PRISON HEALTH IN SCOTLAND

A Health Care Needs Assessment

Dr Lesley Graham

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Foreword

My colleague, Dr Lesley Graham, in collaboration with many contributors, has compiled a health care needs assessment for prisoners in Scotland. The assessment brings a new level of clarity and insight into the health and health needs of prisoners, particularly in comparison to the Scottish general population from which they are drawn.

Prison accommodates, often for very short, but sometimes very long periods, a sizeable section of the least healthy Scots. In any one year, over 23,000 individuals are prisoners in Scottish prisons. The Scottish Prison Service information system (PR2) contains records for over 100,000 prisoners, most of them Scottish residents. On that basis, 2% of the Scottish population have been prisoners at some point in the past 12 years.

This report brings together available information, assesses its quality and interprets prisoner health data in comparison with the Scottish general population, and other prison populations. The ultimate aim of this report is to assist Prison Services, in partnership with others, to make better decisions that support the health care of prisoners; indeed, it will assist in assessing the health needs of offenders and the families and communities from which they come.

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SECTION ONE: INTRODUCTION

1. Background, Context and Rationale

1.1 In the last seven years, health care strategy in Scottish prisons has undergone a period of development, implementation and review, placing nursing services at the core of health care to prisoners [1]. In particular, work has focused on addictions, suicide risk management, mental health and dental health. Prison health care is also delivered in the context of the Scottish Prison Service principles of COCO (Custody, Order, Care and Opportunity). There has been growth in interest and commitment to governance, quality assurance and integration of public services in the justice and health sectors alike.

1.2 Nationally, health policy has now focused on the need for improved care of people with long-term conditions and recognises that, while general levels of health have improved, there remains a stubborn gap in health experience between the least and most fortunate [2]. New policies and plans have been published, notably for key areas such as mental health, Hepatitis C, sexual health and alcohol [3-6].

1.3 The national strategy for the Management of Offenders was launched in 2006 [7]. The statutory bodies of Community Justice Authorities, in partnership with other agencies, are tasked with taking the lead on its delivery. The nine Offender Outcomes outlined in the strategy reflect the central belief that better health and wellbeing can contribute to a reduction in the rate of re-offending. Such a contribution is ambitious and complex but must offer, co-ordinate and sustain services to support people who are normally hard to reach and who have multi-layered needs.

1.4 Public health and health care services can benefit the health of prisoners by becoming more closely involved in their care, evidently before and after being in prison, but also during their time as prisoners. In England and Wales, the NHS now commissions and provides health care to prisons. In Scotland, a programme board (the Prison Health Care Advisory Board) has considered the feasibility of such re-configuration in Scotland.

1.5 Health care in SPS is also developed and delivered in the context of international health and prison policy. Guiding principles are that health care in prison should be equivalent to that delivered in the community [8], that prison health is part of public health [9] and that the prison setting is potentially an opportunity for health promotion [10].

1.6 Decisions on policy development, planning and delivery of health care require to be based on up-to-date, robust and comprehensive information on the health needs of the population being served. The last comprehensive review of prisoner health in Scotland was over four years ago [1]. This Needs Assessment is therefore both desirable and timely.

1.7 The report does not attempt to be global. It has focused on areas which pose the main clinical challenges, use up the most resources, and contain good information that guide decision making for these and other areas of clinical care.

2. Overview of Prisoners in Scotland

2.1 Prisoners in Scotland are a unique population. They are overwhelmingly young (average age 33), white (98%), male (95%) and drawn from a very narrow section of the general population. The most recent sharp rises, however, in the proportion of the Scottish prison population have been of women and older men. A further feature is that prisoners drawn from ethnic minorities are numerically in proportion to the general population (3% against 2%), in contrast to the disproportionately higher rates of incarceration of these populations in other prison systems. Whilst the minority of the prison population (2,700) are there for long periods and have been convicted of very serious crimes, the large majority come from families and communities who live in poverty in every respect - materially, economically, socially and emotionally.

2.2 A disproportionately high number of them have never worked, nor have their parents or grandparents. They may have been in care, or dropped out of school with few or no qualifications. They lack trusting relationships and mentors who have crime-free backgrounds. They are risk takers in every sense, with their liability to addiction, sexual disease, physical or emotional trauma, many with significant brain damage, and at a much higher risk of early death. The majority smoke, have drug problems and mental illness. A significant minority report alcohol problems and experience of abuse. Their lives are chaotic. Their health, in physical, mental and social dimensions, is poor. Experience of prison can erode, preserve or strengthen the first two, but reliably destroys social well-being.

2.3 Unsuccessful criminals are often young and in prison repeatedly, whilst in later life they tend to commit fewer offences. However, many are parents. They and their children may continue to live in poverty, with poor health experience and life opportunities which, in turn, can result in an offending lifestyle.

3. Prison Health Care and Its Context

3.1 Health care is available to prisoners from the first hour of admission. Assessment immediately seeks to preserve and stabilise life, then goes on to identify and address health problems, aiming to prevent disease, protect and improve health. The longer a patient stays in prison, the greater is the opportunity to make a difference, but prison is a function of the judicial system rather than the health and social services. Prisoners start and stop being patients when the court decides, reverting to community services, sometimes with little or no notice. Health care in prisons is therefore geared towards admission screening and primary care with enhanced services for addictions and mental health, in recognition of the needs of young people and their risk taking lifestyles. New services are being developed, for example for Hepatitis C, a common and important condition. Key parts of the service, including dentistry, are largely unavailable to prisoners in ordinary community life. Prison, with its dynamic of lost liberty, restricted choice and unequal power within relationships, is a challenging place to practice health care and to be a patient. It is, nevertheless, a major opportunity for people who seek to have a second chance, and that includes achieving better health.

3.2 The following general constraints are key and they mark out prison health above all else. Prisons are overcrowded and busy places. At any one time, there are currently approximately 7,200 prisoners in prisons in Scotland. In the course of a year, over 26,000 prisoners are admitted to prisons in Scotland, 5,000 of who have never been there before. Over 43,000 prisoner receptions[1] take place annually. The requirements of courts, of evidence, and the sanctions of custody are prime considerations over care plans and intervention. Consequences are frequent movement of prisoners, poor prison conditions, separation and boredom. Each of these factors has its effect on the patient, their carers, families and fragile relationships between all, including the staff as well as the delivery of care. As a residential penal institution, choice of carer is absent, and duty of care is constant.

4. Aim and Objectives

Aim

4.1 To contribute to the evidence base for the planning and provision of health and health care for Scottish prisoners.

Objectives

- To describe the population of Scottish prisoners and their health problems.
- To make comparisons with the health of the general Scottish population.
- To compare with the health problems of prisoners elsewhere in the UK.
- To describe the services and health care standards designed to meet the need for health care.
- To describe current service provision.
- To identify gaps and how to address them.

5. Methods

5.1 A range of approaches to assessing health care need can be taken [11]. This assessment has utilised epidemiological, comparative and corporate methods. As there was a requirement for reporting in a relatively short time frame, a pragmatic approach to data collection was taken, using the most up-to-date existing data possible. Where necessary, this was supplemented with primary data analysis. Assessment of data quality was also made. The findings were then triangulated[2]. Where information gaps existed, these could be substituted or extrapolated from other appropriate sources. It also allowed data validation between differing sources. This then allowed an overall picture to be constructed and inferences to be drawn.

[1] An individual may have more than one admission to custody per year.

[2] Validation of one data source through comparison with one or more similar sources.

5.2 The prison estate and the prison population were described from SPS corporate information and routine publications **(Section 2)**.

5.3 The decision as to which clinical areas to study was agreed through discussion within the Health and Care Directorate and was based on what were thought to be areas of greatest concern. Thirteen 'domains' were selected:

- Alcohol Problems.
- Tobacco Use.
- Drug Problems.
- Blood Borne Viruses.
- Asthma.
- Diabetes.
- Epilepsy.
- Coronary Heart Disease.
- Accidents and Injury.
- Sexual Health.
- Dental Health.
- Dyspepsia.
- Mental Health.

5.4 For each domain, a series of prevalence indicators were devised along with matching prescribing indicators. Where possible, reporting was carried out at prison level **(Section 3)**.

5.5 Model service provision and standards of care were described drawing from SPS Health Care Standards and SPS national contracts for health care services **(Section 4)**.

5.6 Information on actual service provision and standard of health care being delivered was taken from secondary assurance sources: the annual audit of the Health Care Standards carried out by each prison and returned to the Health and Care Directorate **(Section 5)**.

5.7 Further corporate views were sought through discussion of the findings from the Needs Assessment with SPS Health Centre Managers and members of the SPS Health and Care Directorate. This allowed further refinement of the reporting.

5.8 The findings and implications were then summarised in a final section **(Section 6)**. Costings to address gaps were not included in the study scope.

5.9 Further detail on methods and data sources are given in each section.

REFERENCES

1. SPS Nursing Services Review 2003

2. Delivering for Health
   http://www.scotland.gov.uk/Publications/2005/11/02102635/26356

3. Delivering for Mental Health
   http://www.scotland.gov.uk/Publications/2006/11/30164829/16

4. Hepatitis C Action Plan for Scotland
   http://www.scotland.gov.uk/Publications/2006/09/15093626/0

5. Plan for Action on Alcohol Problems Update
   http://www.scotland.gov.uk/Publications/2007/02/19150222/0

6. Respect and Responsibility
   http://www.scotland.gov.uk/Publications/2005/01/20603/51177

7. National Strategy for Management of Offenders
   http://www.scotland.gov.uk/Publications/2006/05/19094327/2

8. United Nations Basic Principles for the Treatment of Prisoners, Principle 9, 1990
   http://www.unhchr.ch/html/menu3/b/h_comp35.htm

9. Prison Health as Part of Public Health, Moscow Declaration 2003
   http://www.euro.who.int/Document/HIPP/moscow_declaration_eng04.pdf

10. Ottowa Charter for Health Promotion, WHO 1986
    http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf

11. Toolkit for Health Care Needs Assessment in Prisons, Marshall et al, University of Birmingham 2000
    http://www.hsmc.bham.ac.uk/prisonhealth/Tom%20Marshall1.pdf

SECTION TWO: PRISONS AND POPULATIONS

1. The Prison Estate

1.1 There are 15 prisons in Scotland in nine Health Board areas. All but one (HM Prison, Kilmarnock) are publicly owned. One prison (HM Prison, Low Moss) was closed in May 2007. **Map One** (below) outlines their position geographically.

Map One

2. Prison Type and Category of Prisoner

2.1 Most prisons have the security status of 'closed', with physical barriers, security measures and limited movements to prevent escape. Two prisons (the 'Open Estate') have a more relaxed status with no physical barriers, for prisoners of low security risk, often nearing the end of their sentences. Some of these prisoners can attend outside work placements unsupervised and take home leave for weekends or extended periods. Some prisons operate an enhanced regime of independent living in preparation for release (HM Prisons Cornton Vale and Shotts, and HM Young Offenders' Institution, Polmont).

2.2 Certain prisons hold particular populations: HM Prison, Cornton Vale is the sole 'women only' prison in Scotland (though other prisons previously had limited spaces for women, such as HM Prison, Inverness); HM Young Offenders' Institution, Polmont is exclusively for young male offenders (aged 16-21); and HM Prison, Peterhead holds the majority of the long-term sex offender population. Some prisons hold prisoners serving long-term sentences (terms of four or more years) such as HM Prisons, Glenochil and Shotts. Local prisons are those which hold both remand and short-term convicted prisoners. However, nearly all prisons have a variety of offenders at different times and, with the current rise in prisoner numbers and the changes underway to the estate, these profiles can change rapidly. Full details on each prison's principal type and category of prisoners can be found in **Table One (see p12)**.

3. Planned Changes

3.1 Four of the publicly run prisons are undergoing major re-construction. This includes extra capacity being built in HM Prisons, Glenochil, Perth and possibly Edinburgh and HM Young Offenders' Institution, Polmont. One prison, HM Prison, Low Moss, has recently closed. There are also plans to build at least two new prisons.

4. Capacity

4.1 Each prison has a number of spaces for which it was built, the 'Design Capacity'. However, high prisoner numbers have to be accommodated, for example through cell sharing. 'Continuous Cell Occupancy (CCO)' is the situation whereby a single space in a cell can be utilised by more than one prisoner. This can be due to one prisoner being on home leave. 'Available Contracted Spaces' are the number of places for which resources have been provided. The 'Places Available For Use' is the upper limit that each prison can hold. If additional resources are provided, the 'Available Contracted Spaces' can rise to the maximum number of 'Places Available For Use'. CCO numbers are incorporated into the maximum number of available spaces.

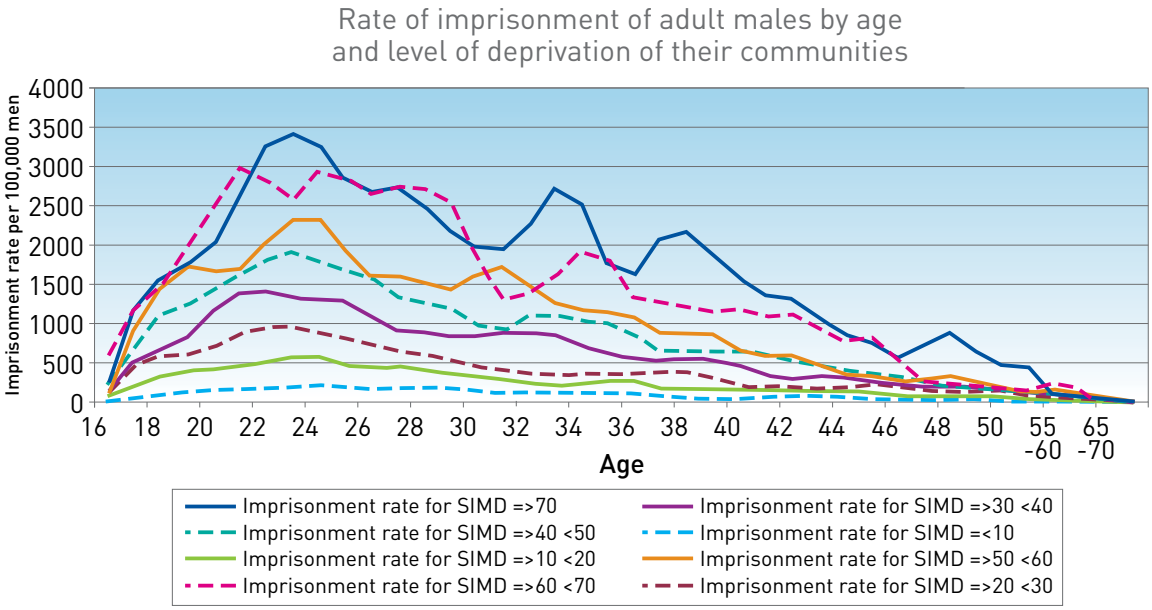
4.2 In March 2007, the design capacity total for the Scottish Prison Service was 6,466, the total available contracted spaces were 6,710 and the maximum number of spaces available for use was 7,541 [1]. The planned changes to estate capacity, if approved, would increase the overall design capacity spaces to 8,666 by 2010/11. The Average Daily Population (ADP) in 2006/07 was 7,182. **Table One** specifies figures for each prison.

5. The Prisoner Population

5.1 The majority of prisoners are male, young and white and come from deprived backgrounds (**see Figure One**). In 2006/07, the average daily population was 7,182, 95% (6,830) of whom were men. The total remand population was 1,566 and total sentenced population was 5,615. **Table Two (see p13)** shows the ADP for 2006/07 by prison, by male/female, age group and sentence type.

5.2 Ethnic minority groups represent 3% of the total prison population (including persons awaiting deportation). The proportion of ethnic minorities in the Scottish population as a whole is around 2% [2].

Figure One: Rate of Imprisonment of Adult Males by Age and Scottish Index of Multiple Deprivation (SIMD), 2003



Source: Houchin R, Social Exclusion and Imprisonment in Scotland, SPS 2005

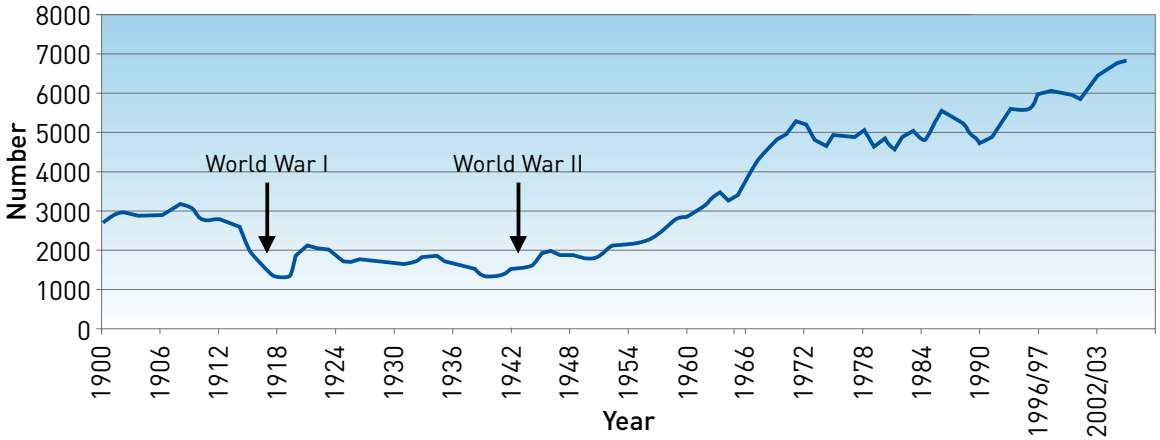
5.3 In 2006/07, a total number of 26,195 prisoners were admitted to Scottish prisons, of which 11,727 were on remand and 14,468 were convicted. 10,550 transfers[2] took place between prisons, mostly of sentenced prisoners (9,865). There were a total of 25,257 liberations into the community, 10,883 of remand prisoners and 14,374 of convicted prisoners. **Table Two** shows these figures broken down by prison.

5.4 There were 43,621 receptions into Scottish prisons in 2006/07, of whom 23,181 were prisoners on remand and 20,403 were sentenced. In March 2007, 266 prisoners were on Home Detention Curfew [2]. It should be noted that health care for those on HDC is provided by the NHS in the community, and not SPS.

[2] A transfer is a movement of a prisoner from one prison to another.

6.Population Trends

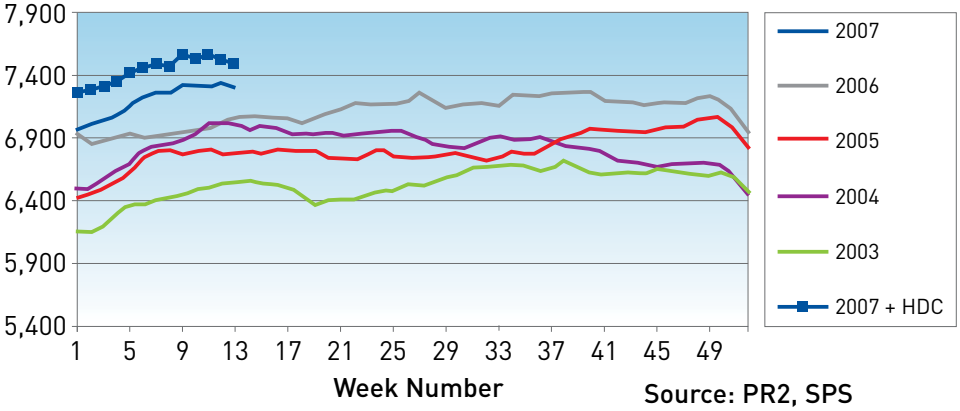
6.1 The figure below shows the change in prison numbers over the last century in Scotland.



