

# Prison Health in NHS Greater Glasgow & Clyde

A health needs assessment



# 2012

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## LIST OF ABBREVIATIONS

<b>ABI</b>	Alcohol brief intervention
<b>ACT or ACT 2</b>	Care SPS suicide risk management strategy based on assessment, context, care and treatment
<b>ARBI</b>	Alcohol related brain impairment
<b>BBV</b>	Blood borne virus
<b>CAT</b>	Community Addiction Teams
<b>CBT</b>	Cognitive Behavioural Therapy
<b>CHP</b>	Community Health Partnership
<b>COPD</b>	Chronic Obstructive Pulmonary Disease
<b>DSL</b>	D Hall South Lower (a sheltered accommodation area in HMP Barlinnie for prisoners who may be vulnerable)
<b>GBV</b>	Gender based violence
<b>GDS</b>	General Dental Service
<b>GPASS</b>	General Practice Administration System for Scotland
<b>HAV</b>	Hepatitis A virus
<b>HBV</b>	Hepatitis B virus
<b>HCV</b>	Hepatitis C virus
<b>HEAT</b>	A core set of Ministerial objectives, targets and measures for the NHS in Scotland focused on Health improvement, Efficiency, Access and Treatment.
<b>HEP</b>	Hepatitis
<b>HIV</b>	Human immunodeficiency virus
<b>HMI</b>	Her Majesty's Inspectorate
<b>HMP</b>	Her Majesty's Prison
<b>HNA</b>	Health needs assessment
<b>HWL</b>	Healthy Working Lives
<b>NHSGGC</b>	NHS Greater Glasgow and Clyde
<b>NICE</b>	National Institute for Clinical Excellence
<b>NRES</b>	National Research Ethics Service
<b>PR2</b>	Prison records system
<b>PTI</b>	Practice Team Information
<b>PTI</b>	Physical Training Instructors
<b>QOF</b>	Quality Outcomes Framework
<b>RAH</b>	Royal Alexandra Hospital, Paisley
<b>ROOP</b>	Roots out of Prison
<b>SG</b>	Scottish Government
<b>SHAW</b>	Scotland's Health at Work
<b>SIGN</b>	Scottish Intercollegiate Guidelines Network
<b>SIMD</b>	Scottish Index of Multiple Deprivation
<b>SPS</b>	Scottish Prison Service
<b>TAS</b>	Throughcare Addiction Service

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## EXECUTIVE SUMMARY

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### Background and context

Scotland has one of the highest rates of imprisonment in Western Europe and the prison population is rising [1]. In the last decade the average daily prison population in Scotland increased by 27% [1].

The burden of physical and mental illness in the prison population is high; disproportionately so when compared to the general population [2]. This has variably been attributed to socioeconomic disadvantage and lifestyle and behavioural factors such as substance misuse, smoking and poor nutrition which are common in the prison population [2,3]. Prisoners suffer from multiple deprivation [2,3]. Many are a product of the care system, have experienced physical, emotional or sexual abuse and have difficulties forming and maintaining relationships. Levels of educational attainment are low and unemployment high. Homelessness is common. Prior to incarceration prisoners rarely engage with health care services in the community; during imprisonment demand for health care services is high [3,6,7].

Traditionally health care services in Scottish prisons were provided by the Scottish Prisons Service (SPS). On 1st November 2011 responsibility for the provision of health care to prisoners was transferred from SPS to the National Health Service (NHS). The aim of the transfer was to ensure that prisoners received the same standard of care and range of services as offered to the general population according to need. The guiding principle is that of 'equivalence' of care.

### Aim and scope

The aim of this Health Needs Assessment (HNA) was to provide a systematic baseline assessment of the health and health care needs of prisoners in NHS Greater Glasgow and Clyde (NHSGGC) and to identify gaps in the current service provision to inform service future planning and development. It focuses on the two operational publicly owned prisons within NHSGGC: HMP Barlinnie and HMP Greenock. A third prison, HMP Low Moss, falls under the remit of NHSGGC but it was under renovation at the time of this HNA.

### Method

Information about the prison population was drawn from published literature and reports provided by staff from the Justice and Communities Directorate of the Scottish Government. Information about the prisons from HMP Inspectorate reports, direct observation and interviews with members of staff in each prison. To fully understand the level and nature of existing services a service mapping was undertaken jointly with nominated staff from the prison health teams using direct observation and extensive staff and prisoner interviews and focus groups.

### Summary of findings

Overall the findings are in line with other national and international studies on prison health. Despite characteristic differences between the prisons within NHSGGC there was a high level of consensus amongst both prisoners and staff groups about health needs and priorities.

The report acknowledges the thoughtful contribution of prison staff and the positive approach to improving health services that they expressed. This has impacted on the formation of recommendations that both validate existing approaches and identify opportunities and

priorities for health gain. In addition to more fundamental changes they identify opportunities for quick wins that do not require significant financial outlay.

Findings are noted here under key health topics in relation to prison health.

### *A note about provision in relation to addictions*

A new addictions model is currently under development. It is hoped that this will provide opportunities to enhance service provision across the addiction topics noted below (sections 1-3).

## **1. Alcohol misuse**

Demand for alcohol services in prison is high. Twenty percent of prisoners are alcohol dependent and over half of prisoners were drunk while committing their offence. There is no routine screening on admission and service provision is variable. We recommend early routine screening for all prisoners and development of an integrated care pathway with recourse to local services. Interventions should be tailored to individual need and extended to include remand prisoners.

## **2. Drug misuse**

Drug dependence was universally identified as being a major issue in the prison population. Opiates are the most commonly cited drug but a range of other illegal drugs including cannabis and cocaine were noted. Team working and communication between addictions services is variable, often to the perceived detriment of prisoners. An integrated, holistic approach to the management and treatment of addictions while in prison would contribute to more effective continuity of care on liberation. We make eleven recommendations in the context of a move towards the development of an enhanced service model. Since completing this report a new third sector model has been agreed that will incorporate greater emphasis on prisoner outcomes and improved throughcare and community engagement with mainstream health services.

## **3. Tobacco use**

The majority of prisoners smoke. Demand from smoking cessation services is high and not currently meeting need. There is limited access to some treatment options, for example one to one work. Recommendations include maximising the integration of smoking cessation services in prison in line with the community-based model to ensure continuity of care on liberation; annual review of all prisoners who smoke, and training and resources to increase the capacity of all staff to deliver smoking brief interventions.

## **4. Diet, physical activity and healthy weight**

The prison environment presents both opportunities and challenges to improving diet and physical activity, and in turn achieving healthy weight.

The prison menu offers 5 portions of fruit and vegetables per day but sometimes these are embedded within specific menu choices. The availability of fresh fruit and vegetables should be increased (notably in HMP Barlinnie) irrespective of menu choice. Dietary needs in relation to weight/nutrition should be identified at an early stage and access to NHS specialist professional advice made available.

Access to sports and gym facilities is valued and utilised by prisoners but it is variable across the prisons. NHSGGC should work with SPS and Education to identify and develop opportunities,

including those that link physical activity to other initiatives. For example a gardening project might include physical activity, learning, diet and life skills such as cooking. Examples of current good practice include the development of mental health and well-being activity groups in HMP Greenock and the provision of yoga to prisoners attending the Day Care Centre in HMP Barlinnie. Such models should be supported by NHS and extended to include other prisoner groups. Schemes to facilitate exercise referral while incarcerated and on liberation should be considered.

## **5. Dental health**

Dental services are under-resourced, need is high and unmet need is substantial. Remand prisoners in particular have poor access to dental treatment. Dental services focus upon urgent and emergency care rather than preventative care and oral health promotion. We recommend that dental services should be resourced adequately to meet the need for emergency, urgent and routine care and to provide preventive care. All prisoners (including those on remand) should have access to an oral health assessment on admission and to regular review while in prison. Written protocols and training should be available to staff to triage dental problems and to deliver oral health promotion. Oral health promotion should be incorporated into other interventions (e.g. smoking cessation) and sugar-free medication and low-sugar diet options should be available routinely.

## **6. Long term conditions**

In some areas links with specialist services in secondary care are exemplary, (e.g. tissue viability in HMP Barlinnie). Health care staff report complying with national evidence based guidelines for treatment, care and clinical standards but consideration should be given to introducing a framework for quality standards. Continuity of care and development of agreed protocols is in the early stages. This could be supported by use of an electronic clinical information system to support the registration, recall and review of prisoners with long term conditions. This will also facilitate timely information exchange with primary care and support regular audit of compliance with guidelines and standards in the care management of prisoners with long term conditions.

Use of supportive IT is limited but a new system in development (Vision IT) will allow careful scrutiny of prescribing practice and adherence to formulary which will be monitored.

Whilst there is enthusiasm for nurse-led chronic disease management clinics, and a holistic approach to treatment, the breadth and frequency of provision can be variable, often due to a shortage of appropriately trained staff. Health care teams should be supported and resourced in expanding and developing nurse-led specialist clinics to meet need. Difficulties accessing allied health professions and very limited pharmacy provision (technical rather than professional services) are evident. The provision of pharmacy services in prisons in NHSGGC should be reviewed and protocols for referral to allied health professionals should be developed. Facilities for providing stepped up care, for example for those returning from hospital or with a physical dependency, are lacking. A review of the provision of health care facilities for prisoners requiring stepped up care should be carried out in conjunction with SPS to identify risks and opportunities. All prisoners with a long term condition should be adequately provided with information and be involved in their care planning and opportunities to increase self-care and self-management should be identified. Discharge planning should include timely communication with primary and where appropriate secondary care prior to liberation.

## **7. Anticipatory care health checks**

Both prisons host an in-reach Keep Well programme delivered by SPS until April 2012. A wellwoman clinic has been established in Greenock and a wellman service operates in Barlinnie which is very highly regarded by staff, prisoners and external agencies. Each prison should develop an in-house Keep Well programme which continues to engage at least 60% of eligible prisoners. The checks, monitoring and support should be more closely aligned to community Keep Well to enhance continuity of care. Pathways and gaps in referral provision should be mapped and a directory of referral services created. Wellman/woman content should be reviewed to ensure consistency with community provision. Delivery should be co-ordinated with Keep Well to reduce duplication. A post should be created in each prison to oversee this work and support wider health improvement activity with support, advice, training and development.

## **8. Mental health problems**

Mental health was considered by prisoners and staff to be the most important health issue amongst the prison population. Prevalence data is lacking although existing literature indicates that the majority of prisoners have one or more mental health problems and dual diagnoses. Prison primary mental health care services are under-resourced and unmet need is significant. Despite limited capacity high quality services are available to prisoners in NHSGGC with severe and enduring mental illness: access to mental health teams including psychiatrists is better than in the community, where required transfer to care from custody is prompt and throughcare is excellent. The Day Care Centre in HMP Barlinnie provides exemplary care, with a broad range of therapeutic activities, to highly vulnerable prisoners. NHSGGC should support the existing areas of good practice that have been developed and are delivered in partnership with SPS in both prisons including the Day Care Centre in HMP Barlinnie and the Alternative Therapy groups in HMP Greenock.

However, we recommend a range of aspects that should be included in a comprehensive review to examine how to enhance mental health and well-being in prisons in NHSGGC. This should link with the current national mental health strategy due out soon and the national framework for health improvement in prisons.

## **9. Learning disability**

The prevalence of learning disability in the prison population is not known but staff and prisoners in NHSGGC perceive it to be under-recognised. Routine screening is not undertaken and opportunities to identify the need for a formal assessment for learning disability may be missed through poor communication. NHSGGC have recently identified funding which will allow them to take forward a national framework for learning disability while assessing local levels of need including for people with Autism Spectrum Disorders. It will encompass issues of communication, ARBI and Head Injury. This post will be in place by Autumn 2012.

## **10. Literacy and numeracy**

Approximately 1 in 6 prisoners lack functional literacy and numeracy skills, although only a fraction of this number report difficulty or seek help with reading, writing and numbers. Although need is high, demand for literacy and numeracy services can be low. This report recommends the inclusion of a screening tool for literacy and numeracy as part of the core screen, a protocol to ensure that SPS staff inform health staff of prisoners who have literacy

and numeracy difficulties, awareness training for health care staff and improved strategies for communication between staff and prisoners with difficulties.

### **11. Sexual health and BBV**

BBV clinics in both prisons were identified as examples of good practice and a number of harm reduction initiatives are in place to reduce transmission. However, limited staff capacity, means that not all prisoners eligible for HCV treatment are receiving it. This should be addressed. To develop the service further, all prisoners should be provided with high quality information about routes of BBV transmission and a review of need for preventive activity should be carried out to inform service design and delivery. High risk prisoners should continue to be offered BBV testing at admission and unimmunised prisoners offered HBV/HAV vaccination. Prisoners have limited access to information and education around sexual health, well-being and relationships. This should be improved and include access to contraceptive advice and provision, with a focus on the pre-liberation period. Routine sensitive enquiry of abuse should be undertaken and resources to support affected prisoners put in place. Consideration should be given to a needle replacement scheme and, at national level, a needle and syringe exchange programme.

### **12. Communication**

In both prisons examples of good and poor communication were evident. Most staff felt disengaged from the wider NHS community. Communication within health care teams and between health care teams, SPS and wider partner organizations could be more effective. NHSGGC communications strategy should reflect the inclusion of prison health staff and NHSGGC organisational development could be deployed to facilitate improvement. Learning from HMP Low Moss could inform new opportunities for exchanges, shadowing and special interest visits between prison based health care staff and staff from primary and secondary care. Consultations between health care staff and prisoners should be private and confidential. All prisoners should have access to an advocacy service. Inequalities sensitive information about prison health care services, and personal treatment/care plans, should be readily available to prisoners and families should have access to general information about health services in prison.

### **13. Parenting**

Almost half of all prisoners have one or more dependant child and most of them will be caring for their child upon liberation. Children of prisoners can be caught in a cycle of inter-generational social and economic deprivation which can in turn lead to criminality. Ongoing family contact can reduce re-offending and promote recovery for those with substance misuse issues. Whilst the impact of parenting interventions delivered in the prison setting on prisoners and their children has not been established, they are valued by prisoners and staff. The Triple P programme has been piloted in HMP Barlinnie but not HMP Greenock. We support a service improvement target of rolling out sustainable parenting programmes to all prisons, with partner agencies, whilst developing a clear evidence base.

### **14. Employability**

Most prisoners are unemployed at the time of sentencing; few gain employment after liberation. Improving employment is an important element in reducing re-offending. NHSGGC should work with SPS and partners to enhance life-skills and employability courses and refer and support prisoners to employability services, especially those with complex health needs. NHSGGC should support Criminal Justice Authorities and partners to enhance and evaluate

community employment provision for ex-offenders especially for those with additional physical and mental health needs. The NHS can address barriers to employment by implementing campaigns to reduce stigma and discrimination by employers and by acting as an exemplar employer.

### **15. Health at work**

HMP Barlinnie and HMP Greenock engage enthusiastically with NHSGGC Healthy Working Lives programmes. Planning groups include senior management in both prisons. We recommend continued development and implementation of events, interventions and policy developments to maintain (Barlinnie) and gain (Greenock) Gold awards. Including prisoners is an example of good practice. This Health Needs Assessment should inform programmes, for example the need for mental health training identified amongst SPS staff. Given the extensive effort made to date, consideration should be given to a stronger health impact assessment.

### **16. Staff training and development**

Both prisons have an enthusiastic and dedicated work force operating in a challenging environment to meet the very complex needs of prisoners. A lack of awareness of professional development opportunities within the NHS was noted by health care staff and so we recommend that the identification of training and development opportunities should be supported. The development of and participation in a practice network should be supported and encouraged.

### **17. Access to services**

The referral process was identified as problematic for prisoners with learning disability or literacy issues and potentially stigmatising in relation to mental health. This report suggests that it is reviewed to ensure it is inequalities sensitive. In general, access to health care services was very good and in some cases, better than the community based equivalent. Nevertheless prisoners perceived there to be unacceptable delays in accessing a GP. Prisoners felt it would be valuable to deliver an informal drop in style clinic in the Halls. The feasibility of this should be explored.

### **18. Pharmacy services**

Pharmacy services are currently limited to technical services. Both staff and prisoners were generally satisfied with the repeat prescription system. However, aspects of the service are unsatisfactory and can impact negatively on staff time (e.g. providing medications to prisoners can involve considerable delay). The current contract with Lloyds Pharmacy will continue for 18 months. During this time Lead Pharmacists are reviewing the service delivered and making recommendations on improvements. These should consider an expansion of services to reflect a community based model; the dispensing of supervised medications; the risks associated with use of the Kardex system; adherence to the NHSGGC formulary; and regular audit.

### **19. Information technology**

Use of IT to support the delivery of health care in the prisons is extremely limited. Forthcoming national development in this area is likely to bring positive change. During this HNA, health care staff report limited access to computing facilities to support ongoing education and training (for example access to Athens and web-based learning resources) and electronic communication (staff email, access to Staffnet). Since then, access has improved and training has been provided. Measures should be put in place to ensure systematic quality assurance of electronically recorded health information.

## **20. Resources**

Levels of need and demand for health care services in prison are very high but resources are limited. A strategic approach to addressing limited resources, taking account of forthcoming national guidance, for example the National Framework for Health Improvement in Prisons, and informed by this HNA, should be adopted.

## **21. Continuous quality improvement**

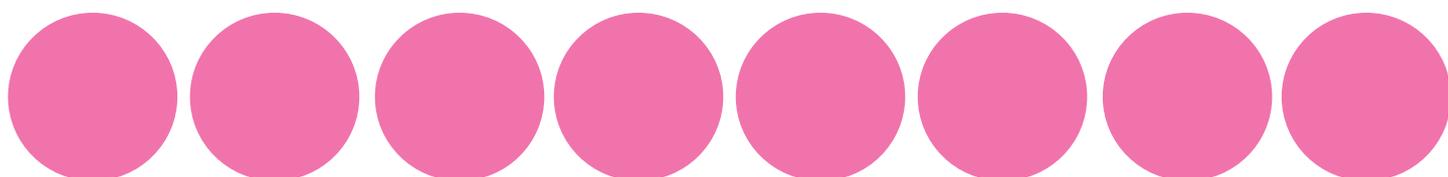
Very limited local data were available to describe the health needs of the prison population and there was a corresponding paucity of evidence of robust audit and/or service evaluation. These data are crucial to inform the planning and delivery of safe, effective, equalities sensitive, health care services and should be collected. A core monitoring dataset to support service planning, delivery and evaluation should be agreed and implemented. NHSGGC Public Health and Health Improvement team should collaborate with prison based NHS teams and partner organisations to support service evaluation and identify opportunities to contribute to the evidence base.

## **22. Re-offending and throughcare**

Most offenders are re-offenders. The importance of improving physical and mental health and well-being on recidivism is increasingly being recognized; as is the impact of offending upon the health and wellbeing of offenders, their families and victims. In prison there is scope for NHSGGC to work with SPS and partner organisations to develop, enhance and evaluate existing offense-led programmes, for example programmes on alcohol, drugs and domestic violence. Integrated care pathways should be developed to ensure information sharing with community service providers and continuity of health care for prisoners at liberation.

Throughcare provision is variable nationally and regionally. A large number of service providers contribute to throughcare, including the SPS and voluntary sector. Many prisoners expressed a need for immediate support on liberation, for example having appointments with a general practitioner in place prior to liberation. In both prisons there were many examples of staff, health care and SPS, going above and beyond to try to support prisoners through the gate. The role of health care staff in throughcare should be clearly articulated. They should continue to contribute to integrated case management and work holistically with partner agencies (particularly the management of mental health problems and stabilisation of addictions) to ensure the provision of robust health at throughcare for prisoners on liberation.

It was beyond the scope of this report to fully consider through-care and reoffending and this will be the focus of the next stage of work in 2012 with partners including Criminal Justice Authorities. This should consider areas such as recidivism as a health target, the development, delivery and evaluation of throughcare services (for example Routes out of Prison, the Barlinnie North West project, and One Glasgow), and mapping and analysis of gaps in healthcare services and services to reduce reoffending. This work should be informed by the experience of prison based healthcare staff and ex offenders.



# SECTION 1: Introduction



## SECTION 1: INTRODUCTION

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### Background and context

Scotland has one of the highest rates of imprisonment in Western Europe and the prison population is rising [1]. In the last decade the average daily prison population in Scotland increased by 27% [1].

The burden of physical and mental illness in the prison population is high; disproportionately so when compared to the general population [2]. This has variably been attributed to socioeconomic disadvantage and lifestyle and behavioural factors such as substance misuse, smoking and poor nutrition which are common in the prison population [2,3]. Prisoners suffer from multiple deprivation [2,3]. Many are a product of the care system, have experienced physical, emotional or sexual abuse and have difficulties forming and maintaining relationships. Levels of educational attainment are low and unemployment high. Homelessness is common.

Imprisonment may contribute to poor physical and mental health and well-being and exacerbate social exclusion [3,4]. Many prisoners experience mental illness (predominantly anxiety and depression) following incarceration, lose contact with their families during their sentence and are homeless, unemployed and socially isolated on liberation [3,4]. Emerging research suggests that incarceration increases the longer-term risk of re-offending [3,5]. The health and social care needs of the prison population are complex [2,3,4]. Prior to incarceration prisoners rarely engage with health care services in the community; during imprisonment demand for health care services is high [3,6,7]. Imprisonment therefore provides a rare opportunity to engage this marginalized population, improve physical and mental health and well-being and address the wider social determinants of health [3,7,8]. Beyond the benefits experienced by the individual, improving physical and mental health and well-being in the prison population may lead to wider societal gains through a reduction in rates of re-offending and by breaking the cycle of inter-generational socioeconomic disadvantage and criminality [3,5,9,10].

Traditionally health care services in Scottish prisons were provided by the Scottish Prisons Service (SPS). On 1st November 2011 responsibility for the provision of health care to prisoners was transferred from SPS to the National Health Service (NHS). The aim of the transfer was to ensure that prisoners received the same standard of care and range of services as offered to the general population according to need. The guiding principle is that of 'equivalence' of care, as highlighted in 'Equally Well'

*"Offenders and ex-offenders should have access to the health and other public services they need and benefit from the same quality of service as the rest of the population" [9].*

Whilst providing health care in the prison setting is an opportunity for the NHS to engage a hard to reach population and reduce health inequalities, it also presents a number of unique challenges [7]. Prisons are often overcrowded [1,8,11]. The number of new admissions or 'receptions' is high and prisoners can be transferred or liberated with little or no notice [1]. Planning and delivering services for a dynamic population is challenging. Poor communication

between prison health care staff and community service providers is a barrier to timely information sharing and effective inter-agency working which impacts on quality of care. Within the prison setting security is prioritised over health care. The prison regime may be disempowering and reduce personal autonomy, a barrier to health promotion, self-care and self-management [8,12]. Although demand for health care services in prison is high reflecting need, resources are limited and unmet need is significant [6,7]. Difficulties recruiting, training and retaining health care staff to work in the prison setting have been documented [13]. A lack of skilled staff impacts on the range and quality of health care services available, as does limited use of information technology (IT) and inadequate health care facilities [14]. Models of delivering health care in the prison setting have traditionally been biomedical with a focus on triage and crisis intervention rather than prevention [7]. The development of alternative models of care has been hindered by a genuine paucity of evidence on the effectiveness of interventions to improve physical and mental health and well being in the prison setting [7]. It cannot safely be assumed that interventions that are efficacious in clinical trials or indeed effective in routine clinical practice in the community will work in the prison setting. The prison population are a multiply disadvantaged group with complex needs and as such the provision of services equivalent to those in the community is unlikely to have a significant impact on health outcomes or reduce population level health inequalities [2]. To achieve this, services will need to be enhanced and developed to meet need, with a focus on equivalence of outcome rather than equivalence of services [15].

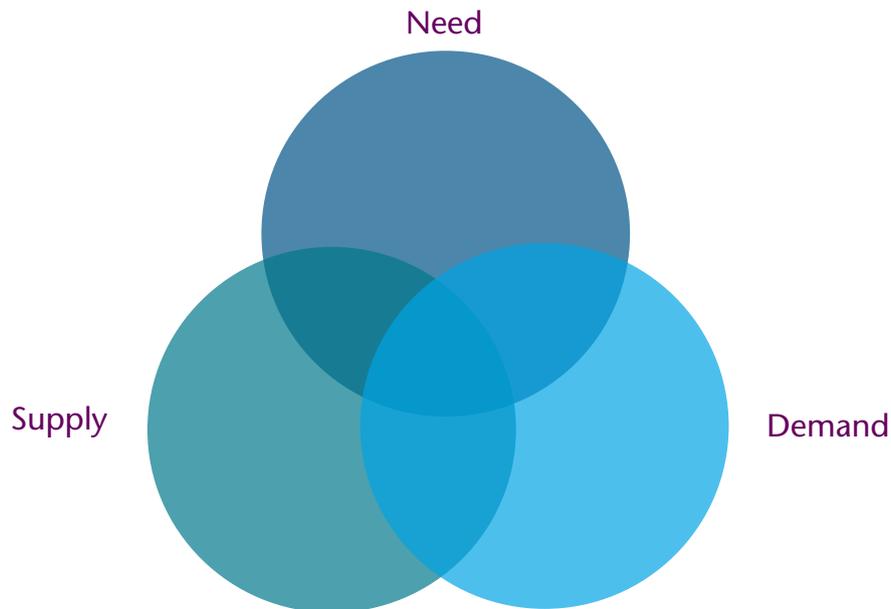
## Overview of health needs assessment

Health needs assessment (HNA) has been defined as a “systematic method for reviewing the health issues facing a population, leading to agreed priorities and resource allocation that will improve health and reduce inequalities” [16].

There are three approaches to HNA [17].

1. An epidemiological approach considers the incidence or prevalence of a problem, the services and/or interventions available to address the problem and the effectiveness of those services and/or interventions.
2. A corporate approach gathers views on what is needed from a range of stakeholders with specialist knowledge.
3. A comparative approach compares the services of other providers, for example other prisons or services available in the community, and investigates discrepancies.

In the context of HNA, need is the ability to benefit from an intervention; there must be both a health problem and an intervention that is effective and acceptable [7]. Need may be expressed, based on the perceptions of patients and/or providers, or normative, based on the perceptions of patients and/or providers and supported by data about the health issue with evidence of inequalities relative to other populations. Demand is what people would like and supply is what is actually provided. Demand for services is influenced by both need and supply. Demand and supply are not necessarily indicators of need. The interaction between demand, supply and need is shown in Figure 1. The aim of HNA is to ensure that service provision meets demand and need – the area represented by the three intersecting circles.



**Figure 1. The interaction between need, supply and demand**

## Aims and objectives

The aim of this HNA was to provide a systematic baseline assessment of the health and health care needs of prisoners in NHS Greater Glasgow and Clyde (NHSGGC) and to identify gaps in the current service provision to inform service future planning and development.

Specific objectives were:

- To describe the health and well-being of prisoners in NHSGGC compared to the general population.
- To map the health care and health promotion services currently provided in prisons in NHSGGC.
- To explore key informants views of the health care needs of prisoners in NHSGGC and how these are being met by current service provision.
- To identify gaps in health care and health promotion services provided in prisons in NHSGGC compared to those provided in the community, considering evidence relating to clinical effectiveness, local and national standards, guidelines and targets.
- To make recommendations for future service planning and development.

## Scope

The HNA focused on the health needs of men and women incarcerated in prisons based in the NHSGGC board area. It does not address the health needs of prisoners from NHSGGC incarcerated in prisons outside the NHSGGC board area, for example in HMP Cornton Vale or HMP Polmont (young offenders). Nor does it consider the health needs of offenders in the community. At the time of writing, two prisons (HMP Barlinnie and HMP Greenock) were operational in the NHSGGC board area. This HNA focuses on the health needs of prisoners in these establishments.

## Methods

The HNA was undertaken from November 2011 through March 2012 by a team of four members of staff from the Public Health and Health Improvement Directorate, NHSGGC.

The HNA applied a widely recognised methodology developed by Stevens et al [7,17]. All three approaches to HNA (epidemiological, corporate and comparative) were used and information triangulated to provide a complete picture of the health needs of the prison population and how these are currently being met.

Conducted in a short time frame to provide a baseline assessment of the health and health needs of the prison population in NHSGGC on the transfer of the responsibility of providing health care in prisons to the NHS, the HNA adopted a pragmatic approach to data collection and focused on key areas. Further details on the methods used in the HNA are provided in each section.

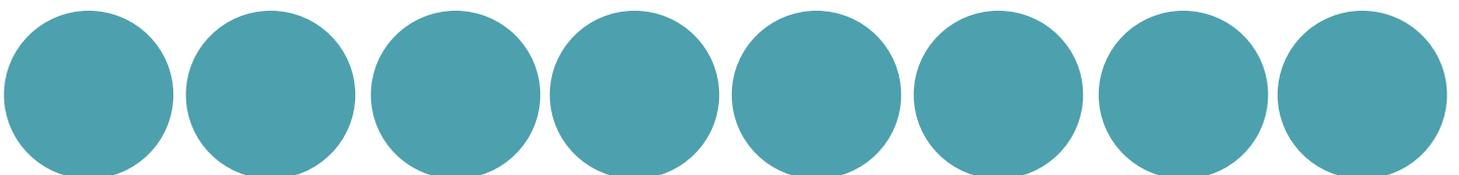
The HNA was considered service evaluation rather than primary research, therefore approval from the National Research Ethics Service (NRES) was not sought. In keeping with the principles of good research, participants in the corporate needs assessment were provided with an information sheet about the HNA. Informed consent was sought prior to all focus groups and interviews with key informants, with anonymity and confidentiality assured.

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## SECTION 2: Prisons, the prison population and health care



## SECTION 2: PRISONS, THE PRISON POPULATION & HEALTH CARE

### Overview

There are three publicly owned prisons in NHSGGC: HMP Barlinnie, HMP Greenock and HMP Low Moss. All three are closed prisons. This section provides an overview of the prisons and prisoners and maps the health care services currently provided in two prisons: HMP Barlinnie, which is located within the North East sector of Glasgow City, and HMP Greenock which is located within Inverclyde. It does not cover HMP Low Moss which opens in March 2012 in East Dunbartonshire, nor does it cover the healthcare of prisoners who are from the GGC region but who are serving long or short term sentences in prisons in other parts of the country, including females in HMP Cornton Vale or young offenders in HMP Polmont, both of which are located in Forth Valley Health Board region.

### Methods

Information about the prison population was provided by staff from the Justice and Communities Directorate of the Scottish Government: information about the prisons from HMP Inspectorate reports, direct observation and interviews with members of staff in each prison. A directory of all the services available in each prison, including service specifications, was not available. Service mapping therefore relied upon direct observation and extensive interviews with prison staff and was jointly produced with nominated staff from the health care teams in each prison.

### HMP Barlinnie

Situated in the North East of Glasgow, HMP Barlinnie is the largest prison in Scotland and holds all categories of male prisoner. Although its main purpose is to house remand and short term convicted prisoners from courts in the west of Scotland, HMP Barlinnie receives short term convicted prisoners from all over Scotland and recently, sentenced long term prisoners awaiting transfer. The prison has a segregation unit that houses protected prisoners, a specialist facility for prisoners that have committed sex offences and facilities for prisoners from throughout Scotland who have been transferred for management and/or operational reasons. The prison was designed to accommodate 1,027 prisoners however it regularly houses 1,500 prisoners, approximately 20% of the prison population in Scotland. In 2010/11 the average daily population in HMP Barlinnie was 1,384 and the figure for March 2012 was 1,467. A reduction in numbers for a period of time is anticipated when HMP Low Moss opens. In terms of the mix of prisoners, in March 2012 there were 80 prisoners with long term sentences waiting to be transferred on to other prisons, 881 convicted prisoners serving short sentences and approximately 492 people on remand. HMP Barlinnie has a very high turnover of prisoners being admitted, for example in January 2012, 734 were transferred in/out and 131 liberated making it a very challenging environment for healthcare. HMP Barlinnie never closes to admissions.

HMP Barlinnie is Victorian built and includes 6 Halls (A - E and Letham) housing remand, protected prisoners, sexual offenders, high security cells, and a vulnerable prisoner facility for residential care unit prisoners who may have mental health problems, physical health issues and/or learning disabilities. Residential Hall conditions are sometimes inadequate for example shower facilities are not always easily accessible. D Hall has been refurbished and Letham Hall which is relatively new. There are a range of facilities for prisoners to encourage health

improvement but the very high numbers and turnover of prisoners (on average 400 movements each week) limits their effectiveness. For example the gym and fitness centre is available each day, but due to the high numbers of prisoners it would not be possible to accommodate people each day and use might be limited to once or twice a week. However cardiovascular equipment is now in each Hall except D, and is reported by health care staff to be reasonably well used. HMP Barlinnie has won awards for catering where there is always at least one healthy option, sometimes two or three, indicated on the menu with an 'apple' sign. However, reports from catering indicate that uptake of the healthy options is quite low. In Barlinnie convicted prisoners are entitled to receive four visits per month and those on remand can receive daily visits.

