitis C on those affected by infected NHS blood has been established.

Table 1: Distribution of SIBSS beneficiaries by application type and award recipient type, data to March 2018

Application Type	Primary Infectee	Secondary Infectee	Widow, widower, civil or long-term partner	Total
Chronic HCV (Stage 1)	305	11	12	328
Advanced HCV (Stage 2)	116	0	34	150
Co-infected/HIV Only	23	0	9	32
Total	444	11	55	510

2. Executive Summary: Conclusions and Recommendations

2.1 Characteristics of Members of the Scottish Blood Support Scheme (Term of Reference 1)

- As at March 2018, 328 people were members of SIBSS and belonged to the Chronic HCV application category; 305 were primary infectees, 11 were secondary infectees and 12 were widows, widowers or civil partners. The average age of the primary infectees was 58 and 170 (60%) were male.

The following estimates apply to primary infectees as at September 2017.

- Half were diagnosed before 1996; two thirds and one third acquired the infection through blood transfusion and blood factor respectively.
- Approximately 70% had received a course of therapy (this proportion is probably an under-estimate due to missing information) and, of those who had been treated, just under one third had received two or more courses; just over 80% of those treated had been given a course of interferon.

2.2 Impact of Hepatitis C on Health, Wellbeing and Quality of Life (Term of Reference 2)

- People with hepatitis C, regardless of liver disease status, are at an increased risk of a number of extrahepatic diseases; most of these are relatively uncommon and usually not life threatening. Renal disease due to Membranoproliferative Glomerulonephritis (MPGN) and B-cell Lymphoma (currently an advanced HCV-defining disease) are exceptions.

Key Recommendation

- **Accordingly, Renal Disease due to Membranoproliferative Glomerulonephritis (MPGN) should be added to the advanced HCV eligibility criteria as it is a condition known to cause a considerable negative impact on life expectancy.**

- Other conditions such as sporadic porphyria cutanea tarda and rheumatoid arthritis are more common in people with hepatitis C, but any causal link with reduced life expectancy is not clear cut.
- Interferon-based therapies (used between 1994 and 2016 in Scotland) invariably cause adverse effects which are debilitating over long periods; in contrast, the direct acting antiviral (DAA) agents, now used for all patients, are safe (note: long-term follow-up studies of recipients of DAAs will be undertaken for completeness) and very well tolerated.
- Evidence from the scientific literature -indicating that the mental health (particularly depression, anxiety and self-worth), and thus the quality of life, of people with hepatitis C, regardless of liver disease status, is impaired considerably - is compelling; this evidence is strongly supported by testimonials given by SIBSS beneficiaries.
- Evidence from the scientific literature indicates a relatively small reduction in general physical health due to hepatitis C among people without advanced liver disease; the exception applies to people who have relatively uncommon extrahepatic manifestations of hepatitis C.
- While testimonials from SIBSS beneficiaries generally support these findings, individuals often reported that periods of fatigue and general malaise were due to their hepatitis C in full or in part. It is possible that the physical health impact of hepatitis C is more pronounced in people infected through blood factor/transfusion who often have other chronic disease conditions (e.g. blood factor disorders), but the evidence base associated with this specific group of individuals is insufficient to say.
- There is no appreciable evidence to indicate that hepatitis C or the number/amount of exposure(s) influences health and wellbeing outcomes.

- While hepatitis C in those without advanced liver disease is not life threatening, it is life changing; this is particularly applicable to people who acquired it through blood factor or blood transfusion, not least because of the “additional blow” conveyed to them by NHS procedures/treatments.
- Hepatitis C, particularly in the context of the source of infection being an NHS one, changed lives because of its negative effects on family, relationships in general, ambition, employment, self-esteem and general mental wellbeing; these effects stem from a number of factors including the stigma associated with hepatitis C and the recalibrating effects of being diagnosed with an infection that, according to their healthcare attendants, would likely reduce the quality and quantity of one’s life.
- Most individuals with chronic HCV who are registered with SIBSS were aware of their infection for many years, most lived with the uncertainty surrounding its consequences and most attributed, fully or in part, any ill health to it.
- For those diagnosed more recently, there has been less uncertainty due to improved knowledge and better treatment; however, the failure to have been offered a test decades before (and the disadvantages of a later diagnosis) has caused resentment.
- While the majority have been treated successfully, the legacy of their infection manifests, commonly, in the reflection – “...if I hadn’t been infected with hepatitis C what would my life have been like...”
- While some infected people welcome action in the form of Inquiries, Reviews and Reports, most are stressed by them and yearn for closure – a time when they are free from hepatitis C in their bodies, but also free from hepatitis C in their minds.
- In the context of the life changing impacts of hepatitis C on infected individuals, the burden on many of their partners and the widows/widowers/partners of those deceased—a burden which was particularly evident in conversations with SIBSS beneficiaries - must be recognised.

2.3 Impact of Hepatitis C on Mortality (Term of Reference 3)

- People who have advanced HCV disease are at considerably greater risk of death than the general population.
- At the population level, people without advanced HCV disease have much the same risk of death as people who are uninfected with Hepatitis C and have similar underlying health characteristics. This does not exclude the possibility of Hepatitis C contributing to the death of an infected individual who does not have advanced HCV (e.g. death associated with mental health problems).
- The recording of hepatitis C on the death certificate is unreliable and, when it occurs, cannot be used to differentiate between hepatitis C having made a

contribution to death or not in instances where the person has died from non-advanced HCV defining diseases/conditions.

2.4 Assessment of the Impact of Hepatitis C at the Individual Level (Term of Reference 4)

- At the individual level, an overall assessment of impact is almost impossible i) because of the complexity of teasing out the contribution of ill-health to hepatitis C among people of varying ages who usually have other conditions (co-morbidities), ii) because it spans over many years, iii) because so much of the impact is unrecorded in patient files due to the absence of any comprehensive, systematic and ongoing assessment (i.e. "no-one asked us!"), iv) because some patient records are no longer available and v) because, in many instances, patients did not disclose, in particular, the psycho-social impacts of hepatitis C to their attending healthcare professionals due to, for example, embarrassment, feeling uncomfortable, stoicism or self-denial.
- Patients' representatives, and the patients themselves through the conversations as described in this Report, were of the view that any form of "means testing" would be unfair, enormously stressful to both patients and their healthcare assessors, and would compromise the ethos of SIBSS beneficiaries supporting and caring for each other - an ethos that has been nurtured over many years.
- It was, however, recognised by the Clinical Review Group that, while the great majority of people with chronic HCV had been affected by their infection, some had not been appreciably affected and, for those who had been affected, there had been a spectrum of impact – both clinical and non clinical (e.g. employment, ambition, relationships). Accordingly any assessment which was just clinically-based would ignore the very considerable non clinical impacts as described in this Report.

Key Recommendations

- **From an award perspective, the Clinical Review Group appreciated the dilemma of the unfairness, impracticality, divisiveness and stress of formal individual assessment on the one hand and the failure of a non-differentiating "blanket approach" to recognise differences in hepatitis C impact on the other. To address this dilemma, the Clinical Review Group favours, unanimously, the following approach:**
- **People with chronic HCV (including those who have cleared their virus through treatment), or their widows, widower or partners, who are**

currently SIBSS beneficiaries or who become eligible to be SIBSS beneficiaries in the future, should be asked to self-declare hepatitis C impact in the following simple way.

- If they themselves considered that their (or their spouse's/partner's) hepatitis C had not appreciably affected their life, they would not be eligible for a chronic HCV annual payment award; however if the situation changed in the future and they considered that hepatitis C was now affecting their life, they could apply for a chronic HCV award as below.
 - If they themselves considered that their (or their spouse's/partner's) hepatitis C had seriously affected and continued to affect their life, they would be eligible for a chronic HCV award at a higher level.
 - If they themselves considered that their (or their spouse's/partner's) hepatitis C had affected and continued to affect their life, but not seriously, they would be eligible for a chronic HCV award at a lower level.
- Accordingly, those applying for a chronic HCV award would have to declare themselves in one of two categories. A definition of 'serious' would be provided to assist the decision making; this definition would be to the satisfaction of the Clinical Review Group. There would be no requirement for the applicant to justify the application and the category they declared themselves in. The process would be entirely based on trusting the judgement of the potential applicant. There would be no requirement for a healthcare professional to be involved.
 - In the context of the available evidence as outlined in this report and the vast collective experience of its members, the Clinical Review Group deemed this approach to be optimal for the following reasons:
 - It has patient and healthcare professional support, it is simple to administer, it aims to ensure that those with the greatest need receive the greatest benefit, it avoids patient/healthcare professional conflict and any need for an appeals process, it reduces stress among applicants to a minimum, it is person-centred recognising that the individual's perception of hepatitis C is critical, it promotes both individual and collective responsibility and it sends out a loud and clear message saying "you are trusted to make the appropriate declaration".