6.2 Over the 10 year period, 1997/98-2006/07, the average daily prison population has increased by 19%. In the same 10 year period, the female prison population has increased by 90%, over five times the growth experienced in the male prison population (16%). The population of older prisoners (over 55) is growing. **Figure Two** shows the weekly average prison population from 2003 to 2007 and demonstrates a year on year rise.

Figure Two

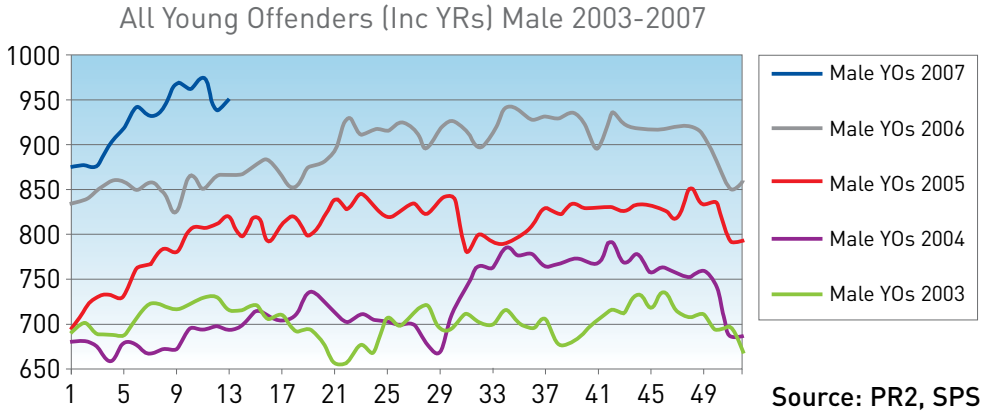
Weekly Average Total Prisoner Population 2003-2007



Source: PR2, SPS

6.3 Much of this rise is due to increasing numbers in the remand population (particularly those who are untried) and of young offenders (**see Figure Three**).

Figure Three



Source: PR2, SPS

7. Return to Custody

7.1 50% of prisoners return to custody within two years. Men are slightly more likely to return than women (50% compared to 47%) and young offenders more likely than adults (60% compared to 47%). Of those who do return, 50% do so within six months of release and 75% within a year [3].

8. International Comparisons

8.1 In Scotland, there were 143 prisoners for every 100,000 of the general population in 2006/07, 27th highest out of 57 countries in Europe. The rate for England and Wales was 149 per 100,000. Imprisonment rates vary greatly between the jurisdictions from 623 per 100,000 in the Russian Federation to 76 per 100,000 in Cyprus. The highest incarceration rate in the world is found the United States, at 737 per 100,000 population [4].

REFERENCES

1. **Population and Accommodation Report, Friday 2 March 2007, Scottish Prison Service**

2. **Prison Statistics Scotland 2006/07, Scottish Executive**
   http://www.scottishexecutive.gov.uk/Resource/Doc/196743/0052707.pdf

3. **Ash and Biggar, Return to Custody 2001, Scottish Prison Service**
   http://www.sps.gov.uk/multimediagallery/A90BD38F-C036-4D75-8C7D-00E8E00804FD.pdf

4. **International Centre for Prison Studies**
   http://www.prisonstudies.org/

Table 1: SCOTTISH PRISON SERVICE ESTATE

Prison	Public or Private	Category/Type (Principal Use)	Design Capacity (March 2007)	Places Available for Use (March 2007)	Average Daily Population (2006/07)
Aberdeen	Public	Closed, local remand with a short-term sentence population. A small female unit for short-term sentences (10 places max) closed in 2006.	155	225	228
Barlinnie	Public	Closed, local remand with a short-term sentence population.	1018	1639	1480
Castle Huntly	Public	Open, male estate for prisoners requiring low supervision/preparation for release. Some prisoners on home leave. Continuous cell occupancy in operation.	285	285	278
Cornton Vale	Public	Closed, national remand and sentenced prison and Young Offenders' Institution for all sentence lengths for female prisoners. Has an independent living unit.	375	375	347
Dumfries	Public	Closed, local remand with a short-term sentence population and protection prisoners serving short and long-term sentences.	179	189	200
Edinburgh	Public	Closed, local remand with a short-term sentence population. The national long-term sentence population moved to Shotts in March 2007.	756	786	782
Glenochil	Public	Closed, national long-term sentence population.	440	440	436
Greenock	Public	Closed, local remand with a short-term sentence population and a national long-term sentence top-end unit for those approaching end of punishment part of sentence.	254	350	310
Inverness	Public	Closed, local remand with a short-term sentence population and a small female unit for short-term sentences (10 places max).	104	150	147
Kilmarnock	Private	Closed, local remand with a short-term and national long-term sentence population.	500	596	599
Low Moss	Public	Closed, with a short-term sentence population for prisoners with medium or low supervision. Closed down in March 2007.	327	326	299
Noranside	Public	Open, male estate for prisoners requiring low supervision/preparation for release. Some prisoners on home leave. Continuous cell occupancy in operation.	140	167	161
Perth	Public	Closed, local remand with a short-term and long-term sentence population and convicted young offenders.	448	481	487
Peterhead	Public	Closed, national for long-term sentence sex offender population.	306	306	302
Polmont	Public	Closed, national remand and convicted with all sentence lengths for young offenders (aged 16-21). Has an independent living unit in the West of Scotland.	639	620	610
Shotts	Public	Closed, national long-term sentence population with an independent living unit.	540	516	515
TOTALS			6,466	7,451	7,182

Table 2: SCOTTISH PRISON SERVICE: AVERAGE DAILY POPULATION BY AGE, GENDER AND PRISON, AND NUMBERS OF ADMISSIONS, TRANSFERS AND LIBERATIONS 2006/07

Prison	ADP	Gender by Age Range and Remand and Sentenced																		No of Admissions	No of Transfers	No of Liberations
		16-19		20-24		25-29		30-34		35-39		40-44		45-50		50-55		55+				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
ABERDEEN																						
Remand		9	0	18	0	20	0	15	0	6	0	6	0	4	0	1	0	1	0	536	90	486
Sentenced		1	0	32	0	49	0	32	0	15	0	9	0	5	0	2	0	4	0	748	252	677
Total	228	10	0	50	0	69	0	47	0	20	0	15	0	10	0	3	0	5	0	1,284	342	1,163
BARLINNIE																						
Remand		0	0	113	0	117	0	90	0	76	0	53	0	24	0	13	0	9	0	3,384	119	3,094
Sentenced		9	0	238	0	225	0	163	0	148	0	97	0	48	0	24	0	31	0	4,507	1,828	4,435
Total	1,480	9	0	351	0	342	0	253	0	224	0	151	0	72	0	37	0	40	0	7,891	1,947	7,529
CASTLE HUNTLY																						
Remand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sentenced		0	0	45	0	46	0	51	0	54	0	37	0	20	0	14	0	12	0	1	866	214
Total	278	0	0	45	0	46	0	51	0	54	0	37	0	20	0	14	0	12	0	1	866	214
CORNTON VALE																						
Remand		0	11	0	27	0	23	0	13	0	9	0	8	0	3	0	2	0	1	1,182	24	1,130
Sentenced		0	23	0	46	0	56	0	38	0	33	0	29	0	11	0	7	0	5	980	18	953
Total	347	0	35	0	73	0	79	0	51	0	42	0	37	0	14	0	9	0	6	2,162	42	2,083
DUMFRIES																						
Remand		7	0	10	0	7	0	4	0	3	0	3	0	2	0	1	0	1	0	235	10	189
Sentenced		1	0	21	0	30	0	22	0	22	0	17	0	19	0	11	0	21	0	510	144	244
Total	200	8	0	30	0	37	0	26	0	25	0	19	0	21	0	11	0	22	0	745	154	433
EDINBURGH																						
Remand		36	0	50	0	39	0	26	0	23	0	17	0	7	0	5	0	6	0	1,566	134	1,460
Sentenced		5	0	105	0	108	0	101	0	91	0	63	0	44	0	21	0	33	0	2,126	479	1,436
Total	782	41	0	155	0	146	0	128	0	114	0	80	0	52	0	27	0	39	0	3,692	613	2,896

Table 2 continued: SCOTTISH PRISON SERVICE: AVERAGE DAILY POPULATION BY AGE, GENDER AND PRISON, AND NUMBERS OF ADMISSIONS, TRANSFERS AND LIBERATIONS 2006/07

Prison	ADP	Gender by Age Range and Remand and Sentenced																		No of Admissions	No of Transfers	No of Liberations
		16-19		20-24		25-29		30-34		35-39		40-44		45-50		50-55		55+				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
GLENOCHIL																						
Remand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Sentenced		0	0	65	0	99	0	89	0	75	0	53	0	31	0	15	0	9	0	2	500	120
Total	436	0	0	65	0	99	0	89	0	75	0	53	0	31	0	15	0	9	0	2	503	120
GREENOCK																						
Remand		18	0	32	0	18	0	16	0	11	0	7	0	4	0	0	0	2	0	796	37	728
Sentenced		3	0	32	0	42	0	31	0	32	0	24	0	15	0	10	0	11	0	1,179	215	609
Total	310	21	0	65	0	60	0	47	0	44	0	31	0	19	0	10	0	13	0	1,975	252	1,337
INVERNESS																						
Remand		13	0	14	0	11	1	6	1	6	0	4	0	3	0	1	0	2	0	593	68	552
Sentenced		3	0	32	0	42	0	31	0	32	0	24	0	15	0	10	0	11	0	1,179	215	609
Total	147	14	0	32	1	24	2	17	1	21	1	12	1	11	0	4	0	5	0	1,415	309	1,198
KILMARNOCK																						
Remand		23	0	21	0	16	0	11	0	8	0	5	0	3	0	1	0	2	0	582	52	516
Sentenced		1	0	96	0	115	0	102	0	99	0	49	0	27	0	11	0	6	0	980	573	1,095
Total	599	25	0	117	0	132	0	113	0	107	0	54	0	31	0	12	0	9	0	1,562	625	1,611
LOW MOSS																						
Remand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sentenced		0	0	85	0	68	0	60	0	41	0	28	0	9	0	4	0	4	0	26	2,046	1,679
Total	299	0	0	85	0	68	0	60	0	41	0	28	0	9	0	4	0	4	0	26	2,046	1,679
NORANSIDE																						
Remand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sentenced		0	0	24	0	22	0	27	0	29	0	28	0	15	0	7	0	8	0	0	314	115
Total	161	0	0	24	0	22	0	27	0	29	0	28	0	15	0	7	0	8	0	0	314	115

Table 2 continued: SCOTTISH PRISON SERVICE: AVERAGE DAILY POPULATION BY AGE, GENDER AND PRISON, AND NUMBERS OF ADMISSIONS, TRANSFERS AND LIBERATIONS 2006/07

Prison	ADP	Gender by Age Range and Remand and Sentenced																		No of Admissions	No of Transfers	No of Liberations
		16–19		20–24		25–29		30–34		35–39		40–44		45–50		50–55		55+				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
PERTH																						
Remand		45	0	58	0	48	0	35	0	21	0	13	0	8	0	3	0	3	0	1,714	60	1,616
Sentenced		68	0	47	0	39	0	28	0	27	0	16	0	11	0	8	0	9	0	1,903	698	955
Total	487	113	0	104	0	87	0	63	0	48	0	29	0	19	0	11	0	12	0	3,617	758	2,571
PETERHEAD																						
Remand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sentenced		1	0	27	0	27	0	30	0	38	0	40	0	35	0	32	0	71	0	3	196	1
Total	302	1	0	27	0	27	0	30	0	38	0	40	0	35	0	32	0	71	0	3	196	1
POLMONT																						
Remand		116	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,139	87	1,112
Sentenced		393	0	66	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	678	1,136	1,113
Total (1)	610	509	0	100	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1,817	1,223	2,225
SHOTTS																						
Remand		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Sentenced		0	0	88	0	99	0	95	0	89	0	63	0	43	0	25	0	14	0	3	359	82
Total	515	0	0	88	0	99	0	95	0	89	0	63	0	43	0	25	0	14	0	3	360	82
Overall Remand	1,566																			11,727	685	10,883
Overall Sentenced	5,615																			14,468	9,865	14,374
Overall Total (2)	7,182	751	35	1,339	74	1,259	81	1,046	52	930	43	639	38	389	14	212	9	263	6	26,195	10,550	25,257

1. Excludes an average daily population of one prisoner aged under 16.
2. Components may not add to totals due to rounding.

SECTION THREE: EPIDEMIOLOGY OF PRISONER HEALTH

1. Overview

1.1 This section draws together data to describe a range of health-related conditions. The conditions were chosen from the expert views of those in SPS health care as representing problems that were both serious and prevalent in the prisoner population. For each condition, key health indicators were selected for measurement. Data was drawn from SPS data sources. Comparative indicators are reported from general population health data, where possible from the Scottish population. Where feasible, standardisation to the prison population has been carried out[3]. Comparisons are also made with health indicators reported for the English prison population [1].

2. Methods

SPS Data Sources

2.1 Health care records in SPS were, until 2007, paper-based. Implementation of G-PASS into SPS commenced with the establishment of a disease register. This was compiled from problem summary sheets in each patient paper record. G-PASS is accessible only to health care staff. A data extract from this register was drawn. Percentage prevalence has been calculated by dividing number of patients with a given condition by the total number of prisoners on the day of extract.

2.2 Each year, a census survey of all Scottish prisoners is carried out. In recent years, questions on health have been introduced. Where possible, these have been designed to mirror those in general population surveys for comparative purposes.

2.3 The SPS information management system, PR2, has the capacity to record high level health-related data. In particular, these relate to conditions that may put a prisoner's health at risk (such as at risk of self-harm) and that prison staff should be aware of. Integrated Case Management includes high level recording of addiction management and this will be available for future reporting. This system is open to all staff including health care. Data from PR2 is reported from extracts carried out in April 2007.

2.4 SPS prescribing data is collected though the pharmacy contract. Drugs were chosen to align with the key health indicators and defined daily doses per 1,000 population calculated. This gives a proxy for population prevalence rates. Data is reported from 2007.

[3] Prison population figures for standardisation used the Average Daily Population for 2005/06.

Comparative Data Sources

2.5 Comparative data is drawn from a variety of sources such as population surveys and national morbidity and prescribing data collated by the Information Services Division of National Services Scotland. The most recent year available is utilised. Data on the English prison population is cited from the 'Health Care in Prisons: A Health Care Needs Assessment [1] and the 1998 ONS Survey of the Psychiatric Morbidity of Prisoners [2].

Data Quality

2.6 There is no systematic data quality assurance yet in place for SPS electronically held health data so no quantifiable measure of data quality is possible. Response rates for the SPS prisoner survey compare favourably to general population surveys with a response rate of 73% in 2006. A pragmatic approach has been taken to assess data robustness, including triangulation of data from different sources. Comments and caveats on data reliability are given.

3. Alcohol

3.1 From the Scottish Prison Survey 2006, 44% of prisoners said they were drunk at the time of their offence. 41% are likely to have an alcohol problem (as defined by two or more positive answers to CAGE questionnaire), 41% of men and 36% of women. G-PASS recorded 13% of prisoners overall as diagnosed with alcohol abuse and 1.5% as having alcohol dependence. **Table One (see p31)** shows prevalence by prison. PR2 can potentially be used to record those at risk of Delirium Tremens (DTs), although many prisons continue to use a paper system. A snapshot data extract (May 2007) showed only 0.6% of prisoners at risk of DTs, which would suggest the data is of doubtful completeness.

3.2 The drugs shown in the box below are specifically used in the management of alcohol dependence and relapse prevention. Although rates for Acamprosate are higher than for the general population, the figure for Disulfiram is lower.

Drug	Divided Daily Dose/1,000 SPS Population	Divided Daily Dose/1,000 Scottish Population
Acamprosate Calcium	143	79
Disulfiram	132	142

3.3 In the Scottish population, 13% of men and 7% of women are likely to have an alcohol problem, as defined by two or more positive answers to CAGE [3]. There is no comparable data from the Scottish population for either alcohol abuse or alcohol dependence. In the UK population, 7.4% overall were alcohol dependent (11.9% men, 2.9% women).

3.4 In English prisoners, 58% of male and 36% of female remand prisoners were found to be drinking hazardously compared with 68%/39% of sentenced prisoners [2].

3.5 It is evident that self-reported alcohol problems in Scottish prisoners are much higher than those in the general population. Similar findings are found in the English prisoner populations. It would appear that there is under-recording in the SPS clinical setting (G-PASS) and considerable under-recording in the PR2 management system. Alcohol is not officially available for consumption in the prison setting. Given its volume, little is smuggled in. There is very little illicit production. It can, however, be consumed on home leave visits. Relapse prevention medication can be prescribed pre-release. The prescribing rates therefore reflect this context and are not directly comparable with community prescribing patterns.

3.6 The disparity between self-reported rates and recording of clinical diagnoses does suggest that alcohol problems are under-detected, under-recorded and under-treated in SPS.

4. Tobacco Use

4.1 Overall, 78.4% of prisoners in Scotland smoke, with self-reported smoking rates for women greater than those in men (84% compared to 78% respectively) [5]. These rates are considerably higher than in the general Scottish population, with smoking rates of 26% for both men and women over aged 165. They are marginally higher than the 75% reported in the UK prison population as a whole [2]. Smoking rates by prison are reported in **Table Two (see p31)**, with highest rates in HM Prisons, Aberdeen and Inverness, and the lowest in HM Prison, Peterhead. Two-thirds of smokers (62%) wished to give up. Over half (54%) had increased the amount they smoked since being in prison. By contrast, 1 in 5 (20%) were smoking less [6].

4.2 There was no record of smoking behaviour in G-PASS. Reported smoking rates in Scottish prisoners are likely to be accurate.

5. Drug Problems

5.1 48% of prisoners were recorded in G-PASS as having a history of drug dependence (either previous or current). Highest prevalence was recorded in HM Prison, Low Moss (64%), HM Prison, Barlinnie (63%) and HM Prison, Aberdeen (61%), with the lowest rate in HM Prison, Peterhead (5%). Also recorded was drug injecting status (past or current) with an overall figure of 17.5%. The highest figures were for HM Prison, Aberdeen (45%) and lowest for HM Prison, Peterhead (1%). The figures by prison are shown in **Table Three (see p32)**.