## HMP Greenock

HMP Greenock is a 'community facing' prison receiving remand and short-term convicted male and female prisoners from local courts. HMP Greenock primarily serves the population and the courts of the North Strathclyde criminal justice region that includes East and West Dunbartonshire, Inverclyde, Renfrewshire and East Renfrewshire and part of Highland Health Board. HMP Greenock holds a small number of male young offenders and young people on remand (aged under 21 years). In addition, it is a top-end national facility for long-term prisoners who are coming to the end of their sentence and preparing to be moved to an open facility.

The prison was designed to accommodate 255 prisoners. The average daily population in 2010/11 was 224 males comprising remand and shorter-term male prisoners including young offenders awaiting trial and sentencing, and around 60 male life prisoners preparing for release. There were on average 51 females who will be returning to North Strathclyde local authorities and who have transferred through from HMP Cornton Vale. The accommodation consists of three Halls: Darroch Hall (female), Chrisswell House (long term nearing end of their sentence) and Ailsa Hall (all others). In an annex of Ailsa Hall is a small 4 bed segregation unit.

HMP Greenock began life as a female prison and is a small facility that has some strengths and weaknesses in terms of healthcare provision. The biggest issue is that lack of space in the health centre limits the clinics that can be delivered, sometimes when one runs another has to be suspended. This is exacerbated by the lack of space in the Halls which means that health care staff have to compete with other agencies to get interview rooms. The wider physical environment is more conducive to health improvement. For example there is a well equipped gymnasium that prisoners can access each day; outdoor football pitches; a visitor area and prisoners are allowed visits each day with a creche at a weekend; an education centre led by Motherwell College; a Link Centre staffed by SPS officers who deliver many courses with a range of third sector agencies; employment and training programmes.

## HMP Low Moss

HMP Low Moss, in East Dunbartonshire, closed in May 2007. The original prison, dating from the 1930s, was demolished and a new purpose built facility constructed on the same site. It is anticipated that this 'community facing' prison will receive its first prisoners in late March 2012.

The new Low Moss facility is designed to accommodate 700 prisoners. HMP Low Moss will take most of the court referrals reducing the number of remand prisoners in HMP Greenock significantly.

## Health and wellbeing services overview

The responsibility for the healthcare services in each of the prisons was transferred to NHS Greater Glasgow and Clyde on 1 November 2011. Healthcare is managed directly by a Health Care Manager for each prison. The managers in turn report to the Head of Prisons Healthcare who is based in North East Glasgow sector but with a board-wide remit. There are three key management groups:

1. The prison healthcare operational management group includes representation from different NHS teams.
2. The Director of Glasgow City CHP chairs the Prison Governors meeting.
3. The Head of Health Improvement for Glasgow City chairs the board-wide prisons/offenders health improvement group which includes public health, regional and specialist health improvement practitioners.

### **Health care teams**

The HMP Greenock health care team has one clinical manager in charge and a staff team of nurses that includes one mental health nurse, two addictions nurses, 6.5 practitioner nurses, one health centre administrative assistant and one health care support assistant. Some staff have specialisms they contribute in addition to their core role. For example, a practitioner nurse specialises in BBV work alongside her general role, and one practitioner nurse has training in learning disabilities healthcare but this is not a distinct post. At weekends there is no addiction or mental health service, nor administrative or health care support assistance. The GP attends six days a week to deliver the medical service to the population, this includes five morning sessions where routine health issues and admissions to prison are seen and two afternoons where a specialist service for addictions and long term prisoners is carried out. The Saturday clinic is in place to see admissions to prison from Friday night.

HMP Barlinnie has a Healthcare Manager and four clinical managers covering mental health, addictions and primary care. In addition to their specialism and team, they are also responsible for care in one or more Halls. There are 24 practitioner nurses, 3 fte mental health nurses (2.5 in post) and a 0.2 dual diagnosis nurse, nine addictions nurses, four healthcare assistants and three administrators. Three GPs on average per day provide a service and see approximately 300 patients a month. The mental health team has three staff on duty Monday to Friday 8am-4pm and there is no weekend provision. The addictions team operates mainly from the addictions clinic each day. Practitioner nurses dispense prescribed medications, triage, deal with non-critical incidents, and run a series of nurse-led clinics. Four staff are trained in sexual health including two BBV specialists, one in learning disability, there is an infection control nurse and five staff are cleanliness champions. There is always one practitioner nurse on duty overnight for advice and triage purposes with accessibility to an on call Medical Officer seven days a week. It is the only SPS prison that provides this. There is a GP service seven days a week to deliver the medical service to the population, this includes three morning and two or three afternoon sessions where routine health issues and admissions to prison are seen and an evening session on Mondays and Fridays. There are five afternoons where a specialist service for addictions and long term prisoners is carried out. The Saturday clinic is in place to see admissions to prison from Friday night and a Sunday clinic is for prisoners whom the practitioner nurses triage as requiring urgent medical attention.

### ***In-reach provision***

HMP Greenock also has in-reach from a range of healthcare services. There is a two hour session of psychiatry each week provided by NHSGGC Forensic Psychiatry; there are three dentistry sessions provided each month by a dentist contracted to provide this service. A BBV out reach service includes visits from a GI/liver specialist consultant. Two Barlinnie nurses provide BBV clinics and this in-house model is regarded as more effective than an in-reach service (e.g. in the national prisons BBV survey); a local optician is commissioned to provide three hourly sessions every month. A podiatrist visits every three months as required. Dieticians, occupational therapy and physiotherapy input is not systematic and is on a named patient basis.

HMP Barlinnie provision includes two NHSGGC psychiatrists coming in twice each week for three hours on a Tuesday and two hours on a Friday. There is a dental session each day Monday to Friday seeing approximately 200 patients a month. A BBV out reach service includes visits from a GI/liver specialist consultant and clinical nurse specialists. An optician and a podiatrist visit each fortnight with no reported waiting lists. Allied Health Professional provision is on an as required basis, as is the case with HMP Greenock. There is no clinical psychology input and the SPS Forensic Psychology service is offence-driven rather than health-driven, mainly does statutory work and rarely links in with health.

To improve health and wellbeing, health care teams in both prisons work in partnership with SPS staff and a range of third sector agencies who are funded to provide healthcare and related social welfare/wellbeing services. These agencies are specified in the relevant topic sections and frequently operate out of the Link Centres. However others have been commissioned directly by SPS to work alongside health care. They are detailed in the following sections.

## **The prisoner's healthcare journey**

### ***Admission***

At admission prisoners have a rigorous health check and details are entered onto GPASS. Practitioner nurses usually do the admission but all registered nursing staff are trained to do so. All admissions get the full check and there is an abridged version for prisoners transferring. Information is gained by asking the prisoner directly, looking at history on the PR2 system, healthcare records (if available) and visual inspection where appropriate. This includes the ACT 2 Care interview.

HMP Greenock piloted the current GPASS care management admit form. There are six sections to the check with key points being 1) vital signs, drug allergies, weight, infestations, infections including hepatitis or other BBV known or risk 2) physical health including asthma, diabetes, epilepsy, operations, physical or sensory disability 3) female section including smear, hysterectomy, pregnancy, contraception, prostitution, (no longer ask about GBV or abuse at this stage, HMP Greenock only) 4) social lifestyle including alcohol, smoking, drug use including injecting site infections and urine drug screens, housing or homelessness status 5) psychiatric risk including psychiatric disorder or history, psychological interventions, self-harm history, any community or mental health workers involved with, thoughts of self harm or suicide are asked directly 6) any prescriptions that the person is on from GP or other provider and any outstanding hospital and community appointments. Where risk is identified from admission or transfers an ACT 2 Care process is established. HMP Greenock not only piloted the current forms but has a more manageable number of admissions and therefore more time with people.

HMP Barlinnie can be very busy in terms of admissions especially on a Monday after a busy weekend. Health care staff seek to provide quality healthcare admission whilst minimising extensive queues for prisoners at a potentially stressful time for them. The poor conditions for prisoners in the reception area and cubicles have been consistently noted by HMI. In addition HMP Barlinnie do not yet meet adequate reception standards by ensuring that prisoners have showered or have clean clothing before having their health assessment, nor do they provide facilities for urine testing prisoners. These factors can make the working conditions for health care staff more difficult.

### ***Settling in***

HMP Greenock has an induction area in Ailsa Hall where prisoners spend their first one to three nights, depending if they had been in before, which allows them to settle in and find out about all the different processes, for example healthcare, visits, getting property in, personal cash etc. HMP Barlinnie has a 'First Night In Custody' facility in E Hall and all prisoners go there except those who are placed at risk. It is seen as a model of best practice, in contrast to the reception facilities. This is for one night unless they are admitted at a weekend. Provision for non-English speakers is good (HMI 2011). Allocation to accommodation in both prisons is managed by prison officers according to space but health staff in HMP Greenock can ask for prisoners to be doubled up with a friend/ relative depending upon security. Where there is a perceived risk prisoners can be allocated into an anti-ligature or observation cell depending upon their ACT status.

To assist in communication with the Hall staff and officers for health and safety, there is a system of 'health care medical markers'. This is a process where health care can inform other staff of health conditions e.g. epilepsy, asthma, diabetes, infection, infestation, amputations etc and the necessary action (for example, must be located on ground floor) and provide clear written instructions of actions to be taken in certain circumstances without breaching confidentiality (for example if the prisoner has seizures). Medical markers are logged on PR2 prisoner records computer programme and officers informed in writing to ensure that this is communicated well. In HMP Barlinnie these are written during the admission interview and taken to the Halls by a nurse at the end of admissions process to ensure officers are made aware of needs.

### ***Link Centre: core screening, national induction and pre-release***

The rehabilitation and support officer team at the Link Centres organise the core screen, national induction and pre-release. They also lead four courses focused on offending and linked to drugs, alcohol and mental health.

#### ***Core screening***

All convicted prisoners serving seven days or over are asked to participate in a Core Screen interview. The purpose of this screening tool is to enable support through a sentence. The interview covers issues such as housing, benefits, job advice, resettlement, childcare issues, substance misuse, educational needs and employability. The Core Screen is the primary source for referring to one of the partner agencies and is potentially significant for health improvement and public health.

#### ***National Induction***

Every prisoner who has not completed National Induction within the previous six months is

listed to attend this two hour information session which covers things such as fire evacuation, visits, what services prisoners can access and how to access them, ACT, the Listeners, anti-bullying, race relations, etc. Prisoners can complete a PT induction form and a basic literacy assessment called an "Alerting Tool" and Phoenix Futures present on services they can access for addictions.

### *Courses related to health and offending*

Officers deliver SPS-approved courses that focus upon mental health, addictions and offending behaviour including 'Drugs action for change' (see drugs section), 'Alcohol awareness course' (see alcohol section) and 'Anxiety and sleep course' (see mental health section). In addition, they run 'Constructs', a 26 session nationally accredited programme, which lasts nine weeks, based around the CBT model, looking at alternative ways to think and act to prevent re-offending, via discussion, exercises and role play.

## Accessing healthcare

HMP Greenock health centre is in operation between 7.45 - 21.15 weekdays and 8.30 -18.30 weekends. HMP Barlinnie is in operation between 6.45 - 21.30 weekdays and 8.30 -17.30 weekends and there is a nurse on duty 24 hours a day. Prisoners can access health services by filling out a written referral form located in the Halls. In HMP Greenock these are coloured white for general health, pink for mental health, yellow for addictions and orange for ordering in medication. These basically match the colour of the paper used for the speciality in the health care records. In HMP Barlinnie these are all white except for the pink mental health forms. Some staff are not happy about the colours as it may prevent help-seeking for stigmatised conditions but others feel colours may be helpful for prisoners who cannot read well.

The process for prisoners who are not able to read or write effectively is to request help from an officer, cellmate or a friend. They can also speak to a nurse directly at medication rounds in the Hall or in passing. Officers often phone healthcare about poor readers (and those who are not coping well) as they have noticed it in their daily work. A lot of referrals from prison staff come to the nurse that specialises in learning disabilities even though they may in practice have learning difficulties of various kinds.

## Delivering health care

Healthcare services are provided in both the health centre and in Halls. In HMP Greenock, the GP and the psychiatrist see prisoners in the health centre but may go to Halls according to need. In HMP Barlinnie the GP and psychiatrist see prisoners in the Halls more than in the health centre. Services such as dentistry, opticians and podiatry take place in the health centres of both prisons.

In HMP Greenock, daily medications including methadone are administered in Darroch and Ailsa Halls. Chriswell prisoners receive all of these medications at the health centre. Suboxone and subutex are always given at the health centre. In HMP Barlinnie, daily medications are administered in the Halls, however most people with diabetes and controlled drugs e.g. analgesia are given in the health centre. Methadone, Suboxone and Subutex is mainly administered in the addictions centre except for C Hall (morning) and D Hall (afternoon). There is a clear protocol for the safe administration of Gaviscon and Paracetamol. Officers stock these

drugs from Lloyds Pharmacy and return stock forms to show existing supplies have been depleted.

A number of clinics are provided for prisoners with current or long-term health conditions. In HMP Greenock these include: mental health, addictions, BBV, learning disabilities, asthma, Well Woman, hepatitis A and B and seasonal flu vaccinations. A diabetes clinic is not run regularly. In HMP Barlinnie these include mental health, addictions, BBV (twice weekly), learning disabilities (occasional), asthma (fortnightly), Well Man (daily), hepatitis A and B (each weekend) flu vaccinations (seasonal), diabetes (fortnightly) and tissue viability (weekly). Prisoners can self refer via referral forms that are located in Halls, or be referred by staff (SPS, GP, nurses or Keep Well) or be picked up on admission or in consultations. In terms of reminders for appointments, for the optician, dentist, chiropody and clinics, they get a letter from healthcare administration. Clinic lists are also posted on sharepoint for SPS staff to check. Mental health and addictions tend to see people more rapidly so letters are not sent.

## Throughcare

The main points of contact with community-based agencies by health staff is on admission and at pre release. For the Health care team this is on an as required basis for each prisoner. This currently usually involves a fax to confirm medications and doses on admission and a discharge letter to make appointments prior to release. The main contact is with the medication prescriber (GP) but additional liaison can take place with community mental health and addictions teams and if someone is arriving / leaving with BBV and treatment plan. This is changing with the introduction of the new Vision system in June 2012 where all prisons will be linked electronically and notes will transfer. Staff will also be able to access emergency care records from the prisoners own GP to confirm medication.

### *Pre-release*

The rehabilitation and support officers at the Link Centre organise a pre-release service which aims to prepare prisoners for release as much as possible. Around four weeks prior to release prisoners are invited to attend the Link Centre to ensure that referrals made at the Core Screen have been met and to make new referrals if circumstances have changed that can relate to health, social circumstances or welfare. The Link Centre hosts a wide range of agencies who support prisoners in the two prisons and also at throughcare and these are outlined in the main section below.

## Health services and health improvement by topic

### ***Alcohol misuse***

There are two addictions nurses in HMP Greenock and nine in HMP Barlinnie. The service's initial priority is to maintain safety by providing detox programmes using Chlordiazepoxide, diazepam and vitamin supplements. They also provide longer-term treatments especially Acamprosate, which assists with cravings for alcohol, and Disulfiram, which creates negative feedback if alcohol is consumed - these are usually commenced one or two weeks prior to release.

These treatments are combined with psychosocial support from both nurses and Phoenix Futures. This involves trying to develop an accurate assessment and a general picture of alcohol use to identify and address current or underlying issues related to alcohol misuse, for example

coping or abuse. HMP Greenock, but not HMP Barlinnie, frame their approach in the context of the 'five areas analysis', adopting CBT principles, which is supplemented by written materials by Chris Williams (NHSGGC).

### *Screening*

The addictions team feel that there is a need to increase alcohol screening but at present this is not done routinely as there are insufficient staff trained to do so. The new funding made available to NHSGGC for alcohol work in prisons has the potential to improve this.

### *Links with Community Addictions Teams*

The health care team in HMP Greenock have some issues in terms of joint working with Greenock community wellbeing alcohol clinic who will not continue prescriptions of disulfiram that have been started prior to prisoners being released. In HMP Barlinnie the liaison with community-based services for people with alcohol addictions is mainly undertaken by Phoenix Futures.

### *Phoenix Futures*

Phoenix offer a range of services for people with alcohol addiction. For prisoners serving over 31 days this includes: alcohol addiction assessments; treatment and care planning; two-hour alcohol awareness courses; individual support and motivational interviewing and a pre-liberation group that can include making referrals at throughcare.

### *Alcohol awareness courses*

Delivered by the SPS officer rehabilitation and support team in the Link Centres, the content of the course Alcohol Awareness is very similar to that of Drug Action for Change, although it is centred on alcohol use. It is also shorter, being eight sessions long. It is suitable for anyone who wishes to be more alcohol aware, as well as those who may, or do have a problem with alcohol. Group work for alcohol addiction is related to sentence management and is only provided for long-term prisoners. The SPS officer team delivering the standardised programme in HMP Greenock feel that it can be significantly improved and would like to link with NHS colleagues to refresh materials. This course is delivered by the addictions officers at HMP Barlinnie in the addictions unit.

### *Voluntary sector provision*

Both prisons have Alcoholics Anonymous coming in each month and they provide their services in the Halls directly. In HMP Greenock Inverclyde Alcohol Service provides a range of services to people with alcohol related problems in prison, which includes information and advice, one to one counselling and support.

### **Drug misuse**

Drug misuse, and its linked physical and mental health implications, is a major healthcare issue in both prisons for example in HMP Greenock 30% of short-term and remand males (A Hall), 50% of females (Darroch Hall) and 15% of lifers (Cresswell Hall) are typically on methadone. In HMP Barlinnie around 90 prisoners will be on detox and 350-400 prisoners across Halls are typically on methadone at any one time plus individuals on suboxone (which takes longer to dispense due to concealment issues). Recent HMI data highlights that over 80% of prisoners test positive for illicit substances on entry to HMP Barlinnie (and 10% on liberation).

## Care

The model of care is based upon a harm reduction model outlined in NICE guidance. The Scottish Government 'Road to Recovery' framework informs practice. For those in treatment the immediate need is confirming medication with their prescriber (by the next day ideally) and assessing risk related to when they last took methadone (as staff need to adjust the dose if the person is off it for even a short period). For those not in treatment, health care staff try to get prisoners to engage with both the addictions nurse and Phoenix Futures. When these prisoners arrive they are offered detox' for 12-15 days based upon what is found in the urine drug screen.

Those in treatment or detox are encouraged to engage with services for assessment, for example they may come in with heroin but also have alcohol problems etc. Health care staff use person centred approaches to try and understand and support the person whether in relation to treatment or just general support. The service provision involves one-to-one interviews, including motivational interviews to stay drug-free, planning treatment plans and reduction plans, multi drug urine testing and monthly testing for those on methadone and suboxone/subutex (to check for illicit use, for safety and methadone administration). In HMP Greenock an addictions clinic runs each Friday afternoon with the GP and prisoners get a quarterly review.

Health staff link with community prescribers pre-release to confirm methadone doses and make appointments when prisoners go to court or are due for release. There is no needle exchange in either prison. HMP Barlinnie has an initiative where prisoners can get a clean 'set of works' on liberation if they are admitted to prison with used syringe and/or needles as these are disposed of in sharps bins. The prisoner is asked if he requires a 'needle pack' on liberation. Injectors who are admitted without needles are given a "C card" in their release packs that they can take to the chemist and exchange for needles, provided they go to the chemist.

The Health Centre addictions staff feel that links with Community Addictions Teams (CAT) are variable but generally are improving. The main issue is replying promptly to faxes about discharges for appointments in some areas. A consultant addictions nurse has been identified by GGC to provide support to the prisons teams. The NHS Drugs and Alcohol Health Improvement team' have not had involvement with the prisons to date but are keen to offer support as required.

The health care team work in partnership with SPS addictions officers to provide support to prisoners with different forms of addictions. The addictions officers (ten in HMP Barlinnie) do the urine testing for illicit substances and also run a range of courses including First Steps, Alcohol Awareness and Positive Relationships. Phoenix helps SPS officers to deliver harm reduction courses.

Phoenix Futures have a national contract with SPS (This contract was transferred to the NHS on 1 November and is now being managed by them) to provide most of the psycho-social support to prisoners with addictions and deliver other courses. Health care staff work jointly with Phoenix Futures in HMP Barlinnie to deliver naloxone courses (50 per year, -weekly with Phoenix Patient Group Directive). In both prisons, NHS health care staff feel that there is scope for them to deliver more and wider group-work with extra resources and that this would make their jobs more satisfying. Phoenix Future's contract expires in April 2013. At this time funding will be diverted to Prison Health Teams to provide the Enhanced Addiction work to the

prisoners in Greenock and Barlinnie. This is intended to allow NHSGGC to develop and improve the patient care pathway and addictions service delivery to prisoners. Improved throughcare and links to mainstream health services are also being progressed since transfer.

In terms of Phoenix's provision, prisoners serving less than 31 days will receive the opportunity to attend National Harm Reduction Sessions where they are provided with information on drugs and alcohol use, tolerance levels and Blood Borne Viruses. This forms part of the SPS National Induction Programme and is delivered as required to all admissions and transfers. Females can be referred to Throughcare Addictions Services (TAS, see below). Prisoners serving over 31 days can receive the full service:

- Addictions Assessment (Drugs/Alcohol/Smoking/Volatile Substance Misuse) looking at needs, providing a care plan, exploring treatment options and providing information and materials on harm reduction.
- Harm reduction group is a single session on harm reduction measures specific to substances and paraphernalia individuals' use. It considers the effect of illicit use on health.
- Alcohol Awareness is a two-hour session on alcohol use and treatment options available, providing harm reduction information and advice. Individuals may be referred to the SPS alcohol awareness programme.
- Individual Motivational Interviewing as agreed during initial assessment and care planning. Level and frequency of support will depend upon individual needs and can include different methods of intervention.
- Pre-liberation Group session is offered to all prisoners serving over 31 days. It provides information on harm reduction, tolerance levels, BBVs, and sign-posting or referral to external agencies.

In addition the SPS Drugs Action for Change course is delivered by the Rehabilitation and Support team. This nationally approved activity runs for 12 sessions and examines drug use, its effects on the user, their family and their community and the cycle of change. The course also gives practical advice about where to get support and about self-help. It is suitable for anyone who is thinking of actively stopping or decreasing their drug use.

### *Other providers*

In addition to the core addictions services from NHS, SPS and Phoenix Futures, there are a number of statutory and voluntary sector agencies working in partnership with a remit for supporting prisoners who misuse drugs in prison or throughcare. Narcotics Anonymous provide support to both prisons in the Halls.

In both prisons, Throughcare Addictions Services (TAS) provide support at throughcare and on release by community workers connected to Criminal Justice Social Work Departments who will visit clients while in custody and will continue working with the agreed care plan and address any further needs following release. Support will continue if they are transferred to another establishment and referrals will continue as appropriate.

In Greenock additional providers include:

- Dumbarton Alternatives - The main objective of this project is to reduce drug related deaths of persons released from prison and also to reduce re-offending. The target group

is male and female prisoners from West Dunbartonshire, East Dunbartonshire and Argyle and Bute who have addiction issues and are looking for support.

- 218 Project - Is a Turning Point Scotland service and Glasgow Addiction Service initiative that takes a person centred, holistic approach in dealing with issues that women face in relation to their offending, substance misuse, physical and mental health along with other social needs i.e. accommodation and child care. This offers residential and day support.
- Inverclyde 'Moving On' Project - This project provides a drop in facility in HMP Greenock for drug users but only in response to referrals. It provides one to one support, alternative therapies and drug rehabilitation programmes. Workers visit the prison on demand for remand prisoners and those due for release within 30 days.

### **Tobacco use**

There is high demand for smoking cessation programmes within the prison. In HMP Greenock, four smoking cessation groups are run each year by Phoenix Futures co-facilitated with the addictions nurse. Six groups of up to 12 participants are co-facilitated each year in HMP Barlinnie where the addictions nurse also runs some extra courses. Remand prisoners are not included. Phoenix Futures are funded by SPS as part of the national contract to deliver this. The health care service provides tablets, patches or nasal spray options for nicotine replacement. The staff delivering these groups are trained by ASH Scotland and work to the Maudsley Model and their guidelines. All prisoners who smoke should get brief advice about smoking cessation. This is not possible at the moment. It is not a routine as part of clinics as there are not enough staff trained to give brief advice (only one addictions nurse is currently trained in Greenock and two Phoenix staff). So those who do get advice are usually those over 35 years of age who attend Keep Well checks. At present this work has not been linked in with the tobacco Planning and Implementation Group at NHSGGC who have a HEAT targets including focusing upon people living in SIMD 1 and 2, clear models of delivery and throughcare, and good levels of resources.



### **Diet and weight management**

Weight is screened upon arrival as all prisoners are weighed. The aim of this is frequently to pick up on malnutrition in the first instance especially for those who are addicted to drugs or alcohol and may be homeless. However, this is also one opportunity to pick up on obesity, as are routine clinics and Keep Well for those aged over 35 years and Well Man/woman clinics. Health care staff state that interventions and support usually comprise a combination of one to one advice and literature, and that this is usually patient-initiated. In HMP Barlinnie, the Well Man clinic offers to see prisoners who are at risk or trying to lose weight each week to provide additional support and encouragement.



In terms of the environment the catering staff at HMP Greenock state that prisoners have a choice about diet selection at meal times. There is always a vegetarian option and a low calorie option and five fruit or vegetable choices each day. Fruit and yoghurt is available with any meal choice. Sugar is provided routinely with tea packs but sweeteners can

be supplied if requested. There is no food focus group.

In HMP Barlinnie there is always at least one healthy option which is labelled, and often two or three choices. There are restrictions. For example fruit is only available with the sandwich option at lunchtime. There is a quarterly food focus group with prisoners and the catering manager. The catering has received a healthy living award and the catering managers have been given Butler Trust awards.

A dietician was seconded to the SPS funded by SG from 2008-12 to review nutritional and dietary requirements, support food standards compliance, and offer guidance about special diets, cultural and religious needs. Issues included prisoners being both over and under weight and difficulties for many in identifying healthier options in the menus. In addition the prisons have different facilities and staffing and a daily budget of £1.57-2.15. Both prisons have been part of the national process to add signage to help with selection of healthy choice options, to develop a database of standard menus with appropriate nutritional content and portion sizes, and have developed agreed practice for special diets.

### ***Exercise and fitness***

Within the Health and Fitness centre at HMP Greenock, prisoners can access a variety of cardiovascular and weight training equipment. There is also an indoor sports area and two AstroTurf five-a-side pitches available for use in good weather. The Physical Training Instructors (PTI) are trained and able to draw up individual training plans and to advise on issues such as healthy eating and lifestyle. To access the centre prisoners fill out a referral form, available at induction. This is passed to the health care staff to check that the prisoner is of good health to attend the centre. Once passed there is an induction on how to use the fitness equipment and prisoners are provided with a PT card. This is necessary to use the centre and also allows for tracking of usage. In HMP Greenock the gym and facilities are available daily for prisoners. And, whilst HMP Greenock gym is not particularly intimidating compared to some other prison gyms, a class has been developed each week called alternative therapies where males and females with mental health problems and other vulnerabilities can participate in group exercise to support recovery. There is enthusiasm from prison PTIs to link with NHS community activity teams and projects like Live Active to develop programmes and courses for those with health issues e.g. linked to Keep Well referrals, and to explore possibilities for a through-care exercise on referral scheme for some prisoners.



In HMP Barlinnie, the gym facilities are available daily for prisoners but due to high volume and limited space it means that twice a week is more realistic in terms of access. There is also enthusiasm from prison PTI instructors to link with NHS community activity teams. They have also recently trained 15 sports officers who can assist in new developments and who may form an important potential resource and public health ally, for example supporting smoking cessation or weight management programmes. At present football is available at five a side pitches and there is an over 40s game each week facilitated by sports and games officers. There is cardiovascular equipment in each of the Halls. It is worth noting that HMI recently suggested

that prisoners in HMP Barlinnie should get waterproofs for use in their daily fresh air hour in the external exercise areas.

### **Dental health**

Practitioners provide three dental sessions each month in HMP Greenock and five dental sessions each week in HMP Barlinnie. Neither prison has access to a dental hygienist. Prisoners can self-refer or do so through the nurse or GP. There is high demand as many prisoners do not have a dentist outside and have particularly poor dental health often exacerbated by addiction issues. The current waiting time for an emergency or pain, including extractions or fillings, is eight weeks in HMP Greenock and eight to ten weeks in HMP Barlinnie. Waiting times for routine appointments, or more cosmetic work including dentures, is much longer and does not meet the bi-annual ideal. Remand prisoners are only eligible for emergency treatment. Prisoners are given a toothbrush and toothpaste at admissions and from then on are expected to purchase these themselves. The facilities at Barlinnie are being upgraded to meet new Glennie Report Standards. NHSGGC are also moving to a community dentist staff group with salaried dentists providing the service from July 2012.



### **Keep Well**

Keep Well has been provided in both prisons since 2010. The aims are to identify those at most risk of developing serious preventable illnesses; provide suitable interventions and services to them; and provide follow up care. Risk assessments and guidance checks are provided every five years focused upon areas of higher deprivation. The focus is upon cardiovascular disease and risk factors especially high blood pressure, cholesterol, smoking, diabetes and lifestyle factors. Overall risk is assessed through an Assign score. Prisoners were identified as a vulnerable and priority group and Keep Well is delivered in both HMP Barlinnie and HMP Greenock through a national 'in-reach' team from the Scottish Prison Service. The screening template was adapted for prison use and the age range reduced to 35 years. Short term and remand prisoners were excluded. The latest figures from SPS indicate that in HMP Barlinnie 513 prisoners have received a check out of 917 invited (56%) of which 324 have since been liberated. In HMP Greenock corresponding figures are 184 out of 282 invited (65%) with 112 liberated since their checks. A national evaluation commissioned by Health Scotland confirmed a 70% national uptake from those eligible, increasing with age and proximity to release. In terms of impact, most were given advice about smoking, diet and exercise. Over a third were given a referral to another service. There is not data on referral uptake and impact but reported factors assisting change included good gym facilities, smoking classes and availability of fruit. Barriers included reality of prison life, dominant prisoners in the gym, and the basic pleasure of smoking, fat and sugar in a prison context. Provision is changing as of April 2012 to an in-house model with a half time nurse to support the delivery of Keep Well and associated health improvement actions. In 2012/13 the target will be to deliver checks to 60% of eligible prisoners and to enhance provision in prison and at throughcare.



### ***Well Man/Woman checks***

HMP Greenock runs Well Woman clinics which includes smear testing, breast awareness, contraception and pregnancy testing. These run every fortnight with a nurse, and monthly with a female doctor. HMP Barlinnie delivers approximately 40 Well Man checks every week with an open referral, sign posting and follow up. This is a popular and valued clinic in HMP Barlinnie and in addition to the checks the practitioner nurse monitors and supports patients who have complex needs where the Hall nurse may have less time, and also runs health promotion sessions. The uptake of this service is significantly higher than it is for in-reach Keep Well checks as it is easier for the staff to get access to the Halls and it does not require the officer escort times to be pre-arranged. Follow up is also more effective. It is also easier to refer to services based upon local knowledge. This was identified as an area of good practice in the recent HMI report.

### ***Long term conditions clinics***

A number of clinics are provided for prisoners with current or long-term health conditions. In HMP Greenock these include: mental health, addictions, BBV, learning disabilities, asthma, Well Woman, hepatitis A and B and seasonal flu vaccinations. A diabetes clinic is not run regularly. In HMP Barlinnie these include mental health, addictions, BBV (twice weekly), learning disabilities (occasional), asthma (fortnightly), Well Man (daily), hepatitis A and B (each weekend) and flu vaccinations (seasonal), diabetes (fortnightly), tissue viability (weekly). Prisoners can self refer via referral forms that are located in Halls, or be referred by staff (SPS, GP, nurses or at Keep Well) in admission or consultations. The health care team deliver a regular nurse led clinic for people with asthma. There are not regular clinics for other key long-term conditions. People with diabetes and epilepsy are seen on an ad hoc basis as no nurse is trained to deliver a clinic. For people with Coronary Heart Disease there is ad hoc screening of lipids and dietary advice provided. People with Coronary Heart Disease are often referred to the Well Man clinic and reviewed and supported as necessary. For individuals with complex needs the team try to provide stepped up care otherwise they would rely on basic care plans.

### ***Mental health including self-harm and suicide***

There is only one mental health nurse within the health care team in Greenock and a weekly session of psychiatry. Barlinnie has 2.5 mental health nurses within the health care team, one nurse works one day a week on dual diagnosis, and there are twice weekly session from psychiatry. This means that much of the work is necessarily reactive and includes, 1) communication with community prescribers and services on admission and pre release to confirm medication doses and make appointments, 2) undertaking individual interviews after someone self-refers or is referred by health and prison staff, and helping with treatment planning and care, 3) participating in ACT 2 Care suicide prevention case conferences, 4) running mental health clinics, 5) for prisoners who become unwell and need to be detained under the mental health act, liaising with the courts, psychiatrist, GP and Governor in completing the detention paper work (prisoners can be sectioned by the courts and come to HMP Greenock to wait on a bed, or by the prison GP or psychiatrist if a prisoner becomes mentally unwell during custody), 6) attending risk management group for prisoners who are progressing to open estate, 7) attending life long restriction groups, 8) facilitating weekly multi-disciplinary mental health meetings, and 9) maintaining and monitoring prisoners on anti-psychotics and depot medication. In terms of scale HMP Barlinnie receives around 100 referrals a month and there can be 20 to 40 people on ACT at any point.