2.5 Relativity of the Hepatitis C Infection Impacts among Chronic and Advanced HCV Individuals (Term of Reference 5)

2.5.1 Overall Contextual Conclusions Encompassing those from Terms of Reference 2-4 as above

- In many instances, people with advanced hepatitis C will have their lives shortened by the impact of infection; while certain people without advanced hepatitis C may have their lives shortened by the impact of infection (for example hepatitis C being a factor in a cycle of depression and addictions), the overall impact of hepatitis C on mortality among this group as a whole (i.e. at a population level) is not appreciable. That said, survival among infected people with underlining bleeding disorders and other serious chronic conditions is compromised when compared with survival among the general population.
- For people with hepatitis C, regardless of whether or not they have advanced hepatitis C, the impact on their mental health and way of life, often over decades, has been profound. The mental health effects – especially those manifesting themselves in depression, anxiety and stress – are incontrovertible; such certainty stems from comprehensive and high quality evidence from the scientific literature, supported by illuminating testimonials from a random sample of SIBSS members.
- Just as critical are the notable losses sustained by most infected individuals. Such losses relate to relationships with family and friends, employment and financial security, and stem from many factors; these include i) the stigma of hepatitis C because of its association with injecting drug use and the fear of transmission to others, ii) the loss of ambition and self-esteem from knowing one has a life-threatening, generally untreatable, condition, iii) the debilitating effects of antiviral treatment and iv) the constant, long standing, reminder through news bulletins that one is the victim of an NHS “scandal and disaster”, the scale and intensity of which is unprecedented.
- Any physical impacts of hepatitis C on people without advanced hepatitis C are difficult to characterise and quantify, not least because the underlying bleeding disorders and chronic disease associated with this group, and the mental health effects as described above, could themselves influence, for example, energy levels and cognitive ability. Nevertheless, what is undisputed is the self-perception that hepatitis C was, is or might have been the cause of such difficulties.
- While the hepatitis C impacts among those without advanced disease, generally, are not life threatening, they are life changing; and such life

changing effects have not just been confined to the affected person. The effects also apply to their spouses/partners and children and parents.

2.5.2 Conclusions Concerning the Relative Impacts of Hepatitis C

With respect to the relativity of hepatitis C impacts associated with chronic infection and advanced hepatitis C, the consensus of the Group is as follows:

- The impacts of hepatitis C on the great majority of SIBSS members, regardless of their chronic hepatitis C/advanced hepatitis C status, have been very considerable and the characteristics and intensity of these impacts have varied among people and within the same person over long periods of time.
- While the impacts of hepatitis C, generally, are greater among people with advanced hepatitis C, there are instances of people with such advanced disease who have been less affected than those with chronic hepatitis C; in other words, there is a considerable overlap in terms of impact – one which reflects the different ways people manage adversity on account of differences in their underlying mental and physical health and their living circumstances, particularly those relating to financial and human (family and friends) resources.
- The impacts of hepatitis C on many spouses or partners of those living and widows/ widowers/civil and long-term partners of those deceased are very substantial, regardless of chronic hepatitis C/advanced hepatitis C status.
- Sharing a life with an infected person with chronic hepatitis C means sharing the fallout – particularly in the context of that fallout relating to mental ill health and notable losses.
- Accordingly, assessing the relativity of the impacts of hepatitis C among those with and without advanced hepatitis C is complex and challenging. The Clinical Review of the Impacts of Hepatitis C Group consider that this complexity is, at present, not factored into the decision making around awards but should be.

Key Recommendation

- **The Group recognises that there is a gap between the awards made to those with and without advanced hepatitis C, but is of the view that the extent of the difference between the current awards – a difference which was accentuated by the Financial Review Group (FRG) recently - is inconsistent with the difference between the cumulative past (and future) lifetime impacts of hepatitis C experienced by those with and without advanced hepatitis C. The Group considers that this inconsistency is unfair and inappropriate, and should be addressed commensurately.**

Key Recommendation

- **The Group recommends, for the purposes of consistency and fairness, that any new arrangements for the chronic HCV category of individuals should incorporate the same approach to widows, widowers and partners as that currently in operation for those belonging to the advanced HCV category.**

Key Recommendation

- **In circumstances where an individual with chronic HCV dies as a consequence of HCV, their widow, widower or partner may apply to SIBSS for consideration of an advanced HCV award for widows, widowers or partners.**

Key Recommendation

- **Given the impact of hepatitis C and interferon-based therapies on individuals' mental health (particularly depression, anxiety, self-worth) and quality of life, the Group considers that specialist psychological support be made available to those who belong to the chronic HCV category (including widows, widowers and partners) and who want it; this measure will address the justified perception that their needs have not been taken as seriously as they should have been.**

3. Origin of the Clinical Review of the Impacts of Hepatitis C

The origin of the Clinical Review of the Impacts of Hepatitis C stemmed from the Financial Review Group (FRG) Report on Contaminated Blood: Financial Support: Conclusions and Recommendations 2015 (3).

The report made the following recommendations for people infected with hepatitis C through blood transfusion or blood factor in Scotland.

- For people with advanced HCV disease:
 - annual payments would be increased from £15,000 to £27,000 (sums higher for HIV co-infected individuals)
 - widows/widowers/civil partners would receive an annual payment (75% of the annual payment as above)
 - the total lump sum for those with advanced HCV would continue to be £70,000

 - For those with chronic HCV (without advanced disease):
 - the lump sum would be increased from £20,000 to £50,000

 - The report recommended that further work should be undertaken as follows:
 - 'the current thresholds for Stage One and Stage Two of the Skipton Fund should be the subject of a specific, evidence-based review to create new criteria based on health impact, rather than focusing predominately on liver damage'.
 - 'the review should also thoroughly evaluate the criteria attributing HCV to the cause of death, including death certificate data'.
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4. Hepatitis C Virus: Facts and Figures

4.1 General

- The Hepatitis C Virus (HCV) was discovered in 1989; hitherto, acute symptomatic hepatitis, particularly among blood and blood product recipients, which was not caused by Hepatitis A or B viruses, was referred to as non-A, non-B Hepatitis.
- A diagnostic test, the HCV antibody test, began being used in 1991.
- Worldwide, it is estimated that 80 million people are living with chronic Hepatitis C infection.
- Infected people were first treated with standard interferon in 1994 - with effectiveness (sustained viral response, i.e. sustained clearance of virus from the blood) rates of 10-20%.
- Pegylated Interferon and Ribavirin therapy became available in 2001 – with effectiveness rates of 50-60% overall (the rate was considerably lower among people infected through blood transfusion/blood products as their infections tended to be of the Genotype 1 variety - a strain which is less responsive to this type of treatment).
- During 2014-17 a range of all-oral, safe and highly effective therapeutic agents became available (the Direct Acting Antivirals (DAAs)), for all genotypes of Hepatitis C; effectiveness rates of between 95 and 100% are achieved, even in individuals with compensated cirrhosis (4).

4.2 Epidemiology of Hepatitis C in Scotland

As at 2017 (5, 6)

- Approximately 34,000 people were chronically infected with Hepatitis C; this figure excludes tens of thousands of people who were infected, but cleared their virus spontaneously or through treatment, or who have died.
- 45% of the 34,000 were undiagnosed.
- Of the undiagnosed, it is estimated that only a very small number (less than 30) are people who acquired their Hepatitis C through blood transfusion (7).
- Four hundred and forty four people were known to have acquired hepatitis C infection through blood transfusion or blood factor in Scotland and were beneficiaries of the SIBSS.
- It is estimated that between 500 and 1000 people became infected with Hepatitis C during 2017; almost all acquired their infection through injecting drug use behaviours.
- Since the implementation of heat treatment for blood factor in 1986 and the testing of blood donors for hepatitis C in 1991, there have been no

acquisitions of infection through the receipt of blood factor or blood transfusion, respectively, in Scotland.

4.3 Impact of Hepatitis C on Severe Life-Threatening Illness and Life Expectancy Once an Individual has Developed Cirrhosis of the Liver

The life expectancy of someone who has developed cirrhosis of the liver is considerably reduced as indicated below (table 2).

- Among untreated or unsuccessfully treated individuals, the estimated rate of progression from compensated cirrhosis to decompensated cirrhosis (liver failure) is 6.5% per year (8).
- Among successfully treated individuals, the estimated rate of progression from compensated cirrhosis to decompensated cirrhosis is 0.5%. However, this estimate is based on one single study only (9).
- Among untreated or unsuccessfully treated individuals, the estimated rate of progression from compensated cirrhosis to hepatocellular carcinoma is 3.5% per year (9, 10).
- Among successfully treated individuals the estimated rate of progression from compensated cirrhosis to hepatocellular carcinoma is 1-1.3% per year (9, 10).
- Among untreated or unsuccessfully treated individuals, the estimated rate of progression from liver failure to death is 18.5% per year (8).
- Among successfully treated individuals, the estimated rate of progression from liver failure to death is unclear at present; successful treatment of patients with liver failure is a new phenomenon and, thus, more time needs to elapse in order to determine this progression rate.

Table 2: Impact of Hepatitis C on severe, life-threatening illness and life expectancy

Outcome	HCV Infection Status	Estimated proportion that will develop outcome per year
Liver Failure	Untreated or unsuccessfully treated	~6.5%
	Successfully treated	~0.5%
Hepatocellular cancer	Untreated or unsuccessfully treated	~3.5%
	Successfully treated	1 – 1.3%
Death	Untreated or unsuccessfully treated	18.5%
	Successfully treated	Not Known

5. Scottish Government Policy

- In 2008 the Scottish Government launched Scotland's Hepatitis C Action Plan (11, 12).
- In the first decade since the launch, over £100 million of additional funding has been allocated to hepatitis C prevention, diagnostic and treatment services for all individuals infected or at risk of infection, regardless of the route of acquisition of infection.
- As a consequence of this investment, the proportion of those chronically infected with hepatitis C who have been diagnosed has increased from 38% to 55% and the number of people treated annually has increased from 450 per year to about 2000 per year (5, 6, 13).
- The annual number of new presentations of Hepatitis C-related liver failure declined by approximately 30% between 2014 and 2016 – almost certainly as a consequence of the new DAAs being targeted at those at highest risk of progressing to life-threatening liver disease (13,14).