5.2 From the Scottish Prison Survey 2006, 67% of prisoners overall (67%M, 73%F) reported having used illegal drugs in the previous 12 months before coming into prison (**Table Three**). In 2003, 66% of prisoners tested positive for illegal drug use at the point of reception into prison [7]. 48% reported being under the influence of drugs at the time they committed their offence [5]. Self-reports of illegal drug use whilst in prison in the previous month were 29% overall (28%M, 40%F), with high rates in HM Prisons, Cornton Vale, Low Moss and Shotts. Of those using illegal drugs, 125 per 1,120 (11% of drug users and 3% of prisoners overall, male

only) reported injecting in prison, with highest figures in HM Prisons, Aberdeen and Inverness. Of these, 71% (79) reported sharing works (see **Table Three**). Figures from a snapshot of PR2 in May 2007 state that 209 (3%) of prisoners were noted to be at risk from drug withdrawal.

5.3 17% of all prisoners were on a methadone prescription [8].

5.4 8% of the Scottish population reported using illegal drugs in the previous year [9]. In 2003, there were an estimated 51,582 (1.84%) problematic drug users aged 15-44 (2.69%M, 1.1%F). Injecting prevalence (current and past) was estimated at 0.67% [10]. Of those entering drug treatment services, 45% reported having previously been in prison and 29% reported injecting in the previous month. Of those, 42% reported sharing injecting equipment, with 27% sharing needles and syringes [11]. Projected estimates of the number of people on methadone in 2004 in the Scottish population are 0.38% overall [12].

5.5 Figures on drug use in the English prison population in 'Health Care in Prisons' [1] cite the large study by the office of National Statistics in 1998 [2]. 73% of male remand and 66% of male convicted prisoners had used illegal drugs in the previous 12 months to imprisonment, with lower figures for women (66% remand, 55% convicted). 51% of male remand and 43% of male convicted prisoners were drug dependent, with similar figures for women (54% remand, 41% convicted). 38% of male remand prisoners and 48% of male convicted prisoners had used illegal drugs in prison in the previous month, again with lower figures for women (25% remand, 34% convicted). Rates of injecting drug use (ever) were 28% for male remand prisoners and 23% for convicted. Female remand prisoners had higher rates of injecting history of 40% (23% for convicted). Rates of injecting in prison were 2% overall.

5.6 It is clear that drug use in Scottish prisoners is very high, with two out of three reporting use of illegal drugs whilst in the community, compared to less than one in 10 in the general population. Likewise, two out of three test positive on admission (comparable figures to self-reporting). One out of two has been recorded with a history of drug dependence, similar to rates for English prisoners. It is likely that there is under-recording in G-PASS, given the discrepancy between admission testing/self-report and medical history rates. Whilst in prison, drug use continues with nearly one in three prisoners reporting use in the last month, with figures slightly lower than in English prisoners. 11% of drug users in prison inject, lower than rates for those entering drug treatment in the community (29%), but much higher than for the general population (0.67%). Sharing of works is also higher than reported for those entering drug treatment in the community. Just less than one in five of prisoners are prescribed methadone. Overall self-report of methadone prescribing from the Scottish Prison Survey (not shown) match prescribing rates, suggesting self-report of prescribing is likely to be reasonably robust. Self-report of continuing drug use whilst in prison may not be so reliable.

6. Blood Borne Viruses

6.1 In December 2006, 19 prisoners were noted to be HIV positive [13]. The G-PASS disease register in April 2007 recorded 14 patients with HIV, 0.2% of the prison population. 5.4% were recorded as being Hepatitis C positive, with highest rates in HM Prisons, Glenochil and Aberdeen (14% and 13% respectively) and 1.5% Hepatitis B positive overall, with highest rates in HM Prison, Shotts (9%) **Table Four (see p32)**.

6.2 Of the 19 HIV positive patients in Scottish prisons in 2006, seven were on HAART treatment. All prisoners are routinely offered Hepatitis B vaccination.

6.3 In the Scottish population, 5,078 people have been diagnosed HIV positive and of these, 1,531 are known to have died [14]. In Scotland, 20,163 people are known to be Hepatitis C positive, and a further 30,000 are estimated to be undiagnosed [15]. The authors' report on studies in Scottish prisoners and estimate the overall prevalence of Hepatitis C in the prison population to be 16-20% (45-54% in current or previous Intravenous Drug Users (IDUs) and 4% in non-IDUs). Extrapolating these estimates to the age and sex structure of the Scottish prison population gives overall numbers of 9551 [6]. There are no figures for Hepatitis B prevalence in the Scottish population.

6.4 For English prisoners, Marshall et al cite figures from 1997 testing of prevalence rates for Hepatitis C and B of approximately 10% [1].

6.5 Intravenous drug use is a known risk factor for transmission of Blood Borne Viruses (BBVs). The high rate of drug use in the prisoner population, along with risky sexual behaviour, means that prevalence of BBVs is likely to be high. There are few prisoners known to be HIV positive. As an audit is carried out by SPS each year, these figures will be accurate. It is not certain whether the low figure is due to under-detection. It is clear from centrally held clinical data in SPS that both Hepatitis C and Hepatitis B status are under-recorded. Although a universal vaccination programme is in place for Hepatitis B, it is possible that both Hepatitis C and Hepatitis B are under-diagnosed and treated.

7. Asthma

7.1 The G-PASS disease register records 12% (787) of Scottish prisoners as having asthma. **Table Five (see p33)** shows figures by prison, with the highest prevalence in HM Prison, Cornton Vale (22%) and lower rates of 9% in HM Prisons, Greenock, Noranside and Low Moss. A similar overall prevalence is reported from the 2005 Scottish Prison Survey, where 13% self-reported as having asthma. HM Prison, Cornton Vale once again has the highest rate (22.7%) and with rates of approximately 16% reported from HM Prisons, Aberdeen, Dumfries and Peterhead **(see Table Five)** [17].

7.2 These rates are higher than in the Scottish population as a whole, with rates of 5.4% [18] and 5.3% [19] reported. Asthma is known to be more common in younger people. Applying PTI rates to the prison population, the expected prevalence was 7.8% [533]. This shows that, even adjusting for the age/sex structure of the prison population, the observed rates of asthma in Scottish prisoners are higher than expected.

7.3 Prescribing rates (Defined Daily Dose per 1,000 population) for two drugs commonly used in the treatment of asthma (Salbutamol and Salmeterol) were calculated and compared with national rates. Rates for Salbutamol were slightly higher than the national average (25,560 DDD per 1,000 compared with 24,008 DDD per 1,000), whereas rates for Salmeterol were slightly lower (814 DDD per 1,000 compared with 2,306 DDD per 1,000). Whilst lending some support to the reporting of higher prevalence, the prescribing rates are not proportionally as high, suggesting that asthma is marginally under-treated in the prison population.

7.4 No directly observed asthma rates were reported for the English prison population [1]. Instead, rates from general population data (the Health Survey for England 1996 and Key Health Statistics from General Practice 1996) were applied to the English prison population. An overall prevalence of 14% was expected, similar to SPS observed figures.

7.5 In conclusion, the reported figures from SPS derived data are likely to be a reasonably robust measure of the prevalence of asthma in the Scottish prisoner population, but that there is a degree of under-treatment.

8. Diabetes

8.1 1.7% (109) of Scottish prisoners were recorded in SPS G-PASS as having Diabetes, 0.6% Type 1 and 1.1% Type 2. A higher proportion (2.3%) self-reported having diabetes in the SPS Prison Survey 200517. These figures are reported by prison in **Table Six (see p33)**. Highest rates were reported in HM Prisons, Dumfries and Peterhead (3% respectively) in G-PASS. Self-reported rates were high in HM Prisons, Peterhead (7.4%), Cornton Vale (3.8%) and Inverness (4%). This compares with overall prevalence rates in the general Scottish population of 3.5% (3.5% PTI 2005-06) [19], (3.4% QOF 2006) [18], (3.2% Scottish Diabetes Survey) [20]. There is no national reporting by type of diabetes.

8.2 The first 4 drugs shown in the box below are oral anti-diabetic drugs, predominately used for treatment of Type 2 diabetes. Insulin is used in the treatment of Type 1 diabetes. In general, prescribing of oral hypoglycaemic drugs is lower than the Scottish norm and prescribing of (this brand of) insulin is higher.

Drug	Divided Daily Dose per 1,000 SPS population	Divided Daily Dose per 1,000 Scottish population
Metformin Hydrochloride	2,404	4,452
Glibenclamide	17	100
Gliclazide	1,014	2,966
Glipizide	321	655
Insulin Lispro	746	338

8.3 The English HNA did not report directly observed figures from the prison population. Extrapolations from Key Statistics from General Practice 1996 gave expected figures of 0.8% for males and 0.6% for females [1].

8.4 Extrapolating from the Scottish population (PTI 2005/06) [19] to the SPS population, the expected number of prisoners in Scotland with diabetes is 214, a prevalence of 3.1%. The higher figures for self-reporting, along with higher expected numbers than those recorded, suggest that diabetes is currently under-reported in G-PASS. Type 1 diabetes is commoner in younger age groups and Type 2 in older age groups. The prisoner population is predominately young and male. The higher prescribing of insulin and lower prescribing of oral hypoglycaemic drugs likely reflects this pattern.

9. Epilepsy

9.1 SPS G-PASS reports that 2.1% (136) of prisoners have been diagnosed with epilepsy. Prevalence for each prison is shown in **Table Seven (see p34)**, with HM Prison, Barlinnie having the highest prevalence of 3%.

9.2 These rates are higher than those for the Scottish population as a whole, reported as 0.54% from Practice Team Information (PTI 2005/06) [19] and 0.7% from the Quality Outcome Framework (QOF 2006) [18].

9.3 Taking data from the Scottish population (PTI 2005/06) [19] and applying it to the Scottish prison population, 80 prisoners would be expected to have epilepsy, a prevalence rate of 1.2%.

9.4 The drug Sodium Valproate is used in the management of epilepsy. The prescribing rate in SPS was 26,245 DDD per 1,000, markedly higher than the rate of 903 DDD per 1,000 for the Scottish population.

9.5 There were no directly observed rates for the English prison population [1]. Estimates by extrapolating from community data were made giving a rate of 0.4%, rates lower than in the Scottish general population. Research was quoted which had found epilepsy rates in the prison population to be twice that of the general population at 0.8% (Gunn 1969; Whitman et al 1984). It should be noted this research is considerably out of date.

9.6 It would therefore appear that the Scottish prison population has a disproportionately higher number of people with epilepsy than expected. This observation is backed up with prescribing rates over twice that of the general population. This high prevalence may be due to pre-disposing factors such as previous head injuries and substance misuse, as well as other life circumstances.

10. Coronary Heart Disease

10.1 2% (131) of people in Scottish prisons in 2007 were reported in SPS G-PASS as having Coronary Heart Disease (CHD). In 2005, a higher proportion of prisoners, 4.4%, self-reported a 'heart condition' [17]. **Table Eight (see p34)** shows data by prison. HM Prison, Peterhead reports the highest prevalence from both G-PASS (5%) and the prison survey (14.5%). This would equate with the older population profile in that prison. Prevalence in the general Scottish population ranged from 3.5% [PTI 2005/06] [19] to 4.5% [QOF 2006] [18].

10.2 Coronary heart disease is more common in men, older age groups and in deprived groups. Prisoners are predominantly young, male and from socially disadvantaged circumstances, and display a high prevalence of lifestyle risk factors such as smoking, poor diet and physical inactivity. The relatively young age of the prison population would offset some of the influence of the other determinants. Adjusting for the age/sex structure of the Scottish prison population, and extrapolating from Scottish population figures [PTI 2005-06] [19], the expected numbers of prisoners with CHD is 125, a prevalence of 1.8%, similar to SPS observed rates. This has not been adjusted for deprivation.

10.3 Prescribing rates for a range of drugs used in the treatment of CHD are shown in the box below. Across all prescribing indicators, the DDD per 1,000 population figures for SPS are markedly higher than those in the Scottish population. This would indicate that, although under-recorded, CHD is being diagnosed and treated.

Drug	DDD per 1,000 SPS	DDD per 1,000 Scotland
Amilodipine	12,482	3,850
Aspirin (75mg)	27,662	12,855
Atenolol	12,941	8,059
Bendroflumethaizide	21,459	4,035
Bisopropol Fumarate	1,882	749
Captopril	514	20
Digoxin	1,566	116
Dilitiazem Hydrochloride	2,543	617
Furosemide	10,492	451
Enalapril Maleate	5,392	118
Isosorbidide Mononitrate	6,225	1,669
Lisinopril	8,748	1,940
Nifedipine	3,903	195
Ramipril	21,840	15,568

10.4 The English HNA of prisoners did not report directly observed figures from the prison population. Using data from the 1994 Health Survey for England, and also adjusting for social class, the estimated prevalence for men was 0.7% and for women, 0.5% [1]. These figures are considerably lower than the observed figures for Scottish prisoners.

10.5 In conclusion, although recorded and estimated rates for CHD in the prison population are similar, given that these rates are not adjusted for the known risk factors for CHD, it is possible there is a degree of under-detection. By contrast, the high prescribing rates indicate that there is a high prevalence of CHD in Scottish prisoners currently being treated.

11. Dyspepsia

11.1 The volume of prescribing in SPS for drugs for gastro-intestinal conditions such as Dyspepsia has been noted to be high. A range of clinical indicators of Dyspepsia were therefore chosen. These were as follows, with overall prevalence and numbers reported from SPS G-PASS in brackets:

- Dyspepsia (0.46%/30)
- Duodenal Ulcer (1.2%/79)
- Peptic Ulcer (0.14%/9)
- Gastric Ulcer (0.25%/16)
- H Pylori Positive (0.18%/12)

11.2 Data for each prison is reported in **Table Nine (see p35)**. No comparative data is available from either published Scottish population data or for the English prison population.

11.3 Prescribing indicators for three drugs used in treating dyspeptic symptoms were calculated. These drugs were Ranitidine (an H2 receptor agonist), Omeprazole and Lansoprazole (proton pump inhibitors). The prescribing rates for all three were markedly higher than those for the general population and are shown in the box below.

Drug	DDD per 1,000 SPS	DDD per 1,000 Scotland
Ranitidine	8,262	3,905
Omeprazole	15,568	12,825
Lansoprazole	6,699	7,242

11.4 The prescribing data shows prescribing rates markedly higher than in the general population, whereas the reported prevalence is very low. This would suggest that recording of GI problems in G-PASS is incomplete. Another possibility is that there is a degree of inappropriate prescribing.

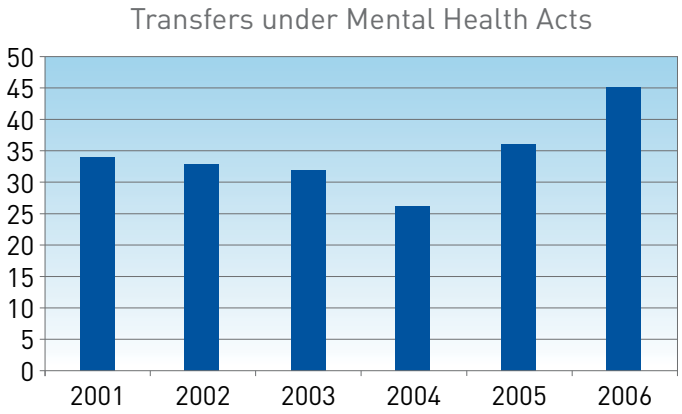
12. Mental Health

12.1 From the G-PASS disease register, 14% of prisoners had a history of psychiatric disorder, with the highest prevalence of 36% in HM Prison, Shotts. 0.6% of Scottish prisoners overall were recorded as having schizophrenia and 0.2% with bi-polar disorder. 0.4% of prisoners were recorded as having anxiety/depression. 7.3% of prisoners had a previous history of self-harm, including attempted suicide, ranging from 23% in HM Prison, Inverness and 0% in HM Prison, Castle Huntly. A snapshot from PR2 in May 2007 showed 67 (0.9%) prisoners were on ACT2Care (at risk of suicide or self-harm), with the greatest proportion in HM Prison, Cornton Vale (2.7%) **Table Ten (see p35)**.

12.2 In 2004, there were 140 recorded attempts at self-harm and 26 attempted suicides, a fall from levels in 2002 of 328 and 83 respectively [21]. 19% of prisoners self reported feeling depressed on a daily basis, 25% felt unhappy and 24% did not feel hopeful about the future [17].

12.3 In 2006, there were 45 transfers under the Mental Health Act (Scotland) 2003, nine more than in the previous year. This Act came into force in October 2005. **Figure One** shows numbers from 2001 to 2006.

Figure One



12.4 The drugs in the box below are used in the management of the mental health problems of depression and psychosis. Across all prescribing indicators, the DDD per 1,000 population figures for SPS are markedly higher than those in the Scottish population. This would indicate that there is a considerable burden of mental health problems that are being diagnosed and treated in Scottish prisons.

Drug	Condition	DDD/1,000 SPS	DDD/1,000 Scotland
Citalopram	Depression	8,055	5,062
Escitalopram	Depression	3,740	1,060
Fluoxetine	Depression	12,664	5,525
Mirtazapine	Depression	11,625	1,366
Paroxetine	Depression	2,384	2,152
Trazodone Hydrochloride	Depression	5,566	571
Quetiapine	Psychosis	2,098	187
Olanzapine	Psychosis	5,533	678

12.5 In 2006, there were nine deaths from suicide [22].

12.6 In the Scottish population, the overall prevalence of depression is 4.9% and 5.8% for anxiety [PTI 2005/06] [19]. Taking these figures and applying them to the Scottish prison population, the expected prevalence would be 8% for anxiety and 8% for depression. These figures are considerably higher than those currently recorded in G-PASS. There are no figures from the Scottish population for schizophrenia or bi-polar disorder to extrapolate from. The prevalence of severe long-term mental health problems (not defined) is 0.6% [QOF] [18].

12.7 A large study of psychiatric morbidity in the UK general population reports higher population prevalence than Scottish population rates for mental health problems with 0.5% (in past year) for functional psychosis, 11% for depression and 9% for anxiety. Prevalence of personality disorder was 5.4% for men and 3.4% for women [4]. These figures suggest that Scottish PTI data (derived from attendances at General Practice) may not reflect true prevalence in the general population.

12.8 Prevalence of mental health problems in English prisoners is drawn from a large study in 1998 and direct comparisons can be made to a study of the general population [2]. Prevalence of schizophrenia was 9% for male remand prisoners, 6% for male convicted prisoners and 13% for female convicted prisoners. High rates of depression were found (26% male remand, 19% male convicted, 36% female remand and 15% female convicted). Anxiety levels were similar overall to the UK population (11% male remand, 8% male convicted, 11% female remand and convicted). Personality disorder prevalence was extremely high (78% in male remand, 64% in male convicted, 50% in female prisoners).