### *Gaps in provision*

The health care teams have stated a number of gaps in provision including but not exclusively: 1) mental health promotion, 2) primary care mental health provision, 3) poor awareness of mental health issues amongst the SPS staff, 4) many staff not trained to respond to disclosure about abuse, especially but not exclusively with female prisoners, 5) limited counselling provision, 6) scope for improved joint with addictions team (HMP Greenock) and 7) staff isolation (Greenock). They also felt that there was scope to develop more group sessions.

In addition a concern noted by HMI (2011) was that for those on ACT 2 Care in HMP Barlinnie, many of the 'safer cells' in the Halls had little comfort with lack of power, furniture or ventilation and suggest they be improved, especially given the vulnerable state of the individuals in them.

In Greenock, developments have been instigated by the mental health nurse despite limited resource, for example:

- **Alternative therapies:** a weekly exercise group for males and females with mental health problems as an alternative form of support to enable recovery and participation.
- **Bibliotherapy:** books and reading based upon Chris Williams materials now a mainstream part of the library service.

Other providers will provide support where a referral is made for an individual:

- **Scottish Soldiers, Sailors, Airmen and Families Association:** Post Traumatic Stress Disorder (PTSD) counselling for serving and ex-armed forces personnel and their families.
- **Gateways (Scottish Association for Mental Health):** supports people for 12 weeks to develop wider social contacts within their community. Primarily for those with mild to moderate mental health issues from the Inverclyde area.

HMP Barlinnie has instigated several developments to enhance care for those with mental health problems, for example:

### *D Hall South Lower (DSL)*

This is a more sheltered accommodation area for prisoners who may be vulnerable including those with mental health problems. This smaller unit provides enhanced support and access to the Day Care Centre services. There is greater demand than capacity and, whilst Hall officers have some training, there is scope to improve their awareness about mental health.

### *Day Care Centre*

The Day Care Centre is a major initiative for people who need extra support especially for those with mental health problems. Access is through the mental health team, for any prisoner, but primarily for those in DSL. Core services include yoga, a stress centre (relaxation, massage, one-to-one sessions), learning and education groups and health checks. It is a base for Well Man clinics, groups run by mental health team, and education groups by Motherwell College. The Day Care Centre also runs health promotion days. There are several third sector agencies involved for example Therapet bring in 'Pepper' the dog each week and Theatre Nemo do creative arts projects. The centre has been praised in numerous reports and one case study of a service is provided here for illustrative purposes:

### *Lifelink*

Lifelink works in the Day Care Centre and has been operating since 2004. Initially funded through Choose Life, it is now directly contracted through SPS. Lifelink is involved in the multi-disciplinary mental health team. It operates four days a week with three part-time staff and demand is high. They aim to enable vulnerable and distressed prisoners to improve their mental/emotional health and wellbeing, where appropriate to address difficult personal and behavioural issues and thereby improve their ability to function and engage effectively in other activities such as education and work, which form part of the rehabilitative process. Activities include relaxation group work, one-to-one therapeutic personal support sessions and a massage therapy. There is some follow through work undertaken and some clients have engaged in Lifelink's community service once they have left prison but the numbers are small. The short-term and transient nature of the prison population has a significant impact on the opportunities for longer term engagement with clients. Reporting to SPS is on numbers of clients only but used to involve client satisfaction forms.

In both prisons a listener scheme operates that uses a peer support model. It was reported to be well supported by the Samaritans and SPS staff but uptake was modest (HMI 2011).

In addition, officers at the Link Centres run the Anxiety and Sleep course which aims to help prisoners reduce their anxiety levels and develop a healthy sleep pattern. This course is 13 sessions long and includes information about sleep and stress along with regular relaxation exercises.

Figures about violence and fear of violence were noted in the recent HMI (2011) report for HMP Barlinnie as relatively low with 50 serious assaults between prisoners recorded in the last year and most prisoners surveyed reporting feeling safe. However, other studies report this as being higher, especially in areas where there is no CCTV coverage.

### *Community services links*

The GGC Mental Health Improvement team, who cover areas such as stigma, mental health training and suicide prevention, do not have any links with either prison. In HMP Greenock, the mental health nurse has made local links with Inverclyde health improvement team to develop joint working on stigma prevention and suicide awareness.

Both prisons report effective working relationships with the local community mental health teams (CMHT). They facilitate in-reach from CMHTs and feel that through-care works well for those who come in with an existing diagnosis of a severe mental illness. NHSGGC have nominated a mental health nurse consultant from forensic mental health to provide specialist mental health advice to the health care teams.

### ***Learning disability***

Both prisons have a general practitioner nurse who has a background training in learning disabilities but at present there are not any staff that have a dedicated role for healthcare of people with learning disabilities. In HMP Greenock a practitioner nurse holds a clinic once every six weeks for a very small number of individuals who have learning disabilities or autism. They are working to adapt some of the healthcare materials and offer support to individuals. The clinic offers both an assessment element (HASI) which would indicate where a person may have

a learning disability and also provides an opportunity to support the individual with a learning disability and where necessary assist the person to access services, making referrals to other agencies where this is appropriate and necessary. In HMP Barlinnie the nurse holds occasional clinics and offers support to individuals. If someone is identified as being vulnerable due to a learning disability at admission to HMP Barlinnie or through the care process or by Hall Officers, then a place in D Hall can be requested where they will receive extra support and access to Day Care Centre services. In Barlinnie the learning disability-trained nurse has had some training on how to complete the HASI assessment (piloted at HMP Greenock and adopted by other establishments). She has had one day to notify the Hall staff of the upcoming service and provide them with the referral forms but due to staffing issues has not had time to run a clinic yet, but has completed some assessments as part of her normal daily duties.

The NHSGGC lead nurse for learning disabilities is working with managers and staff in each of the prisons to develop a post which will carry out a national piece of work on a Learning Disability Framework that can be utilised across all Scottish prisons. This post will be developed over the summer of 2012 and will work closely with staff in Greenock, Low Moss and Barlinnie prisons while also exploring differences at Cornton Vale and Polmont Young Offenders prison in Forth Valley Health Board area.

### ***Literacies, learning and arts***

Literacy assessment is carried out as part of the Core Screen by Link Centre officer staff. They ask about numeracy, literacy and computer use. In addition there is assessment at the education induction sessions at the learning centres where the prisoners enquire about education classes. There are several options available for those seeking support including education classes provided by Motherwell College in the prison and various additional projects. In Greenock these are:

#### *Community literacies team*

This project assists individuals to improve their reading, writing and speaking skills to help them feel more confident. Developing numerical skills can help them deal more confidently with numbers at home and in gaining employment. Community Learning Disability Teams also support from prison to the community by continuing the service after release.

#### *The Big Plus Inverclyde (Highholm Centre)*

This project offers courses that can lead to certificates in communication and or numeracy. The courses are designed to improve reading, writing and speaking skills. A worker attends the prison weekly.

#### *Prison library*

The library is based within the Link Centre and operates on a request and delivery basis. It includes materials provided by lots of agencies including The Women's Library, and now hosts the CBT- based bibliotherapy resources.

#### *Toe-by-Toe (Shannon trust)*

Peer mentoring scheme that assist those who can't read or can't read very well, through a peer tutoring programme. Prisoners teaching Prisoners using a simple manual,

prisoners who can read teach prisoners who can't in five, simple, twenty-minute sessions per week. The whole course takes around six months to complete. Prisoners who wish to become a volunteer coach and prisoners who wish to learn must be serving at least a twelve-month sentence to participate.

### *Motherwell College*

Motherwell College are responsible for delivering education within the prison learning centre. They offer numeracy, literacy, computing skills, arts and crafts and music. Once an alerting tool has been completed at induction, prisoners are given a one to one interview to develop a learning plan.

In HMP Barlinnie, Motherwell College are also contracted by SPS to manage education through the learning centre. They deliver over 40,000 'offender learning hours' a year using the learning centre but also the residences, the Day Care Centre and across the prison estate. Education staff visit each prisoner serving over 6 months in their first week to screen their numeracy and literacy using the SPS Alerting tool, however this is quite an old approach and does not identify additional learning needs, so college staff have added the Big Plus screening tool to ascertain literacy and numeracy skills. There are no education classes for those on remand. The prison library is based in the activity centre and, whilst not very attractive, has potential to host health education resources. The learning centre staff also co-ordinate toe-by-toe peer education approaches.

The learning centre has a strong reputation for developing creative approaches using arts including visits from writers, theatre groups and external agencies working in partnership. This included piloting projects in five prisons in Scotland as part Creative Scotland's Inspiring Change programme with The Citizens Theatre, National Gallery of Scotland, National Youth Choir and The Scottish Ensemble. A specific suggestion from HMI is that arts courses in drama, art and creative writing could be extended to the activity centre to increase opportunities at evenings and weekends. The learning centre also provides unique projects led by the education staff, such as Hidden City @ Barlinnie a poetry and animation project helping to develop literacy skills in a creative way. The Learning Centre work closely with the Day Services to provide education for the prisoners in D Hall's high dependency unit. They cover topics such as creative writing, maths and English. Recently they have also been working with the BBC on a documentary project where this same group of prisoners were involved in all aspects of the production including, writing the scripts, planning the filming, camera work, directing and editing. This finished piece of work is planned to be used as an educational DVD in secondary schools to give young people an understanding of what being in custody is really like.

For both prisons, the Glasgow Adult Literacy Link Project provides prisoners, returning to Glasgow City, with professional advice and support about literacy or numeracy provision within the communities to which they return. Following referral the project's development worker meets the person in prison and, following release, supports the person to access adult literacy options in their local area. Those who participate in the project are encouraged to see improved literacy levels as a way of widening horizons into other opportunities. At present the project is working with men in HMP Barlinnie and female prisoners in HMP Greenock but is also open to male prisoners, returning to Glasgow, if they wish to be referred.

## **Sexual health**

A number of policy drivers are now in place to inform sexual health improvement in prisons including: The Scottish Government 'Sexual Health and BBV Framework' 2011 with specific recommendation for sexual health actions and education with women (and youth offenders); recommendations in the National Prisons Health Improvement Framework 2012; and NHSGGC HI Principal chairs the Scottish health promotion specialists group on sexual health improvement for prisoners which is looking at practical approaches for prisons.

Until recently there has been limited sexual health service provision in HMP Greenock prison. Recently a new Well Women Clinic has been developed by one of the newly appointed female salaried GP's. Two areas were raised as gaps in provision by both health and SPS staff, 1) an absence of awareness courses or supports in relation to Gender Based Violence (GBV) for female or male prisoners (either perpetrators or recipients of GBV), 2) a lack of training and or confidence in responding to and supporting prisoners who disclose abuse, particularly sexual abuse, combined with a lack of provision of counselling for those individuals. There are three developments to note:

### *Sexual health needs assessment*

Two years ago HMP Greenock were involved in trying to pilot a sexual health needs assessment for prisoners jointly with Sandyford but difficulties with the Research Ethics Committee and the low response rate of prisoners willing to pilot the questionnaire has meant that this did not take place.

### *Caledonia Youth*

Offer counselling services to under 25's in HMP Greenock, to individuals who wish support with relationships, feelings and sexual health. We do not have feedback on the results of these interventions.

### *Condom distribution*

In phase one of Respect And Responsibility the Scottish Government backed a trial of providing free condoms to inmates in HMP Greenock prison and since then Andrew Fraser, Medical Director SPS, has clarified that it is possible for NHS Boards to provide free condoms to prisoners, however no such systems for this have yet been put in place (the Board is currently in the process of reviewing its condom distribution systems - prisoners have not been factored into this process to date).

In HMP Barlinnie a sexual health questionnaire has been developed and is in use. This is a means of self referral but can also be used by other practitioners. Once issued to a prisoner the questionnaire is completed and returned to the health centre at which point the Sexual Health Nurse reviews, tracks and follows up any further actions. Counselling services are available to all prisoners who access the service, whether or not they have a confirmed diagnosis. This counselling is provided by the Sexual Health Nurse who has completed a Sexual Health Training module. Currently there is no link between this clinic and the Sandyford Clinic although they are available for advice, the relevant nurse would like to see this service developed. The Sexual Health Nurse can deliver training on all aspects of sexual health. Free condoms can be provided on prisoner request and can either be given to the prisoner or

put into his property for liberation. There is a low uptake of this service within Barlinnie.

Two officers have recently completed Safe to Say training, a course in dealing with people who have been abused and recognising the signs of abuse, and are now able to deliver this training to other staff. They hope to be able to start running courses within Barlinnie by May 2012

### **Blood borne viruses**

BBV services are seen as a success in both prisons, for example HMP Barlinnie nursing team have received a Butler Award for their work.

On admission people are routinely asked if they know if they have HIV, HEP and other BBVs and this is recorded onto GPASS. Everyone is offered a HEP B vaccination when they come in. Staff discuss risk factors for HEP C and prisoners are advised to put in a self referral if they wish to be tested. BBV clinics are run three days a week in HMP Greenock by a practitioner nurse who combines this with a more general role. In HMP Barlinnie this operates two days a week. Prisoners get a treatment plan which depends on factors like status and duration of sentence. Prisoners on HEP C treatment (interferon) are seen twice weekly for bloods and assessment and then a weekly injection. For Hepatitis C (HCV) there is extensive work underway in relation to Hepatitis C through the Managed Care Network including:

#### *Prevention and awareness-raising*

NHSGGC funds voluntary sector agency C-Level to deliver HCV Prevention initiatives, including group work with prisoners at induction and pre-release groups

#### *Testing*

NHSGGC is the first area in Scotland to offer a new method of diagnosing HCV infection. The Dried Blood Spot (DBS) test enables diagnostic testing on small drops of blood taken from a person's finger. This removes the need for venepuncture in people who may have poor venous access due to previous injecting drug use.

#### *Best practice networks*

Nurses from both establishments are represented on two strategic groups - HCV Managed Care Network Steering Group, and HCV Prevention Network, and two locality-based delivery groups (Inverclyde and Renfrewshire Local Planning Group, and HMP Barlinnie Local Planning Group).

#### *Clinical assessment*

Prisoners who are diagnosed with chronic HCV infection require clinical assessment to determine the health of their liver, type of hepatitis C infection, and to consider antiviral treatment. Previously, this required the prisoner to be seen at a hospital Outpatient dept – which was resource-intensive for the prison and the NHS. NHSGGC now offer dedicated sessions from a hospital Liver Nurse Specialist who attends the prison to provide information to prisoners who are HCV positive, and to offer them clinical assessment in situ. HMP Greenock does not use in-reach. Instead the BBV Practice Nurse liaises between NHS, hospital and prison and receives all notes and arranges for scans to be completed.

### *Treatment*

Antiviral treatment for prisoners with chronic HCV is now being offered in HMP Barlinnie by a Consultant in Infectious Diseases (from the Brownlee Centre) in partnership with prison health care staff at HMP Barlinnie. In HMP Greenock a consultant from RAH does in-reach according to patient need. NHSGGC have made resources available to equip both prison clinics with equipment needed to deliver this service (e.g. fridges to hold drugs and vaccines, other clinical consumables, and a centrifuge to spin bloods down). As before, this in-reach service reduces the need to transport prisoners to hospital to commence treatment.

### *Peer support*

C-Level were due to provide peer support services to prisoners. They were developing a new intervention to recruit HCV-positive prisoners and train them to provide information and support to their peers within the establishment. This is taking place monthly in HMP Barlinnie but not thought to be taking place in HMP Greenock.

HMP Greenock report that there are approximately two or three prisoners in treatment (treatment lasts six months or longer). Many prisoners admit they would not have complied with treatment outside but did so because they were in custody so it provides a real opportunity for health improvement. HMP Barlinnie can have 12-15 patients at any one time. Both note that more people could potentially be treated for HEP C but are not due to resource limits.

### **Parenting and relationships**

There is little structured work on parenting, domestic violence or relationship issues for the general prisoner population in Greenock, but there is a specific provision for females. This is however being viewed as an area for development with the involvement of health staff in Triple P work.



### *Circle*

This project offers services to women being released from prison who have children under the age of 16 years and who are affected by parental drug and or alcohol use. HMP Greenock have two Circle workers based within the Link Centre two days each week. They can offer a service to women and their families who live in East Renfrewshire, Inverclyde and Renfrewshire, Argyll and Bute, East or West Dumbartonshire. The project aims to help individuals with particular support needs in preparation for release including: hands-on support to access other services such as social workers and housing officers, assistance in filling in forms through to managing children's behaviours by helping to set up routine's such as bedtimes. Circle workers can help children by meeting them to discuss any worries they may have, help them access groups or activities, support their attendance at school etc.

HMP Barlinnie also report little structured work on domestic violence or relationship issues. However, there are additional health-related family programmes underway. The scale and context for family support is important in public health terms as HMP Barlinnie has over 7,000 family visitors each month and over 1,000 children visitors. Four projects/services are described:

### *Triple P Pilot*

Triple P has been adopted by NHS GGC as a major public health approach to enhance parenting and early years which has a direct effect on a range of other health issues later in life. It involves training for health and social care professionals but not exclusively health visitors. Training has included the full five levels of intensity of support within the programme and the aim has been to enable key practitioners to all come up to level three. Triple P can be offered on a one or on group basis to families. Triple P already has links with 'Families Outside', who work with the Wise Group on the Routes Out of Prison Programme. Triple P have a pilot project with HMP Barlinnie. The rationale being that the male prisoners were a high priority group and that prison provided an opportunity to reach and engage with fathers who are much harder to engage with in the community than mothers. The course lasts for eight weeks and they are now delivering the seventh course and have worked with 36 fathers. The project has proven to be popular with prisoners and staff with positive feedback including from the Governor. The prison has shown some flexibility in order to support the course for example participants are given a monthly bonding session with their children on a Saturday. The project has been developed with the family contact team in the link centre rather than with health to date. It is noted as good practice development by HMI.

### *Prisoner Family Project*

Parkhead Citizens Advice Bureau has received funding from the Robertson Trust from 2011 initially for a year but which may be extended. The project is to support the families of prisoners and their boundary area is Glasgow. They support the rights and financial inclusion of families including accessing funds, benefits advice and debt management support. A common situation is that prisoners on short-term sentences can lose benefits in prison and families can require help to preserve their tenancies. It can also involve signposting families to agencies if there are relationship issues such as domestic violence, abuse, often linking with Women's Aid and Victim Support as families can often be the victim of the offender's crime. Everyone using the service is offered a rapid benefits check. The service promotes itself to families by materials and visits to the High Court and to HMP Barlinnie. They have capacity to provide a service to about 160 families a year and are not yet at full capacity. In addition Citizens Advice Bureau Parkhead have a worker in HMP Barlinnie one day a week to advise prisoners.

### *Families Outside*

This is a small organisation and the only national charity in Scotland working solely to support the families of people involved in the criminal justice system. They are partners in the Wise Group-led Routes Out Of Prison (ROOP) national project contributing direct family support and research on health and welfare needs of families. They are also linking with the Governor at HMP Barlinnie and various local faith and community groups to try and establish a visitor/family support centre.

### *Arts*

SPS family liaison officers have also made a series of positive developments, an example being forming a strong link with The Mitchell Library (Glasgow Life) who provide a set of activities for children of prisoners.

### ***Employment and training***

Jobcentre plus is based in both prisons to provide information and advice on different benefits, for example, what the individual is entitled to and what to do when released from custody. They can also assist with benefit applications e.g. Community Care Grants, Incapacity Benefit, Income Support and Job Seekers Allowance. They are also able to provide information on the Futures Job Fund, Flexible New Deal, Work-Trial, Full and Part-time employment or further training – and now the Work Programme, which prisoners are mandated onto upon release, Those looking for employment on release, the worker can run a job search for individuals and provide them with a benefits appointment following release.

Health care staff are not currently involved directly in employment and training activities. They have a role in HMP Greenock in assessing suitability for in-house work and training for health reasons. They can also signpost to employment at Keep Well or Well Woman clinics. Health care staff have a similar role in HMP Barlinnie whereby staff do not have a direct role in employability work but can refer through Keep Well, Well Man or at induction. They generally do not do a health assessment for suitability for work placements unless this is requested. Vocational training and work parties are managed by SPS staff. In Barlinnie for example this includes industrial cleaning, gardening, recycling, construction, forklift and kitchen work, metalwork and laundry. However, most have long waiting lists and there is a significant lack of vocational activity and purposeful activity with up to 70% prisoners locked in cells instead of engaging in work or education, especially remand and those waiting for long periods to transfer (HMI 2011).

Employment on release is receiving increased attention and is a core concern of public health/ health improvement given the links between employment, re-offending, income and health - a case study for Glasgow City is included here to illustrate promising approaches - Glasgow City Community Justice Authority and Glasgow Works lead an “Offender Employability Strategic Group” which brings together the various agencies providing employment and vocational training that is for, or can be accessed by, prisoners and ex-offenders returning to the community. Partners include Jobcentre Plus and HMP Barlinnie Prisoner Outcomes Manager. Glasgow is well served with a mix of generic and focused employability programmes. However there is need for greater co-ordination and to focus upon those serving shorter sentences who have little statutory support and high readmission rates. The group recommends early intervention schemes that meet the person in prison and at the gate. They also promote trusted/peer support models and holistic provision (for example employment can be sustained with settled housing, finances, addictions being addressed). They are strengthening links with employers to provide real jobs and Marriott are highlighted as a positive employer in Scotland. They also aim to enhance links between criminal justice, employability, health and colleges.

### ***Housing and homelessness***

In HMP Greenock, workers from Inverclyde and West Dunbartonshire housing departments attend the Link Centre on a weekly basis. Workers from Renfrewshire, Argyll and Bute, North Ayrshire and Aspire2gether (Ayrshire) also attend on request. These workers provide information and advice with regards to housing benefit, gaining and closing tenancies, supported accommodation and what to do if someone is homeless. If individuals are from an area not covered by the prison, Aspire2gether can assist by contacting the housing department in that area on the individual’s behalf and advising them of what the next steps are. In addition, Rough Sleepers Initiative (RSI) provides a service for male and female prisoners from the Renfrewshire

area who have in the past been sleeping rough, living temporarily in a hostel, or have nowhere to live following release. The service also includes trying to prevent homelessness by offering a support and resettlement service. An Outreach worker attends the Link Centre upon referral to undertake pre-liberation interviews with anyone referred to the service to prevent roofless/homelessness. In addition for female offenders, the 218 project has a residential section.

A number of agencies are based in HMP Barlinnie and operate out of the Link Centre. Glasgow City Council Homeless Casework Team works there each day, and Ayrshire Housing and Renfrewshire Homelessness Partnership and RSI provide a regular input through the centre. One example of this is that Barlinnie work with the Glasgow Elim Church Foodbank. They provide vouchers which can be exchanged for an emergency supply of food for the prisoner as an individual or as part of a family. The foodbank is run in accordance with the Trestle Trust and is based in Govanhill. Close links have developed with Specialist Homelessness Health Centre staff where many NFA released prisoners will be directed on release for a GP service or Methadone script. Prison healthcare now sits within this directorate with the intention of improving joint working.

### **Advocacy**

In HMP Greenock, the prison health care staff link with a local advocacy agency, Inverclyde Advocacy. In HMP Barlinnie Advocacy is provided by Circles Advocacy Services based at the Rowanbank clinic, Glasgow. However due to limited capacity they are only able to provide this service for those who are being cared for under the mental health act. This is a service which is required to be available for a much wider audience. Both prisons are in discussions with the Patient Services Manager, through the prisons operational management group, about shaping the commissioning of a board-wide advocacy service that can provide support for all patient groups including prisoners.

### **Health at Work**

The Health at Work team have been working in partnership with HMP Barlinnie and HMP Greenock prisons for over ten years. The prisons have worked to improve their standard of workplace health promotion over this period via the framework of a national award scheme – originally Scotland’s Health at Work (SHAW), latterly revamped to become Healthy Working Lives (HWL). The award focuses upon staff health, but they also involve prisoners who are their equivalent of the ‘local community’. Each prison has a health promotion committee for staff and prisoners.

HMP Greenock climbed from bronze SHAW in 2001 to silver, and to gold in 2008. But they have since let this slip. They have now reformed the development group and are working towards the bronze award by developing: an employee working group; a staff health needs assessment; a health improvement action plan and a portfolio of evidence to demonstrate four health campaigns and two health activities. These currently include fitness and training sessions. The group is run by the staff training officer and includes the Deputy Governor.

Barlinnie gained their bronze SHAW award in 1997, and went on to receive silver then gold in 2008. To achieve this they have completed the actions noted above to a high standard plus developed a detailed three year health improvement plan and strategy signed by the governor. The plan includes health checks, campaigns, group-work, surveys and therapies in the

workplace. The HAW team is organised by the staff training officer. They are looking to develop the award further for prisoners working in the prison.

The Health at Work team note that there is scope to further explore evidence based approaches to dealing with stressful workplaces, and the scope to link in with prisoner employability activities.

### **Throughcare**

A comprehensive report has been produced by an NHSGGC multi-agency group, covering the throughcare arrangements for healthcare for both HMP Barlinnie and for HMP Greenock. This focuses upon the arrangements and protocols for core health services and covers addictions, mental health, BBV, dentistry and specifies these clearly (see Health Throughcare Guidance, 2011). In addition, a wide range of partners provide throughcare services. A complete list of these is beyond the scope of this study but the approaches are illustrated through two examples:

#### *Routes Out of Prison (ROOP)*

ROOP is led by Wise Group in prisons across Scotland and delivered nationally including in HMP Barlinnie and HMP Greenock. This large scale initiative works out of HMP Greenock Link Centre three days a week. HMP Barlinnie is ROOP's biggest programme. The service is offered to all prisoners with sentences between four months and four years but not to high risk offenders. Support is provided by a team of 'Life Coaches' and employment advisors, many of whom have experience of offending and recovery, and know what it's like for people coming out of prison. ROOP helps prisoners to prepare for release and life coaches based in the prison begin to work with people four weeks prior to release. They use one-to-one meetings to identify and agree supports and how to link into other agencies such as, benefits, housing, employment, health and addictions. Community-based life coaches then come in and visit the person twice and are able to meet them at the gates if necessary upon liberation. One advantage of being a national service is that prisoners returning to the GGC region from prisons in other parts of the country can be met and supported (ROOP have access to national release data). An evaluation by Edinburgh University found high levels of engagement with the service from prisoners after release. Their Lottery funding has run out and they are funding this directly at the moment with the hope and expectation of future funding from the Scottish Government challenge fund.

A number of other organisations also provide throughcare support to prisoners. HOPE are a charity comprising mainly volunteers who provide a range of services which include visits, befriending, advocacy and advice to people in prison, but also emotional and practical support to people at and after the point of release. Faith In Through Care also support people leaving prison. They link with HMP Barlinnie's full time and part-time chaplains and other faith groups. Their volunteer-based service supports liberated prisoners to reintegrate into community life with a range of practical supports through their base in Possil.

#### *North West Glasgow throughcare pilot*

One challenge of throughcare is to ensure sufficient capacity, quality and co-ordination between throughcare agencies. An innovative development is being piloted between HMP Barlinnie and Glasgow City Criminal Justice Authority for prisoners returning to the North West of the city. This draws together a partnership of statutory and voluntary sector agencies and learning from this should inform approaches across all three prisons in GGC.

## SECTION 3: Epidemiological Needs Assessment



## SECTION 3: EPIDEMIOLOGICAL NEEDS ASSESSMENT

### Overview

This section is presented in three parts. The first describes the health of the prison population in NHSGGC. The second reviews the evidence on the effectiveness of interventions or services provided in the prison setting. A third section very briefly explores the needs of defined prisoner populations and identifies the importance of equalities sensitive practice in service planning, delivery and development.

### Methods

The epidemiological needs assessment focused on collecting information on a number of key areas. These were selected based on a rapid review of the literature and following discussions with staff in the Directorate of Public Health and Health Improvement, NHSGGC and the SPS (health care and custodial). These areas were thought to cover the major health and health-related issues affecting prisoners in NHSGGC. The areas identified included:

- Alcohol misuse
- Drug misuse
- Tobacco use
- Diet, physical activity and healthy weight
- Dental health
- Long term conditions
- Mental health problems
- Learning disability
- Literacy and numeracy
- Sexual health and blood borne viruses (BBV)
- Parenting
- Employability
- Re-offending

A 2007 National Prison HNA in Scotland identified weakness in the recording of health data electronically within SPS [1]. Although GPASS had been recently introduced, use of this was limited and quality assurance of data absent. Following an initial scoping exercise it was apparent that very limited local health information was readily available. The time frame of the HNA precluded a review of prisoners' paper-based medical records. A pragmatic approach was taken to obtaining local data where available and supplementing this with published data, acknowledging the limitations in terms of the completeness and accuracy of the former and the generalisability of the latter.

The GPASS system is not routinely used to record clinical information in HMP Barlinnie. HMP Greenock routinely use the GPASS system to record self-reported information collected during the health care assessment at reception. A 'snap shot' of these data for all prisoners incarcerated in HMP Greenock on the 22nd February 2012 was provided by health care staff. The daily prison population on that day was used as a denominator to provide prevalence estimates expressed as a percentage. Prevalence takes into account both new and existing cases in a

population and provides a measure of the burden of disease in a population at one point in time.

SPS prescribing data are collected through a pharmacy contract with Lloyds. Local data for HMP Barlinnie and HMP Greenock were available for a one month period (September 2011). Data were available at the level of the individual prisoner. In HMP Barlinnie 77% of prisoners were receiving one or more medication (mean 2.4 (SD 1.8) drugs, range 1 – 15). In HMP Greenock 52% of men and 100% of women were receiving one or more medication (mean 2.4 (1.9), range 1 – 9 and mean 2.7 (1.8), range 1 – 11) respectively. Crude estimates of the prevalence of prescribing of medications used in the treatment of selected medical conditions outline above were produced by dividing the number of prisoners prescribed key medications by the average daily prisoner population for each establishment. Each prisoner was counted only once for each medication, the daily dose of medication was not considered. This however should change with the introduction of the new Vision system which is intended to improve prescribing monitoring, and sharing of information across health teams in prisons and with mainstream services. Unless otherwise stated in the text the medications selected for each condition corresponded to the British National Formulary (BNF 62) [2]. For example drugs used in the treatment of depression corresponded to all the drugs listed in section '4.3 Anti-depressant drugs' in the BNF (see Appendix 1). It should be noted that some medications have multiple indications. It was not possible to determine from these data why the medication was prescribed. For example Gabapentin can be used in the treatment of epilepsy but also in the treatment of neuropathic pain. This should be considered in interpreting these data.

A rapid review of the literature on the health care needs of the prison population and models of delivering health care in the prison setting was carried out. Details of the literature search strategy used are outlined in Appendix 2. Where local data describing the health of the prison population was unavailable estimates were taken from the published literature with priority given to Scottish and UK-based studies.

Comparative data was taken from a number of sources including routinely collected data from primary care (Practice Team Information (PTI) [3] and Quality Outcomes Framework (QOF)) [4], data from national surveys (Scottish Health Surveys) [5] and in some cases the published literature.

## **The health of the prison population**

This section is presented under a series of sub-headings which correspond to the key areas described in the methods section.

### ***Alcohol misuse***

Alcohol misuse is a major public health problem in Scotland. There are established links between alcohol misuse and crime, in particular violent crime and anti-social behaviour [6]. In the 2011 Scottish Prisoners Survey, 55% of participants in HMP Barlinnie and 52% in HMP Greenock reported being drunk at the time of committing their offense [7]. In the general population the prevalence of alcohol misuse is greatest among young, socioeconomically deprived men, a group over-represented in the prison population [8]. Prisoners with alcohol problems often have complex needs including dual diagnoses (mental illness and substance misuse), physical health problems (which may be directly attributable to harmful levels of alcohol consumption), and problems with housing, employment and relationships [8].

A recent Prison HNA for Alcohol Problems compared the prevalence of alcohol problems in prisoners participating in the 2008 Scottish Prisoners Survey to that in the general population using data from the 2008 Scottish Health Survey [8]. At all ages, in both men and women, the prevalence of alcohol problems, as assessed by two or more positive responses on the CAGE questionnaire, was higher in the prison population than the general population. Overall, 44% of men and 48% of women in prison were found to have an alcohol problem compared to 13% of men and 9% of women in the general population. The prevalence of alcohol problems was greatest in the youngest and fell with advancing age. In men aged 16 – 24 years alcohol problems were two and a half times more common in the prison population than the general population; in women three and a half times more common. Interestingly alcohol problems were more common in female compared to male prisoners in all age groups. In prisoners of all ages and both sexes, alcohol problems were more common in remand than sentenced prisoners (although this finding may be partly explained by recall bias).