6. Membership of the Clinical Review of the Impacts of Hepatitis C Group

Membership of the Clinical Review of the Impacts of Hepatitis C Group

Member	Job Title/Role	Organisation
Professor David Goldberg	Consultant Clinical Epidemiologist (Chair)	NSS Health Protection Scotland
Professor John Dillon	Professor of Hepatology and Gastroenterology	University of Dundee
Mr Dan Farthing-Sykes	Chief Executive Officer	Haemophilia Scotland
Professor Peter Hayes	Professor of Hepatology	University of Edinburgh
Mr Tommy Leggate	Manager	Scottish Infected Blood Forum
Mr Allan McLeod	Epidemiologist	NSS Health Protection Scotland
Dr Grainne O'Brien	Clinical Psychologist	NHS Lothian
Professor Campbell Tait	Professor of Haematology	NHS Greater Glasgow and Clyde
Ms Jan Tait	Lead Clinical Nurse Specialist	NHS Tayside
Mr Bill Wright	Chair	Haemophilia Scotland
Ms Petra Wright	Scottish Officer	The Hepatitis C Trust

7. Terms of Reference of the Clinical Review of the Impacts of Hepatitis C Group

The following terms of reference were agreed by the group members and by the Scottish Government.

To inform decision making around the potential award of payments to i) individuals who have ever been infected with chronic hepatitis C as a result of NHS blood, tissue or blood products, but who have not progressed to advanced disease, or ii) their widows, widowers or partners. (Note: people who have cirrhosis, hepatocellular carcinoma or B cell non-Hodgkins lymphoma or have had or are on the waiting list for a liver transplant are otherwise known as 'advanced' HCV individuals and those who have not are otherwise known as 'chronic' HCV individuals):

1. Characterise members of the Scottish Infected Blood Support Scheme in terms of their age, gender, blood transfusion/blood factor source of infection, antiviral treatment history and infection status in particular.
2. Assess the impact of chronic hepatitis C virus infection, and associated antiviral treatment, on the health, wellbeing and quality of life of people who have not progressed to advanced HCV disease.
3. Assess the impact of chronic hepatitis C virus infection, and associated antiviral therapy, on death among people who did not progress to advanced HCV disease and have died (including those whose death has been attributed (directly or indirectly) on the death certificate to hepatitis C).
4. Provide a view on i) the challenges of assessing the extent of the hepatitis C infection impact at an individual level, ii) whether or not such an assessment should be undertaken and, if so, iii) what would be the optimal approach to such an assessment.
5. Provide a view on the relativity of the hepatitis C infection impacts among chronic HCV and advanced HCV individuals.

8. The Process

- During July-September 2017, Professor Goldberg met, separately, all relevant patient representatives.
- In November 2017, the first meeting of the group was held; terms of reference and the work plan were approved.
- During July-December 2017, literature reviews and analyses of Scottish data were undertaken.
- During December 2017-February 2018 conversations with a random sample of patients were had.

- In January 2018, Professor Goldberg engaged with members of the Scottish Infected Blood Forum and Haemophilia Scotland at one of their joint meetings in Glasgow.
 - In March 2018, the Group met to review the evidence base and to make recommendations.
 - During March-May 2018, the report was finalised and approved by the Group.
 - On 1 June 2018, a final report was submitted to the Scottish Government.
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9. Term of Reference 1

Characterise members of the Scottish Infected Blood Support Scheme in terms of their age, gender, blood transfusion/blood factor source of infection, antiviral treatment history and infection status in particular.

9.1 Methods

The Scottish Infected Blood Support Scheme holds a database of people who are receiving awards as a consequence of hepatitis C infection having been acquired through blood factor or blood transfusion.

This database contains limited information on individuals including personal identifiers (name and address), date of birth, gender, application type (advanced HCV, chronic HCV, co-infection with HIV or HIV) and status of beneficiary (primary infectee, secondary infectee or widow/widower/civil partner/long term partner). It also contains the patient's Community Health Index (CHI) number. No clinical information concerning hepatitis C treatment and response is held on this database.

Health Protection Scotland (HPS) presides over databases holding information on all individuals in Scotland having had a diagnosis of hepatitis C infection; a range of data are held and these include limited personal identifiers (e.g. soundex code of surname and first part of postcode), data of birth, gender, diagnosis date, treatment for hepatitis C, response to treatment and route of acquisition of infection (e.g. blood factor, blood transfusion, injecting drug use, etc.); the patient's CHI number is also held.

For most of the variables, information is reasonably complete and accurate, and certainly sufficient for monitoring and research purposes; the data held at HPS are not used to aid the clinical management of individuals.

To achieve a better understanding of the clinical characteristics of SIBSS beneficiaries – especially from a treatment and treatment response perspective – it was agreed by the SIBSS Advisory Group and the Clinical Review Group that the

SIBSS database and the HPS databases should be linked in a standard and approved way which would not compromise patient confidentiality. The linkage process, involving the use of the CHI number, was approved by the NHS's Public Benefit and Privacy Panel - a panel comprising experts whose job it is to ensure that the purpose of, and processes involving, any such data linkage are legitimate i.e. in the public interest and having no potential to do harm to patients.

The linkage exercise used SIBSS data to September 2017 and does not include additional individuals who have been added between September 2017 and March 2018.

9.2 Results

9.2.1 General

The following analyses apply to chronic HCV and advanced HCV primary infectees. Co-infected individuals were excluded because of the small numbers. For Chronic HCV and for Advanced HCV, 251 and 94 cases, respectively were successfully linked.

9.2.2 Diagnosis of hepatitis C

Chronic HCV: Of the 251, 122 (49%) were diagnosed before 1996, 79 (31%) between 1996 and 2005, and 50 (20%) between 2006 and 2016.

Advanced HCV: Of the 94, 45 (48%) were diagnosed before 1996, 22 (23%) between 1996 and 2005, and 27 (29%) between 2006 and 2016.

9.2.3 Route of HCV acquisition

Chronic HCV: Of the 251, 86 (34%) acquired their HCV through blood factor and 162 (65%) through blood transfusion. Route of transmission was not available for 3 (1%) of Chronic HCV cases.

Advanced HCV: Of the 94, 35 (37%) acquired their HCV through blood factor and 59 (63%) through blood transfusion.

9.2.4 Receipt of a Course or Part-Course (some were not completed due to e.g. adverse effects) of HCV treatment

Chronic HCV: Of the 251, 71 (28%) of those diagnosed had received no course, 109 (43%) one course, 60 (23%) two courses, 10 (4%) three courses, <1% four courses. Of those who had received therapy, 57% had received interferon only, 16% had received a Direct Acting Antiviral agent only and 26% had received both.

Advanced HCV: Of the 94, 10 (11%) of those diagnosed had received no course, 43 (46%) one course, 26 (28%) two courses, 10 (11%) three courses, 5 (5%) four courses. Of those who had received therapy, 37% had received interferon only, 21% had received a Direct Acting Antiviral agent only and 42% had received both.

9.2.5 Time between HCV Antibody Positive Diagnosis and First HCV Treatment

Chronic HCV: Of the 180 treated individuals, 96 (59%) took less than five years, 19 (12%) took five to nine years, 23 (14%) took 10 to 14 years, 10 (6%) took 15 to 19 years, and 16 (10%) took 20 plus years. Time to first treatment was not available for 16 cases.

Advanced HCV: Of the 84 treated individuals, 47 (60%) took less than five years, 8 (10%) took five to nine years, 5 (8%) took 10 to 14 years, 5 (6%) took 15 to 19 years, and 12 (15%) took 20 plus years. Time to first treatment was not available for 6 cases.

9.2.6 Sustained Viral Response (SVR) Rates (i.e. sustained clearance of virus from the blood)

Chronic HCV: Of the 180 treated individuals, 152 (84%) had achieved SVR

Advanced HCV: Of the 84 treated individuals, 76 (90%) had achieved SVR

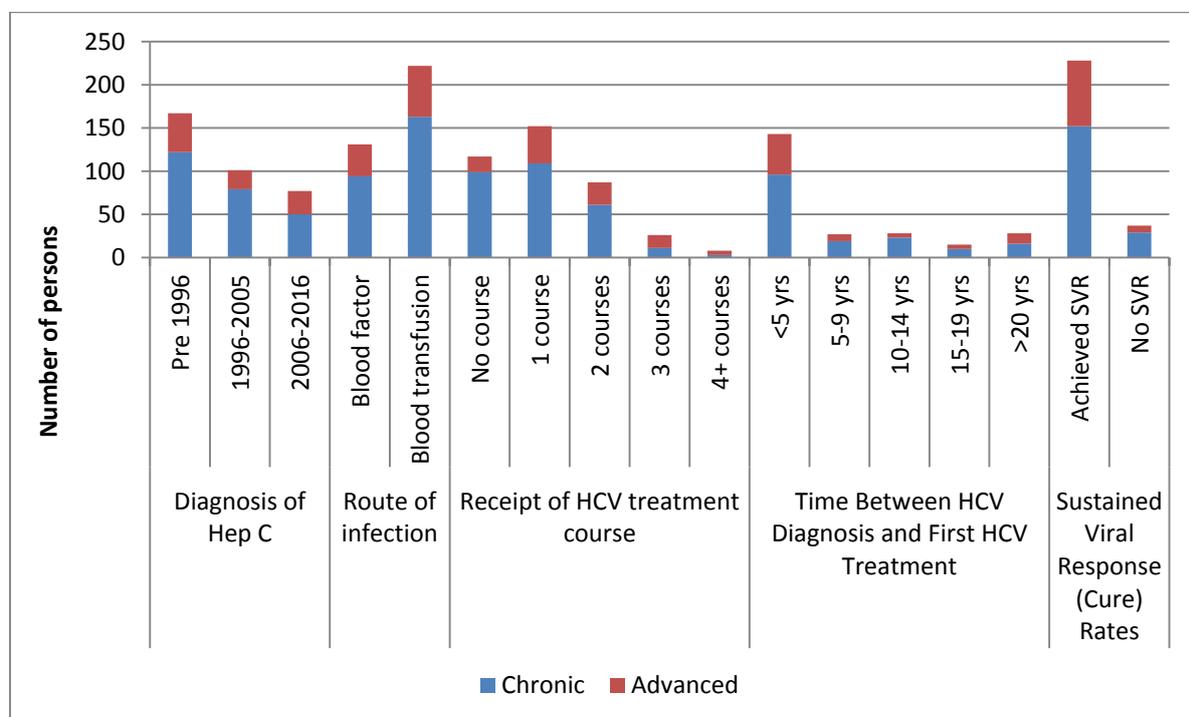


Figure 1: Summary of linkage between SIBSS and HCV diagnoses and clinical databases

10. Term of Reference 2

Assess the impact of chronic hepatitis C infection and associated antiviral treatment, on the health, wellbeing and quality of life of people who have not progressed to advanced HCV disease.