12.9 Self-report from the Scottish Prison Survey shows that one in four prisoners feel unhappy and not hopeful about the future. It is likely that mental health problem prevalence rates in Scottish prisoners will be similar to those in English prisoners. Although not reflected in G-PASS clinical recording, the high levels of prescribing of drugs for psychiatric problems in Scottish prisons is evidence of a considerable burden of mental health problems, in particular depression and psychosis.

13. Accidents and Injuries

13.1 In 2006/07, there were 70 claims from prisoners seeking compensation for personal injury [23]. These include assaults, clinical negligence, health and safety injuries, sharing of smoking cells and voting rights.

13.2 During the same period, there were 249 injury reports on 'others' which includes visitors and contractor staff, as well as prisoners. This compares with 641 injury reports of staff. There was no recording of accidents or injuries available from the G-PASS register. In 2005, there were 69 hospital admissions of prisoners with a primary diagnosis of an injury [24].

13.3 No comparative data was available from either the Scottish general population or the English prison population.

13.4 It is likely that the true extent of the incidence of accidents and injuries in the Scottish prison population cannot be fully determined from existing information systems. The lack of comparative data from both the English study and the Scottish population means that no firm conclusions can be drawn.

14. Sexual Health

14.1 Chlamydia was chosen as the indicator for sexual health. There were no cases of Chlamydia recorded on the G-PASS disease register in April 2007. Several adhoc screening exercises have been carried out in Scottish prisons. A small study by the Healthy Respect Project in young men in HM Prison, Edinburgh found a prevalence of 12%. Locally held clinic statistics in HM Young Offenders' Institution, Polmont show a prevalence of 13%. In HM Prison, Perth, of 61 self-referrals in 2006, 9 (15%) were positive for Chlamydia. It was not possible to derive a specific prescribing indicator for Chlamydia.

14.2 These figures contrast with prevalence rates in the under 25 year old Scottish population of 0.8% (men) and 1.9% (women) [25].

14.3 There were no direct estimates of extrapolated figures on Chlamydia reported for the English prison population [1]. The report did cite previous research that found that prisoners were more likely to have risky sexual behaviour, such as greater number of partners, more likely to have had sex with a prostitute and to have undergone unsafe sex [26].

14.4 It is likely that prisoners, both men and women, are at increased risk from sexually related disease such as Chlamydia. Several local prevalence studies show much higher rates than in younger people in the general population. It is not possible to give a comprehensive overview for all prisoners from centrally held data.

15. Dental Health

15.1 In 2006, 45% male and 46% female prisoners reported 'hardly ever' or 'never' having painful aching in the previous 12 months [5]. Similar figures of 47% (M) and 36% (F) were reported in a large study of the dental health of Scottish prisoners [27]. Analgesic effects of drugs such as methadone are likely to mask dental pain. 43% of male prisoners and 40% of female prisoners reported bleeding gums. Smoking inhibits gum bleeding, and given the high prevalence of smoking in prisoners (see above), this figure could be higher if fewer prisoners were to smoke. 34% of adult male prisoners, 10% of young offenders and 20% of women prisoners reported having a denture. 54% of male and 60% of female prisoners reported having visited a dentist in the last year [5]. There is no recording of dental clinical data in G-PASS.

15.2 More people in the general population were likely to have 'never' or 'hardly ever' had painful aching (ie suffer less pain) (70% men and 71% women). 11% of men and 10% of women in the general population had a denture and 65% of men and 71% of women had visited the dentist in the previous year (UK Adult Dental Health Survey 1998, figures weighted for the Scottish prison population and reported in Jones et al) [26].

15.3 Dental decay was assessed in the Scottish Prisons Dental Survey carried out in 2002. For male prisoners, severe decay was three times that of the general population (29% compared with 10%). In women prisoners, severe dental decay was 14 times greater than the general population (42% compared with 3%) [26].

15.4 There are no prescribing indicators for dental health.

15.5 There was no prison-based data reported in Health Care in Prisons Marshall et al [1].

15.6 Dental health in Scottish prisoners is considerably poorer than that of the general population.

16. Conclusion

16.1 There was difficulty in precisely defining the burden of health problems in Scottish prisoners with evidence of likely under-diagnosing, under-recording and under-treatment. However, by taking an approach of triangulation with multiple comparative and proxy data sources, it has been possible to build up an approximate picture. What is clear is that the health of Scottish prisoners is worse than that of the general population across all of the domains examined, with particularly high prevalence in addictions, mental health and dental problems.

REFERENCES

1. Health Care in Prisons: A Health Needs Assessment, Marshall T, Simpson S, Stevens A, University of Birmingham 2000

2. Singleton et al, ONS Survey of the Psychiatric Morbidity of Prisoners 1998
   http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsStatistics/DH_4007132

3. Scottish Health Survey 2003
   http://www.scotland.gov.uk/Publications/2005/11/25145024/50251

4. Psychiatric Morbidity Among Adults Living in Private Households, ONS 2000
   http://www.statistics.gov.uk/downloads/theme_health/psychmorb.pdf

5. Scottish Prison Survey 2006
   http://www.sps.gov.uk/default.aspx?documentid=21190703-e7b4-4abc-bc83-44b5d0f06f69

6. Scottish Household Survey 2005
   http://www.scottishexecutive.gov.uk/Publications/2006/08/03090800/0

7. Drug Misuse Statistics 2003
   http://www.drugmisuse.isdscotland.org/publications/03dmss/03dmss2b.htm

8. SPS Health and Care Directorate data, December 2006

9. Scottish Crime Victimisation Study 2004
   http://www.scotland.gov.uk/Publications/2007/01/16115536/0

10. National Prevalence Study 2003
    http://www.drugmisuse.isdscotland.org/publications/abstracts/prevalence3.htm

11. Scottish Drug Misuse Statistics 2006
    http://www.drugmisuse.isdscotland.org/publications/06dmss/06dmssb.htm

12. How Many People are Receiving Methadone?
    http://www.drugmisuse.isdscotland.org/publications/local/isd_methadone.pdf

13. SPS Health and Care Directorate Audit 2006

14. HIV Infection and AIDS: Quarterly Report to 31 March 2007 (ANSWER)
    http://www.hps.scot.nhs.uk/ewr/article.aspx

15. Hutchison et al; Hepatitis C Virus Infection in Scotland, Epidemiological Review and Public Health Challenges, Scottish Medical Journal, Volume 51, pp8-15

16. Milne D, Detection of Hepatitis C in Scottish Prisons, June 2006 (unpublished)

17. Scottish Prison Survey 2005
http://www.sps.gov.uk/default.aspx?documentid=21190703-e7b4-4abc-bc83-44b5d0f06f69

18. Quality Outcome Framework 2006
http://www.isdscotland.org/isd/4897.html

19. Practice Team Information 2005/06
http://www.isdscotland.org/isd/info3.jsp?pContentID=1044&p_applic=CCC&p_service=Content.show&

20. Scottish Diabetes Survey 2004
http://www.diabetes-healthnet.ac.uk/downloads/pdf/Diabetes_Survey_2004_Summary.pdf

21. SPS Health and Care Directorate Data 2004

22. A Fraser, SPS Deaths in Custody 2006 (unpublished)

23. SPS Injury Surveillance Reports (unpublished)

24. L Graham, SMR01 Bespoke Data Analysis 2005 (unpublished)

25. HPS Weekly Report, Volume 41, No 2007 to 2011

26. HIV/AIDS Risk Behaviour in Adult Male Prisoners, Strang et al, Home Office Research Findings No 82
http://www.homeoffice.gov.uk/rds/pdfs/r82.pdf

27. Jones, McCann and Nugent, Scottish Prisons Dental Health Survey 2002, SE 2004

Table 1: Alcohol Problems

Percentage Prevalence of Alcohol Problem Indicators by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
Alcohol Problem (1)	38.7	49.7	24.4	36.7	36.7	33.5	28.4	44	61.2	36.3	41.1	35.2	40	50.8	34.9
Alcohol Abuse (2)	12	18	8	11	8	14	9	17	37	17	9	11	5	7	13
Alcohol Dependence (3)	3	2	1	4	4	1	1	3	0	1	0	1	0	0	1

(1) Two or more positive answers to CAGE Questions, Scottish Prison Survey 2006
(2) G-PASS Disease Register, April 2007
(3) G-PASS Disease Register, April 2007

Table 2: Tobacco Use

Percentage Prevalence of Tobacco Use by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
Smoker (1)	88.2	81.1	74.1	84.9	69.4	76.5	75.5	75.9	88.0	80.7	78.4	83.2	63.4	73.3	76.9

(1) Scottish Prison Survey 2006

Table 3: Drug Problems

Percentage Prevalence of Drug Problem Indicators by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
HO Drug Dependence (1)	61	63	38	52	28	48	59	51	48	64	16	47	5	28	58
Injecting Drug User (1)	45	28	15	19	14	9	27	11	20	25	2	16	1	3	16
Illegal Drugs Before Prison (2)	72.6	70.0	50.9	73.2	39.8	63.1	70.1	65.5	56.2	70.7	41.8	76.9	25.7	84.4	62.3
Use of Illegal Drugs in Last Month (2)	39.7	24.3	23.6	39.5	14.2	31.8	33.6	27.8	19.3	39.1	12.1	34.1	9.0	23.7	37.3
Injected Last Month (n=125) (2)	6.8	2.5	0	0	1.7	3.0	3.6	2.9	5.5	2.1	5.2	4.8	2.3	1.8	3.5
Share Works (n=79) (2)	62.5	66.7	0	0	100	72.7	66.7	100	100	66.7	33.3	61.5	75.0	57.1	100

(1) G-PASS Disease Register, April 2007
(2) Scottish Prison Survey 2006

Table 4: Blood Borne Viruses

Percentage Prevalence of Blood Borne Viruses by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
HIV (1)	0	0.05	0	0	0	0	0	0	0	0	0	0	0	0	0
Hepatitis C (1)	13	8	8	8	8	6	14	4	7	4	2	0.4	0	0	0
Hepatitis B (1)	1	1	0	0	0	0	0	0	0	1	0	7	0	0	9

(1) G-PASS Disease Register, April 2007

Table 5: Asthma

Percentage Prevalence of Asthma by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
Asthma (1)	14	10	14	22	13	14	10	9	10	9	9	11	10	10	14
Asthma (2)	16.3	12.4	11.1	22.7	16.7	10.6	8.6	15.2	12.0	13.4	11.1	13.6	16.8	11.8	12.5

(1) G-PASS Disease Register, April 2007
(2) Self-Report from Scottish Prison Survey 2005

Table 6: Diabetes

Percentage Prevalence of Diabetes by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
Diabetes Type 1 (1)	0	1	1	0	0	1	0	1	1	1	1	1	0	0	1
Diabetes Type 2 (2)	1	1	1	1	3	2	0	1	1	0	2	1	3	0	1
Diabetic (3)	0.6	2.0	2.8	3.8	2.7	2.2	2.1	1.9	4.0	0.4	2.8	1.1	7.4	1.1	1.4

(1) G-PASS Disease Register, April 2007
(2) G-PASS Disease Register, April 2007
(3) Self-Report from Scottish Prison Survey 2005

Table 7: Epilepsy

Percentage Prevalence of Epilepsy by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
Epilepsy (1)	2	3	2	2	3	2	3	3	1	1	1	1	1	1	2

(1) G-PASS Disease Register, April 2007

Table 8: Coronary Heart Disease (CHD)

Percentage Prevalence of CHD by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
CHD (1)	0	2	2	1	4	3	1	2	2	0	2	2	5	0	2
Heart Condition (2)	3.1	4.5	6.3	2.7	6.7	5.7	1.8	4.6	4.0	1.6	6.3	3.1	14.5	2.3	3.6

(1) G-PASS Disease Register, April 2007
(2) Self-Report from Scottish Prison Survey 2005

Table 9: Gastrointestinal (GI) Problems

Percentage Prevalence of GI Problems by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
Dyspepsia (1)	0	1	1	1	1	0	0	0	0	0	0	2	1	0	1
Duodenal Ulcer (1)	0	2	2	0	2	0	1	2	1	2	2	1	2	0	2
Peptic Ulcer (1)	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0.4
Gastric Ulcer (1)	0	0	1	0	0	0	0	1	0	0	0	1	0.2	0	0
H Pylori Positive (1)	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0.2

(1) G-PASS Disease Register, April 2007

Table 10: Mental Health

Percentage Prevalence of Mental Health Problems by SPS Prison

	Aberdeen	Barlinnie	Castle Huntly	Cornton Vale	Dumfries	Edinburgh	Glenochil	Greenock	Inverness	Low Moss	Noranside	Perth	Peterhead	Polmont	Shotts
H/O Psychiatric Disorder (1)	11	8	16	14	26	15	20	21	20	9	13	11	11	1	36
Schizophrenia (1)	0	1	0	0	1	1	1	0	0	1	1	0.4	1	0	1
Bipolar Disorder (1)	0	1	0	0	0	0	0	0	0	0	0	0.2	0	0	0
Anxiety and Depression (1)	0	0	5	1	0	0	0	0	0	0	0	0.2	0	0	0
Intentional Self-Harm (1)	12	8	0	11	14	6	9	6	23	7	2	5	5	1	12
On Act2Care (2)	1.4	0.5	0.7	2.7	1.4	0.9	0.4	0.3	2.2	N/A	0.7	1.6	2.3	0.8	0.6

(1) G-PASS Disease Register, April 2007
(2) PR2 Extract, May 2007

SECTION FOUR: SERVICES AND INTERVENTIONS, HUMAN AND PHYSICAL RESOURCES

1. Overview of Model of Care

1.1 There are many ways in which contributions are made to the health and well-being of prisoners by a wide and varied range of people in many different settings. These people include prison chaplains, prison officers, voluntary agencies (such as the Samaritans), the family and relationship service providers, social workers and not least, prisoners themselves, through schemes such as the Listeners (trained prisoners offering a listening service). Due to time constraints, this needs assessment will be focussing on the health care needs of the prison population and the health care services that are being delivered to address them.

1.2 The overall model of health care in the Prison Service in Scotland is that of an enhanced primary care service, with enhanced care delivered in addictions, mental health and blood borne viruses. It is a nurse-led service, with nursing staff employed directly by SPS. The service is supplemented by contracted staff of general practitioners, pharmacists, specialist addiction staff and agency nurses. Nursing cover is extended in some prisons and doctors are on-call at all times.

1.3 Out-patient and secondary care is provided by local Health Boards and the State Hospital, sometimes with in-reach provision. Local arrangements are in place for provision of certain health care services such as psychiatric services, dentistry and Allied Health Professionals (AHPs) on a prison by prison basis. Local service delivery will also reflect the prison population and their specific needs. It is beyond the scope of this needs assessment project to provide such detail in full.

1.4 Health promotion initiatives can range across many service aspects. Active involvement of prisoners in these initiatives is encouraged through participation in health focus groups. Prisoners can also provide self-care, for example by purchasing 'over the counter' medication or through self-management of chronic disease.

1.5 These health care services are delivered in the specific context of the prison setting. This includes the constraints and complexities of the need for order and security, a highly vulnerable, predominantly young, male population with many and complex health care needs and a high turnover (or 'churn'), particularly in the remand population. Some interventions are generated by the requirements of the Prison Service itself, such as nursing and medical examinations on admission to prison, assessments prior to transfer and liberation or voluntary drug testing requirements.

1.6 This section describes the range of health care services and interventions from directly employed and contracted health care staff that should be delivered across the Scottish Prison Service estate, including a description of the human and physical resources. The aim is of SPS is 'to provide health care to the prison population ..... that is equivalent to that available in the wider community, in a manner that is consistent with the standards set by national health professional and advisory bodies and the Prisons and Young Offenders Institutions (Scotland) Rules 2006' [1]. The SPS Health Care Standards set out what care should be delivered by all prisons and health care staff. These are audited on an annual basis (reported in **Section Five**). The Health Care Standards are implemented through the prison contract between the SPS 'Client' and the SPS 'Provider'. In addition to the prison contract, there are several national contracts in place that contribute to the delivery of health care and define what services should be provided in these areas. These contracts are for specialist addiction services (currently with Phoenix Futures), pharmacy services (Alliance), nursing agency (ScotNursing) and general practitioner services (Medacs).

2. The Scottish Prison Service Health Care Standards

2.1 Each Health Care Standard is sub-divided into different criteria. The number of criteria differs and ranges from 10 (**Health Care Standard 1**) to 39 (**Health Care Standard 11**). A full description of each criteria can be found in the SPS Health Care Standards 2006 [1]. A synopsis of each standard is given below.

2.2 **Health Care Standard 1: Health Assessment on Admission into Prison From Community**

'A Health Care Assessment of all prisoners from the community will be carried out on admission.'

Key Features
The assessment is to include a physical, mental and addictions screening by a nurse (on day of admission) and doctor (within 24 hours of admission). Confirmation of any medication is to be made with the community prescriber by fax or telephone (no timeframe).

2.3 **Health Care Standard 2: Primary Care**

'The provision of primary care services is available.'

Key Features
Arrangements should be in place for self-referrals which are then to be reviewed by a nurse triage system. Self-care is to be supported, as well as patient involvement in care planning. Specialist services should only be provided by those competent to deliver that care. Out-patient referral to be made according to clinical need and effective communication with other service providers to be carried out.

2.4 **Health Care Standard 3: Mental Health Services**

'To promote mental well-being and provide mental health care within an integrated multi-disciplinary mental health service.'

Key Features
Each prison is to have a Multi-Disciplinary Mental Health Team (MDMHT) and to have arrangements in place for provision of psychiatric services. The MDMHT should have a referral system in place and meet at least fortnightly. Referrals should be assessed within 72 hours. Emergency referrals should be seen within 24 hours. On-going cases to be reviewed at least two monthly. A range of therapeutic interventions, including day care, should be offered. For those with on-going problems prior to liberation, referral to community agencies should be initiated. Prisoners whose mental health problems are such that they are unfit to remain in prison should be referred to an appropriate specialist. Compliance with relevant statutes should be adhered to.

2.5 **Health Care Standard 4: Stepped-Up Services**

'The provision of Scottish Prison Service Stepped Up Services.'

Key Features
Care that is beyond normal primary care and where care needs require more intensive monitoring and provision, perhaps before and after hospitalisation. Aspects include initial assessment within one hour by a health care professional, full nursing assessment within 24 hours and allocation of a named nurse within 24 hours. A multi-disciplinary care plan should be devised and regularly reviewed.

2.6 **Health Care Standard 5: Health Care on Transfer or Liberation**

'The health care of prisoners will be maintained throughout the transfer to other prisons and on liberation.'

Key Features
Twenty-four hours notice between health centres should be given for planned transfer of a prisoner from one prison to another. The case should be discussed with the receiving health centre for emergency transfers. Health care records and medication must accompany the prisoner. A full health care assessment will be made on the day of admission. This is to include a physical, mental and addictions screening by a nurse (on day of admission) and doctor (within 72 hours of admission). Prisoners receiving treatment or serving sentences longer than six months should be reviewed by a doctor prior to liberation. For those on medication, a five day supply is to be provided. Details of outstanding out-patient appointments to be given.