As part of the 2010 Prison HNA for alcohol problems a study screening all admissions to a male prison in Scotland over a 12 week period for alcohol problems using the AUDIT tool was carried out [8]. Alcohol problems (AUDIT score  $\geq 8$ ) were found in 73% of participants, among whom 36% had evidence of alcohol dependence (AUDIT score  $\geq 20$ ). Higher scores were found among prisoners on remand or a short sentence (<6 months) who were predominantly young and unemployed with low levels of educational attainment.

The point prevalence of self-reported alcohol dependence from GPASS in HMP Greenock in 2012 was 22% in men and 20% in women. This figure is significantly lower than that reported in the 2008 Scottish Prisoners Survey [7]. However it should be acknowledged that prisoners were responding to a yes/no question relating to their alcohol use at reception screening rather than an assessment for alcohol problems based on a validated screening tool. In 2007, Graham noted that alcohol problems were “under-detected, under-recorded and under-treated” by SPS [1]. The prevalence of alcohol dependence from GPASS in HMP Greenock in 2012 is significantly higher than that reported by Graham in 2007 (2%) suggesting that detection and recording may be improving over time [1].

In the 2011 Scottish Prisoners Survey, 49% of participants in HMP Barlinnie and 54% in HMP Greenock indicated that they would accept help if offered in prison for their alcohol problem [7]. However only a quarter of respondents in HMP Barlinnie and half in HMP Greenock stated that they had been given a chance to receive treatment during their sentence with just 13% and 36% respectively reporting that they had received treatment during their sentence. Improving the treatment options available for those with alcohol problems is currently being addressed as part of a new development funded by the Alcohol and Drug Partnership funding to target specific alcohol work with prisoners. This will be introduced in Autumn 2012.

### ***Drug misuse***

Problem drug use is associated with a number of health and social problems including psychiatric morbidity, alcohol dependence, sexual health problems and risk of BBV (related to high risk behaviours) and social exclusion (homelessness, low levels of employment and educational attainment, breakdown of significant relationships, criminality, experience of stigma) [9]. Two thirds of the 10,813 new clients accessing drug treatment services in Scotland in 2010/11 were unemployed, almost 1 in 8 were homeless, 1 in 5 funded their drug use by crime and 1 in 5 had previously been in prison [9]. Clients were predominantly young (median age 32 years), white (96%), male (72%), heroin users (62%). Problem drug users are also at

risk of premature all cause mortality, and drug related death; the rate of drug related death in Scotland in 2010 was 2.55 per 100,000 population. In 2010/11, 0.8% of all consultations with a general practitioner in primary care were drug related (PTI) [3]. A significant proportion of dependant drug users in Scotland receive opiate substitution treatment. In 2010/11 the rate of prescribing of oral methadone solution in Scotland was estimated to be 122 prescriptions per 1,000 population; 200 per 1,000 population for diazepam and 99 per 1,000 population of dihydrocodeine [9].

Mandatory drug testing is not carried out in Scottish prisons. However drug testing may be carried out to inform clinical or operational management (risk assessment or suspicion testing). A sample of prisoners contributes to prevalence testing of drug use at reception and liberation. In 2010/11 86% of prisoners sampled in HMP Barlinnie tested positive for all drugs at reception, 83% in HMP Greenock. The drugs detected were most commonly benzodiazepines (61% and 60% respectively), cannabis (45% and 49%), opiates (34% and 48%) and cocaine (9% and 2%). In total 4% of prisoners sampled in HMP Barlinnie and 7% in HMP Greenock tested positive for methadone. At liberation, 32% in HMP Barlinnie and 37% in HMP Greenock tested positive for all drugs at liberation, most commonly benzodiazepines.

Detailed information on drug use is collected in the Scottish Prisoners Survey. In 2011, 70% of respondent in HMP Barlinnie reported use of illegal drugs in the 12 months before being in prison, 44% said that they were under the influence of drugs at the time of their offence, 20% that they committed an offence to get money for drugs and 29% reported receiving treatment for problem drug use prior to incarceration [7]. Corresponding figures for HMP Greenock were 74%, 48%, 23% and 29% respectively. The majority of respondents in both prisons stated that their drug use had decreased since coming into prison. A fifth of respondents from both prisons reported illegal drug use in the last month whilst in prison. Although only 1% reported injecting drug use in the last month whilst in prison, two thirds of this group reported sharing drug injecting equipment. A high proportion reported that they would accept help if offered for their drug use whilst in prison (45% in HMP Barlinnie and 57% in HMP Greenock), although only 31% and 45% respectively said that they had been given a chance to receive treatment with fewer of this group still reporting that they had received treatment during their sentence (26% and 46% respectively). In total, 27% of respondents from HMP Barlinnie and 30% from HMP Greenock reported being prescribed methadone with the majority receiving a maintenance dose.

The point prevalence of self-reported drug dependence (all drugs) from GPASS in HMP Greenock in 2012 was 65% in men and 78% in women; intravenous drugs use 26% and 35% respectively. These figures are higher than those reported by Graham in 2007 [1] but comparable with those from the 2011 Scottish Prisoners Survey [7]. The point prevalence of prescribing of opiate substitution treatment in HMP Greenock in 2012 was 20% in men and 51% in women. Corresponding data for HMP Barlinnie were not available. However data from 2010 national drug misuse statistics provided a point prevalence of opiate substitution prescribing for HMP Barlinnie of 22% (n=308) [9].

### ***Tobacco Use***

The overall prevalence of smoking in the Scottish prison population was reported to be 76% in the 2011 Scottish Prisoners Survey; 80% in HMP Barlinnie and 86% in HMP Greenock.

The point prevalence of current smoking from GPASS in 2012 in HMP Greenock was 79% in men and 90% in women. In comparison, the prevalence of smoking in adults in the Scottish population was reported at 25% (26% men and 25% women) in the 2010 Scottish Health Survey [5] and 24% in the QOF in primary care [4].

Smoking is an integral part of prison life, with tobacco being used as a coping mechanism (to manage boredom and counter anxiety) and as currency [10]. In addition, the prevalence of smoking in prisoners is likely to be higher than in the general population because prisoners are socioeconomically disadvantaged with a high prevalence of mental illness and concurrent addictions [1]. However with limited availability of tobacco in prison and access to smoking cessation support, this setting may provide an unprecedented opportunity to engage an otherwise difficult to reach population [11]. The 2011 Scottish Prisoners Survey reported that of the current smokers in HMP Barlinnie and HMP Greenock, 60% and 42% said that they would like to quit, suggesting that there is a demand for smoking cessation support [7]. Whilst restrictions on smoking in prison were introduced in Scotland in 2006 this did not extend to a ban on a prisoners smoking in his/her cell which is considered a private space. In the 2011 Scottish Prisoner Survey, 77% of prisoners reported sharing their cell with a current smoker in HMP Barlinnie and 13% in HMP Greenock [7]. This may be a barrier to smoking cessation.

### ***Diet, physical activity and healthy weight***

Diet and physical activity are important determinants of both physical and mental health and well-being. It is estimated that 90% of the total burden of disease in developed countries is attributable to five modifiable risk factors: tobacco, alcohol, poor diet, lack of physical activity and overweight/obesity [12]. All five risk factors are common in socioeconomically deprived populations.

#### ***Diet***

The 2010 Scottish Health Survey reported that 20% of men and 23% of women in the Scottish population ate the recommended 5 pieces of fruit and vegetable per day [5]. Men and women aged 16 – 24 years old were the least likely to meet this recommendation (16% and 17% respectively). Comparable data are not available for the prison population. The SPS provides virtually all food for prisoners and is therefore uniquely placed to influence a prisoner's diet. Standardised recipes developed input from a dietician and following guidance from the Food Standards Agency (FSA) were introduced by SPS in 2010. Menus provide 5 portions of fruit and vegetables per day and 'healthy options' are identified in accordance with SPS standards. Despite this only 54% of respondents from HMP Barlinnie and 58% from HMP Greenock reported being content with menu choice in the 2011 Scottish Prisoner Survey [7]. Two thirds of prisoners in HMP Barlinnie and half in HMP Greenock were unhappy with the selection and price of food available to purchase in the prison. This is consistent with the findings from a recent evaluation of Keep Well in Prisons in which prisoners identified limited menu choices and described the 'healthy' menu options as unappetising [13]. Whilst it was acknowledged that prisoners could purchase fruit and vegetables it was noted that this was a barrier to healthy eating due to limited income and competing priorities (for example purchasing a phone card to contact family members). Data describing the uptake of the 'healthy' options on the menu was not available locally although anecdotally this is reported to be low. Elsewhere it has been reported that even when available the majority of prisoners choose not to adopt a healthy diet [14]. 'Unhealthy' options may be preferentially chosen by prisoners as a means of regaining

control and personal autonomy, as a tool to manage boredom or as a 'comfort' [13,14].

### *Physical Activity*

In the 2011 Scottish Prisoners Survey almost all prisoners in HMP Barlinnie (95%) and HMP Greenock (98%) reported that they could take daily exercise if they wished [7]. In total, 62% of prisoners in HMP Barlinnie and 61% in HMP Greenock reported undertaking 30 minutes or more of moderate physical activity on at least 5 days per week. This compares very favourably with data from the general population among whom 66% of men age 16 – 24 years met this recommendation, falling to 10% of men aged 75 years and over [5]. Corresponding values in women were 37% and 7%.

In the prison setting physical activity may be used as a tool to manage boredom or stress, gain confidence, regain control or as an opportunity to socialise [11]. Young male prisoners have been reported to take more exercise whilst in prison compared to outside because they are drug free. There may however be barriers to exercising in prison. Access to gym facilities may be restricted and there may be limited availability of gym equipment. Some prisoners may feel intimidated using the gym due to a 'dominant' prisoner. In addition prisoners with physical and/or mental health problems may have less access to the gym despite the fact that the arguably have more to gain from engaging in appropriate physical activity.

### *Healthy weight*

Overweight/obesity, an accumulation of body fat, arises when energy intake is greater than expenditure over a long period of time. Diet and physical activity are major determinants of overweight/obesity and interventions to modify either or both will have a direct impact on overweight/obesity. The 2010 Scottish Health Survey reported that 68% of men and 62% of women in the Scottish population were overweight or obese (BMI >25 kg/m<sup>2</sup>); 28% of men and women were obese (BMI >30 kg/m<sup>2</sup>) [5]. Obesity increased with age, peaking in middle age (55 - 64 years). For example the prevalence of obesity in men aged 16 – 24 years was 18% compared to 37% in those aged 55 – 64 years. Corresponding values in women were 18% and 39%.

The literature on healthy weight focuses almost exclusively on overweight/obesity. However in the prison population, a multiply disadvantaged group with complex health and social care problems, underweight and malnourishment may also be an issue.

### **Dental health**

Few studies on the dental health of prisoners have been published. Data on dental health is not systematically recorded in prison health care records; data on drug prescribing for dentistry are not available. The 2002 Scottish Prisons Dental Survey which studied 5.4% of men and 41.5% of women incarcerated in Scottish prisons provides the most comprehensive overview of the dental health of the prison population (Table 1) [15]. The report described very high levels of unmet normative need for dental care in the prison population. Prisoners had significantly poorer oral health than the general population, with fewer standing teeth and more decayed teeth but fewer filled teeth (comparison with 1998 UK National Adult Dental Health Survey). Almost all prisoners reported brushing their teeth at least daily. Whilst a high proportion of prisoners reported attending the dentist within the preceding year, this was most commonly reactive as a result of having experienced dental problems; prisoners were significantly less likely to attend the dentist for routine check ups than the general population. At least half of prisoners

surveyed reported that they did not like visiting the dentist with many reporting anxiety about visiting the dentist.

**Table 1. Data from the Scottish Dental Survey, 2002 [15]**

	<b>Adult men (n=300)</b>	<b>Adult women (n=102)</b>
<b>No natural teeth</b>	7.3%	3.6%
<b>Upper and lower dentures</b>	88%	88%
<b>Percentage with decayed teeth</b>	60%	73%
<b>Percentage with severe decay</b>	28%	42%
<b>Mean number of decayed teeth</b>	2.5	3.8
<b>Mean number of filled teeth</b>	4.9	3.9
<b>Percentage with unmet dental need</b>	76%	89%
<b>Endodontics</b>	28%	42%
<b>Filling</b>	29%	28%
<b>Filling repair (no decay)</b>	2%	2%
<b>Trauma repair</b>	1%	1%
<b>Oral hygiene instruction (bleeding gums)</b>	16%	16%
<b>Brushes teeth at least daily</b>	92%	95%
<b>Attended dentist within last year†</b>	65%	71%
<b>Attended due to trouble with teeth</b>	58%	56%
<b>Don't like visiting dentist</b>	52%	60%
<b>Nervous about visiting dentist</b>	38%	57%

\*Examination carried out on 275 men and 106 women; † includes pre and post incarceration

A number of factors are likely to contribute to poor oral health in the prison population. Prisoners have complex health and social problems, within which oral health may not be viewed as a priority [16]. These health problems, for example mental illness, may contribute to neglect and an inability to self-care. Prisoners are predominantly from disadvantaged backgrounds. In the prison population the prevalence of smoking is high, addictions (drug and alcohol) are common and nutrition is poor [1]. Prisoners are less likely to engage with preventative health care and are less likely to attend a dentist unless they are experiencing dental pain [16]. In the community dental pain may be masked by substance use; whilst incarcerated, pain relief is less accessible and prisoners may have greater awareness of dental pain increasing demand for dental services.

In the 2011 Scottish Prisoner Survey 22% of prisoners surveyed in HMP Barlinnie and 25% in HMP Greenock reported attending the dentist during their current sentence [7]. However, 56% of prisoners in HMP Barlinnie and 64% in HMP Greenock reported waiting >10 days to be seen. In the Scottish Prisons Dental Survey 77% of men and 62% of women reported difficulty in getting an appointment to see a dentist [15]. In addition to excessive waiting times for treatment, participants in the survey reported a focus on emergency treatment rather than prevention. Prisoners report inadequate access to toothbrushes, toothpaste and oral hygiene aids of an acceptable standard. These findings were echoed in more recent Oral

HNA conducted in HMP Kilmarnock in 2007 [17]. However all prisoners are issued with good quality toothbrushes and paste on admission and are expected to buy from funds thereafter. There are two annual oral health events each year. It should be noted that only prisoners who have sentences longer than six months are entitled to review appointments as these would be assumed to be picked up by their own dentists. For those under 6 months only emergency treatments are offered and funded within Prison Health Care budgets. Moving towards a more inclusive and preventative oral health strategy for this group will require additional resources and has been identified as a future service need.

### **Long term conditions**

The prison population consists predominantly of young, white males [1]. However prisoners often experience multiple deprivation, engage in high risk behaviours and have limited access to preventative health care [18]. Therefore, despite their young age, prisoners are at increased risk of chronic disease. In addition, there has been a significant increase in the proportion of older male prisoners in Scotland over the last decade, who may suffer from age-related chronic disease such as stroke or coronary heart disease (CHD) [1]. In the 2011 Scottish Prisoners Survey 29% of participants in HMP Barlinnie and 28% in HMP Greenock reported having one or more long-term illness [7]. In the section that follows four indicator long term conditions are reviewed: asthma, diabetes, epilepsy, and CHD.

#### *Asthma*

The 2007 Prison HNA reported the prevalence of asthma to be 10% in HMP Barlinnie and 9% in HMP Greenock based on data extracted from GPASS [1]. Prescribing rates of drugs used to treat asthma (salbutamol and salmeterol) were lower than would be expected suggesting under treatment. The point prevalence of asthma from GPASS in 2012 in HMP Greenock was significantly higher at 20% in men and 24% in women. The point prevalence of prescribing of long and short acting bronchodilators used in the treatment of asthma in September 2011 was 9% in HMP Barlinnie. Corresponding values for men and women in HMP Greenock were 4% and 14% respectively. In both men and women this is significantly lower than the estimated prevalence of asthma from GPASS which is based on self-reporting at admission. This is consistent with the earlier findings reported by Graham in 2007 [7]. Asthma is an intermittent condition and prisoners reporting a history of asthma may not have been symptomatic for some time (in some cases since childhood) which could contribute to apparent under-prescribing.

Data from PTI and the QOF estimate the prevalence of asthma to be 4.6% (4.0% in men and 5.2% in women) and 5.9% respectively for the whole Scottish population [3,4]. The prevalence of asthma is known to vary according to age and sex. In the 2010 Scottish Health Survey 20% of men and 23% of women aged 16 – 24 years old reported having doctor-diagnosed asthma; 13% of men and 18% of women and women aged 25 – 34 years [5]. Although asthma prevalence estimates from GPASS in HMP Greenock in 2012 were significantly higher than those reported by Graham in 2007, these are broadly consistent with age and sex specific self-reported asthma prevalence estimates from the Scottish Health Survey [1,5].

#### *Diabetes*

The 2007 Prison HNA reported the overall prevalence of diabetes as 2% in HMP Barlinnie and HMP Greenock based on data extracted from GPASS (1% Type I diabetes; 1% Type II diabetes) [1]. These figures are identical to point prevalence estimates from GPASS in HMP Greenock

in 2012. The point prevalence of prescribing of anti-diabetic drugs used in the treatment of Type II diabetes in September 2011 was 1% in HMP Barlinnie and prescribing of insulin (used predominantly in Type I but also Type II diabetes) was <0.1%. Corresponding values for HMP Greenock were 1% and 1% in men, and 2% and 2% in women respectively.

Data from PTI and the QOF estimate the prevalence of diabetes to be 4.4% (4.7% in men and 3.9% in women) and 4.3% respectively for the whole Scottish population [3,4]. The overall prevalence estimated from the 2010 Scottish Diabetes Survey was similar at 4.6% [19]. Type II diabetes accounts for around 90% of all cases of diabetes and is uncommon below the age of 40 years old. It is likely that the higher prevalence of diabetes in the Scottish population as a whole compared to the prison population is as a result of a higher prevalence of Type II diabetes. Unfortunately however, national data describing the prevalence of diabetes are not reported according to type.

**CHD**

The 2007 Prison HNA reported the prevalence of coronary heart disease (CHD) to be 2% in both HMP Barlinnie and HMP Greenock based on data extracted from GPASS [1]. A point prevalence of CHD from GPASS in 2012 in HMP Greenock was not available. The point prevalence of prescribing of selected drugs used in the treatment of coronary heart disease in HMP Barlinnie and HMP Greenock in September 2011 is shown in Table 2. Of note the prevalence of prescribing of beta-blockers, in particular propranolol, was high. However this is indicted for use in the treatment of anxiety with physical symptoms and migraine.

Data from PTI and the QOF estimate the prevalence of CHD to be 2.8% (3.4% in men and 2.7% in women) and 4.4% respectively for the whole Scottish population [3,4]. CHD is age-related and the prison population are young. However this may be offset by a higher prevalence of other cardiac risk factors such socioeconomic deprivation, smoking, poor diet and sedentary lifestyle in the prison population. Graham noted that having adjusted for the age and sex structure of the prison population prevalence estimates of CHD in the prison population were comparable to those in the general population [1]. Whilst CHD may be under-detected in the prison population prescribing data suggested those diagnosed were being appropriately treated.

**Table 2. Point prevalence (%) of prescribing of medications used in coronary heart disease in HMP Barlinnie and HMP Greenock**

	HMP Barlinnie	HMP Greenock		
		All	Men	Women
Anti-platelet and anti-coagulants	2%	2%	2%	4%
Nitrates, calcium channel blockers and other anti-anginals	2%	1%	1%	0
Alpha and Beta Blockers	5%	7%	5%	14%
ACE-inhibitors and ARB*	2%	<1%	<1%	0
Anti-arrhythmics	<1%	0	0	0
Diuretics	<1%	0	0	0
Lipid-regulating drugs	4%	5%	5%	6%

\*Angiotensin converting enzyme inhibitors and angiotensin II receptor antagonists

## *Epilepsy*

A 2007 systematic review of the prevalence of chronic epilepsy in prisoners identified 7 studies examining 2,297 prisoners published between 1966 and 1998 [20]. The review reported an overall prevalence based on clinical interviews of 0.7% (0.5 – 1.1). Three UK based studies carried out between 1987 and 1994 reporting prevalence rates of 0.4 – 1.0% were included in the review. Prevalence estimates in prisoners were similar to those in men aged 25 - 34 years in the general population in England. These data are however almost 20 years old.

The 2007 National Prison HNA reported the prevalence of epilepsy to be 3% in both HMP Barlinnie and HMP Greenock based on data extracted from GPASS; this was supported by high rates of prescribing of sodium valproate, a drug used in the treatment of epilepsy [1]. In contrast, the point prevalence of epilepsy from GPASS in 2012 in HMP Greenock was twice that reported in 2007, at 6% in men and 4% in women. The point prevalence of prescribing of medication used in the treatment of epilepsy was 4% in HMP Barlinnie. Several of the drugs used in the treatment of epilepsy are also indicated for the treatment of other conditions, for example gabapentin is often used to treat neuropathic pain and carbamazepine may be used to treat bi-polar disorder. Limiting analysis to the prescribing of sodium valproate produced a prevalence estimate of 2%. The point prevalence of prescribing of medication used in the treatment of epilepsy was in HMP Greenock was 2% in men and 8% in women; limiting this to the prescribing of sodium valproate only produced prevalence estimates of 0.4% in men and 2% in women. These figures are much lower than the self-reported prevalence from HMP Greenock. Interpreting these data is challenging. Among prisoners with epilepsy traumatic developmental background, multiple deprivation, learning disability, concurrent mental health and substance misuse problems are common [20]. These findings are also common in the prison population therefore it might be anticipated that the prevalence of epilepsy in the prison population would be higher than in the general population. Indeed, data from PTI and the QOF estimate the prevalence of epilepsy to be 0.5% (both men and women) and 0.7% respectively in the Scottish population [3,4]. A recent audit of health care provision for adult male prisoners with suspect epilepsy reported that only 60% of prisoners that were thought to have epilepsy had the diagnosis confirmed following review of medical records (including prescribed medication) and clinical review by a nurse specialist [21]. It may be that some prisoners reporting a diagnosis of epilepsy have experienced falls, fits or blackouts without a formal diagnosis being made. This could, in part, explain the apparent discrepancy between self-reported prevalence estimates and prescribing. In the recent HMP Kilmarnock HNA it was noted that 40% of prisoners with a history of epilepsy (based on case note review) also had a history of alcohol abuse suggesting that some may have experienced alcohol related seizures [22]. However it should also be considered that in the prison population there is evidence that epilepsy is under-treated [21]. The true prevalence of epilepsy in the prison population in NHS GGC is therefore likely to lie somewhere between these estimates.

## ***Mental health problems***

People with mental health problems are among the most vulnerable, disadvantaged and socially excluded in society [23]. Mental health is directly related to quality of life, health related behaviours (substance misuse, smoking, diet, physical activity), physical health and mortality. Co-morbidity of mental health and substance misuse problems is common. People with mental health problems often have difficulties accessing health and social care services and experience stigma. The prevalence of mental health problems in the general population is known to vary according to age, sex, ethnicity and socioeconomic status.

Mental health problems occur on a spectrum of severity, from mild to severe. A minority of people with mental health problems will have severe and enduring mental illness defined as:

*“an enduring pattern of inner experience and behaviours that deviates markedly from the expectation of the individual’s culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time and leads to distress or impairment” [24].*

This includes psychotic disorders (schizophrenia and other delusional states), bi-polar affective disorder (manic depression) and personality disorder.

In the 2010 Scottish Health Survey 13% of men and 17% of women in the adult general population had evidence of a possible psychiatric disorder (based on GHQ score >4) [5]. Data from PTI estimate the prevalence of anxiety in the men and women to be 2.6% and 5.4% respectively and the prevalence of depression to be 1.7% and 3.4% respectively [3]. Data from the QOF estimate the prevalence of long term mental illness to be 0.8% [4]. The population prevalence of admission to hospital under a mental health specialty was estimated at 0.4% in 2010/11 [25].

Many prisoners have mental health problems prior to incarceration; for some, mental health problems, especially anxiety and depression, may be a reactive response to imprisonment [26,27]. In all, the prison environment (over-crowding, lack of privacy, solitude, social isolation, lack of purposeful activity, limited access to health care services, loss of autonomy, changes to prescribed medication) may exacerbate mental health problems [26-28].

The most comprehensive and robust data on the prevalence of psychiatric disorder in the prison population in the UK are from a 1998 Office of National Statistics study of 1,250 men and 187 women aged 16 – 64 years imprisoned in England and Wales (Table 3) [29]. The prevalence of mental disorder in the prison population was high; over 90% of prisoners had one or more psychiatric disorder (psychosis, neurosis, personality disorder, drug or alcohol dependence). Dual diagnoses were extremely common; 80% of prisoners had two or more psychiatric disorders (most commonly a major psychiatric illness and substance misuse) and 12 – 15% of prisoners had 4 or 5 co-existing disorders. Dual diagnoses were most common in remand prisoners. Around 15% of the prison population had severe and enduring mental illness. In total, 30% of prisoners had a history of intentional self harm. Neurotic disorders were more common in women. Overall, psychiatric disorders were higher among remand than sentenced prisoners. These data are now dated. However a 2009 systematic review of the prevalence of psychiatric disorder in prisoners did not identify any additional contemporary UK based data [30].

Scottish data are available from a 1995 study of 389 remand prisoners (18 women) which reported the prevalence of major psychiatric disorder to be 2%, severe depression 14%, depression 40%, anxiety 34% and disturbed sleep 40% [31]. Over half of those surveyed had had contact with psychiatric services prior to incarceration. More recently, in ‘Out of Sight: Severe and Enduring Mental Health Problems in Scotland’s Prisons’ the prevalence of severe and enduring mental health problems in Scottish prisons was estimated to be 4.5% [27].

**Table 3. Prevalence of psychiatric disorder and self-harm in prisoners and the general population in England and Wales (Singleton, 1998)**

Psychiatric disorder	Prevalence (%)				General Population (2001)
	Male prisoner		Female prisoners		
	Remand	Sentence	Remand	Sentence	
Any schizophrenic/delusional disorder <sup>b</sup>	9	6	13	13	0.5
Affective psychosis <sup>b</sup>	2	1	2	2	-
Neurotic disorders	59	40	76	63	13
Personality disorder <sup>b</sup>	78	64	50	50	5
Alcohol dependence <sup>a</sup>	30	30	20	19	12
Drug dependence	43	34	52	36	5
Suicide attempt in the last year	15	7	27	16	-
Self-harm (not suicide attempt) in the current prison term	5	7	9	10	-

<sup>a</sup> Measured as AUDIT = 30. <sup>b</sup> Prevalence of schizophrenic or delusional disorders, affective psychosis and personality disorder was made from a combined sentenced and remand female sample.

The 2007 National Prison HNA reported that 8% of prisoners in HMP Barlinnie and 20% in HMP Greenock had a history of psychiatric disorder [1]. The prevalence of schizophrenia in HMP Barlinnie was 1%, bi-polar disorder 1%, anxiety/depression 0% and a history of intentional self harm (including suicide attempts) 8%. Corresponding figures for HMP Greenock were 20%, 1%, 0%, 0% and 9%. Prescribing rates of medications for depression and psychosis were high, suggested that prevalence figures from GPASS significantly under-estimated the true prevalence of mental health problems in both prisons.

In total 12% of respondents in HMP Barlinnie reported seeing a member of the mental health team during their sentence, 21% in HMP Greenock [7]. However 20% in HMP Barlinnie and 7% in HMP Greenock reported waiting over 10 days to see a member of the mental health team. The point prevalence of previous psychiatric disorder from GPASS in 2012 in HMP Greenock was much higher, 40% in men and 59% in women. Unfortunately a breakdown of psychiatric diagnoses was not available. Similarly the point prevalence of previous intentional self-harm (previous suicide attempt) was also much higher than that reported in the 2007 national HNA, 23% (14%) of men and 55% (24%) of women in HMP Greenock in 2012.

The point prevalence of prescribing of medications used in the treatment of depression in HMP Barlinnie in September 2011 was 28%. The point prevalence of prescribing of anti-psychotic medications was 3%. No prisoners were prescribed anxiolytics. In HMP Greenock the point prevalence of prescribing of medications used in the treatment of depression was 9% in men and 61% in women. The point prevalence of prescribing of anti-psychotic medications was 3% in men and 2% in women and prescribing of anxiolytics, 2% in men and 8% in women.

In 2010 there were 6 suicides in HMP Barlinnie and 35 episodes of intentional self harm. Corresponding figures for HMP Greenock were 1 completed suicide, 1 attempted suicide and

4 incidents of deliberate self-harm. It is important to stress that whilst the prevalence of the mental health problems in the prison population is disproportionately high, the prevalence of offenders in the general psychiatric population is low [30]. In addition, most mentally disordered prisoners are not suffering from mental health problems that would require detention and treatment under the Mental Health (Care and Treatment) (Scotland) 2003 Act [27].

Anecdotal reports from prison staff suggest that there is an increasing prevalence of 'organic' psychiatric disorders in the prisons population; psychiatric disorders attributable to an underlying medical condition for example dementia, syndromes related to traumatic brain injury and Korsakoff's psychosis related to alcohol misuse. Whilst there are no data locally or from the published literature to support this, the trend would be consistent with population level trends and the changing demographic profile of the prison population and their risk taking behaviours. Prisoners with such disorders often have specific needs and may require specialist treatment and care from mental health teams.

### **Learning disability**

Learning disability is defined as,

*"a significantly reduced ability to understand complex information or learn new skills (impaired intelligence or 'IQ') with reduced ability to cope independently (impaired social functioning) which started before adulthood (18 years of age), and has a lasting effect." [32]*

Although an IQ <70 is commonly used to define learning disability, without impaired social function this is not considered sufficient to make a diagnosis. Learning disability is distinct from learning difficulty which is a problem processing certain types of information that does not affect IQ, for example dyslexia.

People with learning disability are a vulnerable group; many are from multiply disadvantaged backgrounds, have concurrent problems with substance misuse, mental and physical illness, experience difficulties communicating and may be victimised [33]. Incarceration is an opportunity to assess and meet the needs of this marginalised population [26,33]. However it is widely acknowledge that learning disability is under-diagnosed in the prison population [26,33].

A 2008 systematic review of the prevalence of intellectual disability (IQ of <70) in the prison population identified 10 studies published between 1998 and 2004 examining almost 12,000 inmates from Australia, Dubai, New Zealand, the UK and USA [34]. The overall prevalence of intellectual disability in the prison population was reported to be between 0.5 – 2.4%. However, there was significant heterogeneity in sampling methods, participation rates and assessment of intellectual disability between studies. The reported prevalence from UK based studies varied from 0.0 to 2.4% (Table 4).

**Table 4. Prevalence of intellectual disability from UK based studies [34]**

Author	Prison Population	Assessment	Diagnosis	Prevalence (95%CI)
Gunn, 1990 [35]	2052 male sentenced	Psychiatrist	Clinical	05. (0.3 – 1.1)
Maden, 1996 [36]	651 male remand	Psychiatrist	Clinical	0.8 (0.3 – 2.3)
Maden 1994 [37]	258 female remand	Psychiatrist	Clinical	2.4 (0.7 – 7.6)
Murphy, 1995 [38]	157 male remand	Psychologist	WAIS-R	0 (0 – 4.1)

\*Wechsler Adult Intellectual Scale - revised

A 1998 screening study using the Quick Test administered by lay interviewers reported the prevalence of intellectual disability (Quick <40) to be 11% in male and female remand prisoners, 5% in sentenced male prisoners and 9% in sentenced female prisoners in England and Wales [29].

In 2004, just 17 prisoners across all 16 prisons in Scotland had been “formally assessed, diagnosed or were strongly believed to have” a learning disability and 2 autistic spectrum disorder, providing a combined prevalence estimate of 0.3% [33]. This is not significantly different from the prevalence of learning disability in the whole population in Scotland which is estimated to be 0.5%[4].

### **Literacy and numeracy**

Low levels of literacy and numeracy are strongly associated with socioeconomic disadvantage [39]. Unsurprisingly then an association has been shown between low levels of literacy and numeracy and poor physical and mental health and well-being, risk-taking behaviours such as smoking and problem alcohol use, homelessness, unemployment and offending [39]. These issues are often inter-generational with a strong association between parental engagement and parental levels of education and poor literacy and numeracy in subsequent generations [39].