Two approaches were adopted – i) the examination of findings of studies published in peer reviewed scientific journals, ii) conversations with beneficiaries of the Scottish Infected Blood Support Scheme (SIBSS).

10.1 Methods

10.1.2 Examination of the Scientific Literature

The most robust approach to examining large amounts of scientific literature on a particular topic is to undertake a systematic review – a review using a systematic approach which permits the inclusion of studies that meet an agreed high standard – and then, when dealing with large amounts of quantitative data, undertaking a meta-analysis (using sophisticated statistical techniques) which involve pooling results from multiple studies to generate an overall, and far more precise, result than any single one.

For qualitative studies, the systematic review technique is appropriate, but the meta-analysis one is not.

Helpfully, in 2016 and 2017, the following papers were published:

- Extrahepatic Manifestations of Hepatitis C: A Meta-analysis of Prevalence, Quality of Life and Economic Burden. Younossi Z et al. *Gastroenterology* 2016; 150: 1599-1608 (15).
- Living with Hepatitis C Virus: A Systematic Review and Narrative Synthesis of Qualitative Literature. Dowsett L et al. *Canadian Journal of Gastroenterology and Hepatology* 2017; article ID 3268650, 11 pages (16)

Of particular note, is the status of the journal *Gastroenterology*; it is the most authoritative specialist journal, worldwide, for the topic of Gastroenterology (including Hepatology) and has an extremely high impact factor of 18 (equivalent to that for the *British Medical Journal*). Also the lead author is a renowned international authority on hepatitis C. The work undertaken by Younossi et al involved examining 600 potentially relevant studies; a total of 102 studies met all of the inclusion criteria and the data from these were included in a range of analyses. Multiple systematic reviews and meta-analyses were undertaken. To address the potential confounding effect of heterogeneity (e.g. age, sex, clinical characteristics such as the presence or

absence or cirrhosis, and behaviours such as injecting drug use and alcohol consumption) additional analyses were undertaken; these were limited by data availability.

The Canadian Journal of Gastroenterology and Hepatology is a less prominent journal, but the work undertaken by Dowsett et al is exhaustive and highly impressive. They examined 798 study abstracts, of which 46 met the rigorous inclusion criteria.

On account of i) the high quality of the two reviews, ii) their comprehensiveness and iii) their recency, the Clinical Review Group considered that there was no need to repeat these exercises. Note that these reviews relate to studies of people who have acquired hepatitis C through any route; there is no substantive review literature on extrahepatic manifestations of hepatitis C among individuals who acquired infection through blood factor/transfusion receipt. Indeed very few Hepatitis C outcome studies, with specific reference to people infected through blood factor/transfusion receipt, have been performed.

Accordingly, for Term of Reference 2, the summarised scientific literature findings on the extrahepatic, including psychosocial, manifestations of hepatitis C - manifestations which are particularly applicable to people who have not advanced to severe liver disease – stem from these two published papers.

Anti-Viral Treatment

With respect to adverse impacts of treatment on infected people, the review of the literature was confined to interferon +/- ribavirin regimens - the bedrock of treatment between 1994 and 2014. The Direct Acting Antiviral (DAA) agents, available from 2014, were not reviewed as these are known to convey minimal side effects.

Three review articles were depended upon because of their high calibre and relevance (17, 18, 19).

10.1.3 Conversations with beneficiaries of SIBSS

Insufficient time was available to conduct a formal qualitative study of people with chronic HCV; such a study would have involved employing an experienced qualitative researcher and securing ethical committee approval. As an alternative, it was agreed by the Scottish Government and the Clinical Review Group (including patient representatives) that Professor Goldberg, Chair of the Group, should meet a sample of SIBSS beneficiaries to listen to their experiences.

To ensure as representative a sample as possible, 15 SIBSS beneficiaries were identified using a random sampling approach; the approach was refined to ensure that a) the blood factor/transfusion acquired hepatitis C distribution among SIBSS beneficiaries was matched in the sample and b) of the 15, two

widows/widowers/partners of infected individuals were included. For those selected through the randomisation process, a telephone invite (incorporating the purpose of the proposed conversation) from a SIBSS administrator was made. The conversations were conducted in the homes, scattered throughout the country, of the SIBSS beneficiaries and lasted up to two hours; patients agreed to their “stories” being used, anonymously, to inform the report, and to quotes being used to illustrate key points.

The conversations between Professor Goldberg and the SIBSS beneficiaries (sometimes accompanied by a relative) were not interviews and the process was not intended to be of a formal qualitative study nature; the initiative was an opportunity for the Chair of the Group to “hear the SIBSS beneficiary voice” – essentially giving the patient the opportunity to tell their story and say whatever they wanted in the context of the Clinical Review, the purpose of which was further explained to them face to face. Accordingly, no questionnaire was used, but notes were taken. Professor Goldberg asked the SIBSS beneficiary to say whatever they wanted; the only questions asked by him related to clarifications of points already made and factual details about e.g. dates of diagnosis/treatment.

Note that the Scottish Infected Blood Forum conducted a similar large-scale exercise, gathering testimonials from infected persons. The findings were published in 2015(20); it was decided not to use these because of the self-selection (and thus the potential for bias) of individuals included in this exercise. However many of the findings of this initiative were consistent with those generated through the random – sample approach used for the Review exercise.

10.2 Results

10.2.1 Examination of the scientific literature: Extrahepatic manifestations of hepatitis C: A meta-analysis of prevalence, quality of life and economic burden. Younossi Z et al. Gastroenterology: 2016.

10.2.1.1 Conditions More Commonly Associated with Hepatitis C

The following conditions were identified as being significantly (statistically) more common among people with, compared to those without, chronic hepatitis C virus infection; the authors did not make any comment on the impact of clinical characteristics (such as liver disease stage or other conditions), behavioural factors

(such as injecting drug use or excessive alcohol consumption) or demographic factors, on the findings (15).

- Mixed Cryoglobulinaemia (symptomatic and asymptomatic): 12 X more common among people with chronic HCV compared to those without.
- Chronic Renal Disease (including end stage): 1.1 X more common
- Diabetes Mellitus (type 2): 1.6 X more common
- B-Cell Lymphoma: 1.6 X more common
- Lichen Planus: 2.3 X more common
- Sjogrens Syndrome: 2.3 X more common
- Porphyria Cutanea Tarda: 8.5 X more common
- Rheumatoid Arthritis: 2.4 X more common
- Depression: 2.3 X more common

Note:

Cryoglobulinaemia is a condition whereby there is an increase in abnormal (mixed) proteins in the blood which can clump together at low body temperature; this may result in inflammation affecting the skin and/or kidneys in particular; renal disease as above is associated with such cryoglobulinaemia.

Sjogrens Syndrome is a disorder of the immune system, sometimes associated with rheumatoid arthritis, causing dry eyes and dry mouth.

B Cell Lymphoma is a type of “blood cancer” in the lymph nodes; it is a life threatening condition with variable response to treatment.

Lichen Planus is an inflammatory condition affecting the skin, hair, nails and mucous membranes.

Porphyria Cutanea Tarda is disorder of metabolism which makes the skin hypersensitive to light.

Publication bias was reported by the authors for both diabetes mellitus and mixed cryoglobulinaemia, but not for other conditions – i.e. the greater likelihood of the publication of studies showing an association between hepatitis C and the disease than the publication of findings not showing an association; accordingly, the increased risks for these conditions should be viewed with caution.

Cardiovascular disease and stroke, respectively, were found to be marginally more common among those with hepatitis C, but, unlike for the associations listed above, were not statistically significant (i.e. there is a reasonable chance that the slightly increased risk finding was a chance one and that if studies were repeated, no increased risk would be detected).

10.2.1.2 The Impact of Hepatitis C on Health-Related Quality of Life

Studies which utilised the SF-36 questionnaire to assess health-related quality of life among hepatitis C infected people were analysed. The SF-36 asks a range of questions (36) about physical and mental health. The questions, generally, apply to recent times; these include, for example:

- Does your health now limit you in these activities – lifting or carrying groceries, or climbing several flights of stairs?
- During the past four weeks have you had any of the following problems with your work or any other daily activities as a result of any emotional problems (such as feeling depressed or anxious)?
 - cut down the amount of time spent on work/other activities.
 - accomplished less than you would have liked.