2.7 **Health Care Standard 6: Clinical and Related Services for Promoting Health**

'To develop and provide clinical services focused on preventing illness and promoting health.'

Key Features
Each prison is to have a Local Health Promotion Action Group (LHPG) which is to devise an annual activity plan to deliver events in partnership with local and national agencies. A minimum of four activities per year should be carried out which should be evaluated by the LHPG. Educational material should be accessible to prisoners who should have the opportunity to become involved through health focus groups.

2.8 **Health Care Standard 7: Blood Borne Virus Services**

'Access to blood borne virus service will be available for prisoners.'

Key Features
Immunisation against Hepatitis B to be available to all prisoners on admission. Information on Blood Borne Viruses (BBVs) and service provision will be given at induction. Measures to inhibit transmission of BBVs to be introduced as per national health care policy. Condoms and dental dams are available to prisoners.

Those known to be Hepatitis C positive to be offered immunisation against Hepatitis A. All prisoners will have access to confidential or anonymous HIV testing. Access to pre-test discussion for both Hepatitis and HIV testing should be available within two weeks of the request by an appropriately trained person. Information regarding risk behaviour will be given. Newly diagnosed BBV positive prisoners to be offered early referral to an appropriate specialist for assessment and treatment. Effective communication with NHS services to be developed to ensure continuity of care. Transfer of a prisoner on treatment for Hepatitis C should not happen unless continuity of care is ensured.

2.9 **Health Care Standard 8: Management of Medicines**

'The provision of pharmaceutical services and safe management of medicines.'

Key Features
All prescribing is to be under the direction of registered health professionals and to follow current legislation, guidelines and standards. Prisoners should have access to pharmaceutical information. Storage of medicines should follow current legislation and guidelines. A range of 'over the counter' medicines are to be made available per local and national policies. In-possession medicines are to be managed appropriately as per local and national policy.

2.10 **Health Care Standard 9: Dental Services**

'To provide dental services comparable to those available within the NHS.'

Key Features
Information about prison dental services is to be available to prisoners. Every prison should ensure the provision of a qualified dentist. Access should be made available, including self-referral. Untried prisoners will only have access to emergency care. Sentenced prisoners to be seen for initial assessment within 10 weeks. Prisoners with severe dental pain unresponsive to initial treatment should receive further treatment within 24 hours. Arrangements for out of hours emergency dental cover are to be in place. Provision of treatment not available under the NHS may be available under private contract with the prison dentist. Facilities and equipment provision, use and disposal is to follow current legislation and good practice guidance.

2.11 **Health Care Standard 10: Prescribing for Clinical Management of Drug and Alcohol Dependency**

'The provision of evidence-based addictions management by staff with the capability to deliver the service.'

Key Features
On entry into prison, an assessment of addiction is to be made by a qualified nurse (see also **Health Care Standard 1**), including history, symptoms of withdrawal, clinical examination and specimen for laboratory analysis. Injecting equipment brought in is to be stored if unused and returned on release. If used, a clean set will be issued on release. If withdrawal is likely, the patient's condition is to be stabilised. Further clinical assessment will take place by both a nurse and a doctor (see also **Health Care Standard 1**).

Those already on a regular substitution medication programme are to be given the opportunity to continue this, subject to confirmation with community prescribing services (this includes willingness to continue prescribing on release). Prescribing is to be through supervised daily doses and regular supervision (minimum monthly).

Those not in established contact are to be offered treatment to stabilise their condition. For prisoners staying less than one month, this can include detoxification (which should follow SPS protocols). For prisoners staying more than one month, referral (including self-referral) can be made to the Enhanced Addictions Care Service (EACS) following commencement of treatment. Substitution therapy can be offered subject to a full specialised addiction assessment. For those staying one to three months, arrangements with a community drug service should be made. For those staying three to six months, substitution therapy will be commenced if a community prescriber is identified. For those staying more than six months, substitution therapy can be commenced. Stopping of substitution therapy should be either voluntary or following a multi-disciplinary team review and include support. There will be no set maximum number for drug treatment programmes. Pregnant drug users will be considered a top clinical priority.

Prior to liberation, contact should be made with the community prescriber at least one month in advance. Attempts to secure an early appointment should be made. Treatment should be provided to cover the weekend if liberation takes place on a Friday. Where possible, a community-based worker should accompany the person to their first appointment.

2.12 **Health Care Standard 11: Health Care Facilities**

'The provision of health care facilities to ensure a safe and effective delivery of health care.'

Key Features
A designated area (minimum 16m²) is to be available to conduct an initial health interview on entry to prison with conditions of privacy and confidentiality. Clinical areas are to be provided and conform to criteria, as set out in detail in **Health Care Standard 11** (for full details see **SPS Health Care Standards 2006** [1]. Appropriate equipment will be available and maintained according to manufacturers' instructions (for further detail see **SPS Infection Control Manual** and other national guidance referred to in **Health Care Standard 11**). Health Care Records are to be stored securely and provision made for computerised record keeping.

2.13 **Health Care Standard 12: Prevention of Health Care Associated Infection**

'Infection control precautions will be applied by all health care practitioners to the care of prisoners at all times.'

Key Features
Procedures for hand hygiene, use of personal protective equipment and use and disposal of sharps to conform with national guidance and good practice (full details and references in **Health Care Standard 12**).

2.14 **Health Care Standard 13: Health Care Records**

'All SPS health care records will be managed and maintained to a high professional standard.'

Key Features
Health care records are to be recorded and kept according to SPS policy, as outlined in SPS Manual Health Care Records system 1997. Practice should also be compliant with the Access to Health Records Act 1990 and the Data Protection Act 1998. Guidance and training on this should be provided to all health care staff. This includes the provision of coherent, legible, comprehensive and accurate record-keeping, accessible to all health care staff. Records (manual) should accompany each prisoner on transfer in secure conditions. On liberation, the record is to be returned under similar secure conditions to the local prison.

2.15 **General Medical Services**

These are currently supplied contractually from Medacs. The contract is subject to the relevant requirements of the Prisons and Young Offenders Institutions (Scotland) Rules 1994, SPS Standing Orders and instructions including SPS Health Care Standards.

Key Features

General medical services are to be delivered at a level of competence appropriate to a General Medical Practitioner. As well as routine general medical care, medical assessment of all admissions is to be undertaken (see also **Health Care Standards 1 and 10**). Care should be provided on a 24 hour basis, with attendance within 30 minutes for urgent care and within one hour for non-urgent care. Participation is required in ACT2Care processes and procedures to provide medical input for those deemed at risk of self-harm. Management of those with alcohol and drug problems should be delivered at the time of admission, in conjunction with other relevant colleagues.

Maintenance of health care records is required in accordance with relevant legislation and guidance (see also **Health Care Standard 13**). Practitioners are to provide professional input to local prison health care management activities. Input may be required for local incidents as requested by SPS staff. Assistance should be given and evidence may be required for Fatal Accident Inquiries. Local security and communication arrangements should be observed. Reports and court attendance must be provided timeously. Prisoner complaints must be dealt with in accordance with Prison Rules.

2.16 **Pharmaceutical Services**

These are currently supplied contractually from Alliance. The contract is subject to the relevant requirements of the Prisons and Young Offenders Institutions (Scotland) Rules 1994, SPS Standing Orders and instructions, including SPS Health Care Standards (see also **Health Care Standard 8**). The service should be governed by the Code of Ethics of the Royal Pharmaceutical Society of Great Britain and be delivered to the agreed service specification.

Key Features

The service provided should be of the supply of goods and pharmaceutical support that is safe, effective and economic. A comprehensive range of medicines should be made available for the prevention, diagnosis and treatment of clinical conditions. The medicines should be appropriately prescribed and correctly administered. Advice and support should be given to health care staff to ensure evidence-based and cost effective use of medicines in compliance with the SPS Formulary. Supply, storage and distribution of medicines, dressings and appliances should be within a legal, ethical and professional framework that also meets the security constraints of the premises. Compliance should be monitored regularly and monthly reports returned to SPS.

2.17 **Enhanced Addiction Casework Services**

These are currently supplied contractually from Phoenix Futures. The contract is subject to the relevant requirements of the Prisons and Young Offenders Institutions (Scotland) Rules 1994, SPS Standing Orders and instructions, including SPS Health Care Standards (see also **Health Care Standard 10**).

Key Features

National Harm Reduction Awareness

Sessions are delivered to all prisoners (unless they have attended within the previous six months). Sessions last one hour and cover a description of addiction services and how prisoners can refer themselves. Basic substance awareness and a range of harm reduction measures are discussed, in particular, the risks of reduced tolerance on return to the community. Direct referrals to the Local Authority Throughcare Addiction Service (TAS) can be made.

Prisoner Assessment and Individualised Care Planning

The SPS addiction assessment tool is to be utilised. For young offenders and female prisoners serving a sentence of less than 31 days, a shortened assessment is made and immediate referral to TAS if appropriate. For all other prisoners serving less than 31 days, referral is made to the prison social work department who, in turn, will refer to Local Authority Criminal Justice Social Work in the community. Prisoners serving 31 days or over are referred to the Enhanced Addiction Casework Service (EACS).

Following assessment, an individualised care plan is to be agreed. This is to be reviewed regularly. With the prisoner's permission, liaison is to be made with any community agencies which have been delivering care.

Alcohol Assessment and Care Planning

If alcohol problems have been identified, a specialised alcohol assessment is to be made. Specific alcohol interventions to be provided include groupwork (minimum two hours per session) or 1:1 support (minimum 45 minutes).

Motivational and Harm Reduction Interventions

Motivational interviewing (for substance misuse) will also be available. Harm reduction/paraphernalia awareness shall be delivered both at individual and group level and through health promotional activities. An individual harm reduction/paraphernalia care plan should be drawn up for those continuing to participate in high risk activities.

Smoking Cessation

General advice, guidance and support are to be provided and to include awareness of provision of Nicotine Replacement Therapy. Smoking cessation groups are to be provided (six to eight weeks duration) with one to one support as required. Promotion of health promotion activities should take place, such as 'National No Smoking Day'.

Pre-Release Groupwork

The main aim of pre-release groupwork is to raise awareness of the dangers associated with loss of tolerance prior to liberation into the community.

General service obligations are to cover maintenance and management of case files, participation in organisational enquiry procedures (such as Fatal Accident Enquiries), participation in multi-disciplinary case conferences, awareness of and partnership working with external stakeholders (eg the Drug and Alcohol Action Teams and community addiction services), staff competency, compliance with general SPS training and procedures (such as use of keys), provision of information to both prisoners and their families, and quality assurance arrangements with audit taking place quarterly.

Contract monitoring is in place, overseen by a dedicated Contract Manager at SPS Headquarters. This includes measurement of outputs across the service interventions on a monthly basis as well as more general contract compliance. An overview of EACS service requirements is shown in the box below.

EACS Service Requirements 2006/07*

Service Intervention	Delivery
National Harm Reduction Awareness Session	406 group sessions per month
Prisoner Assessment and Individualised Care Plan	840 per month
Care Plan Reviews	1,000 per month
Specialised Alcohol Assessment and Individual Care Plan	150 per month
Alcohol Groupwork	45 group sessions per month
1:1 Support/Motivational Interviewing	1,600 per month
Harm Reduction/Paraphernalia Care Planning	422 per month
Smoking Cessation Group	40 group sessions per annum
Pre-Release Groupwork	96 group sessions per month

*August 2006 to July 2007

2.18 **Nursing Agency Contract**

The current contract for the provision of temporary nursing services is with ScotNursing. The contract is subject to the relevant requirements of the Prisons and Young Offenders Institutions (Scotland) Rules 1994, SPS Standing Orders and instructions, including SPS Health Care Standards. The services should also be compliant with all (other) statutory and professional requirements.

Key Features
Supply of suitably qualified (Grade E or equivalent with at least one year's experience) registered nurses and, if required, health care assistants (Grade A and/or B) on both a planned and ad hoc basis.

2.19 **The Throughcare Addiction Service**

This service is provided for prisoners with drug or alcohol problems to provide a link with services in the community. It is not provided by SPS either directly or contractually, but by Local Authority Social Work Departments. It commenced in 2005, replacing the SPS transitional care arrangements.

2.20 **Human Resources**

The full provision of SPS directly employed staff can be defined as the staff complement, provided through the staffing budget. Given that the model of care in the Scottish Prison Service is unique, determination of the staff complement has been historical and pragmatic rather than derived from direct comparison with community provision. The current staffing provision (in Whole Time Equivalent (WTE)) both of SPS employed staff of other clinical staff of enhanced addiction service staff and of professions allied to medicine is outlined in **Section Five**. SPS employed staff are currently at full complement. Budget costs for both SPS staff and for nationally contracted staff will not be reported.

2.21 **Physical Resources**

Requirements for physical resources for the delivery of health care in the Scottish Prison Service are outlined in the Health Care Standards (see above, in particular, **Health Care Standards 8, 9, 11 and 12**).

REFERENCES

1. **SPS Health Care Standards 2006**
http://www.sps.gov.uk//Default.aspx?DocumentID=06acde94-3523-4509-a9df-69d9c61a9820

SECTION FIVE: SERVICES AND INTERVENTIONS DELIVERED, HUMAN AND PHYSICAL RESOURCES PROVIDED

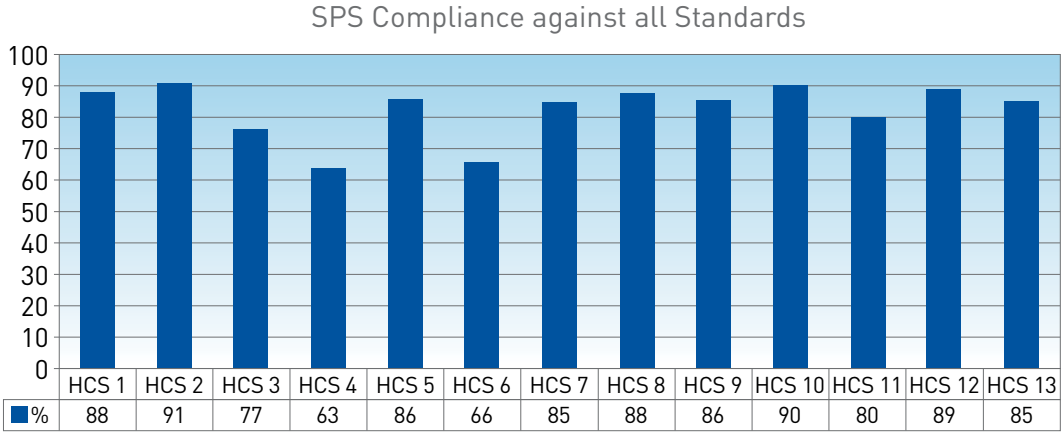
1. Services Delivered and Physical Resources Provided

1.1 The figure below (**Figure One**) shows compliance for all prisons against all Health Care Standards (for a summary of each Health Care Standard **see Section 4** and for a detailed description, refer to **SPS Health Care Standards 2006**)1. Compliance against each individual standard is shown in **Appendix One**.

1.2 Each Health Care Standard is sub-divided into different criteria. The number of criteria differs for each Standard and ranges from 10 (**Health Care Standard 1**) to 39 (**Health Care Standard 11**). Each criterion is reported as either being complied with, not complied with or not applicable. There is no weighting of the criteria within a standard, nor of standards against each other.

1.3 The Health Care Standards with lowest compliance are for Mental Health (**Health Care Standard 3**), Stepped-Up Services (**Health Care Standard 4**) and Health Promotion (**Health Care Standard 6**). Compliance for criteria within each Standard are reported below. Numbers in brackets refer to individual criteria and can be found in **Appendix 1 (see p54)**.

Figure One



2. Health Care Standard 1: Health Assessment on Admission from Community to Prison

2.1 There is very good compliance with basic screening by both nurse, on admission, and a doctor within 24 hours, in particular, for potentially life-threatening situations (such as suicide or self-harm). There is less compliance in the areas of communication, with external agencies (for medical records or confirmation of prescriptions) [1.1.4/1.2.3] of health risk factors to officers (other than suicide or self-harm) [1.1.3] and of information on services to the prisoners themselves [1.1.6].

3. Health Care Standard 2: Primary Care

3.1 In general, there is excellent compliance with delivery of primary care services. Of note is that there is good compliance with communication of health risk factors to officers as compared with Health Care Standard 1, which would suggest that this procedure is undertaken at a later time than first admission [2.1.4]. Weaker areas are that of patient involvement [2.1.5] and of communication with external agencies involved with out-patient referral [2.3.2].

4. Health Care Standard 3: Mental Health Services

4.1 Although every prison has a Multi-Disciplinary Mental Health Team in place, there is evidence that some are having difficulty in delivering a timely and quality service. Not all are able to see a referral within 72 hours [3.2.3], nor do they hold review meetings at least fortnightly [3.2.1]. Less than 40% are able to provide a range of therapeutic interventions such as day care for those who do not need in-patient care [3.3.2]. Advocacy services are not provided in over half of prisons [3.3.1]. Transfers of patients with mental health problems are taking place at times without the written consent of a member of the MDMHT [3.2.11]. Communication with external service providers for follow-up prior to a prisoner being released does not always take place [3.2.10].

5. Health Care Standard 4: Stepped-Up Services

5.1 Overall compliance with this standard is relatively low at just over 60%, with the exception of completion of a 'discharge summary' by the Medical Officer prior to transfer to the NHS [4.3.3].

6. Health Care Standard 5: Health Care on Transfer or Liberation

6.1 Areas of good practice include review following transfer (which mirror services provided on admission) but again, poor provision of information on services to prisoners [5.2.2]. Not all transfers are made with a 24 hour warning to the receiving prison [5.1.1]. Of concern is that there is only 70% compliance for the completion of discharge summaries for prisoners receiving treatment or having served a sentence of 6 months or more [5.3.1].

7. Health Care Standard 6: Clinical and Related Service for Promoting Health

7.1 Overall compliance with this standard is less than 70%. Particularly weak areas are of prisoner involvement [6.1.6], formal action plans being in place (less than 40%) [6.2.4] or of health promotion being built in to induction and pre-release [6.2.6]. It would appear that local events do take place (in the absence of plans) but this is not evident in all prisons.

8. Health Care Standard 7: Blood Borne Virus Services

8.1 On the whole, there is good practice in this area with, for example, Hepatitis B vaccination being offered to all prisoners (with the exception of one prison). Areas to be addressed are provision of condoms and dental dams [7.1.13], offering of Hepatitis A to those know to be Hepatitis C positive [7.1.2] and ensuring transfer of those on treatment for Hepatitis C outwith a health board area does not take place unless arrangements are in place for continuation of treatment [7.1.10]. Note that the standard does not include opportunistic testing for Hepatitis C.

9. Health Care Standard 8: Management of Medicines

9.1 There is very good compliance with this standard, with the exception of provision of pharmaceutical information to prisoners [8.1.4] and of 'over the counter' medication [8.3.3].