A comprehensive overview of literacy and numeracy in Scotland comes from a 2004 analysis of Scottish men and women aged 34 years that participated in the 1970s British Birth Cohort Study [39]. In total 4% of the study population reported difficulties reading, 18% writing and 7% with numbers. On formal testing 39% of men and 36% of women had literacy skills that would impact their opportunities for employment and adversely affect their life circumstances; 71% numeracy skills that would impact their opportunities for employment and adversely affect their life circumstances. These data suggest that problems with literacy and numeracy may go unrecognised. Indeed of the men and women from this study with an identified literacy or numeracy problem, only 1% and 2% respectively had been on a course to improve their literacy and numeracy skills. A more recent 2009 survey of literacy in men and women of working age in Scotland reported that 73% of the Scottish population had a level of literacy recognised internationally as appropriate in a contemporary society [40]. In contrast, an estimated 60% of prisoners have literacy and numeracy skills below this level [41]. Despite this, in the 2011 Scottish Prisoners Survey just 14% of participants from HMP Barlinnie and 9% from HMP Greenock reported problems with reading; 11% and 16% respectively reported problems

with writing [7]. Overall, 19% of the prison population reported problems with numbers (this data was not available according to prison). In total 24% of prisoners said that they would like help with writing, 19% reading and 17% with numbers. In both the prison population and the general population literacy and numeracy problems are largely unrecognised. As such demand for services is unlikely to reflect need.

## **Sexual health and BBV**

### *Sexual Health*

Sexual health in Scotland is poor; the most disadvantaged and vulnerable are at greatest risk of both sexual health problems and BBV [42]. High risk sexual behaviour is linked to drug and alcohol misuse which are prevalent in the prison population [1,42]. There are very few published studies describing the sexual health of the prison population and no robust local data were available. In the 2007 National Prison HNA, Graham reported that the prevalence of chlamydia (as a proxy measure of sexual health) was much higher in the prison population than in the general population: 12 – 15% in young male prisoners, compared to 0.8% in men aged under 25 years in the general population [1]. In the general population the overall trends has been toward an increase in the diagnosis of sexually transmitted infections (genital chlamydia, gonorrhoea, genital herpes and genital warts) with young men and men who have sex (MSM) with men being at greatest risk. These trends may however reflect changes in access to services and testing rather than a true increase in infections and should be interpreted with caution. A 2003 study of male prisoners in England describe prisoners as having more lifetime sexual partners, higher risk partners (sex workers and/or intravenous drug users), and being more likely to have unprotected sex than the general population [43]. These findings were echoed in a more recent small qualitative study of 40 male young offenders in Scotland [44]. There are fewer data still describing sexual activity during incarceration and no Scottish data. A study from England reported that sex activity whilst in prison was uncommon; the vast majority of MSM in prison have experienced same sex activity outside prison and coercion, whilst reported, was infrequent [45].

Many prisoners have been the victims or perpetrators of gender-based violence, or have been in harmful or coercive relationships [18]. Over half of women in prison have been the victims of domestic violence (a quarter of men) and one in three have been the victim of sexual abuse (one in ten men) [18]. In the 2011 Scottish Prisoners survey 12% of respondents had been convicted of an offence involving violence toward their partner, however of this group 83% said that they would not wish to access interventions or support to help them address issues related to violence at home during the imprisonment [7].

### *BBV*

In prisoners BBV are most commonly transmitted through injecting drug use; less commonly through sexual intercourse. Those affected by BBV may be asymptomatic but infectious presenting a significant public health problem. Over 90% of Hepatitis C Virus (HCV) infection in Scotland is acquired through injecting drug use [42,46]. Approximately 90% of intravenous drug users have been imprisoned at some point during their injecting careers. An estimated 1% of the population in Scotland is chronically infected with HCV, although many are undiagnosed. This compares to an estimated prevalence of 16 - 20% in the prison population. Local data from HMP Greenock in 2012 provide a point prevalence estimate of chronic HCV infection of 8% in men and 20% in women. Data from the 2007 National Prison HNA estimated the prevalence of chronic HCV infection to be 8% in HMP Barlinnie and 4% in HMP Greenock [1].

These data may under-estimate the true prevalence of HCV due to under-diagnosis and changes in prevalence estimates over time may reflect increasing access to testing rather than a true increase in prevalence.

In the 2011 Scottish Prisoners Survey a high proportion of prisoners, over 80%, knew about HCV with 42% reporting that they had been tested prior to imprisonment [7]. Targeted screening for HCV among prisoners considered to be at high risk was recommended in the Hepatitis C Action Plan for Scotland [46]. Over 80% of prisoners reported that if offered they would accept an HCV test, although only 36% in HMP Barlinnie and 44% in HMP Greenock reported being tested in prison [7]. Only 41% of prisoners in HMP Barlinnie and 58% in HMP Greenock reported being provided with information about HCV whilst in prison. There is evidence of transmission of HCV in the prison setting [47]. This is consistent with previously described findings from the Scottish Prisoners Survey which indicate that injecting drug use, although uncommon, occurs in the prison setting and prisoners share drug injecting equipment [7]. Transmission may also occur through other routes, for example tattooing and body piercing. In the 2011 Scottish Prisoners Survey 13% of those with tattoos reported having these done in prison and 9% of those with body piercings reported having these done in prison [7].

The prevalence of HIV is reported to be low in the prison population in Scotland. In 2007, 14 prisoners were known to be HIV positive in Scotland providing a point prevalence of 0.2% (0.05% in HMP Barlinnie and 0% in HMP Greenock) [1]. Again these figures should be interpreted with caution due to possible under-diagnosis. In 2012 data from GPASS indicate that there were no HIV positive prisoners in HMP Greenock. In the general population the prevalence of HIV varies according to risk group [42]. The prevalence is highest in heterosexual men and women from high prevalence areas such as the sub-Saharan Africa (7.3%), followed by MSM (3 – 4%) intravenous drug users (0.6%) and heterosexual men and women originating in the UK (0.1%).

The prevalence of chronic Hepatitis B Virus (HBV) is thought to be low (approximately 0.3%) in the general population in Scotland; precise estimates are unavailable [42]. The majority of cases of HBV are reported in immigrants from high prevalence areas such as Asia and Africa. In the 2007 National Prison HNA the prevalence of chronic HBV infection was noted to be 1% in HMP Barlinnie and under 1% in HMP Greenock [1]. A national Hepatitis B vaccination programme operates in all prisons in Scotland.

### **Parenting**

In the 2011 Scottish Prisoners Survey, 48% of those participating reported having one or more dependant child [7]. A third said that they were caring for their child(ren) before being incarcerated and 42% that they would be caring for their child(ren) on liberation. 'Equally Well' recommended that the SPS should "offer family and relationship support from the date of entry to prison" [48]. One fifth of respondents in the 2011 Scottish Prisoners Survey said that they had received help with family issues whilst in prison, most commonly from a family contact officer (38%) or a personal officer (35%) [7]. The majority, 93%, of prisoners reported having contact with someone outside the prison during their sentence; 63% had received a visit during their imprisonment with a third receiving weekly visits. A third of prisoner with dependant children had received a visit from their child(ren) during their period of imprisonment. Three quarters of respondents indicated that they were content with the timing and quality of visits; 70% were content with the facilities available for children during visits.

### ***Employability***

A significant number, up to 80%, of prisoners, are unemployed at the time of sentencing [49]. In 2007/09 only 8.5% of Scottish prisoners gained some form of employment post liberation; just 2.4% of those using Jobcentre Plus gained employment post liberation [49]. This figure is likely to be lower in the current economic climate. In addition to complex health and social care issues that may be a barrier to employment (homelessness, substance misuse, low levels of educational attainment), ex-offenders may experience stigma in the work place [49].

### ***Re-offending***

Most offenders are re-offenders. Of the respondents in the 2011 Scottish Prisoners Survey 78% had previously been on remand, 70% had previously served a prison sentence and 44% had previously served a sentence in the community (these groups were not mutually exclusive) [7].

### ***Evidence of effectiveness***

There is a genuine paucity of studies that examine the effectiveness of interventions in the prison setting [50]. In some areas services that are effective in the community may translate to the prison setting; in others, due to the unique needs of the prison population and operational and structural issues this is not the case. Standards for delivering health care in the prison setting have been produced by SPS [51]. In addition, a number of clinical care standards, guidelines and targets relating to the delivery of patient care in the community are relevant. These will be reviewed in the comparative needs assessment.

### ***Models of delivering health care***

A 2002 rapid review of the literature on models of delivering health care in prisons did not identify a preferred model of care but highlighted a number of key features of contemporary health care in the prison setting [52]. These include health promotion as a unifying concept, health screening on admission to prison, partnership working between the prison service, health care and other service providers (for example third sector), education of prison staff about the health care needs of prisoners and the development of models of care that move beyond the prison setting into the community. Whilst there is broad agreement that these core features should be present in a prison health care system, the evidence base in this area is limited.

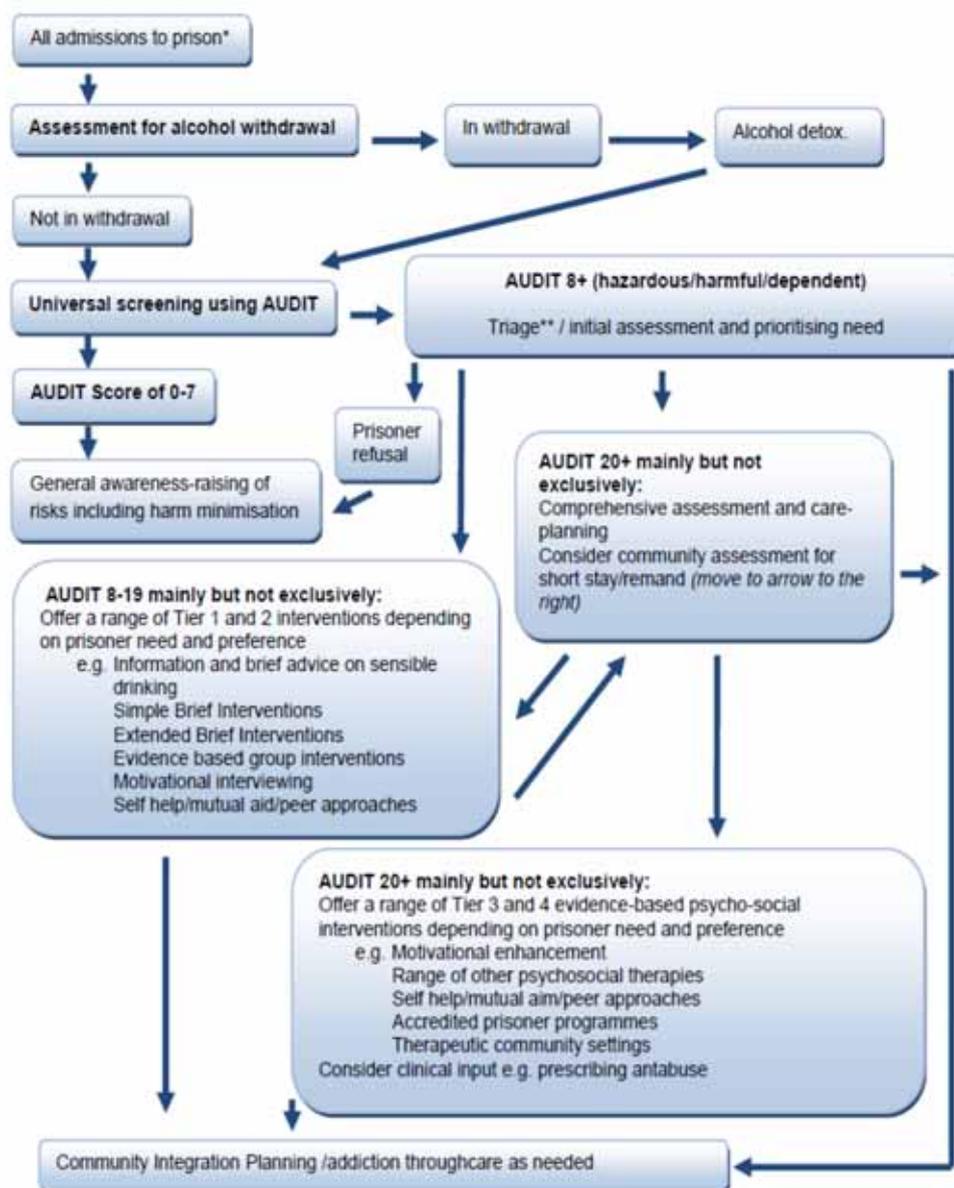
### ***Alcohol misuse***

There is both a need and demand for alcohol interventions in the prison setting. However in Scotland formal alcohol screening is not undertaken at the time of admission to prison. In addition there is significant variation in the availability and delivery of alcohol interventions with gaps in service provision (particularly for remand prisoners) and to date activity in this area has been largely focused on offence-related programmes [8].

There is a lack of evidence on the effectiveness of alcohol interventions in the prison setting. A rapid review of the literature on the effectiveness of alcohol interventions noted that most studies described outcomes of complex interventions in diverse populations with many failing to distinguish between alcohol and drug problems [8]. Few studies were from the UK. The most robust evidence was in relation to the delivery of alcohol brief interventions (ABI). Although evidence in the prison setting was limited, evidence from community based studies can inform service design and delivery in prison. An integrated alcohol care pathway for use in Scottish prisons has been developed based on the identification of alcohol problems using a validated

tool (AUDIT) (Figure 2) [8]. Local delivery of tiered interventions that are person centred, available in a range of formats (one to one, group, peer support) and tailored to need were recommended in the recent HNA for alcohol problems in Scottish prisons. The importance of better links with community services and external providers to improve throughcare was highlighted. The new developments which are being planned for improved alcohol interventions and specific targeting of remand prisoners are intended to start to address these issues.

Figure 2. Integrated alcohol care pathway for Scottish prisoners [8]



\* At any point in a prisoner's stay if they/others think they have an alcohol problem they can enter the start of the process.  
 \*\* Triage is a critical part of the decision making process and includes determining the presence of other co-occurring social and health problems and the prioritisation of those that most need interventions in the context of high demand.

## ***Drug misuse***

In 2010, the SPS published a strategy for the management of substance misuse in prison [54]. Strategic aims included reducing the supply of illegal drugs and associated paraphernalia in prisons and supporting problem drug users by providing a range of treatment and rehabilitation services integrated with other prison services that meet individual needs and are delivered by a competent, confident, valued and responsive workforce, with a focus on the recovery. This builds on recommendations outlined in the 2008 national strategy on drug misuse in Scotland, 'The Road to Recovery' [55].

A 2010 report reviewed the evidence in relation to drug treatment and recovery [56]. This included a critical analysis of the evidence relating to the recommendations in 'The Road to Recovery'. The report acknowledged a lack of contemporary UK based studies. Some evidence for recovery in offenders with drug problems was identified. It was noted that treatment has a key role in recovery. Structured treatment, both abstinence and maintenance, reduced substance use, re-offending, and improve physical and mental health in the prison population. Whilst there was strong evidence for methadone maintenance it was recommended that treatment should be linked with psychosocial support to provide a 'wraparound' individualized package of evidence based care delivered by trained and supported staff. Although there was a strong evidence base from clinical trials to support psychosocial interventions, there was little evidence of effectiveness in routine clinical practice. Within the prison setting there was evidence for 'therapeutic communities' in the delivery of structured treatment programmes. The need for continuity of care and ongoing aftercare on liberation was highlighted. An integrated approach to addressing concurrent health and social care issues such as housing, education, training and employability, which are barriers to recovery was considered important in aiding problem drug users to build 'recovery capital'. Ongoing peer support and family engagement with treatment were considered important. Networks such as Narcotics Anonymous have been shown to be effective in reducing substance use, in part through social networking. Limited evidence that improving parenting skills may aid retention in treatment was identified. It was noted that gender specific interventions addressing issues such as post traumatic stress related to physical, emotional or sexual abuse may be appropriate in a Scottish context. The 2010 'Equally Well' review recommended a review of the Throughcare Addictions Service (TAS) for offenders with addictions [57].

In November 2010 the Scottish Government supported the roll out of a national 'take home' naloxone programme [58]. Naloxone and training on its use is supplied to all prisoners vulnerable to overdose prior to liberation, as a measure to reduce drug related deaths in the community post liberation. The long term effectiveness of this programme has not been established and uptake is said to be lower than anticipated.

## ***Tobacco use***

The Scottish Prison Service Health Care Standard 10 states that prisons with a tobacco dependency should be offered brief advice by suitably trained staff and those expressing a wish to stop smoking should be offered access to services [51]. A guide to smoking cessation in Scotland 2010 identified the need for timely and tailored smoking cessation interventions in the prison setting [59]. A smoking cessation initiative in HMP Bowhouse, Kilmarnock was identified as an example of good practice [60]. The intervention provided smoking cessation support to both staff and prisoners adopting the 'Smokey Joe' model of delivering rolling

group session and NRT (patch, lozenge and microtab) following an initial trial of the 'Maudsley Model' for smoking cessation which was found to be inflexible in the prison setting. Quit rates of 70% in prisoners and 56% in staff at 4 weeks were reported. The project identified a need for tailored information for prisoners, a flexible model for smoking cessation, the appointment of a dedicated smoking cessation adviser, integration of smoking cessation into other activities (for example addictions support). The report noted that in order to build capacity prison staff should be trained in brief interventions and relapse prevention rather than the delivery of smoking cessation sessions. Finally the report noted the importance of working with prisoners' families and ensuring continuity of support on liberation and/or transfer.

### ***Diet, physical activity and healthy weight***

Whilst barriers to adopting a healthy diet in the prison setting have been identified there is no sound evidence pointing to how these can be overcome [11,13,14]. Within the prison setting a number of factors have been shown to increase participation in physical activity [61]. These include offering a range of activities (sport and active living) at times that do not clash with work or training/education commitments, ensuring that facilities are adequate and availability meets demand and linking the promotion of physical activity with other initiatives. For example a gardening project might encompass the promotion of physical activity, education and training, diet and life skills such as cooking. Specific prisoner groups, for example prisoners with mental and/or physical illness may have limited access to facilities such as the gym [11]. In such groups protected time may encourage participation and exercise referral schemes to assess risk and 'prescribe' exercise, particularly for those with physical health problems, such as those available in the community, may be of value.

Diet and physical activity are the major determinants of healthy weight and interventions to modify either or both will have a direct impact on healthy weight. There is very little evidence around effective weight management intervention in overweight/obese individuals in the prison setting. Consideration should be given to whether multi-component weight management interventions delivered in the community are transferable to the prison setting given prisoners have limited choice in relation to diet and physical activity.

### ***Dental health***

Very little is known about the effectiveness of interventions to improve oral health in the prison population. However it is likely that effective interventions in the general population can be translated to the prison population. Examples include brushing twice daily with a high fluoride toothpaste, improving nutrition (reducing consumption of sugary food and drinks) and smoking cessation. 'Reforming Prison Dental Services in England: A guide to good practice published' in 2005 provided examples of good practice including undertaking oral HNA, oral health promotion (integrated with other health promotion activities, for example smoking cessation), improving access to treatment, improving quality of care [62]. The 2007 Oral HNA in Kilmarnock reported a high level of engagement of prisoners with oral health promotion events when available; over half of prisoners attending an oral health promotion event reported a change in oral health behaviours, predominantly an increase in the frequency of tooth brushing [17]. A 2012 report evaluating a 3 year Oral Health Improvement Project in HMP Shotts reported a change in knowledge and attitudes toward oral health in prisoners participating in the project [63]. Although prisoners that took part in the project reported fewer oral health problems than those that did not, there was no objective evidence to support

this and no significant change in oral health related behaviours such as smoking, diet and oral hygiene in either group. The intervention, employing a 'whole prison approach', included the provision of written information on oral health at induction, the development of a range of educational materials around oral health and access to prison dental services, oral health promotion days that included visiting family members, the addition of sweeteners to tea packs as an alternative to sugar, integrating oral health promotion in smoking cessation and staff training and education.

Many of the recommendations from the 2002 Scottish Prisons Dental Survey have not been implemented [15]. For example, assessing oral health at induction, expansion of dental services to meet normative need, increasing the delivery of preventative dental care and the development of oral health promotion activity in prisons. It is likely that some of these issues will be identified in 'A Dental Priorities Group Strategy' due to be published in early 2012, which will include preventive care and the prevention of oral disease in the prison population. In addition a working group has been convened to develop a National Dental Service Framework for the delivery of dental services in the prison setting. The timeframe for delivering this framework is to be announced.

### ***Long term conditions***

Prisoners are more likely to engage with health care services in prison than they are in the community [64]. Therefore prison provides a unique opportunity to assess and manage long term conditions in a high risk and difficult to reach group. There is a lack of contemporary evidence describing the effectiveness of interventions aimed at managing long term conditions in the prison population. However in this area evidence of effective interventions in the community may translate to the prison population. For example, Keep Well checks are now carried out in all prisons in Scotland with an aim of identifying and supporting prisoners aged 35 years and over who are at risk of long term conditions [13].

All prisoners with a long term condition should be managed according to national care standards and clinical guidelines. There are however challenges in managing long term conditions in the prison setting which should be acknowledged. A 2005 survey of the provision of health care in prisons in relation to chronic disease management in England and Wales noted that a lack of IT infrastructure prevented the maintenance of electronic disease registers and the timely transfer of information from and to primary care which negatively impacted on quality of care [53]. Many prisons reported difficulties in recruiting and retaining general nursing staff to carry out annual reviews and the training of staff to run specialist clinics was an issue. In some prisons a lack of written clinical guidelines for disease management were apparent, in others an absence of appropriate educational materials for prisoners was noted. This echoes the findings of a 2007 audit of the treatment and care received by prisoners with suspect epilepsy which noted deficiencies both the investigation and management (including access to specialist advice) of epilepsy in prisoners [21]. Anti-epileptic drugs, which have a currency in the prison setting, were infrequently used and rarely titrated according to clinical need, resultantly epilepsy was often poorly controlled. Over half of prisoners with epilepsy had not had their medication reviewed in the preceding 12 months and almost two thirds required a change in their treatment and there was little evidence that prisoners were provided with information about their condition or treatment.

The management of medications in the prison setting is particular challenge. As noted some

medications have a currency in prison and prisoners receiving these may be vulnerable to bullying and/or extortion. In England national guidance recommends that prison pharmacy services should be patient focused, based on need and promote self-care, integrated into the provision of health care and provide the same range and quality of services in the community [65]. Each prison should have a written policy and risk assessment criteria to determine on an individual basis which medications should not be held by a prisoner, however the default position should be in-possession medication for all prisoners.

Self-care and self-management are guiding principles in the management of long term conditions. However in the prison setting access to informal and semi-formal care, (for example advice from family and friends, self-help, the internet) is extremely limited [50]. Restrictions may be placed on diet, physical activity, access to medication (over the counter and prescribed) and access to health care professionals (custodial staff are often responsible for ensuring that a prisoner attends an appointment) [66]. In addition, given the limited resource and high need in the prison setting health care staff spend much of their time responding reactively, triaging and crisis intervention and may therefore have little time to spend on chronic disease management [50].

### ***Mental Health Problems***

The majority of mental health problems, both in the community and in prison, are mild to moderate. It is estimated that over 80% of mental health problems in the general population and 55% in the prison population can be effectively managed by primary care without input from specialist services [26]. However serious gaps in the provision of primary mental health care in the prison setting have been described [26]. Forensic psychiatry in-reach services were originally intended to target prisoners with severe and enduring mental illness. There is evidence from England that in-reach teams are engaging with only a fraction of prisoners with severe and enduring mental illness, spend very little time delivering face to face interventions and are increasingly, because of inadequate triage, lack of staff and expertise in primary mental health teams, managing prisoners without severe and enduring mental health problems [26].

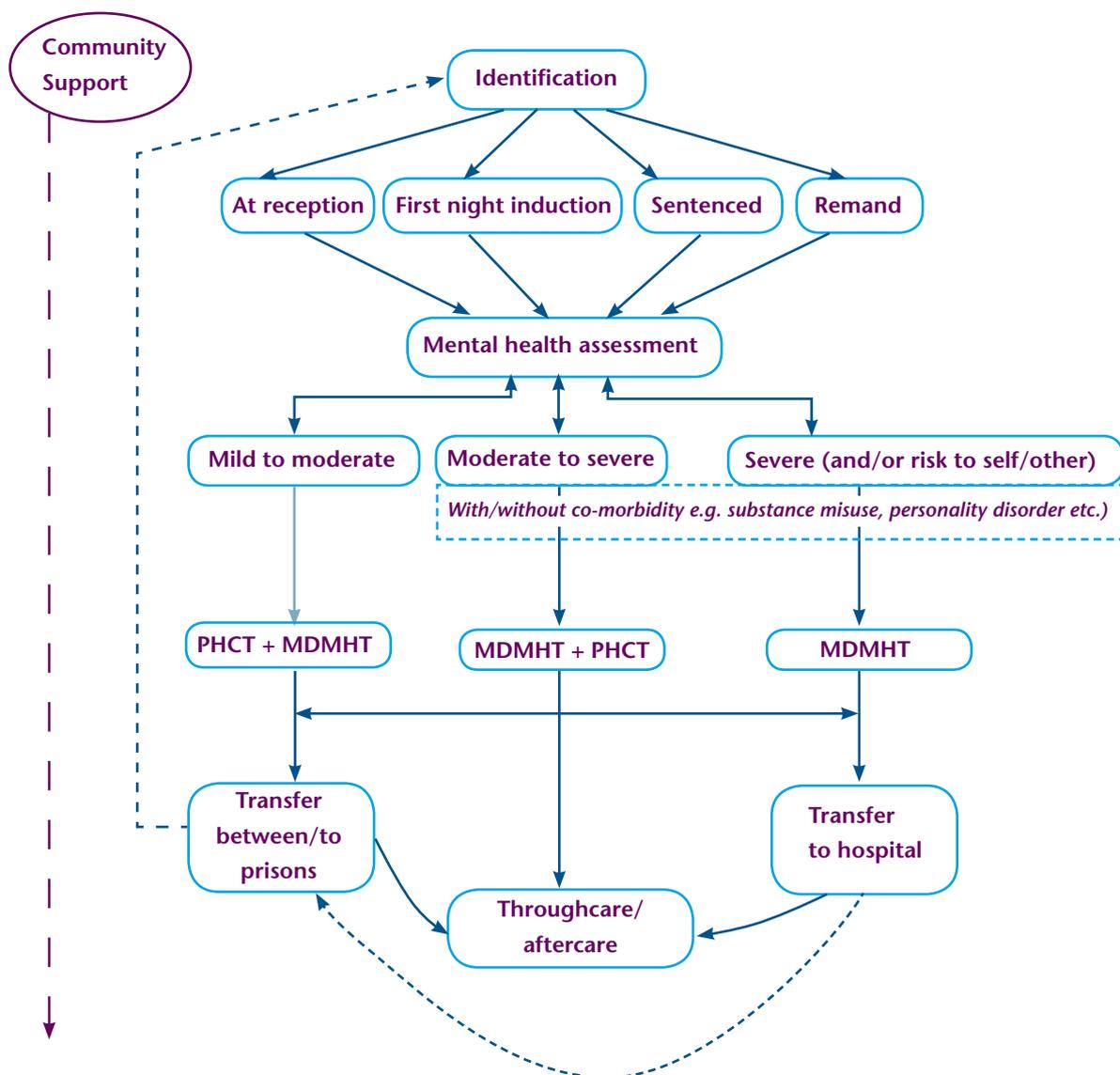
A 2009 systematic review examined service delivery and organisation of mental health services in prisons [30]. The review identified an absence of studies assessing the effectiveness of current policies, guidelines or models of mental health care provision in the UK prison context. A number of common cross-cutting themes emerged, the most significant of which was inadequate staff training and a lack of evidence around *“what works for whom”*.

The 2009 Bradley report identified a number of deficiencies in the provision of mental health services in the prison setting [26]. These included a lack of psychological therapies, a lack of services for prisoners with dual diagnoses, limited availability of services for prisoners with personality disorder, poor adoption of the Care Programme Approach (CPA) as a result of difficulties communicating with external agencies leading to poor throughcare and inadequate provision of mental health awareness training for prison staff.

In Scotland a pathway for prisoners experiencing emotional distress or mental health problems has been developed by ScotPHO in association with the SPS to identify and respond to the needs of prisoners (Figure 3) [67]. The delivery of mental health services in Scottish prisons has been in accordance with the SPS health care standards (standard 3 relates specifically to

mental health services) [51]. These standards stipulate that each prison should have a multi-disciplinary mental health team (MDMHT) that meets fortnightly. Referrals to the mental health team should be seen within 72 hours (emergencies within 24 hours) and on-going cases should be reviewed fortnightly. Arrangements should be in place for the provision of psychiatric services and a range of therapeutic interventions should be available for prisoners. Referral to community agencies should be made prior to liberation in those with ongoing mental health problems. The 2007 National Prison HNA reported that compliance with this standard was 77% overall [1]. Specific deficiencies highlighted were long waiting times from referral to the mental health team to review, a lack of advocacy services, a lack of therapeutic interventions, and poor throughcare for prisoners with ongoing mental health problems. An audit of the MDMHT case load suggested that service provision was not matching need in the prison setting .

Figure 3. Pathway for prisoners experiencing emotional distress of mental health problems



In 2011 the Mental Welfare Commission reviewed mental health services in prisons in Scotland [68]. The commission interviewed 101 prisoners from across Scotland exploring service users experience of prison mental health services. The report identified that access to mental health nurses and psychiatrists was very good, with many prisoners receiving better care than in the community. However a lack of trained mental health staff, lack of therapeutic interventions and difficulties accessing medication were highlighted.

Prisoners with mental health problems report that activities, such as reading, painting, going to the gym, and receiving support from others leads to an improvement in their mental health problems and there is emerging literature to support this view [29]. A 1998 WHO publication identified regular physical activity, regular education, work or training and skills acquisition, access to the arts, cognitive/behavioural approaches, spiritual reflection (including yoga and meditation), anti-bullying strategies and peer and family support as effective in improving prisoners mental well-being [29].

The identification of prisoners that intend to self harm or attempt suicide is challenging. A 2008 systematic review of the effectiveness of interventions to prevent suicide and suicidal ideation identified only one US based study in the prison population which demonstrated that the provision of intermediate care (on par with psychiatric admission) was effective in the prison setting [69]. The review concluded by recommending the evaluation of the interventions of proven benefit in the community in the prison setting citing the example of peer support in prisons. Act 2 Care, SPS's suicide risk management strategy has been implemented in prisons across Scotland [70]. There is some evidence that this has been effective in reducing suicide in prisons; the number of prisoners committing suicide has fallen since the introduction of the policy whilst nationally the rate of suicide has increased. It should however be noted that the number of suicides in prison is small and therefore interpreting trends over time is challenging. There has not been a recent evaluation of Act 2 Care in practice; anecdotally staff report that the process is inflexible and may in fact deter prisoners with suicidal ideation from asking for help.

### ***Learning disability***

Myers identified three triggers to the identification of an individual with learning disability in prison (1) background information provided prior to or at admission (2) information collected at admission or routine assessment following admission (3) information collected at an assessment because a problem has arisen termed 'responsive identification' [33]. However she noted that background information was often not available at admission and prisoners may be reluctant to self-report learning disability, if indeed they are aware of it. Routine screening for learning disability was not undertaken at admission and whilst there were opportunities to identify the need for a formal assessment, for example when a problem arises, through psychological assessment as part of an offence related programme or during an educational assessment, often information was not shared across boundaries. The report concluded by suggesting that there was an urgent need for accurate and valid estimates of the prevalence of learning disability in a sample of the prison population. Whilst it was acknowledged that there were risks in recommending routine screening for learning disability in prison, the use of simple tools that could be applied by non-specialists to identify individuals requiring further assessment was suggested.

A 2011 Department of Health publication 'Positive Practice Positive Outcomes' highlighted examples of good practice in this area which included the use of a screening tool to identify prisoners with learning disability (the Learning Disability Screening Questionnaire) and the development of local care pathways to support the prisoners identified, with the involvement of health, education, local authorities and third sector organisations [71]. The value of having a trained learning disability nurse and/or in-reach from community mental health and learning disability services was noted, as was the importance of joined up working between the police, courts, prisons and probation services.

### ***Literacy and numeracy***

In 'Offender Learning: Options for Improvement' a commitment to identifying and addressing the literacy and numeracy needs of people in the criminal justice system was made with a recommendation to target young offenders, women and individuals with specific learning difficulties such as dyslexia [49]. A screening and levelling tool, 'the Big Plus Challenge' has been developed to identify prisoners serving a sentence of 6 months or more with low levels of literacy and numeracy.

Effective interventions to improve literacy and numeracy in the prison setting may have wider gains in terms of improving personal, social and economic disadvantage in prisoners [49]. A comprehensive 2011 'Review of Research and Evaluation on Improving Adult Literacy and Numeracy Skills' reported that motivation to engage with literacy and numeracy programmes in the prison population whilst low, could be increased by 'concealing' learning, for example embedding learning in vocational or work programmes, or linking attendance to privileges [72]. Framing learning in a suitable context and linking this to motivation, for example developing literacy skills so that a prisoner can write to his/her family, is also effective. Family based literacy programmes are effective and benefit both prisoners and their children. Prison based adult literacy programmes are effective when community based links are formed.