An overall Mental Component Score (MCS) and Physical Component Score (PCS) can be generated by analysing the responses. The overall scores can be compared to the average (mean) score of 50, observed in the general population.

The PCS for hepatitis C infected people, irrespective of their characteristics, was 46 (95% confidence interval 45-47). When the score was further examined for factors such as liver disease severity, anxiety, depression, injecting drug use and alcohol use, a statistically significant association between the proportion of participants with cirrhosis and the PCS was observed - i.e. hepatitis C infected people with cirrhosis were more likely to have a lower score than people without. Accordingly, for people without cirrhosis, the score would be somewhere between 46-50 and for people with cirrhosis the score would be less than 46.

The MCS for hepatitis C infected people was 44 (95% confidence interval 41-46). When further examined for factors, as above, no statistically significant associations were observed - i.e. hepatitis C infected people without advanced liver disease and/or a history of excessive alcohol consumption and/or a history of injecting drug use were just as likely as those with these characteristics to have a 6 point lower MCS than the general population.

The authors of the analysis described the PCS and, particularly, the MCS of hepatitis C infected people as “substantially” lower than the general population average scores. The scores need to be interpreted with caution as they, effectively, represent a snapshot (within a lifetime) of hepatitis C infection. Nevertheless, the findings do indicate that for hepatitis C infected people who have not progressed to cirrhosis, there is evidence of a strong association between having hepatitis C infection and having mental health problems. Further, no evidence of publication bias was reported i.e. there was no greater likelihood of the publication of findings indicating

an association between hepatitis C and depression than the publication of findings indicating no association.

10.2.2 Examination of the Scientific Literature: Living with hepatitis C virus: a systematic review and narrative synthesis of qualitative literature. Dowsett L et al. Canadian Journal of Gastroenterology and Hepatology: 2017

The following are key excerpts from the Results section of the paper (16).

10.2.2.1 Disruption to daily life

“Broadly, studies reported that participants experience considerable disruption to daily living, impaired quality of life and chronic physical and physiological symptoms related to HCV. Study participants reported a variety of physical symptoms such as fatigue (references to 12 studies), weakness (two references), nausea (four references), pain (six references), swelling (one reference), headaches (two references) and sweating (one reference). In addition, a number of studies reported participants experiencing physiological symptoms such as depression (three references), anxiety or panic attacks (one reference), and irritability (two references). Other symptoms such as poor memory (two references) and inability to concentrate (three references) were also reported by participants. Fry and Bates found fatigue and other physical symptoms often made full time work difficult to maintain; many participants switched to working part time, quit their job or changed sectors (one reference).”

10.2.2.2 Impact of diagnosis

“After receiving a positive HCV diagnosis, patients report a range of emotions, including distress (being overwhelmed and frightened and feelings of hopelessness) (twelve references), shame or disgust (five references), denial or doubt (three references) and relief (three references).”

“A diagnosis of HCV impacted individuals’ relationships to varying degrees. Some reported that relationships were strengthened due to the diagnosis (six studies), while others found that HCV negatively impacted relationships (five references).”

“Those who experienced a deterioration in their relationships cited that irrationality and irritability (four references), fatigue (four references), physical pain (two studies), stress and financial burden (one study), fear of transmitting HCV to family and

children (two references), and fear of sexual transmission or pregnancy (four references) as the factors contributing to weaker relationships.”

10.2.2.3 Stigma

“Many individuals across these studies describe the stigma associated with HCV. The cause of stigma was consistently found to be based on either the association of HCV with injection drug use or risky behaviours (twelve references) and/or ignorance or misconception about transmission (ten references). Individuals with HCV reported that misinformation made those around them afraid of touching them (four references) and afraid of them using regular utensils and plates (e.g. those with HCV would be offered plastic utensils and paper plates) (five references).”

“Emotional responses to stigma included hurt feeling (two references), shame (four references), embarrassment (two references), low self-worth (one reference), fear (three references), anger (three references), depression (one reference), isolation (one reference), feeling dirty (four references), and feeling rejected (one reference). Action-based responses to stigma included educating others (one reference), blaming others (one reference), and changing relationships (one reference). Due to perceived stigma or fear of stigmatisation, those with HCV were often afraid to disclose their HCV status (ten references), lost friends (one reference), changed their employment to avoid stigmatisation (two references), and isolated themselves to avoid experiencing stigma (five references).”

The authors concluded that there was remarkable consistency of themes across all studies, suggesting that different populations of HCV infected individuals may have similar experiences. They also concluded that even when clinically relevant symptoms are not present, HCV can still substantially impact a patient’s life.

10.2.3 Examination of the Scientific Literature: Impact of treatment

Over the last 25 years, the treatment of hepatitis C has changed dramatically from a regimen which has major side effects and poor effectiveness (standard Interferon therapy) to ones which have few side effects and very high effectiveness (the all-oral Interferon-free Direct-Acting Antiviral (DAA) agents)(17,18).

The side effects associated with Interferon +/- Ribavirin therapy – usually given over a 24-48 week period – are well recognised; fever, headache, joint pains and muscle pains are encountered in the majority of patients and especially in the early phase of therapy. Neuropsychiatric side effects, such as depression and irritability are also common, as are decreases in white cells, red cells and platelets in the blood.

In 1-6% of instances, Interferon treatment for hepatitis C is associated with the development of an underactive or overactive thyroid gland. Side effects associated with eye sight, hearing, the kidney, the heart and the lungs occur rarely (less than 1% of instances).

The most robust study of the impact of hepatitis C antiviral treatments on physical and mental health of people with mild or no liver disease was published by Younossi et al in 2017 (19). This study analysed patient-reported outcome data from 16 clinical trials conducted during 2012-17; comparisons were made between the effectiveness and safety of Interferon-containing and Interferon-free treatment regimens. The patient-reported outcome data were collected through the use of several instruments; these included the SF-36 Questionnaire (as described above). The results showed that, generally at the group level, people treated with Interferon experienced very considerable declines in mental health, physical health and work productivity, and that these declines reversed slowly following the completion of therapy; for those achieving viral clearance, the subsequent scores were better than the pre-treatment ones. Note that at an individual level there can be longstanding, sometimes irreversible (e.g. associated with the thyroid gland, as above), effects.

Those treated with Interferon-free regimens showed improvements in mental and physical health during the treatment phase and, for those achieving a sustained viral response (sustained clearance of virus from the blood), these improvements continued after treatment completion; the most prominent improvements related to mental health (including worry and emotional wellbeing).

These findings demonstrate the debilitating effects of Interferon on general mental and physical health during the i) treatment and ii) early post-treatment periods (because of the slow reversal of such effects), and improvements in mental health, in particular, as a consequence of viral clearance.

The robustness and comprehensiveness of the studies, and their purity from a non-liver disease perspective, make the finding especially insightful. The authors concluded that the improvements in mental health among those clearing the virus might be due to the resolution of direct hepatitis C virus-related impact on the brain.

It should also be recognised that, during the Interferon/Ribavirin era in particular, therapeutic failure was common not least because the Group in question were more likely to be infected with the less responsive Genotype 1 strain. The impact of receiving “bad news” after a prolonged course of challenging therapy is not well studied but, intuitively, such an experience will have been a negative one from a mental health perspective.

10.2.4 Conversations with individuals registered with SIBSS

Fifteen beneficiaries were interviewed; of these, 11 were male, four had acquired their hepatitis C through blood factor, nine had become infected through blood transfusion and two were widows/widowers/partners of the deceased. Excluding the two widows/widowers/partners, individuals were aged between 35 and 78. All of the 13 individuals who had been infected indicated that they had cleared their virus.

For a small minority, relatively few past and current health and wellbeing issues were apparent. For most, however, the dominant message conveyed was a strong perception that hepatitis C had seriously compromised their ability to reach their full potential - professionally, socially and financially.

The following themes emerged — issues applicable to at least two, but usually several individuals.

10.2.4.1 Impact of Hepatitis C: Notable Losses/Detriments

Loss of Ambition and Constant Worry

For those diagnosed during the 1990s in particular, the lowering of aspiration and ambition as a consequence of being told, at the time of diagnosis and for years after, that i) treatments were relatively ineffective and ii) knowledge about the impact of the infection on health and survival was poor, but over decades the chances of developing cirrhosis, liver cancer and dying from hepatitis C were high. And the associated worry, with consequent anxiety and distress, often lasting many years.

Testimonials from the Individuals who had been infected

- “...it is narrowing... it changes your horizons, your future...”
- “...saw other people getting on with their lives...”
- “...all I could think about was when my liver was going to stop working...”
- “...had myself dead and buried...”
- “...didn’t apply for promotion as I thought I would be dead...”

Testimonials from the Carers or Spouses of Individuals who had been Infected

- “..we were told that she would probably die from liver failure or heart failure but couldn’t say which would be first....”
- “....every time he is ill ...is it anything to do with hepatitis C....”
- “.....he said “how much longer do I have...do I have months, do I have years?”.....”

The Debilitating Consequences of Interferon/Ribavirin

(Note that some of those interviewed had not received such therapy due to contraindications because of other conditions or the relatively recent diagnosis of hepatitis C)

The impact of a course or courses of Interferon +/- ribavirin on health and wellbeing – essentially losing up to a year or years of life, often at a crucial stage, both professional and socially.

- “...treatment was hell... off work for six months...”
- “....very, very tired....and scratching every night....”
- “...very ill with interferon.....”

Restriction on Relationships/Having a Family: Self Imposed to Protect Others

The self-imposed restriction on i) developing relationships (particularly sexual) and ii) having children on the grounds that the knowledge of the time indicated that there was an appreciable chance the virus could be transmitted sexually (now understood to be a rare occurrence but in the 1990s there was considerable uncertainty) and from mother to child. In most instances, such restrictions were “acts of sacrifice” to protect others.