10. Health Care Standard 9: Dental Services

10.1 There is good compliance with the provision of a dental service. Facilities and equipment are provided and, in most prisons, maintained according to current legislation and best practice. Waiting times are high, with less than 60% of prisons able to ensure that sentenced prisoners will be seen by a dentist within 10 weeks [9.3.3] and, of concern, nearly 40% cannot ensure that a prisoner with severe dental pain that has not responded to initial treatment is seen with 24 hours [9.3.4]. There is only 80% compliance with an out of hours service [9.3.9] and record keeping is not complete [9.3.7].

11. Health Care Standard 10: Prescribing for Clinical Management of Drug and Alcohol Dependency

11.1 Overall compliance with this health care standard is very good. Areas scoring less well are on injecting equipment policy (on admission and discharge) [10.1.3] and of drug testing being in line with clinical needs [10.5.3], though the latter may well reflect changing SPS drug testing policy during the year. Of note is that there is no requirement of health care to refer to the multi-disciplinary addiction team.

12. Health Care Standard 11: Health Care Facilities

12.1 This health care standard has 39 criteria, so increasing the likelihood of a reduced overall score (given that scoring is not weighted). Despite this, the overall score is 80%. There is evidence that some of the facilities are such that full decontamination and hygiene practice would not be possible [11.4.1-3] and [11.4.9]. Not all prisons have equipment for health screening [11.1.3].

13. Health Care Standard 12: Prevention of Health Care Associated Infection

13.1 This is also a standard with a high number of criteria (36) but with overall compliance of 90%. There is some evidence of non-compliance with hand hygiene which may be due to both lack of equipment and a practice issue [12.2.3/12.2.4/12.2.8]. Not all good practice with regard to use of personal protective equipment is being adhered to [12.3.11-14]. Whether this is a practice or equipment supply issue cannot be determined.

14. Health Care Standard 13: Health Care Records

14.1 Overall compliance is reported as reasonable at 85%. Areas of concern are completion of a summary sheet, use of abbreviations, jargon and legibility. Critical issues such as confidentiality are being adhered to (though the wording on this is ambiguous) [13.6.3].

15. Summary

15.1 Areas of strength are of provision of baseline primary care services from the point of admission, with particular emphasis on patient safety (such as suicide prevention and addiction management). Enhanced care is also good in addiction and blood borne viruses, eg harm reduction practice.

15.2 Areas where practice is less strong are communication, from external agencies on admission (with the exception of prescribing for drug misuse), to services outside on discharge (in particular for mental health problems) and to prisoners themselves on what services are available. Patient involvement is limited and self-help restricted through lack of OTC medication. Advocacy services, another form of ensuring communication with and from prisoners, are minimal.

15.3 There is evidence of long waiting times for routine dental services and of concern, for acute dental care. Mental health services are unable to provide a full range of therapeutic interventions and there is evidence of prolonged waiting for a first referral. The enhanced service of stepped-up care is not being delivered fully. Health promotion activity seems somewhat adhoc with little evidence of coherent planning.

15.4 Throughcare, both from and to the outside community and within the estate, is not always delivered.

15.5 There are areas of health care provision that are not included in the standards, but would be worth considering (including those evidenced in **Section 3**). These include sexual health needs (other than those addressed through BBV harm reduction), chronic disease screening and management (especially diabetes, CHD, epilepsy and Hepatitis C), provision of services of Allied Health Professionals (AHPs), patient participation and self-help, alternatives to medication such as Cognitive Balanced Therapy and talking therapies (especially for mental health and alcohol problems), co-morbidity (substance misuse and mental health) and lastly, but arguably crucial, health promotion, from a holistic, setting perspective.

16. Enhanced Addiction Casework Services

16.1 The box below outlines the enhanced addiction casework services delivered from April 2006 to March 2007. Output by individual prison is shown in **Appendix 2 (see p61)**.

EACS Service Delivery 2006/07*

Service Intervention	Required Delivery	Actual Delivery
National Harm Reduction Awareness Session	406 group sessions per month (4,872 pa)	4,532 group sessions delivered (17,078 prisoners attended)
Prisoner Assessment and Individualised Care Plan	840 per month (10,080 pa)	4,166
Care Plan Reviews	1,000 per month (12,000 pa)	13,112
Specialised Alcohol Assessment and Individual Care Plan*	150 per month (1,800 pa)	1,108
Alcohol Groupwork	45 group sessions per month (450 pa)	252 group sessions (1,028 prisoners attended)
1:1 Support/Motivational Interviewing	1,600 per month (19,200 pa)	12,298
Harm Reduction/Paraphernalia Care Planning	422 per month (5,064 pa)	2,231
Smoking Cessation Group	40 group sessions per annum	13 completed, 12 running
Pre-Release Groupwork	96 group sessions per month (1,152 pa)	506 group sessions (775 prisoners attended)

*October 2006 to March 2007 only

16.2 Enhanced Addiction Casework Services were introduced across all public sector prisons on 1 August 2005. As part of the annual contract review process, the above performance outputs (required delivery) were re-configured, taking account of evidence-based addiction performance data (actual delivery), the change in the prison population, alterations to the SPS estate (such as the closure of HM Prison, Low Moss), development of Integrated Care Management, and the impact of new custody policy (eg Home Detention Curfew).

16.3 Key changes include:

- EACS provision to all prisoners serving over 31 days (previously excluded sex offenders);
- provision of pre-release group work to all prisoners serving a sentence of over 31 days (previously only to those serving more than two years); and
- integration of specialist alcohol assessment into the ICM Specialist Substance Misuse Assessment.

17. Human Resources

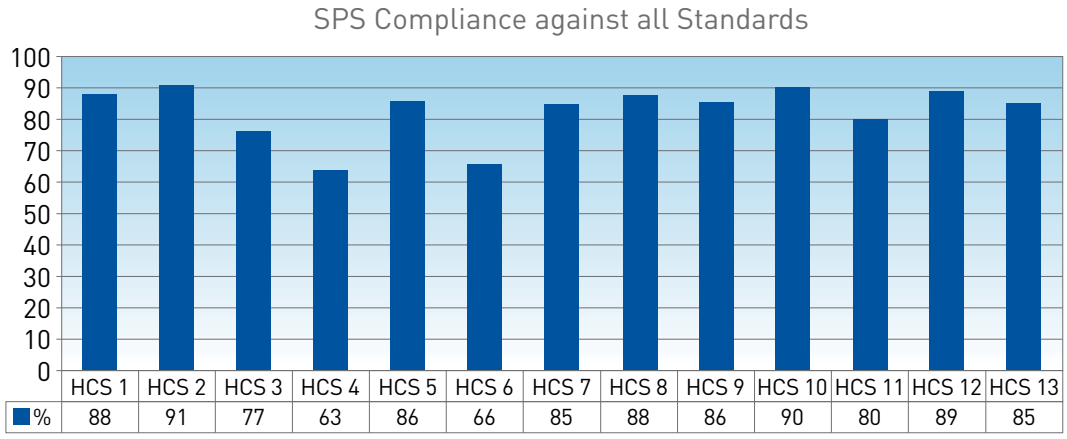
17.1 Human resources are detailed in **Appendix 3 (see p62)**. The staffing at estate level, in Whole Time Equivalents (WTE), for health care and addiction service staff is outlined in **Table One**. Health centre staff breakdown by prison is shown in Table Two and other clinical staff in **Table Three**. Allied Health Professionals (AHPs) staff are outlined in **Table Four**, and Enhanced Addiction Casework Team staff are shown in **Table Five**.

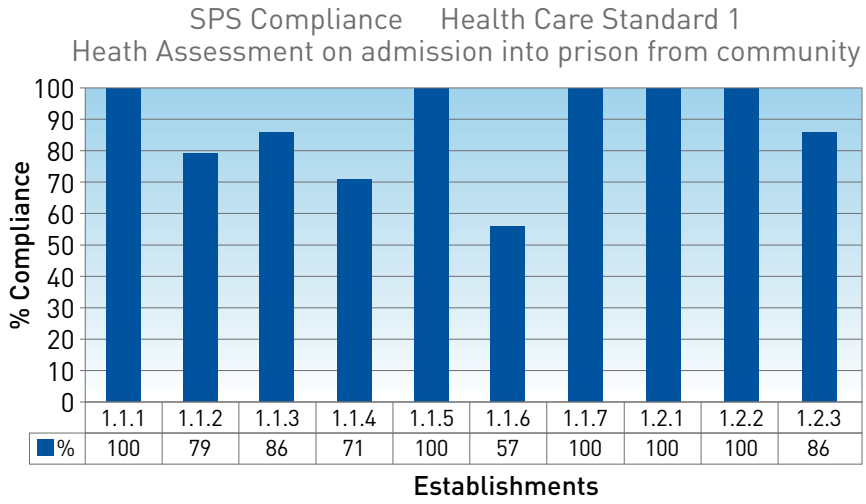
17.2 There are no direct comparisons that can be drawn with staff (WTE):population ratios from the community or other institutional settings as the model of care in Scottish prisons is unique, even in comparison with prison services in England. As discussed in **Section 4**, staffing complement has been determined historically and pragmatically, taking into account the expert views of service providers, the differing needs of the prisons' populations, the provision of services across 15 widespread geographical sites, and the limits of health care budgets. As the prison population has grown rapidly in recent years, and with overcrowding an acute issue, priorities for health care have focussed on ensuring basic and safe health care is delivered.

REFERENCES

1. **SPS Health Care Standards 2006**
http://www.sps.gov.uk//Default.aspx?DocumentID=06acde94-3523-4509-a9df-69d9c61a9820

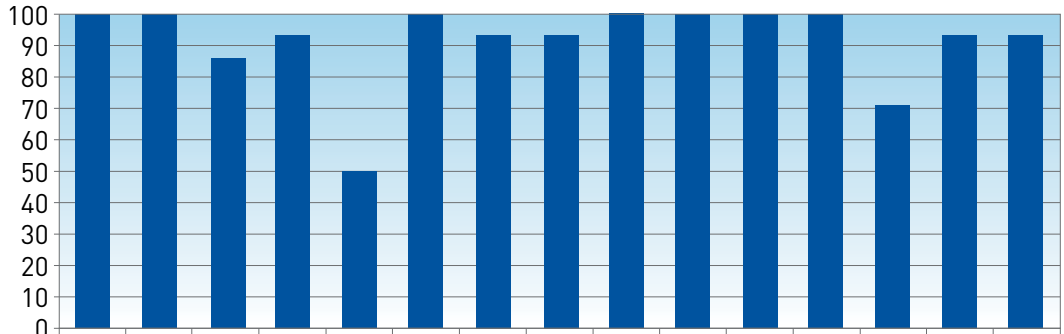
APPENDIX 1


SPS Compliance against all Standards
100
90
80
70
60
50
40
30
20
10
0
HCS 1 HCS 2 HCS 3 HCS 4 HCS 5 HCS 6 HCS 7 HCS 8 HCS 9 HCS 10 HCS 11 HCS 12 HCS 13
% 88 91 77 63 86 66 85 88 86 90 80 89 85


SPS Compliance Health Care Standard 1
Heath Assessment on admission into prison from community
% Compliance
100
90
80
70
60
50
40
30
20
10
0
1.1.1 1.1.2 1.1.3 1.1.4 1.1.5 1.1.6 1.1.7 1.2.1 1.2.2 1.2.3
% 100 79 86 71 100 57 100 100 100 86
Establishments

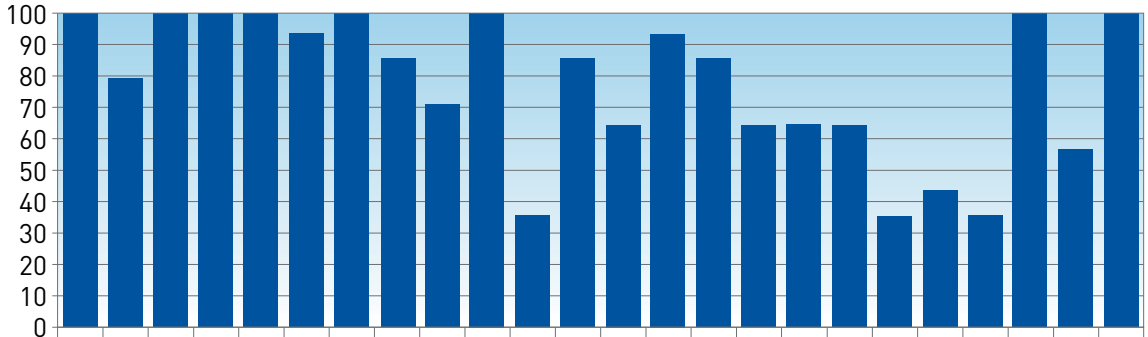
APPENDIX 1

SPS Compliance Health Care Standard 2 Primary Care



	2.1.1	2.1.2	2.1.3	2.1.4	2.1.5	2.1.6	2.1.7	2.1.8	2.2.1	2.2.2	2.2.3	2.3.1	2.3.2	2.3.3	2.3.4
%	100	100	86	93	50	100	93	93	100	100	100	100	71	93	93

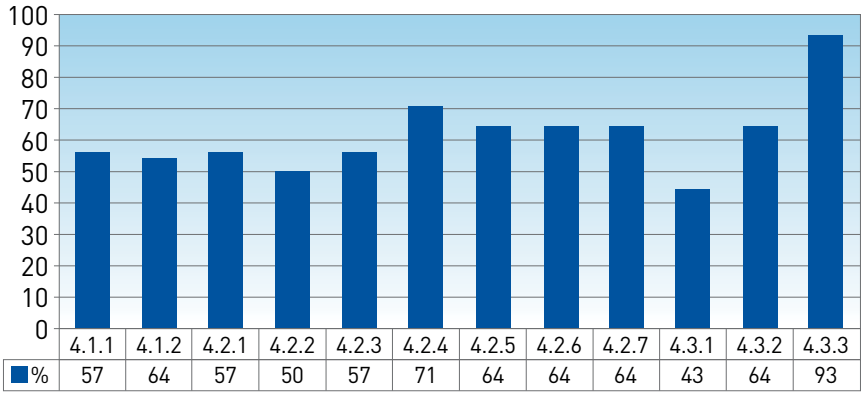
SPS Compliance Health Care Standard 3 Mental Health Services



	3.1.1	3.1.2	3.1.3	3.1.4	3.1.5	3.1.6	3.1.7	3.1.8	3.2.1	3.2.2	3.2.3	3.2.4	3.2.5	3.2.6	3.2.7	3.2.8	3.2.9	3.2.10	3.2.11	3.3.1	3.3.2	3.3.3	3.3.4	3.4.1
%	100	79	100	100	100	93	100	86	71	100	36	86	64	93	86	64	64	64	36	43	36	100	57	100

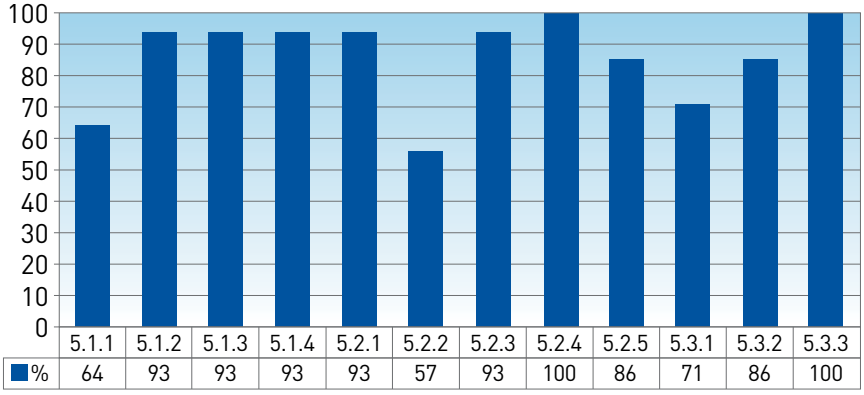
APPENDIX 1

SPS Compliance Health Care Standard 4
Stepped up Services



	4.1.1	4.1.2	4.2.1	4.2.2	4.2.3	4.2.4	4.2.5	4.2.6	4.2.7	4.3.1	4.3.2	4.3.3
%	57	64	57	50	57	71	64	64	64	43	64	93

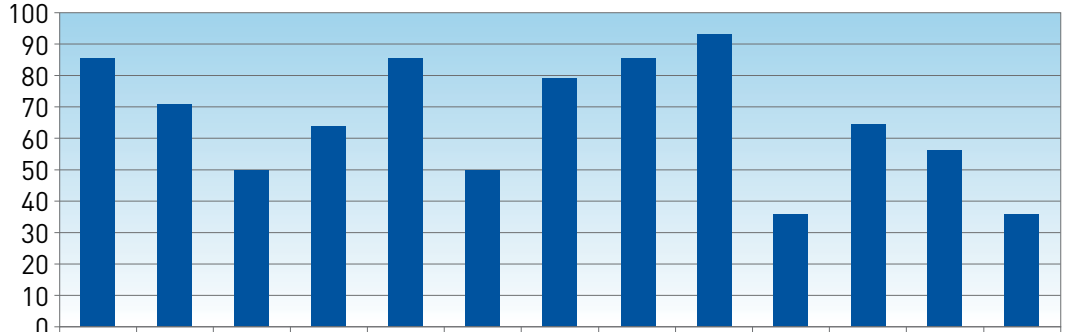
SPS Compliance Health Care Standard 5
Health Care on Transfer or Liberation



	5.1.1	5.1.2	5.1.3	5.1.4	5.2.1	5.2.2	5.2.3	5.2.4	5.2.5	5.3.1	5.3.2	5.3.3
%	64	93	93	93	93	57	93	100	86	71	86	100

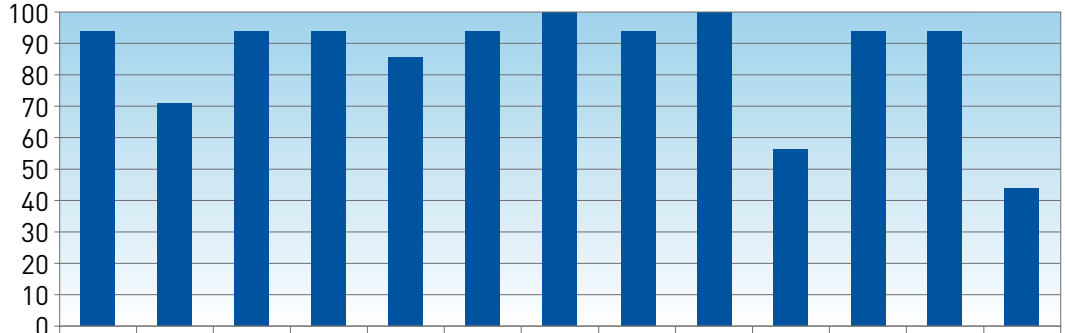
APPENDIX 1

SPS Compliance Health Care Standard 6
Clinical and Related Services for Promoting Health



	6.1.1	6.1.2	6.1.3	6.1.4	6.1.5	6.1.6	6.2.1	6.2.2	6.2.3	6.2.4	6.2.5	6.2.6	6.2.7
%	86	71	50	64	86	50	79	86	93	36	64	57	36