### ***Sexual health and BBV***

#### ***Sexual health***

In 2009 a review of the literature in relation to the sexual health and well-being of vulnerable groups in Scotland a paucity of UK based research in the prison population was noted [73]. No UK based evaluations of interventions to improve sexual health in the prison setting were found. A small qualitative study of 40 male young offenders in a Scottish prison reported that the sex education provided in prisons was viewed favourably by young men when compared to the sex education that they had received in school [44]. The importance of peer influence in determining attitudes and beliefs to sexual behaviour was highlighted. The report concluded by stating that prison offered a unique opportunity to develop and deliver effective interventions around sex and relationship education to improve the long term sexual health of men.

The SPS currently provide condoms, lubricants and dental dams to prisoners. Uptake is reported by staff to be poor and there may be barriers to prisoners accessing these. Women are provided with contraception and family planning advice, as required, pre-liberation. Women in prison are offered cervical screening at intervals as in the community. There is some evidence that uptake of cervical screening is higher in women prisoners with longer sentences suggesting that imprisonment may be a valuable opportunity to engage this difficult to reach group in sexual health promotion [74].

The 2011 'Sexual Health and Blood-borne Virus Framework 2011-2015' stated that the SPS should work in partnership with NHS boards to ensure

*"the sexual health and wellbeing needs of prisoners, and their partners where possible, are addressed, including the provision of contraception, which may include LARC [long acting reversible contraception] and sex and relationships education is prioritized in the first instance to young offenders and women" [42].*

The Framework recommended the provision of multi-agency and multi-disciplinary sexual health services based on local epidemiology and need, with all sexual health and BBV consultations beginning with a risk assessment that includes effective method(s) of contraception, testing for sexually transmitted infections and examine issues such as gender based violence and substance misuse [42]. The importance of providing advice, education and support to women in prison who are or may be the victims of coercive or harmful relationships was highlighted, and sign-posting to appropriate services on liberation, recommended.

### **BBV**

A number of effective interventions for the prevention, diagnosis and treatment of BBV are in place in prisons in Scotland [42,46]. A vaccination is available for HBV, but not HIV or HCV. An effective Scotland wide immunisation policy is in place to offer all prisoners super accelerated HBV (and Hepatitis A) vaccine at the time of admission and ensure that the course is completed. Local point prevalence data from HMP Greenock in 2012 indicated that 58% of all men and 90% of all women had received the super-accelerated course of HAV/HBV vaccine. As previously noted condoms, lubricants and dental dams are available for prisoners to prevent sexual transmission of BBV, although uptake is poor. In 2008, harm reduction packs containing drug injecting paraphernalia, but not needles and syringes, were introduced in Scottish prisons. This initiative has not been formally evaluated although uptake is said to be disappointing. There is little evidence that the provision of drug injecting paraphernalia, other than needles and syringes, reduces the transmission of BBV in injecting drug users. A pilot needle exchange service within the prison setting was proposed in Phase II of the Hepatitis C Action Plan for Scotland [42,46]. This has not been taken forward. A recent review of harm reduction interventions in opiate users found insufficient evidence to support or discount the effectiveness of needle exchange services at reducing HCV or HIV transmission or reducing injecting risk behaviours in the prison setting [75]. Some prisons offer a needle replacement scheme providing known injecting drug users with sterile injecting equipment at liberation [76]. The provision of opiate substitution therapy is recommended as part of a range of interventions to support intravenous drug users [42,46]. Tattooing in prisons was the subject of a 2009 HNA [77]. The evidence relating to interventions to reduce the risk of BBV transmission associated with tattooing was limited. However the study recommended that prisoners should be educated about the risks of BBV associated with tattooing in prison, sterilisation materials and/or facilities should be made available to prisoners providing tattoos to other prisoners and consideration should be given to piloting a tattoo studio. A large proportion of those living with BBV are undiagnosed and there is good evidence that screening high risk individuals, namely those that report ever injecting drugs, at admission to prison for HCV is cost effective [42,46]. Treatment of HCV and HIV are cost-effective; prisoners should have access to specialist treatment and care [42]. There is a wider acknowledgement that the prevention, diagnosis, treatment and care of prisoners with, or at risk of, BBV should be delivered holistically to meet

the needs of the prisoner and include appropriate after care and support in the community on liberation.

### **Parenting**

Ongoing family contact reduces re-offending and in prisoners with substance misuse issues builds 'recovery capital' [55]. This is particularly important for women. It is now widely accepted that children of prisoners may be caught in a cycle of inter-generational social and economic deprivation which can in turn lead to criminality [9,10]. In addition to creating opportunities for prisoners to have ongoing meaningful contact with their families there is a growing interest in the long-term benefits that parenting interventions delivered in the prison setting could deliver. The evidence base in this area is limited. Whilst a number of parenting programmes have been implemented in the UK prison setting, few have been robustly evaluated and the long term impact of these interventions on prisoners and their children has yet to be established. A recent review of parenting interventions in male young offenders noted that the evidence base whilst weak suggested that prisoners valued parenting programmes and that knowledge about and attitudes toward parenting may improve as a result of participation [78]. Interventions that were most effective in a community setting had concrete objectives, used teaching methods tailored to need, used group and individual work, had opportunities for practice and were delivered by experienced practitioners. These core elements could be transferred to the prison setting. The authors went on to recommend that interventions in the prison setting should prioritise prisoners that are already parents, should acknowledge that parenting from prison is significantly different from parenting outside and that ongoing support in the community on liberation is required, should be tailored to need (for example learning support needs) and should be holistic and acknowledge the wider psychosocial issues many prisoners face.

### **Employability**

Increasing employability is considered a key outcome in reducing re-offending [18,79]. A number of recommendations to improve employability among prisoners were made in 'Offender Learning: Opportunities for Improvement' [49]. These included developing employability assessment tools to match opportunities to prior experience, interests and motivation, assisting prisoners to develop a set of core skills (reliability, work ethic, an ability to work as a team) in addition to vocational skills (painting, gardening) and basic life skills (emotional intelligence, managing money, paying bills, cooking), offering community based work placement and ensuring that prisoners are able to organise benefits and housing pre-liberation and can be fast tracked onto appropriate training or educational programmes on liberation.

Whilst there is very limited hard evidence that interventions in that prison setting improve the prospects of employment following liberation, a number of areas of 'good practice' in relation to offender employability have been identified [80]. These include:

- Early intervention in prison with relationships being established prior to liberation and extending beyond liberation, for example 'Routes out of prison'.
- Building trusted relationships and peer support.
- Holistic work across agencies recognising the complex health and social care needs of prisoners, for example addictions services and housing.
- Involving employers and linking to 'real' employment opportunities, this may also tackle prejudice and stigma experienced by ex-offenders trying to re-integrate

into the work place.

- Shared spaces for professional development within and between agencies, for example the Changing Lanes pilot in HMP Barlinnie which involved SPS staff delivering a guidance programme and working in tandem with the local regeneration authorities.
- Improving literacy and numeracy skills with continuity of opportunities post liberation.
- Providing opportunities in further education.

### **Re-offending**

In 2006 the Scottish Government published a national strategy for the management of offenders, the aim of which was to reduce re-offending [79]. Nine offender outcomes were highlighted:

1. Improved physical and mental well-being.
2. Reduced or stabilised substance misuse.
3. Improved literacy skills.
4. Improved employability.
5. Maintained or improved relationships with families, peers and the community.
6. The ability to access and sustain community support (including financial advice and education).
7. The ability to access and sustain suitable accommodation.
8. The ability to live independently if desired.
9. Improvements in the attitudes or behaviour which lead to offending and greater acceptance of responsibility in managing their own behaviour and understanding of the impact of their offending on victims and on their own families.

The strategy highlighted the need for effective multi-agency working to achieve these outcomes. A 2011 literature review identified the following interventions in the criminal justice system as being effectiveness at reducing re-offending [81]:

- Community sentences are more effective in reducing reoffending in the long term than short-term prison sentences.
- Respectful, participatory and flexible contact with a supervisor can trigger positive change in offenders.
- The effectiveness of prison-based interventions is enhanced when aftercare support is provided following release.
- Holistic interventions that target offenders' multiple needs and involve work with offenders' families and the wider community (e.g. employers) are more likely to be effective in reducing reoffending.
- Interventions for women offenders are more likely to be successful if they target financial and family needs.
- Cognitive Behaviour Therapy (CBT) programmes have proven effective in reducing reoffending.

- Stable and quality employment protects against reoffending especially if accompanied with other forms of support.
- Drug treatment programmes have, on average, a positive impact on reoffending.

### **Defined prisoner populations**

It is increasingly recognised that the burden of ill-health in the prison population is not evenly distributed and varies according to age (young and old), sex and ethnicity [82]. For example female prisoners are more likely than male prisoners to have been the victim of physical, emotional or sexual abuse, to experience poor mental health and well-being (including intentional self-harm) and have concurrent substance misuse issues [83]. Barlinnie has a disproportionately high percentage of prisoners with addiction and mental health problems compared to other prisons, reflecting the wider health disparities and challenges in GG&C region. Defined prisoner groups may also have more specific needs. For example, older prisoners are more likely to have physical health problems resulting in disability and dependency which presents a specific challenge to health care providers in the prison setting. Whilst the absolute number of prisoners in these groups is small, in Scotland the greatest relative increase in the prison population over the last decade has been in women and older prisoners [1]. The equalities agenda should ensure that all prisoners receive equivalent care, according to need. It is important then that interventions and services in the prison setting are delivered and developed to be sensitive to health and social care needs of individual prisoners in order to realise equivalence of outcomes and reduce health inequalities [84].

### **Conclusions**

Prisoners are a multiply deprived, marginalised group with complex health and social care needs which are far greater than those in the general population. Mental health problems, substance misuse (alcohol and drugs) and poor oral health are highly prevalent in the prison population. A period of imprisonment is an opportunity to engage this difficult to reach population and intervene to improve physical and mental health and well-being and address the wider social determinants of health. In addition to benefiting the individual, improving physical and mental health and well-being in the prison population, may benefit families, communities and society as a whole.

There is a paucity of evidence describing effective interventions in the prison setting. This is due to a combination of a lack of research in key areas, a lack of robust data collection focusing on outcomes and impacts rather than inputs and outputs, and the inherent difficulties of evaluating the type of complex interventions which are required to address the complex health and social care problems experienced by the prison population. However an absence of evidence of effectiveness is not evidence of ineffectiveness. Some interventions delivered in the community setting may translate successfully to the prison setting; others may require development or enhancement. A number of common principles have emerged in the successful delivery of interventions aimed at the prison population. These include providing context specific interventions that meet the needs of individual prisoners in a flexible, holistic way (multi-agency working that addresses multiple issues), where possible with family or peer involvement and continuity of care on liberation. To achieve this, community-based health and social care provision must also respond adequately.

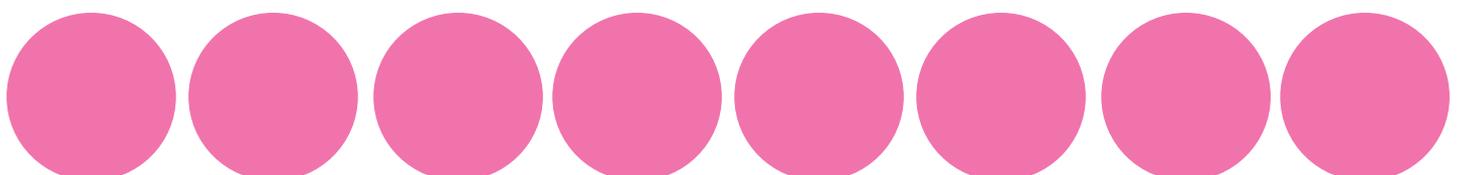
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## SECTION 4: Corporate Needs Assessment



## SECTION 4: CORPORATE NEEDS ASSESSMENT

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### Overview

To complement the epidemiological needs assessment a series of interviews and focus groups was carried out to gather the views of those who work in prison and prisoners. This section is presented in two parts: firstly, the views of those who work in the prison and secondly the views of prisoners.

### Methods

Visits to the prison to conduct interviews/focus groups were organised by a member of staff in each prison. Efforts were made to represent a wide range of views. Interviewees were selected by the organising member of staff. The selection of individual interviewees was opportunistic although consideration was given to the role of staff invited to interview and the type of prisoners included in each focus group. Prisoners taking part were selected on the basis that they were available at the time and their attendance would not disrupt prison routine. Prisoner focus groups were divided into groups: women (convicted); remand prisoners (male); regular convicted (male), and those nearing completion of a life sentence (male) (See Appendix 3 for details). The final sample reflects limitations on selection imposed by prison routines and the need to maintain security at all times. In total five focus groups were conducted and included 27 prisoners; one to one semi-structured interviews were carried out with a further 7 prisoners (3 sentenced and 4 remand). A total of forty six staff interviews included 30 from HMP Barlinnie and 16 from HMP Greenock were carried out. A list of interviewees can be found in Appendix 3.

Staff interviews were semi-structured. They conformed to a schedule used in previous prison HNAs which were adapted for use locally by the research team. These included an opportunity to expand on issues or introduce new topics for discussion (Appendix 4) [1,2]. Interviews with individual prisoners were based on the same schedule but this was modified in practice to reflect the prisoner experience. Again, the focus group schedule was adapted for local use from one previously used in prison HNA (Appendix 5) [1,2]. This was advantageous for both focus groups and interviews because the material had already been successfully piloted. Discussions focused on prisoner health needs, the experience of delivering and using services within prison, including barriers to use, and gaps in service provision. Opportunity was also allowed to talk about wider health improvement issues.

### Analysis

Prison regulations required that no recording equipment was used. All responses were summarised and noted by hand at time of interview/focus group and subsequently typed. The collected data was managed using a framework matrix. From this a series of thematic charts was created incorporating all pertinent interview material and retaining the relationship between primary case data and theme. Charts were shared across the research team. Initial themes were then reviewed and distilled until the key points of relevance were agreed. This was an iterative process undertaken by two researchers and corroborated at intervals by the other team members.

## Results

### ***Health needs of prisoners***

Prisoners in HMP Barlinnie and HMP Greenock were perceived to have multiple health problems, but the two most prevalent and challenging were poor mental health and addictions. Although these are discussed separately in this report there was a keen acknowledgement among staff that many prisoners have, or merit, a dual diagnosis. A range of other health problems were identified, often as sequelae to poverty, poor lifestyle, poor mental health and/or addictions. Issues common across both prisons include malnourishment and conversely, overweight/obesity, poor oral health, diabetes, asthma, epilepsy, ulcers (particularly related to addiction and/or injury) and BBV. Chronic pain, most notably back pain, was identified as an issue; some staff perceived reported pain as part of drug seeking behaviour. Whilst acknowledging that prevalence of learning disability was not clear, staff in both prisons considered it to be under-diagnosed. Poor literacy affecting health was also highlighted. Among older male prisoners cardiovascular disease (including hypertension) and prostatic problems were identified and in women issues relating to reproductive health (contraception and cervical screening).

### ***Health services in prison***

Staff in both prisons described a range of strategies and services to improve prisoner health. The aspects of the health service that were perceived to work well varied between prisons reflecting variation in the type and number of prisoners and staffing levels in each prison.

#### *Core health services: physical health*

Overall, core services for physical health were perceived to work well in each prison (for example access to a general practitioner and nurse triage). There was broad agreement that staff in each prison respond well to critical incidents such as prisoners experiencing acute or emergency health problems.

#### *Clinics*

There was strong enthusiasm for nurse-led clinics in both HMP Barlinnie and HMP Greenock. Staff in both prisons highlighted the BBV service as an example of effective health care delivery. Regular clinics it provide rapid access to testing and treatment and good links to community services. A single point of criticism of this service is the need to have blood samples reach the laboratory on the same day they are taken. The prison regime works against this and often samples have to be retaken repeatedly. In HMP Barlinnie nurse-led asthma and diabetes clinics and the Wellman clinic were highlighted as working well. In HMP Greenock the Well Woman clinic was highly regarded but regret was expressed at the gap in provision of something similar for the men, particularly older men. Staff in HMP Greenock indicated that clinics for asthma and diabetes were infrequent due to staffing issues (in particular the demands of triage and dispensing medication) and lack of space. Health care staff expressed a desire to develop their nurse-led services to meet need.

#### *Gaps in health service provision*

Staff in both prisons identified the same gaps in service provision. Dental provision was described as being inadequate with convicted prisoners experiencing long delays in receiving treatment and treatment for remand prisoners limited to emergency care only. As a result, prisoners were perceived to experience sustained poor oral health and suffer ongoing dental

pain unnecessarily. Difficulty in accessing allied health professionals (AHP), in particular dieticians, speech and language therapist, occupational therapist and optometrists, was noted. Finally, information and services for prisoners with learning disabilities and/or learning difficulties were felt to be lacking. One example given was a lack of accessible, easy to read information about health.

The management of medications was regarded as problematic. In Barlinnie around 250 unsupervised medications need to be delivered each night and prison officers reactively dispense Ibuprofen and Paracetamol in the Halls. Also in Barlinnie, two separate Kardex systems are used, one for supervised and one for unsupervised prescriptions. This was regarded a safety risk.

### *Health promotion*

Staff across both prisons valued health promotion initiatives and expressed a desire to see more of these. Health@Work, Keep Well health checks and Well-Person clinics were highly regarded. Smoking cessation work in HMP Greenock was highlighted as having high completion rates despite limited staff capacity to deliver this intervention. The positive parenting work (Triple P) with men in HMP Barlinnie was highly valued. Parenting interventions are not currently provided in HMP Greenock despite having a small population of female prisoners. Staff in both prisons identified a number of service gaps including supporting prisoners to develop basic life skills, relationship work and programmes on domestic abuse. The support for female offenders through the third sector organization Circle was perceived as being very positive for health and reducing re-offending rates.

### ***The prison environment***

There was an acknowledgement in both prisons that the environment is in many ways inherently detrimental to health; being locked up for long periods, lack of fresh air, necessary security and prison routines all negatively impacting on health. However, it was also acknowledged that for some, prison meets a basic need for food and shelter that they require to maintain health. For example, in prison people who have been recently homeless or who have substance misuse issues can improve their health and access healthcare more readily than they can outside. Opportunities for physical activity were also discussed. Access to the gym was considered to be very limited in HMP Barlinnie whereas in HMP Greenock both male and female prisoners were reported to have daily access the gym, and good access to football pitches. The provision of weekly group gym sessions for protected prisoners, and males and females who have mental health problems in HMP Greenock was highlighted as an area of good practice.

Staff in both prisons felt that they were ill-equipped to provide effective stepped-up care for prisoners returning from hospital or with specific health care needs (for example stoma care) due largely to the inadequate facilities. The buildings and accommodation, particularly in HMP Barlinnie, were considered unsuitable for prisoners with disability or mobility problems. In both prisons, rooms in Halls are not easily adapted for health care activity. Staff in both prisons noted that there was not adequate space for one-to-one or group work. Ensuring privacy in consultations was also noted as an issue.

*“A [sexual health] clinic runs twice a month but there is no private area to hold this, the area is used by other health care staff who often pop in and out whilst patients are being seen”. [Int 12 BL]*

## ***Communication and relationships***

### ***Prisoners and their families***

Routine communication systems can present barriers for prisoners. For example, in both prisons the health centre referral system relies on a written appointment request form which, it was perceived, can inhibit prisoners with poor literacy skills from seeking help. In general, health staff felt that they had good relationships with the prisoners but acknowledged that they had little time to spend talking to them on a one-to-one basis and would value being able to provide more holistic care. That said, one illustrative case recounting the preparation of a long term prisoner with complex health problems for release, highlighted that a great deal of time and effort can, and often is, given at the individual level.

Prison officers in both prisons felt there was a gap in the information available to families about the health service available in prison which caused unnecessary confusion and concern. The need for a clearly written resource to inform families about prison health services was expressed.

### ***Communication within and between health care teams***

In HMP Greenock health care staff felt they had strong management and positive team working. Scope for improved communication and team working between nursing staff and the general practitioner was noted. In addition staff expressed a desire to create more time to have formal case conferences. It was felt that mental health and addictions staff tend to work in separate silos and an opportunity for more joined up working to improve the patient experience existed. Limited time, a high case load and low staffing levels were identified as a barrier to this. In HMP Barlinnie, communication between the addictions and mental health teams was reported to be very good, however it was felt that communication between other teams could be improved, again with the same barriers to this having been identified.

### ***Communication between health care staff and other prison staff***

Overall, staff felt part of a wider team and identified multi-agency working as being good. However, health care staff felt that prison officers could have an improved understanding of and respect for their role with a greater appreciation of the need for patient confidentiality.

### ***Communication with the wider NHS***

Expectations for improved relationships with the wider NHS system have been heightened amongst health care staff by the recent transfer from the SPS. Staff in HMP Barlinnie were keen to build on what they see as very strong working relationships with clinicians and nurse practitioners providing specialist services in secondary care such as tissue viability, asthma, diabetes and the Brownlee Centre. Opportunities for shadowing or exchange periods with prison-based staff moving into the community and community-based staff working within the prison were identified. The system of hospital bookings was identified as being problematic. Hospital appointments are sent directly to prisoners without being coordinated through the prison health care service which can lead to delays or missed appointments. Staff in both prisons were keen to improve communication with colleagues in primary care. Poor communication between primary care and prison health care staff was identified as causing delays in treatment plans on admission to prison, this was noted as a particularly problematic issue in relation to prescribed medication.

*“There is a lack of understanding of how health care in the prison setting operates. Communication between general practitioners in the prison setting and community is often poor. Often, because these patients don’t typically engage with health care outside of prison beyond obtaining repeat scripts, general practitioners actually have very little information on their patients. For example it is not uncommon for us to contact a general practitioner asking why a patient is on gabapentin and the response is usually that the general practitioner doesn’t know”. [Int 10 BL]*

It was suggested that liaising with prisoners’ GPs during the pre-liberation period could ease the transition to release. Special interest visits to prison for general practitioners through the Royal College of General Practitioners were also suggested as a way to heighten awareness.

### *Multiagency working in prison*

In HMP Greenock, health care staff, prison officers and third sector organisations reported very good partnership working. In HMP Barlinnie multiagency working between health care staff, prison officers, commissioned services and third sector organizations was reported to work well in the Day Centre (for mental health/vulnerable prisoners). Elsewhere tensions can arise. An example given by several members of staff was in relation to referrals to the mental health and addictions teams. Consensus between health care staff and prison officers about what constitutes an appropriate addictions referral was stronger than with Phoenix Futures, a commissioned enhanced addictions service. In addition inconsistencies in the information provided to prisoners by the addictions team and Phoenix Futures about, for example availability of methadone maintenance therapy, was highlighted as causing tension between the services and disquiet among prisoners. Both health care staff and prison officers agreed that prison officers lacked information and training about mental health which can lead to inappropriate referrals. That said, prison officers based in the Halls felt they could contribute usefully to discussion about individual prisoners as they observe them routinely. Prison officers expressed a need for more specialised training in relation to mental health and addictions.

### **Mental health problems**

Groups in both prisons identified mental health problems (along with addictions) as the major health problem facing prisoners. There was a feeling amongst several experienced health and non-health staff members that mental health problems were increasingly prevalent. Concern was raised as to whether mental health problems in prisoners and ex-prisoners were being appropriately diagnosed and managed in the community. A number of severe and enduring mental illnesses were identified as being common and challenging to manage in the prison setting including bi-polar disorder, psychosis (including drug-induced psychosis), schizophrenia, borderline personality disorder and intentional self-harm. It was acknowledged that prisoners, especially on remand, may be presenting to health care services for the first time. Dual diagnoses were noted to be common and difficult to manage. Across both prisons staff felt that there were very high levels of undiagnosed and untreated depression and anxiety amongst the prisoners.

*“Anxiety and depression are a significant burden. Prisoners need support coming to terms with being in custody. In some respects it is a normal response to feel anxious or depressed being in custody, but they need help dealing with this”. [Int.7 BL]*

### *Service provision*

In general staff felt that the healthcare provided to prisoners with severe and enduring mental health problems was better than that available for those with common and highly prevalent mental health problems such as anxiety and depression. In both prisons it was felt that access to services for prisoners with severe and enduring mental illness was as good, if not better than in the community. In both prisons the forensic psychiatry team regularly review prisoners with severe and enduring mental illness. In HMP Greenock the weekly multi-disciplinary mental health team meetings which include senior managers were especially valued. Planned throughcare with community mental health teams was also reported to operate effectively.

There was general agreement amongst health and non-health staff in each prison that the mental health teams were relatively under-resourced. Teams were felt to be too small in relation to need, with three core staff in HMP Barlinnie and one core staff member in HMP Greenock. This was felt to affect the quality of healthcare provided with the focus being on triage and crisis intervention. This was typified by comments like 'we're just keeping a lid on it'. Specifically the major gaps include limited time for one-to-one talking therapies, group therapeutic interventions and mental health promotion. A lack of trained mental health staff present during admission was felt to contribute to prisoners with previously undiagnosed mental health problems being missed. Similarly a lack of mental health awareness training was felt to contribute to this in the Halls; and could at times lead to inappropriate referrals. In HMP Greenock it was noted that there was rarely a free room for confidential mental health consultations. Despite these challenges, mental health teams were very highly regarded amongst interviewees for their work and the positive relationships that they have built with prisoners and colleagues.

An area of particular concern amongst staff, especially in HMP Greenock, was that of prisoners disclosing a history of abuse (sexual, emotional or domestic abuse). Whilst both men and women were identified as having been the victims of abuse, women were considered more likely to disclose this to staff. Unresolved issues in relation to past abuse were felt to contribute to ongoing mental health and substance misuse problems. Many staff expressed concern about their ability to respond appropriately to a disclosure of abuse. The lack of counseling services in relation to abuse for both male and female prisoners was recognized as a major service gap. Clearer protocols and improved access to appropriate services, including counseling, were identified as a priority.

A further gap in service provision noted by staff in both prisons was a lack of clinical psychology with no substantive individual or group cognitive behavioural therapy available to prisoners (other than offense-led work, for example for sex offenders). Mental health nurses felt that with more staffing and resources this is an area that could be developed effectively. A lack of clinical supervision for mental health nurses was also noted.

### *Teamwork and partnerships*

Staff groups in both prisons identified opportunities to strengthen the ways in which they worked as health care teams. In HMP Barlinnie the addictions and mental health staff work closely together although this did not extend to the physical health team in the same way. In HMP Greenock prisoners' mental health and addictions issues could at times be treated in parallel. A need for greater clinical supervision, and peer support from specialist nursing staff in other prisons and the community settings was expressed. This may help to reduce professional isolation.

### *Partnership working with officers in the context of the prison environment*

The mental health team staff are said to communicate well with custodial staff. However there was a strong call from both custodial staff and the mental health team for mental health awareness training for officers in both prisons to improve the quality of referral to the mental health team. Custodial officers, particularly in Halls, felt well placed to observe prisoners but poorly equipped to identify mental health issues and would welcome additional training and support.

Staff groups in both prisons reported that the ACT 2 Care initiative, aimed at ensuring a whole system, joined up approach to identifying and supporting prisoners at risk of suicide or self-harm, was a positive development and led to good partnership working. It was felt that this has played a major role in reducing suicides. However some staff expressed concerns about the inflexibility of the system, in particular the 'suicide watch' cells and their potentially detrimental effect on prisoner wellbeing which may inhibit disclosure.

In HMP Barlinnie there was broad support for prisoners with a mental health diagnosis who are seen as high dependency being kept in the segregated DSL area (D Hall south lower) in which the prison regime can adapt more flexibly to their needs. The possibility of extending this ethos to other Halls was identified:

*'In the Halls they don't get this softer stuff. There's nothing in the Halls to ventilate them, no escape. The vulnerable prisoners tend to get swept along with the regime. You wonder, can some of the more relaxed regime from DSL be applied to Barlinnie's other Halls?'* [INT 35].

Related to this there was universal support for the Day Care Centre, which provides structured and therapeutic activities for vulnerable prisoners. Examples of services hosted in the Day Care Centre for this group that were highly regarded include Lifelink, Wellman checks, and the ethos and approach of the officers. This service has to be prioritised to those with highest need meaning that a large number of prisoners are under-served.

*'the 3 guys [officers] are spread thinly in the Day Centre and the challenge is that it only takes a certain percentage [of prisoners]'.*

HMP Greenock has also made efforts to offer more opportunities to prisoners with mental health problems. Examples of good practice identified by the staff included the mental health nurse working in partnership with the physical training instructors to develop group exercise sessions specifically targeting men and women who have mental health problems. Enthusiasm to develop this model further, to engage other prison groups with defined needs, was expressed. Other developments in HMP Greenock include a bibliotherapy resource in conjunction with the library, and links with local mental health improvement teams, although this is restricted due to time constraints. The Circle agency was praised for its work with female offenders in relation to mental health issues.

### *Throughcare*

Practitioners reported strong liaison with community mental health teams but a number of areas in which practice could be improved were identified. Throughcare for prisoners with common mental health problems (as opposed to diagnosed mental illness) was considered to

be particularly poor and was identified as contributing to re-offending. Staff in HMP Greenock noted that lifers on placement or at pre-release often experience considerable anxiety. Little support is available for such prisoners and an opportunity to address this through a programme to support transition and re-integration was identified. For example, there are services in the community that are well-placed to offer continuity of care in relation to abuse where this has been disclosed during incarceration. It was identified that throughcare in this area could be improved by referring to services pre-liberation.

### **Addictions**

Issues around addiction were cited as a major health problem in both HMP Greenock and HMP Barlinnie. Opiates were the most commonly cited drug but a range of other illegal drugs including cannabis and cocaine were noted. Most prisoners were perceived by staff to have a drug and/or alcohol problem even if they did not consider themselves to be an 'addict' or were identified as such by others. Alcohol was considered a significant and increasing issue, particularly amongst men. Many staff felt that the prevalence of alcohol problems, and in turn its impact, is often overlooked and /or underestimated. Addictions were seen to have a central role in other physical and mental health problems, for example malnutrition, poor oral health, tissue infections and psychosis.

### *Admissions*

The admissions process was reported as problematic in relation to addictions, although less so by staff in HMP Greenock where the number of new receptions is considerably lower. In HMP Barlinnie, prisoners are rarely received by a prison doctor; the admission process is handled almost exclusively by nursing staff. In both prisons information from community based general practitioners (or health services in other prisons) can be poor (or non-existent) and delays in information sharing are common. As a result, delays in the verification of medication at admission mean that many prisoners undergo unplanned detoxification (drugs and alcohol). There were mixed views as to whether this works, or is acceptable, however it is consistent with SPS policy in this area. Staff in HMP Greenock reported that subsequent support for prisoners with alcohol addiction who go through detoxification on admission is lacking.

### *Addressing underlying causes*

In both prisons staff felt that there was a major gap in the support and services available which help prisoners address the issues that accompany, or may have led to addiction. These included past or current abuse (sexual, emotional and domestic), mental health problems and concurrent social problems including financial difficulties.

### *Opiate substitution therapy - methadone*

Consistent with the high numbers of prisoners on methadone (the Scottish Prisons Survey 2011 reported 27% in Barlinnie and 30% in Greenock being prescribed Methadone) the management of substitution therapy was the main focus of concern about provision in relation to addictions. Staff teams in both prisons felt that they did their best within limited resources but also expressed a number of concerns. In Barlinnie several staff felt that current arrangements (re methadone) and the health centre are not fit for purpose. In particular, the dispensing of methadone affords no privacy for the prisoner to talk with health care staff, there is a lack of written policies/protocols/procedures around methadone prescribing and dispensing, and there was expressed concern around who is qualified to dispense methadone

and who actually dispenses it. In general, staff are dissatisfied with the methadone dispensing process and feel that too much of their time is spent on this task preventing other health work from being done. Part of this relates to material resources and it was suggested that there should be a methadone dispensing pump in each Hall.

In Greenock there was general feedback from staff that the addictions service in prison does reasonably well but that a staff of two is not enough to meet demand. Staff across both prisons felt that there is insufficient support to reduce methadone dependency so that most prisoners with addictions go back out as addicts and return at some point, becoming examples of the revolving door syndrome.

### *Groups and education programmes*

Overall, health care staff in Greenock felt that partnership working with Phoenix and with officers in relation to addictions works well (e.g. monthly case conferences). However, there is dissatisfaction that they (health staff) are not more involved in the psycho-social work. Much of this is done by Phoenix. In addition there is a series of SPS drug and alcohol courses run by officers in the Link Centre (Greenock) that the officers themselves feel are out of date and which could benefit from being reviewed. Where health care staff have had the opportunity to lead programmes they feel that they have worked well – for example the Well Woman clinic is effective for women with addictions.

The picture reported in Barlinnie was similar. Input from Narcotics Anonymous is valued and affords a degree of continuity for prisoners on release. Phoenix report low demand for alcohol work, which does not fit with some wider concerns about alcohol addiction levels and increasing levels of alcohol-related harm e.g. ARBI. Phoenix staff would like to see better communication with prison addiction staff.

*“Another point is communication with the addictions team here. We meet every 6 weeks but this isn’t enough and there doesn’t seem to be any consistency in prescribing. We say to prisoners, yes you can be started on meth [methadone], this is what we would do and then they are told no. Then we have to deal with the disgruntled customers. We tell them what we think, this guy needs a bit more or he’s over prescribed but I don’t think they respect our opinion”. [Int. 20 BL]*

Phoenix reported that referrals coming from prison officers are often inappropriate. They feel that referrals should only come from specialist staff within the prison or via self-referral.