Sexual Relationships

- “...didn’t want a sexual relationship with a lassie...”
- “...it knocked the edge off things (sexual relationship with spouse).....not something I like to talk about....”

General Relationships

- “...couldn’t go out with friends drinking...”
- “...relationships were a no no...”
- “...I felt dirty, I would contaminate people...”

Children

- “...chance the virus could spread to the baby...decided to have a termination...”
- “....decided not to have any more kids....”
- “...when I had that infection I wouldn’t see my grandson....I was feart.....I just wouldn’t take that chance.....”

Restriction on Relationships: Imposed by Others

Restrictions were found to be imposed by family, friends and potential friends/partners on hearing about the individual being infected – thus seriously

compromising the development and maintenance of relationships; these restrictions are perceived, and/or definitely known, by the infected individual to be due to other people either being afraid of becoming infected or associating the infection with the stigma of injecting drug using behaviours.

Stigma of Association with Injecting Drug Use

- “...people didn’t visit us again...”
- “...I felt ashamed about having hepatitis C...it just seems such a dirty disease...”
- “.....lost a lot of friends...”

Worries about Becoming Infected

- “.....my daughter-in-law wouldn’t allow her to handle the (*grand*) children.....she felt dirty...because drug addicts contracted it.....”
- “... always worried about becoming infected ourselves.....”(as told by the carer of an infected person)

Difficulties with Employment

Difficulties in securing or holding down employment as a consequences of having to declare hepatitis C infection to an employer and the inhibitory consequences of those experiences in terms of seeking future employment.

- “...lost my job because of it...”
- “...was suspended for two months...”
- “...less work, less pay, less pension...”
- “...rejected for a few jobs... I cried because I felt so bad...”
- “...lost driving license...and lost my job because of the hepatitis...they thought I was epileptic but it was the hepatitis....”

Difficulties in gaining life insurance or a mortgage

- “...I couldn’t get life insurance even after clearance...”
- “...when you tell them you had hepatitis they load you....”
- “....my son couldn’t get life insurance because he told them his mother had hepatitis C...”

10.2.4.2 Impact of Hepatitis C: Mental Health Problems Affecting Overall Professional and Social Functioning

Lowering of Self-Esteem and the Perception that Hepatitis C has “Held One Back in Life”

The longstanding, suppressing impact on self-esteem of having a stigmatising chronic life threatening infection superimposed on another usually chronic disease (i.e. haemophilia or disease requiring surgery and blood transfusion) – i.e. the double blow.

The perception that episodes of fatigue, depression, anxiety, poor memory, “brain fog”, general non-specific poor health and not reaching one’s full potential were/are due i) entirely, or in part, to hepatitis C and/or ii) long-term post-treatment effects of Interferon/Ribavirin. These perceptions have been reinforced by health care staff indicating (with justification) that their patients’ symptoms were/are possibly related to their hepatitis C; however, because any causal relationship between infection and symptom cannot be proven in most instances, the patient is often distressed because they feel “deep down” that their hepatitis C is not taken seriously.

Lowering of Self Esteem

- “...all my files still have high risk on them...”
- “...given another name in hospital...made me feel worthless...”

Perception that Hepatitis C has Held One Back: Exhaustion and Memory

- “...always too tired...couldn’t participate...”
- “...in my twenties...always exhausted...”
- “...my memory was shot to bits...”
- “...really, really tired in the last couple of years... maybe it’s the hepatitis C...”

Perception that Hepatitis C has Held One Back: General

- “...over my life I have been held back by hepatitis C – I wonder what I would have been without my hepatitis C...”
- “.... pretty sure hepatitis C kept me off the (renal) transplant list.....”
- “....a difficult life was made even more difficult....” (as told by the spouse of a deceased individual)

The Stress Associated with the Perceived Injustice of Inquiry and Payment Outcomes and “Failure to Get Closure”

For example, stress due to divisions among patients as a consequence of chronic HCV ‘Stage 1’ (and sometimes advanced HCV ‘Stage 2’) individuals believing the award decisions (to date) to be unfair on the grounds that the disparity between chronic and advanced HCV awards is inconsistent with (i.e. much greater than) the disparity in the overall lifetime health and wellbeing impacts of hepatitis C among chronic and advanced HCV individuals.

The ongoing stress associated with the failure to get closure of the issues and put matters behind them. Numerous inquiries, reviews, meetings, personal assessments – all generating cycles of hope and, for many, disappointment.

Inter-Personal Conflict

- “...it turned everyone against each other...”
- “...he (another person with advanced HCV) hates that he is getting this help and I am getting no help at all...I was angry that he no longer had any financial worries...and I felt bad about that...”

Stress Associated with the Process

- “...sick system because if you drank a bottle of whisky (a day) you get rewarded (i.e. one would increase one’s rate of liver disease progression towards advanced disease) ..”
- “...when the Penrose Inquiry came about (i.e. the publication) that really floored me...”
- “...couldn’t take the stress of having to fill in forms and prove it...”

Fear Following Viral Clearance

The fear and the anxiety among those who have cleared their virus, but still have to be monitored because of liver damage (fibrosis but not cirrhosis) and the increased risk of hepatocellular cancer.

- “...scared that it would come back...”
- “...I got fibrosis and it is quite high...worried every time I get a scan...”

Guilt about not Disclosing Hepatitis C Status and the Guilt About Having Possibly Infected Others

The guilt of not having told ex-partners and children about hepatitis C and the nagging suspicion (even though the risk was very low) that they might have become infected and, if so, their infection remains undiagnosed. The guilt of possibly having infected others.

- “...I didn’t know what to say to them...”
- “.....didn’t tell my daughter till last 2 years.....”
- “....I donated blood in the 1980s...somebody else might have it because of me.....”

Anger and Distress about NHS Failures Concerning the Diagnosis of Hepatitis C

Among those diagnosed years after late 1991, when testing was introduced across Scotland, the feeling of anger because the test had not been offered before – generating the perception that damage caused by the virus could have been avoided through the receipt of antiviral treatment and/or advice about the dangers of alcohol consumption; note that a small proportion were diagnosed after 2012.

The feeling of resentment that either a diagnosis of hepatitis C had been made without consent for testing having been obtained and/or an employer knowing about the diagnosis in advance of the patient's knowledge.

- "...I could have been given a test earlier..."
- "...the work was told in 1992 but I was told in 1994....."
- "...why was I not asked to have a blood test....anybody with a blood transfusion should have had it (the test) when it came out...."

Distress of Knowing that Hepatitis C Infection/Disease Stemmed from NHS treatment

The ongoing distress associated with having i) a difficult to treat infection which (they were told) would likely cause debilitating illness and shortened life and ii), for some, the distress of experiencing treatment failure and suffering the severe side effects of Interferon-based therapy – all in the context of the infection/disease having resulted from NHS interventions.

- "...if this hadn't happened I wonder what our lives would have been like..."
- "...and made me feel guilty about the cost of treatment as well..."

Emotional Impact on Close Family Relationships

People described many complex emotional reactions for the whole family in response to the diagnosis of hepatitis C; these included anger, guilt, anxiety and low mood, resulting in a significant strain upon family relationships for some.

- "...mum and dad blamed themselves for my hepatitis C..."
- "...I didn't tell my daughter for years...I still feel guilty..."
- "...and he (partner) had to deal with my anxiety and mood swings..."
- "...he felt I didn't understand, I wasn't sympathetic enoughand he said "you're just trying to make me feel worse" when I mentioned Hepatitis C.....I felt he didn't have the life he should have had, the comfort he should have hadand it wasn't easy for me either....."(as told by the spouse of a deceased infected individual)

10.3 Conclusions

- People with hepatitis C, regardless of liver disease status, are at an increased risk of a number of extrahepatic diseases; most of these are relatively uncommon life-affecting but usually not life threatening conditions. Renal disease due to Membranoproliferative Glomerulonephritis (MPGN) and B-cell Lymphoma (currently a disease which qualifies for advanced HCV payments) are exceptions.

Key Recommendation

- **Accordingly, Renal Disease due to Membranoproliferative Glomerulonephritis (MPGN) should be added to the advanced HCV eligibility criteria as it is a condition known to cause a considerable negative impact on life expectancy.**

- Other conditions such as sporadic porphyria cutanea tarda and rheumatoid arthritis are more common in people with hepatitis C, but any causal link with reduced life expectancy is not clear cut.
- Interferon-based therapies (used between 1994 and 2016 in Scotland) invariably cause adverse effects which are debilitating over long periods; in contrast, the DAA agents, now used for all, are safe (note: long-term follow-up studies of recipients of DAAs will be undertaken for completeness) and very well tolerated.
- Evidence from the scientific literature - indicating that the mental health (particularly depression, anxiety and self-worth), and thus the quality of life, of people with hepatitis C, regardless of liver disease status, is impaired considerably - is compelling; this evidence is strongly supported by testimonials given by SIBSS beneficiaries.
- Evidence from the scientific literature indicates a relatively small reduction in general physical health due to hepatitis C among people without advanced liver disease; the exception applies to people who have relatively uncommon extrahepatic manifestations of hepatitis C.
- While testimonials from SIBSS beneficiaries generally support these findings, individuals often perceived that periods of fatigue and general malaise were due to their hepatitis C in full or in part. It is possible that the physical health impact of hepatitis C is more pronounced in people infected through blood factor/transfusion who often have other chronic disease conditions (e.g. blood factor disorders), but the evidence base associated with this specific group of individuals is insufficient to say.