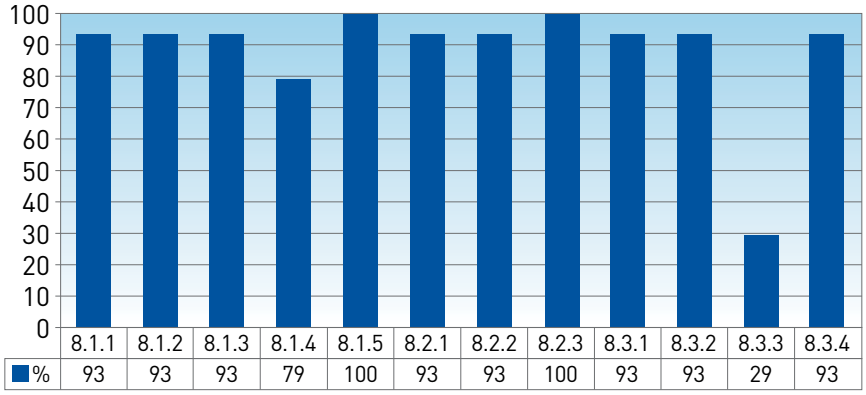
SPS Compliance Health Care Standard 7
Blood Bourne Virus Services



	7.1.1	7.1.2	7.1.3	7.1.4	7.1.5	7.1.6	7.1.7	7.1.8	7.1.9	7.1.10	7.1.11	7.1.12	7.1.13
%	93	71	93	93	86	93	100	93	100	57	93	93	43

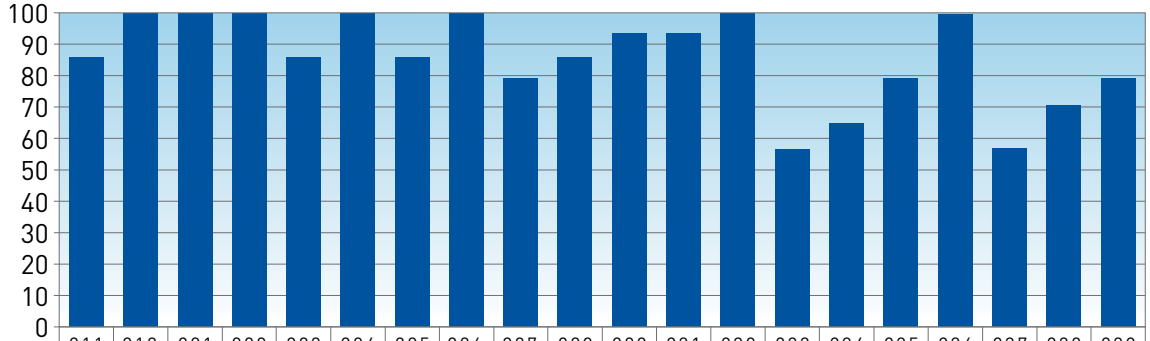
APPENDIX 1

SPS Compliance Health Care Standard 8
Management of Medicines



	8.1.1	8.1.2	8.1.3	8.1.4	8.1.5	8.2.1	8.2.2	8.2.3	8.3.1	8.3.2	8.3.3	8.3.4
%	93	93	93	79	100	93	93	100	93	93	29	93

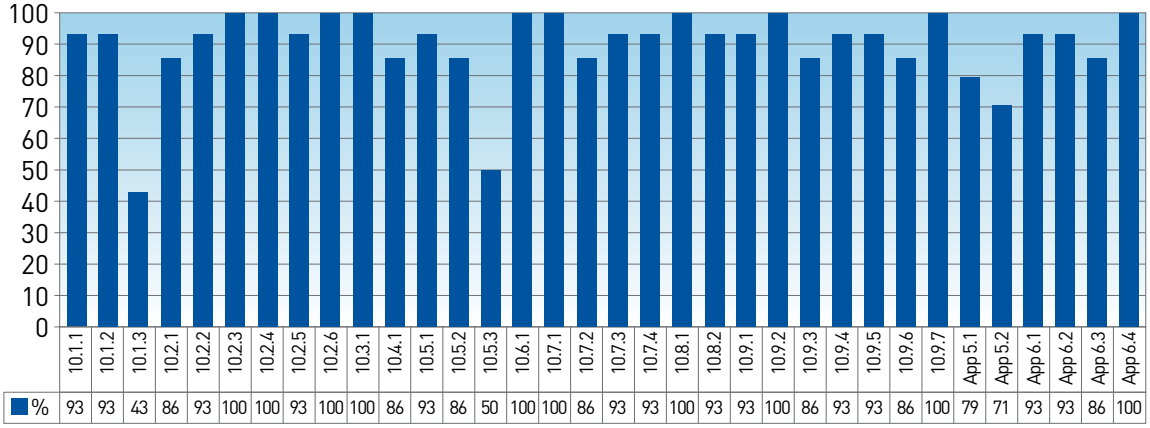
SPS Compliance Health Care Standard 9 Dental Services



	9.1.1	9.1.2	9.2.1	9.2.2	9.2.3	9.2.4	9.2.5	9.2.6	9.2.7	9.2.8	9.2.9	9.3.1	9.3.2	9.3.3	9.3.4	9.3.5	9.3.6	9.3.7	9.3.8	9.3.9
%	86	100	100	100	86	100	86	100	79	86	93	93	100	57	64	79	100	57	71	79

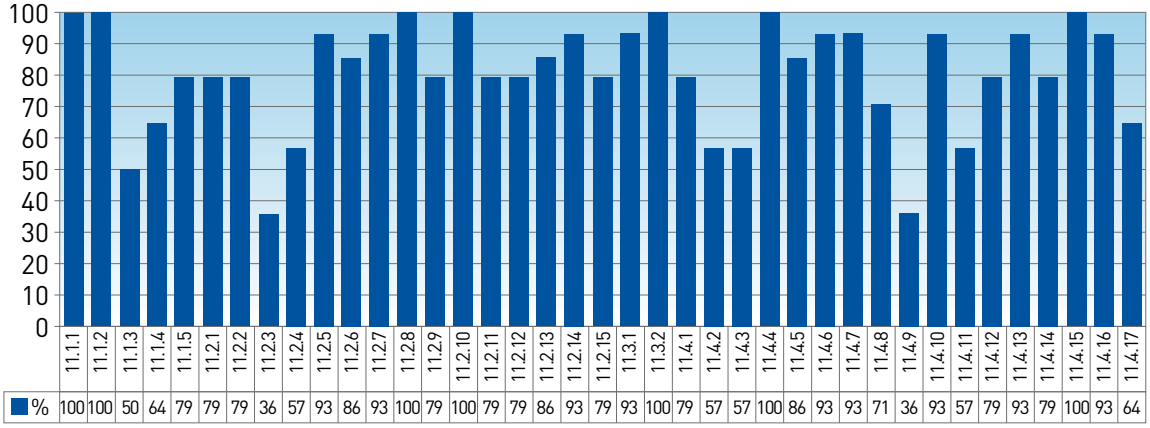
APPENDIX 1

SPS Compliance Health Care Standard 10
Prescribing for Clinical Management of drugs and Alcohol Dependency



	10.1.1	10.1.2	10.1.3	10.2.1	10.2.2	10.2.3	10.2.4	10.2.5	10.2.6	10.3.1	10.4.1	10.5.1	10.5.2	10.5.3	10.6.1	10.7.1	10.7.2	10.7.3	10.7.4	10.8.1	10.8.2	10.9.1	10.9.2	10.9.3	10.9.4	10.9.5	10.9.6	10.9.7	App 5.1	App 5.2	App 6.1	App 6.2	App 6.3	App 6.4
%	93	93	43	86	93	100	100	93	100	100	86	93	86	50	100	100	86	93	93	100	93	93	100	86	93	93	86	100	79	71	93	93	86	100

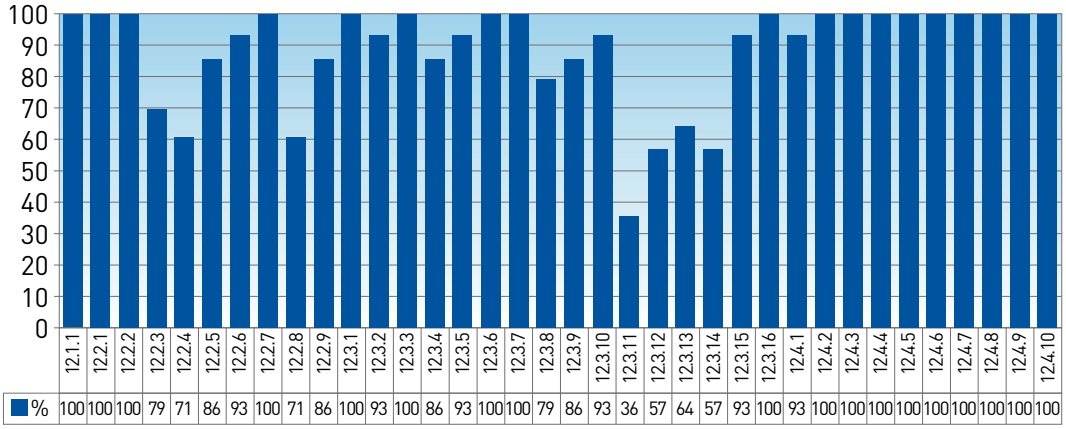
SPS Compliance Health Care Standard 11
Health Care Facilities



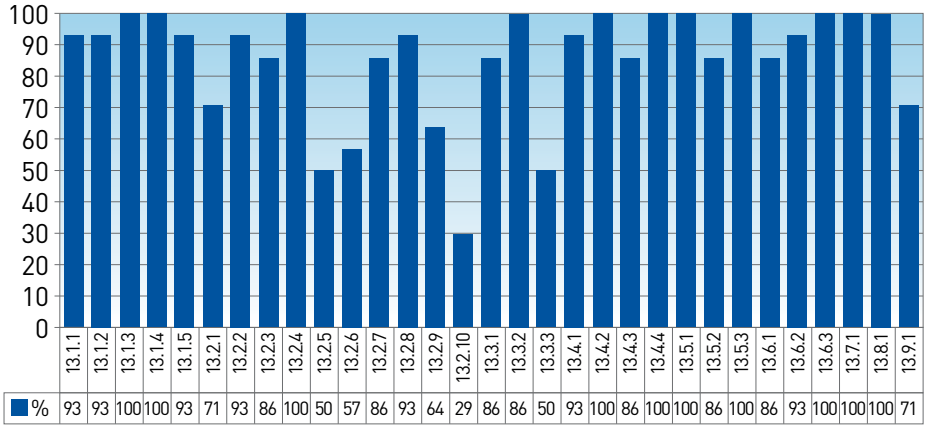
	11.1.1	11.1.2	11.1.3	11.1.4	11.1.5	11.2.1	11.2.2	11.2.3	11.2.4	11.2.5	11.2.6	11.2.7	11.2.8	11.2.9	11.2.10	11.2.11	11.2.12	11.2.13	11.2.14	11.2.15	11.3.1	11.3.2	11.4.1	11.4.2	11.4.3	11.4.4	11.4.5	11.4.6	11.4.7	11.4.8	11.4.9	11.4.10	11.4.11	11.4.12	11.4.13	11.4.14	11.4.15	11.4.16	11.4.17
%	100	100	50	64	79	79	79	36	57	93	86	93	100	79	100	79	79	86	93	79	93	100	79	57	57	100	86	93	93	71	36	93	57	79	93	79	100	93	64

APPENDIX 1

SPS Compliance Health Care Standard 12
Principle of preventing Health Care Associated Infection



SPS Compliance Health Care Standard 13
Health Care Records



APPENDIX 2

EACS INTERVENTION STATISTICS (TOTALS): APRIL 2006 TO MARCH 2007

	National Harm Reduction (Sessions)	National Harm Reduction (Prisoners Attended)	ICM Assessments	Care Plan Reviews	Specialist Alcohol Assessment	Alcohol/Groupwork (Sessions)	Alcohol/Groupwork (Prisoners Attended)	1:1 Support/MI	Harm Reduction/ Paraphernalia Care Planning	Pre-Release Groupwork (Sessions)	Pre-Release Groupwork (Prisoners Attended)
Aberdeen	276	1,036	242	1,137	61	12	18	895	40	41	121
Barlinnie	1,016	2,362	601	637	170	23	92	1,205	128	47	112
Cornton Vale	790	2,368	418	968	50	17	42	1,599	101	57	57
Dumfries	234	579	111	461	27	4	5	300	49	27	37
Edinburgh	537	2,097	422	1,173	66	6	25	1,075	111	28	51
Glenochil	48	246	146	920	28	9	66	661	194	89	100
Greenock	103	672	225	1,166	69	19	39	765	3	26	36
Inverness	288	753	186	681	98	26	52	392	52	28	28
Low Moss	228	1,913	438	1,386	115	25	101	505	111	20	75
Open Estate	91	740	329	1,914	74	52	280	2,021	167	36	36
Perth	507	2,572	236	1,289	42	11	56	690	146	32	35
Polmont	407	1,728	686	508	297	45	242	1,189	1,104	52	64
Shotts	7	12	126	872	11	3	10	1,001	25	23	23
Annual Total	4,532	17,078	4,166	13,112	1,108	252	1,028	12,298	2,231	506	775

APPENDIX 3

TABLE 1: HUMAN RESOURCES

OVERALL HEALTH CARE AND ADDICTION STAFFING

Staff	WTE (Based on 40 Hour Week)	Breakdown	Data Source	Comments
SPS Employed Staff				
Health Centre Manager	7.0	By Prison	July 2007	
Clinical Managers (all)	22.0	By prison	July 2007	
Practitioner Nurse (General)	102.9	By prison	April 2007	
Practitioner Nurse (Mental Health)	32.25	By prison	April 2007	
Practitioner Nurse (Addictions)	34.4	By prison	April 2007	
All	169.55	By prison	April 2007	
Nurses (all)	169.0	By prison	July 2007	
Pharmacy Assistant	6.3	By prison	July 2007	
Health Care Assistant	19.0	By prison	July 2007	
Admin Support	18.5	By prison	July 2007	
Contracted Staff				
Doctor	11.5	By prison	July 2007	Includes 0.1 well woman session
Dentist	2.85	By prison	2005	
Psychiatrist (Forensic)	2.5	By prison (no service in one)	July 2007	
Chiropodist	0.4	By prison (no service in 2)	2005	
Clinical Psychologist	1.05	By prison	2007	£7,300 in HM Prison, Dumfries for counselling. Not known in HM Prisons, Greenock and Low Moss
Physiotherapist	0.39	By prison (no service in 6)	2005	Assumed 0.1 WTE in HM Prison, Dumfries
Occupational Therapist	1.4	HM Prisons, Cornton Vale and Perth only	2005	
Optician	0.23		2007	Does not include adhoc services
Speech Therapist	0.4	HM Young Offenders' Institution, Polmont only	2005	£21,000
Pain Specialist	?	HM Prison, Perth only	2005	£0
Dermatologist	?	HM Prison, Perth only	2005	£2,200
Psychiatric Liaison Nurse	?	HM Prison, Inverness only	2005	£0
HQ Health and Care Directorate Staff	12 Core	N/A	2007	3 secondees
EACS Staff				
Addiction Team Manager	13	By prison	2006	
Addiction Senior Practitioner	9	By prison	2006	
Drug Worker	41.8	By prison	2006	
Addiction Administrator	12	By prison	2006	

APPENDIX 3

TABLE 2: HEALTH CENTRE STAFF

Prison	Health Centre Manager	Clinical Manager	General Practitioner Nurse	Mental Health Practitioner Nurse	Addiction Practitioner Nurse	Pharmacy Assistant	Health Care Assistant	Admin Support
Aberdeen	0	1	5	0	3	0.8	0.6	0
Barlinnie	1	4	20	7.25	6.8	0	3.0	6.0
Cornton Vale	1	2	6.5	7	2.8	1.5	0.5	1.5
Dumfries	0	1	4	0	1	0	0	0
Edinburgh	1	2	12.5	2	4.5	0	3.0	2.0
Glenochil	1	2	10	2.8	3.5	1	2.2	2.2
Greenock	0	1	6.6	1	2	0	0	1.0
Inverness	0	1	3	1	1	0	0	1
Perth and Open Estate	1	3	16.3	3.7	4	2	4	2.8
Peterhead	0	1	4	1	0	0	0.75	0
Polmont	1	2	7	5.5	2.8	0	3.0	1
Shotts	1	2	8 (1 BBV Nurse)	1	3	1	2.0	1
Total	7	22.0	102.9	32.25	34.4	6.3	19.0	18.5

APPENDIX 3

TABLE 3: OTHER CLINICAL STAFF

Prison	Doctor	Dentist	Forensic Psychiatrist	Clinical Psychologist
Aberdeen	0.5	0.05	0.1	0.1
Barlinnie	3.42	0.5	0.2	0.2
Cornton Vale	0.875	0.1	0.2	0.0
Castle Huntly	0.5	0.2	See Perth	See Perth
Dumfries	0.21	0.2	0.1	? (£7,300)
Edinburgh	2.04	0.2	0.175	0.2
Glenochil	0.55	0.6 (0.2 Hygienist)	0.4	0.1
Greenock	0.52	0.1	0.2	?
Inverness	0.3	0.05	0.1	0.1
Noranside	0.15	0.1	See Perth	See Perth
Perth	1.265	0.4	0.5	0.1 (includes Open Estate)
Peterhead	0.26	0.1	0.1	0.1
Polmont	0.35	0.2	0.2	0.05
Shotts	0.45	0.05	0.2	0.2
Total	11.4	2.85	2.5	1.05

APPENDIX 3

TABLE 4: ALLIED HEALTH PROFESSIONAL STAFF

Prison	Physiotherapist	Occupational Therapist (WTE)	Chiropodist (WTE)	Optician
Aberdeen	0	0	0	?
Barlinnie	0	0	0.05	?
Cornton Vale	0	0.5	0.025	0.025
Castle Huntly	Out-Patient	0	0.01	
Dumfries	Varies	0	0	?
Edinburgh	0.2	0	0.02	0.02
Glenochil	0.1	0	0.1	?
Greenock	0	0	0.01	?
Inverness	0	0	0.01	?
Noranside	0	0	0.01	See Perth
Perth	0	0.93	0.025	0.03
Friarton	Out-Patient	0	0.01	See Perth
Peterhead	0.04	0	0.05	0.1
Polmont	0	0	0.025	0
Shotts	0.05	0	0.04	0.05
Total	0.39	1.43	0.4	0.23

APPENDIX 3

TABLE 5: ENHANCED ADDICTION CASEWORK TEAM STAFF

Prison	Team Manager	Senior Practitioner	Drug Worker	Administrator
Aberdeen	1	1	2	1
Barlinnie	1	2	5	1.6
Cornton Vale	1	1	4.6	1
Dumfries	1	0	2	0.6
Edinburgh	1	1	4	1
Glenochil	1	0	2.6	0.6
Greenock	1	1	2.6	1
Inverness	1	0	2	0.6
Perth and Open Estate	1	1	4	1
Peterhead	0	0	0	1
Polmont	1	1	5	0.6
Shotts	1	0	2	
Total	13	9	41.8	12

Notes

- Not all figures are 2007.
- Figures for health care include nursing staff, general practitioners, dentists,pharmacy assistants, psychiatric and clinical psychologists, AHPs and specialist addiction staff only. Many other services will contribute to health and care, eg chaplains, Listeners, voluntary sector in-reach organisations, eg Samaritans, CRUSE, Families Outside, as well as NHS services.
- Assumption should **not** be made that if a service is not provided it is not needed.