### *Community links and throughcare*

Throughcare in relation to pharmacy is reported to work well for planned releases. However throughcare more generally is a major issue. Better planning for accommodation/housing arrangements on release, for example, could be beneficial. Released prisoners, even those with positive intentions, often go straight back to drugs and/or alcohol.

“Follow up is a problem, for example they may be working with the nurses and with Phoenix [in prison] and then when they are liberated it depends upon where they go to. I remember one female recently was supposed to go straight to rehab. It was Christmas and really hard to get hold of services or find accommodation and she went back to her dealer. If you go back to

the same community or to hostels then even the best of intentions can fall by the wayside and they start using again. For lots of single guys they have to go to hostels which is terrible. They can be built up in prison and it's about trying to break that cycle". [Int.43 GR]

In Greenock a wide range of third sector agencies operate in the Link Centre but several staff felt that there is little evidence of throughcare support or of co-ordination. Several respondents would like to see a supported community-based (integrated) throughcare programme including accommodation, employment and health and social support for those who are particularly vulnerable. In Barlinnie, numerous external agencies support throughcare work in relation to addictions. Staff reported some links as being more successful than others. Barlinnie staff felt that throughcare can be adversely affected by the poor links that exist between prison addiction services and those in the community.

*"There is also a disconnect between what happens in the community and in the jail, for example, we tend to be very strict in terms of prescribing but this isn't followed through when clients are liberated". [Int 08 BL]*

Community teams rarely come into the prison and it was suggested that special interest visits for those working in the community addiction services or rotational posts where health staff can rotate into the community and community staff into the prison might improve relations and raise awareness of the need for integrated care.

Communication and building links is understood by all staff as crucial to effective throughcare. While throughcare is resource-intensive it is argued that many released prisoners 'don't get past the carry-out shop' and do not make contact with community addictions teams or other agencies on release. Officers were hopeful about a current pilot in North West Glasgow where third sector agencies visit the prisoners in prison and will then follow-up and track their success in the community.

### **Views of prisoners**

Prisoners emphasised addictions and mental health as the key health issues in prison. Those in Barlinnie noted some aspects of health care that they valued (including the BBV service; the Day Care Centre; courses delivered in prison). In Greenock, with the exception of women, the prisoners were more forcefully critical.

### **Health in prison**

Some prisoners spoke of having specific health issues, some existing prior to prison admission. Commonly these included high blood pressure, pain, injury, poor dental health, diabetes, and asthma. However, all prisoners reported poor mental health as the key issue in prison.

In general, women felt that regular access to fresh fruit and exercise (e.g. the gym) helps to improve their health while in prison although they suggested that the diet, overall, could be improved. Prisoners in Greenock noted that longer term health conditions (e.g. diabetes) are relatively well serviced but that there can be a lack of sustained, long-term health monitoring (e.g. of blood pressure).

## **Admission**

Prisoners highlighted the admissions process as a critical time of anxiety and stress that impacted negatively on the health of most, if not all, of them. In both Barlinnie and Greenock there is a delay in the prescribing or dispensing of any medication to new prisoners until their medication routines outside have been verified with their GPs. It is not uncommon for verification to take anything from a few hours to several days. This can interrupt treatment plans instigated by other doctors and often causes distress to individual prisoners. Prisoners who bring prescribed medication with them to prison often have it withdrawn until verification is assured.

In both prisons, prisoners felt the admissions process to be very rushed. While they understood the reasons behind this (e.g. in Barlinnie they receive large numbers of prisoners at the one time) this did not negate the contribution it made to feelings of fear and anxiety. Men in particular felt that they had neither time nor privacy to speak to nurses during admission. The rushed admission was viewed as a missed opportunity for health staff and prisoners to talk about the impact that entering prison has on mental health and general health more broadly. Some returning prisoners felt that admission worked well because staff knew them already while others felt that staff tended to form opinions of particular prisoners that could persist as prejudice in the case of those returning.

Women (Greenock) were less critical of the admissions procedure. They felt it worked well and that they were able to speak to staff about their concerns and health issues. However, they felt that while all the necessary information about the prison health service was provided on admission, it should be given again in the first week or two as it is difficult to take in at first.

Longer term prisoners (lifers) reported fewer health concerns. By the time they come to Greenock they have usually been in the prison system for some years. Any reactive mental health problems have tended to be resolved as have significant physical health issues. Hence they tend to present with fewer health problems than other new admissions.

## **Environment and prison conditions**

The impact of the prison environment was cited as detrimental to health in various ways. Prison routines made a considerable contribution to this but prisoners also spoke about the old prison buildings that are not designed to deliver modern quality health services. Neither Barlinnie nor Greenock provides adequate facilities for prisoners with physical disabilities (e.g. lack of wheelchair access). One prisoner commented on the unhygienic old buildings and how, coupled with the inherent lack of privacy, he had found post-operative care difficult to manage.

Routines required for security impact on all activity but lifers reported that their health choices (e.g. smoking cessation) are diminished by restrictions that seemed to them unnecessary (e.g. they can only receive support to quit smoking if they sign up for the group programme). Prisoners can spend long periods in their cells and suffer from boredom. Opportunities for physical exercise are limited (particularly in Barlinnie) as is access to fresh air. Bullying was reported as significant and detrimental to health.

## **Access to and the delivery of health services**

### *Referral*

Remand and convicted prisoners in Barlinnie felt that the system of referral to the prison health service could be improved to avoid the delays experienced in seeing a doctor. Lifers felt that there should be greater consistency across prisons in relation to the availability and delivery of health services. Prisoners have limited access to health care staff in the evenings and at weekends and lifers have limited access to all staff at these times.

### *Dental service*

Prisoners in both Barlinnie and Greenock complained about the lengthy wait to see a prison dentist with little in the way of pain relief in the interim. This applies to all prisoners, male and female and, in particular remand prisoners who do not have routine access to dental care.

### *Psychosocial support*

Services in support of social, emotional and relationship issues were reported as poor. Both prisons operate a 'listener' service but this is not valued by male prisoners. Most said that they would not use it. However, all prisoners acknowledged a need to talk about personal issues that can be detrimental to health, such as experience of abuse or bereavement, but would like this to more objective and formally therapeutic. Male and female prisoners expressed an interest in bereavement/loss counselling.

Female prisoners reported feeling scared on release and suggested that something like 'open secret' would be helpful, especially if coupled with activities designed to improve self-esteem.

### *Psychiatric service*

Men in Greenock were unclear about what access they had to a psychiatrist.

### *Optician*

Prisoners in Barlinnie reported little or no access to an optician for all prisoners.

### *Stepped-up care*

While response to critical incidents/emergencies was generally regarded as good (for example the immediate medical care of a prisoner having a stroke), limited resources and the unsuitable environment meant that stepped-up care was experienced as poor and inadequate.

### *Health promotion*

Consistently, prisoners valued health promotion courses but acknowledged an inherent lack of opportunity to make healthy lifestyle choices. Opportunities across the prisons varied: in Barlinnie prisoners can only access the gym once per week while in Greenock daily access is the norm. Women (Greenock) were particularly appreciative of the opportunity to improve fitness and cited diet and gym access as an important part of that. They reported having good access to fresh fruit but for prisoners in Barlinnie fruit is only available as part of the sandwich option at mealtimes.

Barlinnie prisoners reported that they wait too long for support with literacy and numeracy and expressed a desire for more group support to help with employment chances. They described

current employability support as taking 'a conveyor belt approach'.

### ***Staff and prisoner relationships***

Prisoners appreciated the benefit in building good relations with staff (prison and health staff) but felt that security can take precedence over health and wellbeing. In Barlinnie men would like more staff-prisoner contact time and more privacy to talk to nurses and would like to see a regular (daily) drop-in health service staffed by a nurse or doctor, operating from each Hall. Male and female prisoners had different views on existing staff-prisoner relations: men felt that nurse attitudes are mainly good but were more likely to feel stigmatised by staff (e.g. for being 'at it' for medication). They also felt that confidentiality was not assured, that health care staff and prison officers sometimes broke confidences about prisoner health. Women (Greenock) felt very positive about staff and found them understanding.

### ***Medication***

Issues around medication exercised prisoners in both Greenock and Barlinnie. Prisoners expressed a feeling of having no control over the medication they are prescribed and having no option of a second opinion. Medication regimes agreed and prescribed by medical staff on the outside or in other prisons were reported as being overturned on admission to Greenock or Barlinnie (e.g. prescribed Diazepam is often discontinued). This was felt to be due to the lack of verification of previous treatment plans, or the lack of availability of certain medications within the SPS.

Prisoners complained that the delay in seeing a doctor in prison had a knock-on effect on their access to appropriate medication. For example, if in pain and unable to see a nurse or doctor (e.g. out of hours) they rely on officer staff in the Halls who are authorised to administer paracetamol, and only paracetamol, at their own discretion.

In Barlinnie the repeat prescription process was reported as working well although in Greenock one prisoner noted that repeat requests have to be submitted within given time deadlines or they encounter delays. Lifers reported having challenged medical decisions by prison doctors around medication and suggested that there is a big difference between community health provision and that available in prison. In some cases they encountered considerable 'delays and blocks' in the official complaints system and so used family members and/or legal services outside to pursue this further. There was a feeling amongst them that SPS 'dictate' health provision.

### ***Mental health***

With the exception of lifers, poor mental health was regarded as a major problem by all prisoners. Problems include stress as a response to prison admission, anxiety linked to worries about the stigma imposed on families outside, dealing with altered drug routines for those with addictions, fear, vulnerability and bullying, reactive depression/anxiety, and severe and enduring mental illness. Although there was little difference in the views of male and female prisoners around mental health, women in particular experienced high levels of stress/anxiety linked to substance misuse. Barlinnie prisoners suggested that there is a lot of undiagnosed mental illness in the Halls. Lifers (Greenock) suggested that prisoners with mental health issues are over-medicated.

In Barlinnie, prisoners had a positive view of the existing mental health team although they felt strongly that the mental health of prisoners is under-examined. In Greenock, prisoners felt that staff lack knowledge about the prisoners' mental health. A contributing factor to both of the above is the rushed admission process that leaves no time to discuss mental health in depth, the initial mental health assessment being too brief and the lack of any regular mental health review. The system allows no time to speak to a mental health nurse privately on a one-to-one basis. Barlinnie prisoners noted that there are no mental health groups and no input from psychology. Low levels of knowledge about mental health among prison officers was reported by prisoners in both prisons despite the fact that (in Barlinnie) the system relies on officers to pick up on prisoners' mental health problems.

### *Confidentiality*

Prisoners in Barlinnie expressed concern over confidentiality in relation to the internal health referral process. The use of a different coloured form for mental health referrals immediately identifies a prisoner as having this kind of issue. Also in Barlinnie, prisoners were unhappy receiving medication for anxiety from nurses without being given the opportunity to see the doctor.

### *Response to suicide risk*

Prisoners in Barlinnie reported that the suicide cells (used as part of the ACT process) can be traumatic and distressing and this can put them off admitting how bad they feel.

### *HMP Barlinnie: DSL and Day Care Centre*

Prisoners agreed there are some positive approaches to mental health in the prison. This included Wellman clinics which pick up on mental health issues and help to resolve them, and the separation of those who are vulnerable. They felt that the latter helped to prevent bullying of people with mental health problems in the Halls. There was strong agreement that the Day Care Centre is a lifeline for many prisoners. Prisoners appreciated that the Day Care Centre is not exclusively for those from DSL but would like to see the opportunities it offers open to more prisoners from other Halls.

### **Addictions**

Problems related to addiction were also acknowledged as a major health factor in prison. Prisoners often come in with health problems related to their addiction (e.g. poor hygiene, malnutrition) but admission presents additional problems including delays in receiving medication and/or imposed detoxification. This initial period of detoxification can increase stress and anxiety and prisoners see it as a result of prison regimes rather than clinical need (e.g. to allow methadone prescriptions administered outside to be verified). However, several prisoners reported that the detoxification process had helped them to become fitter and healthier and some had been able to sustain this on release (and were back in for other reasons).

Addictions services in Greenock were rated poorly by remand prisoners and lifers. Both groups were unhappy about the dispensing of methadone. Remand prisoners tend to receive methadone late in the day. In Greenock prisoners found that reduction/treatment plans agreed outside or in other prisons, or between the prison health service addiction team and staff from Phoenix, are not always honoured. They reported having better relationships with Phoenix staff

whom they saw as providing a degree of advocacy, than with prison addiction staff. Tension between Phoenix and SPS health staff was noted by the prisoners. Women were more positive as they felt they could make good relationships with addictions staff.

In Barlinnie, the First Step courses delivered by prison officers were well received.

### ***Throughcare***

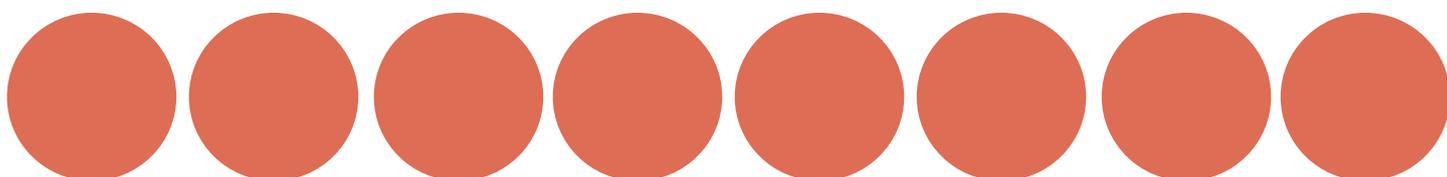
Prisoners (Greenock) would like better links with community services, specifically, employability services.

Women were more positive about being able to leave prison healthier and more committed to sustaining good health but expressed the need for immediate support on release (e.g. having appointments in place).

In relation to addictions Barlinnie prisoners believe that throughcare works quite well, in particular when they have prescriptions organised before release. In Greenock, they would like to have GP appointments set up before release.

### ***References***

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## SECTION 5: Comparative Needs Assessment



## SECTION 5: COMPARATIVE NEEDS ASSESSMENT

### Overview

The aim of transferring responsibility for health care of prisoners from the SPS to the NHS was to ensure that prisoners receive the same standard of care and range of services as that offered to the general population according to need. Acknowledging that providing equivalent services in the prison setting as are provided in the community is unlikely to lead to equivalence of outcomes this section identifies relevant policy, local and national guidelines, standards and targets for care rather than describing service provision in the community. This will allow an assessment of current service provision in prisons in NHSGGC against these metrics.

### Methods

A rapid review of health policy, evidence based guidelines, local and national standards for treatment and care, and national targets and indicators, was carried out and is summarised below under topic specific headings.

### Results

The most significant over-arching health policy in Scotland at present is 'Better Health, Better Care' (2007) [1]. This action plan outlines the governments approach to improving health in Scotland, focusing on the early years and child health, reducing health inequalities and improving the quality of health services. 'The Healthcare Quality Strategy for NHS Scotland' (2010) builds upon this describing the strategic vision for the delivery of safe, clinically effective and patient-centred care in Scotland [2]. 'Equally Well', published in 2008 moved forward with the governments agenda to address health inequalities [3]. These cross cutting policies have been highlighted as being relevant to each of the topic specific areas which are described in further detail in the sections that following.

#### ***Alcohol misuse***

The Scottish Governments strategic approach to addressing alcohol misuse was outlined in 'Changing Scotland's Relationship with Alcohol: A Framework for Action' (2009) [4]. This builds on many of the recommendations made in the 2009 Audit Scotland report on drug and alcohol services in Scotland [5]. One of four priority areas identified in the framework was treatment and support. Included in a range of measures was a commitment to screening for alcohol problems and the delivery of ABI. This is reflected in the 2008 HEAT (H4) target to deliver an agreed number of ABI in primary care, A&E and antenatal settings between 2008/09 and 2010/11 (extended to 2012/13) and a newly introduced HEAT target (A11) for specialist drug and alcohol services to ensure that from March 2013, 90% of clients will wait no longer than 3 weeks to receive appropriate drug or alcohol treatment to support recovery. The framework recommended that NHS boards develop local services to meet local need with priorities identified by local Alcohol and Drug Partnerships. The importance of addressing issues such as concurrent substance misuse, mental health problems and social exclusion was highlighted and a tiered approach to delivering person-centred and evidence-based treatment and support recommended. The relationship between alcohol misuse and offending was recognised and the criminal justice setting identified as a priority area for research on the effectiveness of ABI, leading to the 2010 Prison HNA for Alcohol Problems [6]. The latter HNA made recommendations for the implementation of a tiered approach to delivering

screening, treatment and support for alcohol problems in the prison setting which have been outlined previously. A 2011 report on Quality Alcohol Treatment and Support has built on the recommendations made in the 2009 national framework [7].

In 2004 SIGN issued guidance on the management of harmful drinking and alcohol dependence in primary care (SIGN 74) [8]. These guidelines were reviewed in 2012. In 2010 NICE published guidance on the diagnosis, assessment and management of harmful drinking and alcohol dependence [9]. National Quality Standards for Substance Misuse Services were produced by the Scottish Government in 2006; these standards urgently need updated [10].

### ***Drug misuse***

The Scottish Governments strategic approach to addressing drug misuse was outlined in 'The Road to Recovery: A New Approach to Tackling Scotland's Drug Problem' (2008) [11]. This strategy, which focuses on recovery, was based on recommendations made in a 2008 publication 'Essential Care' [12]. Shortly afterward Audit Scotland published a report describing public spending on drug and alcohol services in Scotland [5]. This highlighted the need for national minimum standards for drug and alcohol services, clarification of accountability and governance and the need to demonstrate effectiveness and expected outcomes against standards. More recently a 2011 report by the Scottish Drug Strategy Delivery Commission updated the progress made against the 59 actions described in 'The Road to Recovery' [13]. Further recommendations made in this report included the need for a quality programme for medical treatments in Scotland, updated UK guidelines that reflect the Recovery Agenda and the Scottish context, a national evidence and research strategy and securing the inclusion of drug and alcohol treatment as a core service in general practice. In 2010 'Research for Recovery: A Review of the Drugs Evidence Base' was published which identified a gap in the evidence base around the pathway to recovery and the impact of recovery on families and communities [14].

The most recent UK guidelines on the clinical management of drug misuse and dependence were published in 2007 (the Orange Book) [15]. This predates the most contemporary NICE guidance from 2007 on psychosocial interventions in drug misuse [16], opiate detoxification for drug misuse [17] and a technology appraisal of Methadone / Buprenorphine and Naltrexone for the management of opioid dependence [18]. There are no corresponding SIGN guidelines. National guidelines for services providing injecting equipment were published in Scotland in 2010 [19].

### **A number of HEAT targets directly related to drug misuse.**

By March 2013, 90% of clients will wait no longer than 3 weeks from referral received to appropriate drug treatment that supports their recovery

Waiting times appropriate to alcohol treatment will be defined and incorporated into a target covering both drugs and alcohol by April 2011. As a milestone to deliver 3 weeks from referral to drug or alcohol treatment by 2013/14, by December 2010, 90% of clients referred to drug treatment will receive a date for assessment that falls within 4 weeks of referral received; and 90% of clients will receive a date for treatment that falls within 4 weeks of their care plan being agreed.

A national indicator to decrease the estimated number of problem drug users in Scotland by 2011 was introduced in 2007 [20].

In 'Equally Well' a commitment was made to ensuring that offenders who wish to seek help for problem drug use are able to access addiction and health services within six weeks of liberation [3]. The 2010 'Equally Well' update recommended a review of the Throughcare Addictions Service, which should offer wraparound support to offenders with addiction issues being released from prison and identified the new substance misuse HEAT targets as a opportunity to ensure that plans are in place for prisoners to receive treatment on transition from custody to the community [21].

### ***Tobacco use***

'A Breath of Fresh Air for Scotland: Tobacco Control Action Plan' (2004) outlined a comprehensive range of actions to prevent, control and treat tobacco use in Scotland [22]. In 2006 the 'Smoking, Health and Social Care (Scotland) Act 2005' came into effect, introducing a ban on smoking in enclosed public spaces. 'Towards a Future without Tobacco', published the same year, outlined the Scottish Governments long term smoking prevention strategy; this has not been updated by the current government [23]. 'Scotland's Future is Smoke-Free' (2008) specifically addressed issues around the availability of tobacco for children and young people [24]. Further legislation was passed in 2010 to restrict the sale and advertising of tobacco and tobacco related products. A key recommendation from 'Equally Well' was that NHS Boards and partner organisations act to prevent young people from deprived areas from smoking and provide effective support to smokers help smokers in these areas to quit [3]. NHS Health Scotland produced a guide to smoking cessation in Scotland (2010) [25]. There are no SIGN guidelines in relation to smoking cessation. However Scottish briefings on a number of relevant NICE guidelines have been produced by NHS Health Scotland [26]. A HEAT target related to smoking cessation requires that NHSScotland delivers universal smoking cessation services to achieve at least 80,000 successful quits (at one month post quit) including 48,000 in the 40% most-deprived within-Board SIMD areas over the three years ending March 2014. Smoking cessation is featured in the Quality and Outcomes Framework (QOF) for the General Medical Services (GMS) contract in primary care [27]. Reducing the percentage of adults in the population that smoke is a national indicator [20].

### ***Diet, physical activity and healthy weight***

In 2008 the Scottish Government produced 'Healthy Weight, Active Living', an action plan to address obesity through improve diet and increase physical activity [28]. This built upon previous strategies focused on diet ('the Scottish Diet Action Plan' [29]) and physical activity ('Let's Make Scotland More Active: A strategy for physical activity' [30]). A 2008 five year review of 'Let's Make Scotland More Active' supported continuing the strategy until 2013 [31]. The strategy recommends that adults should accumulate at least 30 minutes of moderate activity on most days of the week with a national target of 50% of adults meeting this recommended level of physical activity in Scotland by 2022. In 'Better Health, Better Care' [1] the government committed to developing a national food policy; 'Recipe for success' was published in 2009 [32]. In 2010, 'Start Active, Stay Active' UK wide guidelines for the promotion of physical activity across the life course were published [33].

The Foresight Tackling Obesities: Future Choices Project (2007) produced a comprehensive strategic vision to address the obesity epidemic in the UK over the coming decades [34]. In 2010 the strategic vision for the prevention and treatment of obesity in Scotland 'Preventing overweight and obesity in Scotland: A Route Map Towards Healthy Weight', and an associated

action plan was published [35]. This was followed by SIGN 115, guidelines on the clinical management of obesity [36] which superseded previous NICE guidance [37]. There are no HEAT targets related to diet, physical activity or obesity in adults. The provision of lifestyle advice (including physical activity and healthy diet) and maintaining a register of patients that are clinically obese are included in the QOF [27].

### **Dental health**

General Dental Services (GDS) provide primary dental care in Scotland. General dental practitioners are independent contractors who chose whether to treat patients under the NHS. Resultantly, supply may not meet need or demand. On 1st April 2010 dental registration became continuous. Unless exempt, patients are required to meet 80% of the cost of dental treatment under the NHS to a maximum of £378 per course of treatment; dental examinations are provided free of charge. GDS are obliged to provide emergency dental cover to registered patients. A Community Dental Service (CDS) is available as a safety net for adults with special needs and those who are unable to obtain treatment from the GDS. In the 2005 action plan for improving oral health in Scotland the government committed that:

*“NHS Boards will develop and deliver oral health care preventive support programmes for adults in most need such as prisoners and the homeless.” [38]*

It is anticipated that an updated national dental strategy will be published by the Scottish Government in Spring 2012. This will cover preventive care and prevention of oral disease in vulnerable groups such as prisoners.

In 2006 National Standards for Dental Services were developed jointly by the National Care Standards Committee and NHS Quality Improvement Scotland [39]. NICE recommend the interval between dental examinations in adults aged 18 years and over should be no less than 3 months and no greater than 24 months [40]. In Scotland an 18 week referral to treatment standard for dentistry has been introduced. This covers planned procedures carried out by a secondary care specialist or procedures requiring a general anesthetic but not routine care. Guidance on the provision of emergency dental care has been produced by The Scottish Dental Clinical Effectiveness Programme [41]. This states that a patient requiring emergency care should have contact with a clinician within 1 hour, a patient requiring urgent care should receive treatment within 24 hours and a patient requiring routine care should receive access to an appropriate service within 7 days.

### **Long term conditions**

‘Delivering for Health’ (2005) [42] and the ‘Better Health, Better Care Action Plan’ (2007) [1] set out policy commitments to the prevention and management of long term conditions in Scotland. Subsequently a national action plan to improve health and well-being in people with long term conditions was published [43]. Scotland has adopted a generic disease management model comprising of the following components: partnership between informed, empowered people with long term conditions and prepared, proactive multi-professional care teams a strategy and resources to support self management an integrated system of care across primary care, hospitals, social work, housing, community and voluntary sectors decision support (programming evidence-based medicine and clinical guidelines into care and support delivery

processes) through quality improvement and workforce development supported by standards, guidelines, education, practice development and Managed Clinical Networks, care enabled by information systems that support sharing of data delivery assured through the national performance framework, HEAT targets and the Community Care Outcomes Framework. As part of the 2004 GMS contract the QOF was established to standardise clinical care and reward practices in primary care for the provision of quality care [27]. A key aspect of the QOF is the establishment and maintenance of disease registers with regular recall and review of patients with long term conditions. Indicators include secondary prevention of coronary heart disease, primary prevention of cardiovascular disease, heart failure, stroke and transient ischaemic attack, hypertension, diabetes mellitus, COPD, epilepsy, hypothyroidism, cancer, palliative care, mental health, asthma, dementia, depression, chronic kidney disease, atrial fibrillation, obesity, learning disability and smoking. Measures to increase the involvement of community pharmacists in chronic disease management are in place in a complementary scheme.

### *Asthma*

Joint British Thoracic Society and SIGN guidelines on the management of asthma (SIGN 101) was updated in 2012 [44]. Standards for asthma services for children and young people were published in 2007 [45]. There are no corresponding standards for adults.

### *Diabetes*

In 2002 Scottish Diabetes Framework was published [46]. Shortly afterward Diabetes Clinical Standards were introduced [57]. NICE produced guidance on the management of Type 2 Diabetes in 2008 [48]. This has been superseded by SIGN 116 published in 2010 which addresses the management of diabetes and its complications [49]. In 2010 the Diabetes Action Plan was published by the Scottish Government [50]. A national Diabetic Retinopathy Screening Programme operates in Scotland for all patients over the age of 12 years old.

### *Epilepsy*

Clinical standards for neurological services, including the delivery of epilepsy services, were published in 2009 [51]. SIGN 70 a guideline on the diagnosis and treatment of epilepsy in adults is awaiting update [52]. This has been superseded by 2012 guidance from NICE [53].

### *CHD*

Reflecting Scotland's poor cardiovascular health there have been a number of CHD strategies and action plans. The most recent, 'Better Heart Disease and Stroke Care Action Plan' was published in 2009 [54]. Similarly there are a number of SIGN guidelines on the assessment and management of CHD (SIGN 93, 94, 95, 96, 97 and 57) [55-60]. In 2010 clinical standards for heart disease were published [61]. Reducing mortality from CHD among people under 75 years of age in deprived areas is a national indicator [20].

### *Anticipatory Care*

There has been increasing interest in anticipatory care in an attempt to reduce health inequalities. Keep Well was developed as a national pilot to deliver health checks and appropriate interventions and services to individuals at the greatest risk of long term conditions as part of Scotland anticipatory care model [62]. This has now been rolled out and extended to

target disadvantaged groups, including prisoners. A HEAT target of achieving an agreed number of inequalities targeted cardiovascular Health Checks during 2011/12 is in place. As previously noted Keep Well checks now operate in the prison setting throughout NHSGGC.

### *Screening*

Screening is a public health service that aims to identify individuals within the population that are at risk of developing specific diseases. A number of screening programmes are available to eligible residents in NHSGGC. These include breast, bowel, cervical and diabetic retinopathy screening. Access to each of these screening programmes is available to eligible prisoners in NHSGGC via the health care service.

### ***Mental health problems***

Improving mental health has been identified as a national priority in Scotland. Reflecting this, an extensive series of policy frameworks and national programmes have been published. 'Delivering for Mental Health' (2006) outlined a vision for delivery of mental health services in Scotland to 2010 and included a range of targets [63]. 'Towards a Mentally Flourishing Scotland: Policy and Action Plan 2009-2011' followed [64]. Six priority areas were identified including mentally healthy infants, children and young people, mentally healthy later life, mentally healthy communities, mentally health employment and working life, reducing the prevalence of suicide, self-harm and common mental health problems and finally improving the quality of life of those experiencing mental health problems and mental illness. An updated 2011 – 2015 mental health strategy will be published in Spring 2012 [65]. The strategy identifies 14 outcomes across four priority areas: improving access to psychological therapies, implementing the National Dementia Strategy, examining the balance between community and inpatient provision and the role of crisis services and preventing suicide. Suicide prevention builds on the 2002 Chose Life strategy and action plan [66]; a 10 year strategy that aimed to reduce the suicide rate in Scotland by 20% by 2013. This strategy was refreshed in 2010 with a focus on identifying suicidal behaviour in high risk groups, supporting those affected by suicidal behaviour and providing education, training and awareness about suicidal behaviour [67].

Legislation to ensure that people experiencing mental health problems receive effective treatment and care, the Mental Health (Care and Treatment) (Scotland) Act 2003, was introduced in 2005.

National standards for Crisis Services were published in 2006 [68] and followed shortly thereafter by a toolkit for delivering crisis services [69]. In 2007 Standards for Integrated Care Pathways (ICP) for schizophrenia, bipolar disorder, depression, dementia and personality disorder were published [70]. A number of evidence based clinical guidelines have been produced by both SIGN and NICE on the management of depression (SIGN 114 [71]), anxiety (NICE 2011 [72]), dementia (SIGN 86 [73], NICE 2006 [74]), bi-polar disorder (SIGN 82 [75], NICE 2006 [76]), borderline personality disorders (NICE 2009 [77]) and self-harm (NICE 2011 [78]). In 2011, 'The Matrix: A Guide to delivering evidence-based Psychological Therapies in Scotland' was published [79]. This builds on the Scottish governments commitment to increase access to evidence based psychological therapies as reflected in a new HEAT target (18 weeks referral to treatment for psychological therapies from December 2014). 'Equally Well' recommended that interventions to address depression, stress and anxiety should be increasingly targeted in deprived communities, ensuring that approaches and materials used are

appropriate [3]. As previously noted there are a number of mental health indicators in the QOF [27]. There is also national indicator around improving mental well-being in adults in Scotland [20].

### ***Learning disability***

Scotland's national policy for the health and social care needs of people with learning disability is the 'The same as you?' published in 2000 [80]. This 10 year plan is currently being reviewed. Quality indicators for learning disability were first published in 2000 and updated in 2004 [81]. A best practice statement 'Promoting Access to Healthcare for People with Learning Disabilities – a Guide for Frontline NHS Staff' was published in 2006 [82]. The definition of learning disability in 'The same as you?' included autistic spectrum disorder. In 2011 an Autism Strategy for Scotland was published [83]. There are a number of relevant human rights laws and standards to protect people with learning disability from discrimination and ensure equal opportunities. These include The 1998 Human Rights Act, the Disability Discrimination Acts (1995 and 2005), the Disability Equality Duty (2006) and in 2010 the Equality Act; specific to the health care setting, the Adults with Incapacity (Scotland) Act (2000) and the Mental Health (Care and Treatment) (Scotland) Act (2003). Recommendations from 'Equally Well' relating to learning disability included [3]:

- That NHS Boards should target health promotion and health improvement action better for people with learning disabilities and others who may need support to access information.
- That each NHS Board should have a designated senior post responsible for ensuring people with learning disabilities receive fair and equitable treatment from health services.
- That the Government should lead development of a framework for regular health assessments for people with learning disabilities in all NHS Board areas.

Maintenance of a register of adults with learning disability has been introduced as a QOF indicator [27].

### ***Literacy and numeracy***

Adult literacy and numeracy skills are considered integral to achieving economic growth, social cohesion, improving health and well-being and reducing inequalities. Policy frameworks such as 'The Early Years Framework' [84], 'Getting it right for every child' [85] and 'Curriculum for Excellence'[86] address literacy and numeracy in children and young people. In 2010 the Scottish Government published a national adult literacy and numeracy strategy [87]; followed in 2011 by detailed strategic guidance on increasing adult literacy and numeracy capability in Scotland by 2020 [88]. A national indicator to reduce the number of working age people with severe literacy and numeracy problems in Scotland was introduced in 2007 [20].

### ***Sexual health and BBV***

Building upon 'Respect and responsibility: Strategy and action plan for improving sexual health' (2005) [89], 'The Sexual Health and Blood Borne Virus Framework' has recently been published [90]. For the first time this brings together sexual health and blood borne virus strategies (HIV Action Plan for Scotland (2009) [91] and the Hepatitis C Action Plan for Scotland (2006) [92]) in a single framework. Clinical standards are available for Sexual Health [93] and HIV services

[94]. Draft quality indicators for testing, treatment care and support of people with HCV were produced in late 2011 [95]. SIGN guidelines for the management of HCV (SIGN 92) were published in 2006 [96].