- There is no appreciable evidence to indicate that the route of acquisition of Hepatitis C or the number/amount of exposure(s) influences health and wellbeing outcomes.
- While hepatitis C in those without advanced liver disease is not life threatening, it is life changing; this is particularly applicable to people who acquired it through blood factor or blood transfusion, not least because of the “additional blow” conveyed to them by NHS interventions.
- Hepatitis C, particularly in the context of the source of infection being an NHS one, changed lives because of its negative effects on family, relationships in general, ambition, employment, finances, self-esteem and general mental wellbeing; these effects stem from a number of factors including the stigma associated with hepatitis C and the recalibrating effects of being diagnosed with an infection that, according to their healthcare attendants, would likely reduce the quality and quantity of one’s life.
- Most individuals with chronic HCV who are registered with SIBSS were aware of their infection for many years, most lived with the uncertainty surrounding its consequences and most attributed, fully or in part, any ill health to it.
- For those diagnosed more recently, there has been less uncertainty due to improved knowledge and better treatment; however, the failure to have been offered a test decades before (and the perceived disadvantages of a later diagnosis) has caused distress.
- While the majority have been treated successfully, the legacy of their infection manifests, commonly, in the reflection – “...if I hadn’t been infected with hepatitis C what would my life have been like...”.
- While some infected people welcome action in the form of Inquiries, Reviews and Reports, most are stressed by them and yearn for closure – a time when they are free from hepatitis C in their bodies, but also free from hepatitis C in their minds.
- In the context of the life changing impacts of hepatitis C on infected individuals, it is critical that the burden on many of their spouses/partners and the widows/widowers/partners of those deceased - a burden which was particularly evident in the conversations with SIBSS beneficiaries - must be recognised.

11. Term of Reference 3

Assess the impact of chronic hepatitis C virus infection, and associated antiviral therapy, on death among people who did not progress to advanced HCV disease and have died (including those whose death

has been attributed (directly or indirectly) on the death certificate to hepatitis C.

Two approaches were adopted; the examination of the scientific literature and the analysis of Scottish data on hepatitis C.

11.1 Methods

11.1.1 Examination of the Scientific Literature

The assessment of the impact of hepatitis C on the risk of death among people who have not advanced to severe liver disease or developed B cell lymphoma (i.e. people identified as having advanced HCV) is challenging. As indicated above, overwhelming evidence, demonstrating the greatly increased risk of death following the development of cirrhosis of the liver (and/or B cell lymphoma) exists; to this should be added renal failure due to Membranoproliferative Glomerulonephritis.

For those without these conditions, however, the analytical problem has been estimating, with confidence, the contribution hepatitis C infection, per se, makes to mortality as opposed to the contributions to mortality made by the conditions so often associated with being infected with hepatitis C; these conditions include, from a behavioural perspective, injecting drug use and excessive alcohol consumption and, from the specific perspective of individuals registered with SIBSS, blood factor disorders and the serious conditions which led to individuals requiring a blood transfusion.

Accordingly, five studies were deemed particularly illuminating - three following up people from known date of infection and two following up people from known time of SVR following therapy.

11.1.2 Analysis of Scottish Death Certificate Data

Health Protection Scotland (HPS) holds clinical data on all individuals diagnosed with hepatitis C; through the routine linkage of these data with data on hospital discharge diagnoses held at the Information and Statistics division of NHS National Services Scotland and death certificate data held at the National Records of Scotland, a comprehensive understanding of the life course of the hepatitis C infected person can be achieved. Note that all records held in HPS only include partial personal identifiers for anonymity and confidentiality purposes; accordingly, the full name and the address of an individual is not held. Using these data, it was possible to examine the reliability and completeness of the cause of death, with respect to hepatitis C infection, recorded on death certificates.

11.2 Results

11.2.1 Examination of the scientific literature

11.2.1.1 Studies: Follow-Up from Known Date of Infection

The first was a report on the follow-up of nearly 1000 individuals infected through blood transfusion in the UK; this unique cohort of individuals had been traced during the UK Hepatitis C Lookback Programme of the 1990s (21). For all, the exact date of infection was known and all had been infected through blood transfusion; some were from Scotland. A considerable number of individuals (475), identified in the Lookback, who had been transfused but were not infected by hepatitis C, constituted a control group; accordingly, the study design was robust and highly relevant to the question being asked by the Clinical Review Group.

Over an average of 16 years of follow up following hepatitis C infection from blood transfusion, 28% of 924 individuals infected with HCV and 24% of 475 hepatitis C negative controls had died. Excluding those who died from liver disease, 24% of cases and 23% of controls had died; adjusting for a range of variables including age, age at transfusion, and alcohol consumption, no difference in all-cause mortality was observed between cases and controls over the 16 years of follow up.

A similar study, published just after the discovery of HCV, investigated all-cause mortality among people who had developed non-A, non-B hepatitis following blood transfusion in the United States of America (US) (22). Over a follow-up period of 18 years, all-cause mortality rates in both cases and controls were identical at 50%.

The longest follow-up of people for whom time of infection is known relates to people who injected drugs (PWID) in Norway. All-cause mortality rates over a 33 year period of follow-up among those with chronic hepatitis C and those without (control PWID) were no different (23).

11.2.1.2 Studies: Follow-Up from Known Date of SVR

For hepatitis C infected people in the US without advanced liver disease, all-cause mortality rates of 39,400 people who cleared their infection and 1,300 who did not following DAA therapies were compared (24). After adjusting for a number of factors including other clinical conditions (including alcohol and drug use), body mass index, gender, age and ethnicity, the former group had a 50% lower risk of all-cause mortality over a 1-2 year follow up after the completion of therapy. Information about the reported cause of death was unavailable. The authors concluded that getting rid of hepatitis C might decrease the risk of death through reducing a source of chronic inflammation. Another possible reason for the observation is that people with an increased chance of death respond less well to antiviral drugs.

A Scottish study involved the follow-up of 3400 patients, following Interferon-based therapy, for an average of 5.3 years; while there was a significant reduction in all-cause mortality among people with moderate to severe liver disease, there was no significant reduction among those with no/mild disease (25).

11.2.2 Analysis of Scottish Death Certificate Data

To the end of December 2016,

Of 1,864 individuals known to have i) been infected with hepatitis C through any transmission route, ii) developed liver failure and/or hepatocellular carcinoma and iii) died (almost certainly because of their liver disease), 1,014 (54%) had hepatitis C recorded on their death certificate.

Of 222 individuals known to have i) been infected with hepatitis C through blood transfusion or blood factor and ii) died, 76 (34%) had hepatitis C or viral hepatitis mentioned on their death certificate.

11.3 Conclusions

- People who have advanced HCV disease are at considerably greater risk of death than people who are uninfected with Hepatitis C and have similar underlying health characteristics.
- At the population level, HCV infected people without advanced HCV disease have much the same risk of death as people who are uninfected with Hepatitis C and have similar underlying health characteristics. This does not exclude the possibility of Hepatitis C contributing to the death of an infected individual who does not have advanced HCV (e.g. death associated with mental health problems).
- The recording of hepatitis C on the death certificate is unreliable and, when it occurs, cannot be used to differentiate between hepatitis C having made a contribution to death or not in instances where the person has died from non-advanced HCV defining diseases/conditions.

12. Term of Reference 4

Provide a view on i) the challenges of assessing the extent of the hepatitis C infection impact at an individual level, ii) whether or not such an assessment should be undertaken and, if so, iii) what would be the optimal approach to such assessment.

12.1 Methods

Views were sought as to whether or not a method, permitting the robust and rigorous assessment of the impact of hepatitis C on the individual who has not progressed to advanced liver disease, could be developed and command the confidence of both assessors (clinical staff) and assessees (patients).

The model of assessment implemented in England in relation to beneficiaries of the English Infected Blood Support Scheme in late 2017 - following the publication of "Infected Blood: Government response to consultation on special category mechanism and other support in England. 2017"- was used as an example (26). The key decisions made, in relation to the England approach, were as follow:

- Type Two or Three Cryoglobulinemia accompanied by Membranoproliferative glomerulonephritis (MPGN) will be added to the Stage Two criteria.
- "...from November 17, introducing Special Category Mechanism to enable people with Stage One infection having a substantial and long-term negative impact on their daily lives, to apply for the higher payment received by those with HIV or Stage Two hepatitis infection".

In England, people belonging to the Stage One category were written to, told about the change to policy and, were invited to apply if appropriate.

For cases where the application related to either i) mental health problems or ii) chronic fatigue or both i) and ii) the applicant had to answer the following two questions:

- Does your hepatitis C infection or its treatment make it difficult for you to carry out regular daily activities such as leaving your home, using public transport or shopping for essentials, as a result of mental health problems (such as feeling depressed or feeling anxious)?

Yes/No and if Yes, occasionally/monthly/weekly/most days/daily

- Does your hepatitis C infection or its treatment make it difficult for you to carry out regular daily activities such as walking more than 50 meters, climbing stairs, lifting objects from the ground or a work surface in the kitchen, or physical tasks such as gardening?

Yes/No and if Yes, occasionally/monthly/weekly/most days/daily

The attending hospital doctor or viral hepatitis nurse had to respond in the following way:

- Confirm that the patient is suffering from mental health problems and/or fatigue and provide detail about the nature of the problems.
- Answer the following question. In your opinion how likely is it that your patient's a) mental health problems and/or b) fatigue are attributable to their hepatitis C infection (or its treatment effects)?

Not likely/possible/highly likely/definite.