SECTION SIX: CONCLUSIONS AND RECOMMENDATIONS

1. This section draws together the findings from the Needs Assessment and makes conclusions and recommendations. These are primarily for the Scottish prison health care services and their further development both within the organisation and in partnership with others.

2. Prison Health Care in Context

2.1 Like any public service, indeed health service, the supply of services is constrained by resources. The demand for services is always greater than the supply and demand does not always mirror need. The need, in disadvantaged populations, is usually greater than both supply and demand (in that the expression of need is often incomplete), a phenomenon that has been expressed as the Inverse Care Law [1].

2.2 Providing health care in prison can be likened to delivering primary care in a busy inner city A&E Department. The patients are vulnerable, come from deprived backgrounds, have multiple, layered, complex needs and many are there for a very short period of time. This creates huge challenges for the detection, assessment and joined-up delivery of health care. The logistics of record keeping and communication with other service providers are immense. Care must also be available in the context of a setting where custody and order must also be effective at all times.

2.3 Health care in prison must also keep pace with the changes in the health of the community, such as emerging health problems and changing population demographics, along with the change in health policies to reflect that.

2.4 Direct comparisons with health care service standards and actual provision of health services being delivered in the community was not made in this needs assessment. It could be argued that this would be inappropriate, that model of care of an enhanced primary care service in the context of a prison setting, with a vulnerable and disadvantaged population, is by definition a different service. What, however, should not happen is that care provision is less accessible or of lower standard for someone due to imprisonment. The Health Care Standards developed by the Scottish Prison Service take account of national legislation, guidance and health care policy as well as the context and delivery of care in prison.

2.5 As a minimum, health care in prisons should be compliant with existing legislation and regulations. Shortfall here can be defined as the 'compliance' gap.

2.6 Secondly, there should be adherence to the principle of equivalence, the provision of services at least to a standard equivalent to that in the community. Shortfall in this can be defined as the 'equivalence' gap.

2.7 Lastly, given that prisoners represent some of the most disadvantaged, hard to reach people in the community, there is the opportunity to intervene to address health inequalities. Enhancement of existing services and development and provision of new interventions can be defined as closing the 'inequalities' gap.

3. Specific Health Themes

Alcohol Problems

3.1 The prevalence of alcohol problems is high. 44% of prisoners said they were drunk at the time of their offence. The rate of self-reported alcohol problems is four times that in the community. Detection and management on admission of severe alcohol problems which might result in acute withdrawal is excellent. There is no formal screening (such as the use of the AUDIT tool) on admission. Health care recording suggests there is under-diagnosis, under-recording or both, particularly of alcohol dependence and more complex problems such as alcohol-related brain damage.

3.2 There has been recent development of specialist alcohol services which provide a range of interventions. These services are not available to all prisoners and accessing them relies heavily on self-referral. A new programme for alcohol and violence utilising cognitive behavioural approaches has been developed by SPS and is being introduced. Integrated care for co-occurring conditions is less developed. Pre-release groupwork is being provided, but there is no quantification of arrangement of throughcare, other than TAS.

3.3 **There should be formal screening for alcohol problems following admission. Triage (by addiction nurses) should be available before active referral to addiction services. Brief intervention for alcohol problems should be tested and evaluated by health care addiction staff, both for those not requiring a full referral and for those staying 31 days or less. Service development should consider ensuring capacity for specialist addiction services, enhancement of psychological therapies, co-occurring morbidity, services for ARBD and for throughcare.**

Tobacco Use

3.4 Smoking rates in prisoners are extremely high at 78.4%. Recent service developments have provided smoking cessation services and self-help opportunities through 'over the counter' nicotine replacement therapy.

3.5 **These and other innovations should continue to be available and links made with broader health promotion activity (such as exercise). Monitoring through the national smoking cessation database should be pursued. This will enable evaluation of the effectiveness of prison-based interventions.**

Drug Use

3.6 Drug problems are highly prevalent in prisoners with two out of three found to be using illicit drugs on admission and half reporting being under the influence at the time of their offence. Self-report of continued use in prison is lower but still appreciable (and possibly under-reported) with a proportion of drug users (11%) injecting. Those already established on community prescribing are generally continued on it. Nearly one in five of prisoners (18%) are on methadone, an opiate substitute. The detection and management on admission of severe drug problems which might result in acute withdrawal is excellent. Services for those staying more than a month are capable and there are limited services on request for those staying shorter periods. Education is widely available, as is preparation for release. There is good practice on harm reduction, but this is still incomplete.

3.7 **A key challenge is to ensure that health care and addiction services are integrated within prison and that throughcare is effective across the country for those on release. Service developments such as needle exchange and home provision of naloxone should continue to be pursued. Continuation of the investigation and reporting on drug-related deaths in partnership with the police and other agencies is essential.**

Blood Borne Viruses

3.8 The estimated high prevalence of Hepatitis C (20%) in prisoners is linked with the known high numbers of current and former injecting drug users. The known high prevalence of alcohol problems in prisoners will increase the likelihood of liver damage. The known high prevalence of Hepatitis B in drug-using populations has been addressed by a widespread and accelerated vaccination programme which has been externally evaluated as being highly successful in protecting the IDU population in the community.

3.9 **Recent service developments are strengthening opportunistic testing for Hepatitis C but this is not yet universally widespread. This should be standardised. Service provision for long stay prisoners is generally good, but less so for those staying shorter periods. These should be strengthened. Although numbers are low, consideration could be given to more in-depth investigation of service provision for those with HIV.**

Asthma

3.10 Both clinical and self-reporting of asthma is high in the Scottish prison population at 12%, over twice as high as general population figures and half as much again as predicted (8%). High smoking rates may well be contributory to this. The slightly higher prescribing rates for asthma drugs support this, but there may be a degree of under-treatment.

3.11 **The detection and treatment of long-term conditions such as asthma should be strengthened. This can be facilitated by better patient information about service provision and self-care.**

Diabetes

3.12 Prevalence of diabetes (1.7%) is lower than both the general population prevalence (3.5%) and of the predicted rate (3.1%). This would suggest under-reporting and possible under-diagnosis. The prescribing patterns reflect the predominantly younger population profile of the prisoner population.

3.13 **The detection and treatment of long-term conditions such as diabetes should be strengthened. Better patient information would encourage service development and self-care.**

Epilepsy

3.14 There is reliable reporting of a disproportionately higher prevalence of epilepsy (2.1%) in the prison population than expected (1.2%) and than that in the general population (0.5%/0.7%). Prescribing data supports this with rates twice that for the general population. This high prevalence may be explained by pre-disposing risk factors such as previous head injuries. However, there is the possibility of over-diagnosis as many prisoners report fits from detoxification from drugs and alcohol.

3.15 **Further investigation of the nature and prevalence of epilepsy in the prison population is necessary.**

Coronary Heart Disease

3.16 The reported prevalence of 2% was similar to the expected level (1.8%), but lower than general population rates (3.5%-4.5%). Prescribing rates were markedly higher than in the general population. Given the high prevalence of risk factors in the prison population, such as smoking, it is likely that that there is under-recording of CHD.

3.17 **Recording of CHD should be ensured in the patient summary. Given the high numbers of prisoners from deprived communities, anticipatory care following the 'Keep Well' model (assessment of cardiac risk and intervention) should be developed and introduced for a wider age range [2].**

Accidents and Injuries

3.18 The true extent of accidents and injuries in the prison population could not be determined from existing information systems, nor could comparisons be drawn with the general population. The limited evidence suggested that the scale of the problem was not large, but no conclusions could be drawn on the nature and consequences of injury.

3.19 **Further investigation of accidents and injuries through audit and development of more definitive data recording is necessary.**

Sexual Health

3.20 It is likely that prisoners are at increased risk from sexually related disease such as chlamydia. It was not possible to give an overall description but several local studies confirmed higher rates than in the general population. The current provision of condoms and dental dams lessens the risk of sexually transmitted disease.

3.21 **A sexual health needs assessment is currently underway in SPS. The findings of this should inform the development of a sexual health strategic plan ranging from education, prevention and detection, through to treatment provision. This should include assessment and interventions to address needs of childhood sexual abuse. It should also include new interventions such as vaccination against Human Papilloma Virus. A Health Care Standard for sexual health should be developed.**

Dental Health

3.22 A comprehensive dental survey of Scottish prisoners was undertaken in 2002. It showed severe decay to be three times higher than in the general population. Dental services are provided in all prisons, but out of hours coverage is not universal. Waiting times for general treatment are evident in nearly one in two prisons and 40% cannot ensure emergency treatment within 24 hours. There was no evidence of dental health promotion.

3.23 **Capacity for dental treatment should increase, along with encouragement of interventions for dental health promotion. Recent national guidance on dental decontamination and clinical waste management require compliance and building into SPS Health Care Standards.**

Dyspepsia

3.24 Prescribing for drugs indicated for dyspepsia had been noted to be high. A range of clinical indicators were chosen. Reported prevalence was very low. This could be due to under-reporting. No community prevalence data was available for comparison. By contrast, prescribing indicators were markedly higher than those in the community.

3.25 **An audit into prescribing of drugs indicated for dyspepsia should take place to advance understanding of the treatment of this common condition.**

Mental Health

3.26 It was not possible to determine a global figure for the prevalence of mental health problems in Scottish prisons. G-PASS recorded 14% of prisoners as having a history of psychiatric disorder. Low prevalence rates were noted for specific diagnoses such as schizophrenia (0.6%), bi-polar disorder (0.2%) and anxiety/depression (0.4%). These rates contrast markedly when triangulated with other data sources and with corporate views on the burden of mental health problems in Scottish prisons. A large study of prisoners in England found rates of schizophrenia 20 times that of the general population (eg 9% male remand/36% female remand), higher rates of depression (overall one in four compared with one in 20 in the general population) and very high levels of personality disorder (approximately two out of three prisoners overall). Anxiety levels were similar to that in the general population (at approximately 10%). It would therefore be expected that rates of mental health problems would be broadly similar in Scottish prisoners. This is supported by high levels of prescribing of drugs for specific mental health problems, ie depression and psychosis. One drug for depression was prescribed at rates 10 times that in the community and another for psychosis at 20 times the community rate. There, however, must be caution in absolute direct comparison due to differing prescribing preferences.

3.27 Deaths from suicide are relatively low and have fallen over the past few years. Transfers under the Mental Health Act(s) have risen slightly in the previous few years to a rate of just under one per week. A recent audit [3] showed evidence of acutely mental ill people being admitted to prison, and evidence of some delays in finding a hospital bed. On the whole, however, most patients were cared for timeously. A recent internal audit of cases on MDMHT files reported 480 patients, approximately 1 in 15 of all prisoners.

3.28 Services and strategies have been implemented over the past few years to address suicide and self-harm. These have proved very successful. Although screening for suicide and self-harm takes place from the moment of admission, less evident is the efficacy of screening for mental health problems. Following the launch of the SPS Positive Mental Health Policy in 2002 [4], multi-disciplinary mental health teams are in place in every prison, along with specialist mental health nurses. However, there is evidence of delays in referral for initial assessment, delivery of a limited range of interventions, limited advocacy services, and that throughcare on release is not always planned. Although there is an established forensic service, from both psychiatrists and psychologists, these are geared to the assessment of and addressing risk. Provision of services such as psychological (the talking) therapies are very limited. The limited snapshot of MDMHT case load (1 in 15 prisoners) would suggest that service provision is not fully matching need.

3.29 **A more in-depth needs assessment of mental health problems should take place. Service mapping is currently in progress. This should take account of national mental health policy. The newly established Mental Health Strategy Group should take the lead in developing an action plan which should include identifying and securing additional resources. Co-occurring mental health and substance misuse problems should receive more integrated attention. The action plan following the Mental Health Act audit should be fully implemented.**

4. General Themes

4.1 Below are described over-arching themes applicable to health care in general. Some will have already been highlighted in the specific areas discussed above.

Information Management and Technology

4.2 There was evidence suggestive of incomplete health data recording both on the newly implemented G-PASS and in the prisoner record system (PR2). Communication with external providers is not carried out through shared electronic systems. Accurate, complete and timely information is crucial both for ensuring good quality individual patient care, but also for research, policy development and planning.

4.3 **The implementation of G-PASS should continue, with training, guidelines and user support. A data quality assurance programme should be developed and implemented with data quality built into Health Care Standards. There should be agreed information sharing protocols with key external agencies. The place of health care information within the context of Integrated Case Management should be examined, taking cognisance of Data Protection and confidentiality issues. The position and future direction of SPS health care IM&T should be considered in light of strategic planning for other national health care and justice information systems.**

Screening

4.4 There is firm evidence that screening for life threatening conditions, in particular suicide and self-harm, withdrawal from addictions, and severe mental health problems is excellent. Those already established on medication should have it continued. Less evident is screening for less severe mental health problems, alcohol problems, sexual health problems and chronic disease. There is no formal screening for other conditions likely to have higher prevalence in prison populations such as autism spectrum disorder, brain injury (including alcohol-related brain damage), learning difficulties and foetal alcohol syndrome.

4.5 **SPS health should review screening opportunities across the health care spectrum.**

Long-Term Conditions and Anticipatory Care

4.6 There was evidence of under-diagnosis of chronic disease, as detailed under specific health themes. There is no formal anticipatory care in place.

4.7 **SPS health should develop a Long-Term Condition and Anticipatory Care Action Plan in line with the rest of NHS Scotland and should include the 'Keep Well' model. Detection (see Screening above) and treatment of long-term conditions should be incorporated into Health Care Standards.**

Throughcare

4.8 There was evidence of weaknesses in throughcare throughout the patient journey. Communication from outside agencies on admission, on transfer between prisons, and on liberation was patchy. Discharge planning was not always taking place. It should be noted that responsibility for throughcare also rests with community service providers, both on admission and discharge.

4.9 **Discharge planning and communication with external agencies must extend beyond that of addiction prescribing. Health information development needs should be integral to IM&T developments for offender management (see above).**

User Involvement

4.10 There was limited communication with prisoners on health service provision and of prisoner involvement in health promotion and self-care. There is limited exploration of prisoner views on health and care provision.

4.11 **A range of communication media should be utilised such as DVDs, patient leaflets, induction talks, posters etc. Opportunities for self-care (such as self-management of medication and provision of 'over the counter' medicines) should continue to be pursued, as well as peer support (such as the Listener scheme and Routes Out of Prison). Innovative approaches to seeking patient views should be encouraged (such as surveys, patient groups etc). These should link with health promotion interventions (see below). Advocacy services should develop in line with legal and good practice requirements.**

Health Promotion

4.12 Health promotion activity was evident but patchy. There is a wealth of good policy and practice guidance that has been published on the philosophy and opportunities of a 'healthy settings' approach in prisons, which was incorporated into the Scottish Prison Service health promotion framework, 'The Health Promoting Prison' [5]. Some key areas outlined in the framework (such as smoking cessation) have progressed more than others.

4.13 **The SPS health promotion framework should be reviewed, taking into consideration developments in national policy and plans, as well as progress within SPS. Links with external health promotion agencies should be encouraged.**

Allied Health Professionals

4.14 The services of Allied Health Professionals (AHPs) are locally sourced and the distribution is variable. It is not clear whether provision is according to need, nor what service quality assurance is in place.

4.15 **A more in-depth assessment of the need for AHP services is necessary, along with development of Health Care Standards for their provision.**

Pharmaceutical Services

4.16 The standard of provision of pharmaceutical services is, in general, very good to excellent. Areas less provided are provision of information to prisoners and 'over the counter' (OTC) medication (see User Involvement above).

4.17 **Development of patient services such as self-care/OTC medication should be developed in line with the expanding role of community pharmacy services.**

Care for Short-Term Prisoners

4.18 Services for those staying for short periods in prison, and those likely to be in most chaos, are restricted and in the main, address acute problems. Short stays give limited opportunity to both detect the full range of problems (in that they can be multiple, complex and emerge over time) and also to provide effective interventions. It is, however, an opportunity to reach those who are often hard to reach in the community setting. Given the nature of their backgrounds and problems, it is also an opportunity to address health inequalities, a major priority of health policy in Scotland.

4.19 **Innovative interventions should be developed and piloted for assessing and addressing health problems in the short-term prisoner population. Optimal results will be through partnership with external agencies such as CJAs, local authorities, the police and the NHS.**

Health Care Standards

4.20 SPS Health Care Standards are reviewed annually and secondary assurance visits are carried out.

4.21 **The next review of SPS Health Care Standards should take account of this Needs Assessment and consider development of standards in the areas outlined. The standards should continue to take account of national policy and good practice, in Scotland, in the rest of the UK and internationally.**

Limitations to the Needs Assessment

4.22 It is acknowledged that there is a wide spectrum of determinants that can affect the health of prisoner: life circumstances such as unemployment; poor housing; limited education as well as risky lifestyles. Prison itself may well have a detrimental impact on aspects of prisoner health with, for example, overcrowded conditions; loss of privacy and disruption from family and relationships. It was beyond the scope of this study to measure and assess these broader determinants through, for example, description of prison culture and seeking prisoner views.

4.23 This Needs Assessment took place over a relatively short time frame in order to provide an evidence base to the Prison Health Advisory Board, which is due to report to Scottish Ministers at the end of 2007. Data, for the most, was assimilated from that which was already available. The focus of this study has been on reported prisoner physical and mental health and the health care services provided to address them. Costs were not included and have been reported elsewhere. The use of a triangulation approach was able to buttress the findings where local data was absent or incomplete.

4.24 What has been achieved is the development of an approach for the assessment of the health needs of Scottish prisoners. This has been able to paint a broad brush picture as a baseline. Future work must continue to refine the methodology, to investigate further the broader determinants of prisoner health, to develop and improve information, to update the findings, and to encourage a knowledge culture from both a national and local perspective in this important area.

REFERENCES

1. **The Inverse Care Law, Tudor Hart J, Lancet 1971**

2. **Keep Well**
   http://www.scotland.gov.uk/Topics/Health/health/Inequalities/P2010

3. **An Audit of the Implementation of the Mental Health Care and Treatment (Scotland) Act 2003, Graham L, SPS 2006**
   http://www.sps.gov.uk//MultimediaGallery/7d8936a2-cff8-4de0-b272-b3b598abf44f.pdf

4. **Positive Mental Health, SPS 2002**

5. **The Health Promoting Prison, SPS 2002**
   http://www.sps.gov.uk/multimediagallery/EC07D0DC-6A27-4ACE-91BC-BE29E1F49191.pdf