12.2 Results

The England model was shared and discussed with i) Scotland's Viral Hepatitis Clinical Leads Groups (clinical leads and/or hepatitis C coordinators from Scotland's NHS boards) and ii) the Clinical Review of the Impacts of Hepatitis C Group.

There was a general agreement that the England model, i) did not take account of the past impacts of hepatitis C on the current and future lives of infected people and their widows/widowers/civil partners, ii) would likely have a deleterious effect on the doctor-patient relationship and iii) was not robust enough to allow assessment with any precision.

A range of alternative models were explored; these included drawing distinction between different groups of people with chronic hepatitis C using "uncontestable" thresholds based on, for example, the length of time between the date of first knowledge of hepatitis C and the latest date of still being known to be infected, the number/duration of interferon based treatments experienced, the route of acquisition of hepatitis C (i.e. blood factor or blood transfusion) and current age. All such thresholds, however, were regarded as too blunt to be used to differentiate the degree of lifetime impact of hepatitis C on the health and wellbeing of infected people.

The complexity of the impacts of hepatitis C on the individual, particularly from a psychosocial perspective, was viewed as so considerable that it would be inappropriate to undertake any such individual assessment, no matter how sophisticated and rigorous it might be, on the grounds that the end result would often be an unfair one, subject to contestability.

12.3 Conclusions

- At the individual level, an overall assessment of impact is very challenging i) because of the complexity of teasing out the contribution of hepatitis C to ill health among people of varying ages who usually have other conditions (co-morbidities), ii) because it spans over many years, iii) because so much of the impact is unrecorded in patient files due to the absence of any comprehensive, systematic and ongoing assessment (i.e. "no one asked us!")

iv) because some patient records are no longer available and v) because, in many instances, patients did not disclose, in particular, the psychosocial impacts of hepatitis C to their attending healthcare professionals due to, for example, embarrassment, feeling uncomfortable, stoicism or self-denial.

- Patients' representatives, and the patients themselves through the conversations as described in this Report, were of the view that any form of "means testing" would be unfair, enormously stressful to both patients and their healthcare assessors, and would compromise the ethos of SIBSS beneficiaries supporting and caring for each other—an ethos that has been nurtured over many years.
- It was, however, recognised by the Clinical Review Group that, while the great majority of people with chronic HCV had been affected by their infection, some had not been appreciably affected and for those who had been affected, there had been a spectrum of impact – both clinical and non-clinical (e.g. employment, ambition, relationships). Accordingly any assessment which was just clinically-based would ignore the very considerable non clinical impacts as described in this Report.

Key Recommendation

- **From an award perspective, the Clinical Review Group appreciated the dilemma of the unfairness, impracticality, divisiveness and stress of formal individual assessment on the one hand and the failure of a non-differentiating "blanket approach" to recognise differences in hepatitis C impact on the other. To address this dilemma, the Clinical Review Group favours, unanimously, the following approach:**

People with chronic HCV (including those who have cleared their virus through treatment), or their widows, widower or partners, who are currently SIBSS beneficiaries or who become eligible to be SIBSS beneficiaries in the future, should be asked to self-declare hepatitis C impact in the following simple way.

- **If they themselves considered that their (or their spouse's/partner's) hepatitis C had not appreciably affected their life, they would not be eligible for a chronic HCV annual payment award; however if the situation changed in the future and they considered that hepatitis C was now affecting their life, they could apply for a chronic HCV award as below.**
- **If they themselves considered that their (or their spouse's/partner's) hepatitis C had seriously affected and continued to affect their life, they would be eligible for a chronic HCV award at a higher level.**
- **If they themselves considered that their (or their spouse's/partner's) hepatitis C had affected and continued to**

affect their life, but not seriously, they would be eligible for a chronic HCV award at a lower level.

- Accordingly, those applying for a chronic HCV award would have to declare themselves in one of two categories. A definition of ‘serious’ would be provided to assist the decision making; this definition would be to the satisfaction of the Clinical Review Group. There would be no requirement for the applicant to justify the application and the category they declared themselves in. The process would be entirely based on trusting the judgement of the potential applicant. There would be no requirement for a healthcare professional to be involved.
- In the context of the available evidence as outlined in this report and the vast collective experience of its members , the Clinical Review Group deemed this approach to be optimal for the following reasons:
 - It has patient and healthcare professional support, it is simple to administer, it aims to ensure that those with the greatest need receive the greatest benefit, it avoids patient/healthcare professional conflict and any need for an appeals process, it reduces stress among applicants to a minimum, it is person-centred recognising that the individual’s perception of hepatitis C is critical, it promotes both individual and collective responsibility and it sends out a loud and clear message saying “you are trusted to make the appropriate declaration”.

13. Term of Reference 5

Provide a view on the relativity of the hepatitis C infection impacts among chronic and advanced HCV individuals.

13.1 Methods

The following views constitute a consensus of the Group. They are based on the evidence, as above, and their own professional or personal experience as patients, patient representatives, nurse/ psychologist/physician attendants of Hepatitis C patients and national experts in clinical aspects of Hepatitis C.

13.2 Conclusions

13.2.1 Overall Contextual Conclusions Encompassing those from Terms of Reference 2-4 as Above

- In many instances, people with advanced hepatitis C will have their lives shortened by the impact of infection; while certain people without advanced hepatitis C may have their lives shortened by the impact of infection (for example, due to hepatitis C being a factor in a cycle of depression and addictions), the overall impact of hepatitis C on mortality among this group as a whole (i.e. at a population level) is not appreciable. That said, survival among infected people with underlying bleeding disorders and other serious chronic conditions is compromised when compared with survival among the general population.
- For people with hepatitis C, regardless of whether or not they have advanced hepatitis C, the impact on their mental health and way of life, often over decades, has been profound. The mental health effects – especially those manifesting themselves in depression, anxiety and stress – are incontrovertible; such certainty stems from comprehensive and high quality evidence from the scientific literature, supported by illuminating testimonials from a random sample of SIBSS members.
- Just as critical are the notable losses sustained by most infected individuals. Such losses relate to relationships with family and friends, employment and financial security, and stem from many factors; these include i) the stigma of hepatitis C because of its association with injecting drug use and the fear of transmission to others, ii) the loss of ambition and self-esteem from knowing one has a life-threatening, generally previously untreatable, condition, iii) the debilitating effects of previous antiviral treatment and iv) the constant, long standing, reminder through news bulletins that one is the victim of an NHS “scandal and disaster”, the scale and intensity of which is unprecedented.
- Any physical impacts of hepatitis C on people without advanced hepatitis C are difficult to characterise and quantify, not least because the underlying bleeding disorders and chronic disease associated with this group, and the mental health effects as described above, could themselves influence, for example, energy levels and cognitive ability. Nevertheless, what is undisputed is the self-perception that hepatitis C was, is, or might have been the cause of such difficulties.
- While the hepatitis C impacts among those without advanced disease, generally, are not life threatening, they are life changing; and such life changing effects have not just been confined to the affected person. The effects also apply to many of their spouses/partners and children and parents.

13.2.2 Conclusions Concerning the Relative Impacts of Hepatitis C

With respect to the relativity of hepatitis C impacts associated with chronic infection and advanced hepatitis C, the consensus of the Group is as follows:

- The impacts of hepatitis C on the great majority of SIBSS beneficiaries, regardless of their chronic hepatitis C/advanced hepatitis C status, have been very considerable and the characteristics and intensity of these impacts have varied among people, and within the same person, over long periods of time.
- While the impacts of hepatitis C, generally, are greater among people with advanced hepatitis C, there are instances of people with such advanced disease who have been less affected than those with chronic hepatitis C; in other words, there is a considerable overlap in terms of impact – one which reflects the different ways people manage adversity on account of differences in their underlying mental and physical health and their living circumstances, particularly those relating to financial and human (family and friends) resources.
- The impacts of hepatitis C on many spouses or partners of those living and widows/ widowers/civil and long-term partners of those deceased are very substantial, regardless of chronic hepatitis C/advanced hepatitis C status.
- Sharing a life with an infected person with chronic hepatitis C means sharing the fallout – particularly in the context of that fallout relating to mental ill health and material loss.
- Accordingly, assessing the relativity of the impacts of hepatitis C among those with and without advanced hepatitis C is complex and challenging. The Clinical Review of the Impacts of Hepatitis C Group consider that this complexity is, at present, not factored into the decision making around awards, but should be.

Key Recommendation

- **The Group recognises that there is a gap between the awards made to those with and without advanced hepatitis C, but is of the view that the extent of the difference between the current awards – a difference which was accentuated by the Financial Review Group recently - is inconsistent with the difference between the cumulative past (and future) lifetime impacts of hepatitis C experienced by those with and without advanced hepatitis C. The Group considers that this inconsistency is unfair and inappropriate, and should be addressed commensurately.**

Key Recommendation

- **The Group recommends, for the purposes of consistency and fairness, that any new arrangements for the Chronic HCV category of individuals should incorporate the same approach to widows, widowers and partners as that currently in operation for those belonging to the Advanced HCV category.**

Key Recommendation

- **In circumstances where an individual with Chronic HCV dies as a consequence of HCV, their widow, widower or partner may apply to SIBSS for consideration of an advanced HCV award for widows, widowers or partners.**

Key Recommendation

- **Given the impact of hepatitis C and interferon-based therapies on individuals' mental health (particularly depression, anxiety, self-worth) and quality of life, the Group considers that specialist psychological support be made available to those who belong to the chronic HCV category (including widows, widowers and partners) and who want it; this measure will address the justified perception that their needs have not been taken as seriously as they should have been.**

14. Acknowledgements

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