### **Parenting**

Improving parenting and supporting families is considered a key strategy to interrupt inter-generational inequalities and improve outcomes across the life course ('Equally Well' [3], 'Getting it Right for Every Child' [85] and the 'Early Years Framework' [84]). A number of services and interventions are required to address the specific needs of parents and families. The most effective interventions are targeted in the early years (0 – 3 years); for some families on-going support beyond this period is required. A tiered parenting support framework has been developed by Glasgow City Council and NHSGGC with services ranging from universal service provision (for example access to a health visitor) to access to specialist services (education, social care, secondary care) [97]. The main parenting intervention available in NHSGGC is the Triple P-Positive Parenting System, an evidence based programme offering multi-level intervention based on need [98].

### **Employability**

The UK government is responsible for employment in Scotland. Employment services are delivered through Jobcentre Plus in Scotland. Employability includes all the actions that an individual can take to increase their chances of securing and retaining employment. In 2006 'Workforce Plus: An Employability Framework for Scotland' was published which focused on six themes: early interventions, client focused interventions, employer engagement, sustaining and progressing employment, joined up planning and delivery of services and better outcomes [99]. A complementary strategy aimed at 16 – 19 year olds that are not in work, training or education was produced [100]. Both strategies highlighted the needs of offenders and ex-offenders. More recently 'Skills for Scotland: Accelerating the recovery and increasing sustainable economic growth' identified four priority areas for increasing employability: empowering people, supporting employers, simplifying the skills system and strengthening partnerships. A number of national indicators relate directly to employability [20].

A number of recommendations relating to reducing poverty and increasing employment were made in 'Equally Well'. Actions directly relevant to the NHS included [3]:

- NHS Boards should play an active part in employability partnerships across Scotland.
- NHS Boards and public sector employers should act as exemplars in increasing and supporting healthy employment for vulnerable groups.

Professional bodies in the field of occupational and public health should be consulted on incorporating the evidence on the health benefits of employment into professional development and practice

### **Re-offending**

A national offender management strategy was published in 2006 which aimed to reduce re-offending [102]. In 2008 'Scotland's Choices,' a report examining the use of imprisonment in Scotland was published [103]. In total 23 recommendations were made to use prison more effectively for serious crimes and identify alternatives to custodial sentences for less serious

crimes with an aim of reducing the average daily prison population and reducing re-offending. In response the government published 'Protecting Scotland's Communities: Fair, fast and flexible justice' [104]. To implement the recommendations from both publications the Reducing Re-offending programme was introduced in 2009 [105]. A number of national indicators relate to offending and re-offending [20].

## Conclusions

A number of local and national policies, evidence based guidelines for treatment and care and national clinical standards were highlighted. These are applicable in the current context and should inform the planning, design and delivery of health care in the prison setting.

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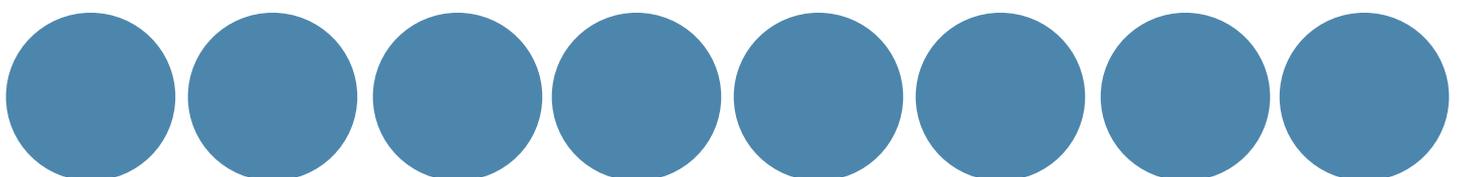
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## SECTION 6: Conclusions and Recommendations



## SECTION 6: CONCLUSIONS AND RECOMMENDATIONS

### Overview

This section concludes the report drawing together the findings from the epidemiological, corporate and comparative needs assessments to make recommendations for future service planning and development.

### Strengths and limitations

Before presenting conclusions and recommendations it is important to acknowledge the limitations of the data presented. The HNA was carried out over a short time period to provide a baseline assessment of health needs of the prison population in NHSGGC following transfer of responsibility for delivering health care in prisons from the SPS to the NHS. As such a pragmatic approach was adopted, describing health needs of the prison population using local data where available supplemented by estimates from the published literature. Very limited local data were available electronically from HMP Greenock and no local data from HMP Barlinnie. Data from HMP Greenock were recorded at the time of admission screening and are not optimal for accurately describing the burden of ill-health in this population. Limited health information is collected at screening and screening questions lack precision (most require a simple yes/no response and do not distinguish between current and historical illness and the information collected are self-reported). In addition, the completeness and accuracy of the data collected are not known.

Local pharmacy data from both prisons was used to describe the prevalence of prescribing as a proxy measure of ill-health. However prescribed medication may not necessarily reflect ill-health. Some medications have multiple indications and it was not possible to determine from these data why medications had been prescribed. In addition some illnesses, for example asthma, although considered a long term condition may not require the ongoing prescription of medication. Health seeking behaviour and local policies toward prescribing should also be considered. For example the prescribing of anxiolytics was very low in both prisons yet there is evidence from the published literature that anxiety is very common in the prison population. Interpreting these data is therefore challenging.

Where no local data were available estimates of disease from the published literature were considered. In many cases data were historical, for example the most contemporary data on dental health were a decade old; data on the prevalence of mental health problems older. Where possible Scottish and then UK wide data were prioritised over international; the latter is likely to be less generalisable of the Scottish population. It should be acknowledged however that some of the data from Scottish studies, in particular the disease estimates from the 2007 National Prison HNA, were derived from a similar approach to that taken in the present study and may be imprecise. The difficulties we experienced in obtaining robust local data to inform HNA are not unique to this study and have been widely described in HNAs in the prison population. Moving forward consideration must be given to systematic routine collection of data on the health and health needs of the prison population.

Comparative data for the general population were largely drawn from routinely collected data from primary care and national surveys. PTI and QOF data provide very crude estimates of disease prevalence and should be interpreted with caution. PTI data is available according to

sex and age group; QOF data is not. All surveys are prone to bias, in particular participation and reporting bias which may threaten the validity of results and have an impact on generalisability. In addition the data available from surveys is limited and in many cases was not able to provide the level of detail or granularity that would have been desirable. For example national survey data on the prevalence of diabetes (according to type) was not available.

The comparative needs assessment was based on an examination of clinical standards, evidence based guidelines and targets for treatment and care. Analogy was not drawn between services in the prison and community because the needs of the prison population are such that providing equivalence of service may not result in equivalence of outcome. Whilst evidence of effectiveness in the community setting may in some instances translate to the prison setting (for example the brushing twice daily with high fluoride toothpaste to prevent dental decay), others may not (for example mental health interventions). Due to the focus on 'community' equivalence comparison was not made between prisons in NMSGC and prisons in other board areas. However there may be value in undertaking such work at a future date to identify examples of good practice given the limited evidence of effective interventions or service delivery in the prison setting.

Attempts were made to ensure that service mapping was as comprehensive as possible. However it should be acknowledged that a large number of service providers (SPS, NHS, local authority, commissioned services and third sector organisations) operate in both prisons and a directory of all the services available, including service specifications, was not available. Service mapping therefore relied upon extensive interviews with prison staff and reflects their knowledge of services available and the service providers. There may then be gaps in mapping, particularly in relation to areas of provision that are more remote from health.

The corporate needs assessment sought the views and options of key informants including a range of people who work in the prison and prisoners. The interview and focus groups schedules used had been developed and used in published HNA in the prison setting. Minor adaptations were made to these for use locally. A large number of interviews with a range of people who work in the prison setting were carried out to obtain breadth of perspectives. Despite efforts it was not possible to interview some key informants, most notable the prison dentists. Participants in prisoner focus groups were selected by health care and custodial staff based largely on convenience. This group are unlikely to be representative of the prison population in general. Acknowledging that some prisoners may feel uncomfortable contributing to discussions in a group setting, a small number of semi-structured interviews were carried out opportunistically with prisoners in the Halls to supplement data from the focus groups. Although the number of focus groups and interviews with prisoners was small, analyses indicated that data saturation had occurred with common themes consistently emerging. Finally, it should be acknowledged that the views and opinions expressed by both people who work in the prison and prisoners may present perceived need therefore it is important that these are considered in the wider context of the epidemiological and comparative needs assessments.

## **Conclusions and recommendations**

Conclusion and recommendations are presented under topic specific themes followed by a number of cross cutting themes that emerged from the HNA. These are not presented in order of priority. These recommendations should be considered in light of a number of important

forthcoming publications including, but not limited to, the National Health Improvement in Prisons Framework, the National Sexual Health Improvement in Prisons Framework and the Dental Priorities Group Strategy, which will further inform planning, practice and local and national policy. Crucially, the lessons learned from the model of service delivery adopted in the newly opened Low Moss facility should inform future actions, guided by the prison Healthcare Managers.

### ***Alcohol misuse***

Over half of prisoners in NHSGGC were drunk at the time of committing their offense; 1 in 5 are alcohol dependent. Young, female, remand prisoners are at greatest risk. Demand for alcohol services in prison is high. Need is not currently being met. Formal alcohol screening is not undertaken at the time of admission to prison. There is variation in the availability and delivery of alcohol interventions with gaps in service provision (particularly for remand prisoners).

We recommend:

- Routine screening for alcohol problems at or soon after admission using a validated tool.
- Development of an integrated care pathway (ICP) of local services for alcohol problems to provide appropriate treatment and support according to need and preference.
- A range of interventions should be available to prisoners tailored to need and preference (for example self-help, ABI, pharmacotherapy and psychological interventions) and delivered in a variety of formats (for example one to one and group sessions).
- Remand prisoners should have access services for alcohol misuse during incarceration.

Recent planned developments around provision of health care to prisoners with alcohol problems who are on remand may help to address these recommendations. The transfer of enhanced addiction case work from the current third sector provider to the NHS aims to develop an improved model of addiction care which builds on previous successful interventions and which will specifically target throughcare and community engagement.

### ***Drug misuse***

Drug dependence was universally identified as being a major issue in the prison population. Demand for addictions services in prison is high and reflects need, however, delays in confirmation of community prescribing at admission are common. Team working and communication between addictions services, in particular health care addictions teams and Phoenix Futures, is variable, often to the detriment of prisoners. Concerns over current arrangement for dispensing supervised medications, in particular methadone were expressed by staff and prisoners. Service provision is variable with health care addictions teams and Phoenix Futures reporting limited capacity to provide psychosocial support and deliver therapeutic interventions to prisoners. The current commission arrangement with Phoenix Futures focuses on the delivery of a set number of interventions in predefined areas. Some interventions were considered by a range of staff (health care, Phoenix Futures and SPS) to be inappropriate, for

example significant resource is devoted to delivering the National Harm Reduction Programme, uptake of which is low. Throughcare was perceived to focus almost exclusively on ensuring that a community prescriber was in place with limited community in-reach.

We recommend:

- A review of the current provision of addictions services should be carried out including an examination of: work load and responsibilities of health care addictions staff; enhanced addictions services currently provided by Phoenix Futures; arrangements for dispensing supervised medications including methadone. Lessons learned from the new Low Moss model should inform this process.[Since completing this report it has been agreed that this third sector model will change, as will the focus on inputs and outputs, which will be replaced by a model which has greater emphasis on prisoner outcomes and improved through care and community engagement with mainstream health services]
- Stakeholders views on the Harm Reduction Programme should be sought to identify innovative approaches to increase uptake.
- Communication between prison health care staff and community prescribers should be improved to ensure timely confirmation of supervised medication(s) following admission. This may be addressed by access to emergency care records with all current medicines identified.
- Opiate dependant intravenous drug users that are not receiving opiate substitution treatment prior to incarceration should, in association with an appropriately trained health care professional, be able to make an informed decision about whether they wish to detoxify or commence maintenance therapy in prison following a period of stabilisation. [\*Since the completion of this report, this is currently being introduced by NHS medical staff once full recruitment to posts ahs been completed]
- Written policies and protocols for the prescribing of opiate substitution therapy should be readily available to all addictions staff, Phoenix Futures and prisoners.
- A range of interventions should be available to problem drugs users tailored to need and preference and delivered in a variety of formats, including one to one and group sessions.
- Psychosocial support and monitoring should accompany opiate detoxification and the provision of opiate substitution therapy.
- Opportunities to increase family involvement and peer support in treatment should be identified.
- Prisoners should have access to networks such as Narcotics Anonymous, during incarceration. This is an area of good practice.
- An integrated holistic approach to addressing concurrent health and wider social care needs (housing, education, training and employability) of problem drug users should be adopted.
- Problem drug users are vulnerable immediately following liberation. Access to addictions throughcare services should be improved to ensure continuity of care. This must extend beyond simply ensuring a community prescriber is available.

### ***Tobacco use***

The majority of prisoners smoke. Demand from smoking cessation services is high and not currently meeting need. There is limited access to some treatment options, for example one

to one work. The development of the addictions model that is currently underway provides opportunities to enhance this provision.

We recommend:

- All prisoners who smoke should be reviewed annually and offered smoking cessation advice.
- All health care staff should be trained in smoking brief interventions. This opportunity could be extended to SPS staff.
- The model of provision of smoking cessation services in prisons in NHSGGC should reflect the model employed in the community in NHSGGC ensuring continuity of care on liberation.
- Consideration should be given to drawing on existing community resources in NHSGGC to deliver smoking cessation services in the prison setting.

### ***Diet, physical activity and healthy weight***

The prison environment presents both opportunities and challenges to improving diet and physical activity, and in turn achieving healthy weight.

The prison menu clearly offers 5 portions of fruit and vegetables per day, however both prisoners and some staff perceived there to be a lack of availability of healthy food, especially in HMP Barlinnie. The majority of prisoners reported being able to take exercise daily and almost two thirds met current recommendations for physical activity. Whilst access to the gym and sports facilities was identified as being good in HMP Greenock, access to the gym in HMP Barlinnie is limited. Examples of good practice included the development of mental health and well-being activity groups in HMP Greenock and the provision of yoga to prisoners attending the Day Care Centre in HMP Barlinnie. Although data on body mass index is routinely collected at admission, formal pathways to assessment, advice and treatment underweight or overweight/obese prisoners are not available and specialist dietetic input is lacking.

We recommend:

- Clinical care pathways should be developed to ensure that prisoners identified at admission as being underweight or overweight/obese are offered assessment, advice, and access to treatment, during incarceration and at through care. This could be carried out in relation to Keep Well.
- Prisoners with a defined need should have access to advice from a dietician.
- The availability of fresh fruit and vegetables in HMP Barlinnie, irrespective of menu choice, should be increased.
- NHSGGC should work with SPS to provide ongoing dietetic advice and support to inform healthy eating initiatives, including any future menu developments.
- The activity groups currently available in HMP Greenock should be supported by the NHS physical activity team. Consideration should be given to extending this model to other groups of prisoners and to HMP Barlinnie.
- NHSGGC and local authority partners should work with prison physical training instructors to develop an exercise referral scheme for prisoners with identified health needs.
- NHSGGC should work with SPS and Education to identify, develop and

evaluate a range of sports and active living opportunities, including those that link physical activity to other initiatives. For example a gardening project might include physical activity, learning, diet and life skills such as cooking.

- NHSGGC, SPS and local authority partners should consider an exercise referral scheme at throughcare for prisoners who use the gym regularly, benefit from structured purposeful activity and where the prospects of employment following liberation are poor.

### **Dental health**

Expressed and normative need for dental care in the prison population is high. Dental services are under-resourced. Unmet need is substantial. Remand prisoners in particular have very poor access to dental treatment. Dental services almost exclusively provide urgent and emergency care with little focus on preventative care. Oral health promotion is lacking.

We recommend:

- Dental services and facilities should be resourced to meet the very high levels of normative need for emergency, urgent and routine care.
- The current policy on the provision of dental services to remand prisoners is inequitable and should be reviewed. Length of time since last dental review should be considered rather than sentence length.
- Continue to provide toothbrushes and high fluoride toothpaste free of charge at admission. Consider providing these free during incarceration and in liberation packs.
- Prisoners should be provided with current, accurate and accessible information about prison dental services including waiting times for treatment.
- The introduction of an oral health assessment at admission.
- In conjunction with the dental team, written protocols for the triage of dental problems should be developed.
- Training in oral health and oral health promotion should be given to all health care staff to ensure that the provision of oral health care is integrated with general health care and delivered by confident and competent staff.
- Protocols for the provision of analgesia for dental pain in the Halls should be reviewed.
- Consideration should be given to expanding dental services to include the delivery of preventative dental care, for example the use of dental hygienists.
- Opportunities to incorporate oral health promotion into other interventions, for example smoking cessation and treatment for drug or alcohol misuse should be sought. In turn the dental team should be able to refer prisoners to these interventions.
- The availability of sugar-free or reduced sugar products, for example sweeteners, should be increased.
- Prisoners should be provided with accurate and accessible information on how to access dental services in the community at liberation and be supported to register with a community dentist prior to liberation making appointments where there is ongoing treatment.

## **Long term conditions**

Use of IT is limited; electronic disease registers to describe the prevalence of long term conditions in the prison population and facilitate recall and review as part of routine care are not available. Health care staff report complying with national evidence based guidelines for treatment and care and clinical standards. It is not currently possible to audit this without a time and labour intensive review of paper based case notes. Whilst there is enthusiasm for nurse-led chronic disease management clinics, the breadth and frequency of provision is variable, often due to a shortage of appropriately trained staff. Due to limited capacity (staff and facilities) staff report having limited capacity to provide holistic care; prisoners report being provided with limited information, particularly around medication, and having limited opportunities for self-care and self-management. In some cases links with specialist services in secondary care are exemplary, for example tissue viability in HMP Barlinnie; links with primary care are more tenuous. Difficulties accessing allied health and very limited pharmacy provision (technical rather than professional services) are evident. Facilities for providing stepped up care, for example for those returning from hospital or with a physical dependency, are lacking. The creation of a NHS salaried medical workforce may result in improved standards as good clinical governance, regular audits, targets and heat standards might be applied as is best practice. Continuity of care and development of agreed protocols is in the early stages. New Vision IT system will allow careful scrutiny of prescribing practice and adherence to formulary which will be monitored.

We recommend:

- An electronic clinical information system should be used to support the registration, recall and review of prisoners with long term conditions. This will also facilitate timely information exchange with primary care.
- Prisoners with long term conditions should be managed in accordance with local and national evidence based guidelines for treatment and care, and health services delivered in accordance with NHS Health Improvement Scotland Clinical standards.
- Health care staff should demonstrate compliance with relevant guidelines and clinical standards through regular audit.
- Consideration should be given to introducing the Quality and Outcomes Framework (QOF) in the prison setting (or developing prison specific QOF indicators which may include conditions such as ARBI).
- Health care staff should be supported in expanding and developing nurse-led specialist clinics to meet need.
- The provision of pharmacy services in prisons in NHSGGC should be reviewed. Consideration should be given to the expansion of pharmacy services to support the management of long term conditions reflecting the community based pharmacy model, for example the development of general medications clinics.
- Protocols for referral to allied health professionals should be developed.
- All prisoners with a long term condition should be involved in their care planning and provided with current, accurate and accessible information, education and advice about their diagnosis, treatment and management.

- Opportunities to increase self-care and self-management in prisoners with long term conditions should be identified, for example developing peer support, increasing access to web-based support, ensuring relevant self-help materials are in the prison library and increasing the availability of in-possession medications.
- Discharge planning should include timely communication with primary and where appropriate secondary care prior to liberation.
- A review of the provision of health care facilities for prisoners requiring stepped up care should be carried out in conjunction with SPS to identify risks and opportunities.

### ***Anticipatory and preventative care (Keep Well and Well-person clinics)***

The Keep Well pilot delivered by SPS engaged 60% of eligible prisoners in NHSGGC. A Well Woman clinic operates in HMP Greenock and a Well Man clinic in HMP Barlinnie; both are highly regarded by staff and prisoners.

We recommend:

- The development of an in-house model for delivering the Keep Well service with protected staff time, which continues to engage at least 60% of eligible prisoners.
- Revision of existing Keep Well templates to reflect those used in the community which will improve continuity of care on liberation.
- The adoption of reporting and monitoring systems used by Keep Well practices in the community.
- Keep Well staff based in prisons should work closely with the community-based Keep Well teams, with the same opportunities to access support, advice, training and development.
- Pathways and protocols for patient referrals and existing service provision should be mapped and a directory of services created. A gap analysis should be conducted to identify areas that require development.
- Staff delivering Well Person clinics should co-ordinate with staff delivering Keep Well checks to target prisoners and avoid duplication of effort.
- The content and delivery of Well Person clinics should be reviewed to ensure that the approaches adopted in prison are consistent with those in the community.
- Health care staff should be supported in developing the Well Person clinic model. In HMP Greenock this should be extended to include a Well Man clinic.

### ***Mental health problems***

Mental health was considered by prisoners and staff to be the most important health issue amongst the prison population. Local data describing the prevalence of mental health problems are lacking. Contemporary data from the literature are also lacking but have consistently indicated that the majority of prisoners have one or more mental health problems and dual diagnoses. Prison primary mental health care services are under-resourced and unmet need

is significant. This finding is consistent with a series of national reports and reviews to date. Despite limited capacity high quality services are available to prisoners in NHSGGC with severe and enduring mental illness: mental health problems are promptly identified, access to mental health teams including psychiatrists is better than in the community, where required transfer to care from custody is prompt and throughcare is excellent. The Day Care Centre in HMP Barlinnie provides exemplary care, with a broad range of therapeutic activities, to highly vulnerable prisoners.

We recommend:

- Senior staff from NHSGGC in partnership with prison based mental health staff should undertake a comprehensive review to examine how to deliver improvements in mental health and well-being in prisons in NHSGGC. This should include, but not be limited to: identification and diagnosis of mental health problems at admission; negative impact of the ACT 2 Care process on individuals under-observations; the development of primary care mental health services; current staffing levels and skills mix; clinical supervision; the availability of advocacy services; concerns raised by prisoners about the listening service; stigma reduction; mental health awareness training for all staff; mental health promotion; In addition see counselling for abuse in BBV/Sexual health section. This should link with the current national mental health strategy due out soon and the national framework for health improvement in prisons.
- NHSGGC should support the existing areas of good practice that have been developed and are delivered in partnership with SPS in both prisons including the Day Care Centre in HMP Barlinnie and the Alternative Therapy groups in HMP Greenock.

### ***Learning disability***

The prevalence of learning disability in the prison population is not known; staff and prisoners perceive learning disability to be under-recognised. Routine screening for learning disability is not undertaken and opportunities to identify the need for a formal assessment for learning disability may be missed through poor communication. Prisons have an identified health care lead for learning disability although capacity to develop services to date has been limited.

We recommend:

- The consistent use of a validated tool to screening for learning disability at admission or in the Core Screen.
- A formal review of service provision for prisoners with learning disability, led by a senior from NHSGGC and relevant prison based staff. This should be informed by forthcoming recommendations from the review of 'Same as you?'

NHSGGC have identified funding which will allow them to take forward a national framework for Learning Disability while assessing local levels of need including for people with Autism Spectrum Disorders. It will encompass issues of communication, ARBI and Head Injury. This post will be in place by Autumn 2012.

## ***Literacy and numeracy***

Approximately 1 in 6 prisoners lack functional literacy and numeracy skills, although only a fraction of this number report difficulty with reading, writing and numbers and seek help. Although need is high, demand for literacy and numeracy services can be low. Poor literacy and numeracy impact directly on health literacy.

We recommend:

- NHSGGC should work with SPS and Education services to ensure the use of a screening tool to identify prisoners with low levels of literacy and numeracy during the core screen.
- A protocol should be developed to ensure that health care staff are informed by SPS of prisoners with literacy and numeracy problems.
- Health care staff should receive training to raise awareness of literacy and numeracy issues.
- Health care staff should adapt their communication and resources to meet the needs of prisoners with low levels of literacy and numeracy.

## ***Sexual health and BBV***

Prisoners often engage in high risk behaviours prior to incarceration. Many have been the victims of gender-based violence or in harmful, coercive relationships. Little is known about sexual activity during incarceration. During incarceration prisoners have limited access to information and education and sexual health and well-being and relationships. Routine enquiry about abuse (sexual and/or domestic) is not currently undertaken by prison staff, including health care staff. BBV in the prison population are most commonly acquired through injecting drug use with HCV being the most prevalent. A number of harm reduction initiatives are in place in prisons to reduce transmission of BBV. BBV clinics in both prisons were identified as examples of good practice. However, due to limited staff capacity, particularly in HMP Greenock, not all prisoners eligible for HCV treatment are receiving it.

We recommend:

- A review of the need, demand and supply of condoms, dental dams and lubricants should be carried out to inform service design and delivery.
- Prisoners should have access to information and education about relationships and sexual health and well-being. This may be best delivered pre-liberation.
- All prisoners, irrespective of gender, should be offered contraceptive advice and provision and if necessary sign-posted to sexual health services in the community pre-liberation. Consideration should be given to including condoms in liberation packs.
- Consideration should be given to introducing routine enquiry of abuse (sexual, domestic and gender based violence) for all prisoners. But prior to implementation it is important to address: the timing of routine enquiry; staff training required to meet needs in the case of disclosure; availability of services in the prison to support prisoners disclosing; pathways to services on liberation.
- Prisoners in high risk groups should continue to be routinely offered

testing for BBV's at admission.

- All unimmunised prisoners should continue to be offered HBV/HAV vaccination at admission.
- All prisoners testing positive for BBV should have access to specialist services including treatment. Nurse-led BBV clinics operating in both HMP Barlinnie and HMP Greenock are examples of good practice but lack capacity to offer treatment to all eligible prisoners – this should be addressed.
- All prisoners should be provided with current, accurate and accessible information about routes of transmission of BBV including intravenous drug use, tattooing and piercing at admission.
- Intravenous drug users should have access to opiate substitution therapy during incarceration.
- Reconsideration should be given, at a national policy level, to the introduction of a needle and syringe exchange programme within the prison setting, acknowledging that among injecting drug users in prison the sharing of drug injecting paraphernalia is common.
- Consideration should be given to the introduction of a needle replacement scheme on liberation in addition to the C card currently provided.

### **Parenting**

Almost half of all prisoners have one or more dependant child. The long term impact of parenting interventions delivered in the prison setting on prisoners and their children has not been established. However prisoners value parenting programmes and following participation, knowledge about and attitudes toward parenting may improve. The Triple P programme has been piloted in HMP Barlinnie; no parenting interventions are available in HMP Greenock.

We recommend:

- Consideration should be given to the roll out of the parenting programmes in prisons across NHSGGC and this has been identified as a service improvement target.
- NHSGGC should work with SPS, local authority and third sector partners (for example Families Outside and Circle), to develop a sustainable, evidence based model for the delivery of parenting programmes in prisons.

### **Employability**

The majority of prisoners are unemployed at the time of sentencing; few gain employment post liberation. Improving employment prospects is a key outcome in reducing re-offending. The complex health and social care needs of prisoners, alongside stigma from the public and potential employers, is a barrier to employment.

We recommend:

- The pivotal role of health care staff in improving employability should be recognised (particularly in the management of mental health problems and stabilisation of addictions). Health care staff should continue to

contribute to integrated case management and work holistically with partner agencies to ensure the provision of robust throughcare for prisoners on liberation.

- The role of the Keep Well team in prisons in identifying and referring prisoners to employability services should be developed.
- NHSGGC community teams should work with SPS and partner agencies to enhance the life skills and employability programmes (for example the Changing Lanes pilot in HMP Barlinnie) currently available for prisoners.
- NHSGGC should work with Community Justice Authorities and partner agencies to support and evaluate throughcare programmes which include employment initiatives. A particular focus should be on ex-offenders who are dually disadvantaged by having physical or mental health problems.
- NHSGGC should work with Community Justice Authorities and partner agencies in campaigns with employers to tackle stigma and discrimination experienced by ex-prisoners.
- NHSGGC should act as an exemplar employer and identify opportunities to support prisoners or ex-prisoners re-entering the work place.

### ***Re-offending***

Most offenders are re-offenders. The importance of improving physical and mental health and well-being on recidivism is increasingly being recognized. SPS provide a range of offense-led programmes in both prisons. A number of partner organizations also contribute to work in this area. Service mapping in this area focused on delivery in the prison setting. This did not consider community based services and is therefore unable to provide a complete picture of activity. Throughcare provision is variable in both prisons. A large number of service providers contribute to throughcare, including the SPS and voluntary sector, although these are not necessarily coordinated. In relation to addictions, through care focused largely on ensuring continuity of prescribing of opiate substitution therapy. In-reach from community based providers is limited and prisoners expressed a desire to have greater access to community based services during incarceration. Many prisoners expressed a need for immediate support on liberation, for example having appointments with a general practitioner in place prior to liberation. In both prisons there were many examples of staff, health care and SPS, going above and beyond to try to support prisoners through the gate.

We recommend:

- The pivotal role of health care staff (particularly the management of mental health problems and stabilisation of addictions) in reducing recidivism should be recognised. Health care staff should continue to contribute to integrated case management and work holistically with partner agencies to ensure the provision of robust throughcare for prisoners on liberation.
- The provision of services to reduce re-offending in NHSGGC, including community based services, should be comprehensively mapped and a gap analysis conducted. This should link in with the national audit of what works in reducing reoffending due to report in October 2012.
- NHSGGC should work with SPS and partner organisations to develop,

enhance and evaluate offense-led programmes (for example programmes on alcohol, drugs and domestic violence).

- NHSGGC should support the development, delivery and evaluation of throughcare services, for example Routes out of Prison, the Barlinnie North West project, and One Glasgow.
- Integrated care pathways should be developed to ensure information sharing with community service providers and continuity of health care for prisoners at liberation.
- Opportunities for health care staff to work more effectively with services in prisons that are responsible for throughcare (SPS and third sector), especially the social dimensions of throughcare such as employability and family relationships, should be identified.
- NHSGGC Public Health and Health Improvement should, in conjunction with partner agencies such as the Criminal Justice Authorities, undertake a wider programme of work to examine throughcare moving beyond signposting to community based services.

### ***Health at work***

HMP Barlinnie and HMP Greenock are engaging enthusiastically with the healthy working lives programmes in partnership with NHSGGC Health and Work team. Planning groups, which include senior management, operate in both prisons.

We recommend:

- Prisons should continue to develop and implement their programmes of events and interventions in order to maintain Gold award (HMP Barlinnie) and gain Gold award (HMP Greenock).
- Each prison should use the HNA to inform the next stages of their Healthy Working Life's programme. For example acting on the identified need for mental health awareness training amongst SPS staff.
- Given the extensive efforts that have been put into achieving the awards, including developing policies and procedures, consideration should be given to a stronger evaluation of these programmes
- The inclusion of prisoners in health promotion activities is an example of good practice and should be continued.
- Health at Work employability staff should support employability programmes with prisoners.

During the HNA a number of cross cutting themes were identified which will be addressed in the section that follows.

### ***Communication***

In both prisons examples of good and poor communication were evident. Of note health care staff felt that the 'business as usual' approach adopted during the transfer of health care service from the SPS to the NHS was a missed opportunity. Whilst enthusiastic about the transfer, most expressed disappointment that at an operational level they felt, and continue to

feel, disengaged from the wider NHS community. The recommendations that follow address communication between health care staff and prisoners, within and between health care teams, between health care staff and other prison staff (SPS, third sector) and finally between health care staff and the wider NHS.

We recommend:

- All prisoners and prisoner's families should be provided with current, accurate and accessible information about the health care services available in prison and how these can be accessed. Information should be inequalities sensitive.
- Consultations between health care staff and prisoners should be private and confidential.
- All prisoners should be provided with current, accurate and accessible information about their treatment and care. Information should be inequalities sensitive.
- All prisoners should have access to an advocacy service.
- Prison health care staff are now part of the wider NHS workforce. This should be reflected in the NHSGGC communications strategy. Health care managers should explore the possibility of using NHSGGC organisational development to support effective communication within health care teams and between health care teams, SPS and wider partner organizations.
- Opportunities for exchanges, shadowing and special interest visits between prison based health care staff and staff from primary and secondary care should be developed. The lessons learned from the Low Moss model should inform practice in this area.

### ***Staff training and development***

Both prisons have an enthusiastic and dedicated work force operating in a challenging environment to meet the very complex needs of prisoners. A lack of awareness of professional development opportunities within the NHS was noted by health care staff. However, several positive developments have taken place including supporting recent team building events with Greenock and Barlinnie, and team reviews are now planned to take place on an annual basis.

We recommend:

- Health care managers should be briefed on and supported in identifying training and development opportunities available to their staff, including health improvement training.
- Prison health care staff should be supported in developing a practice network to provide peer support and share examples of best practice with other health care staff working in prisons in NHSGGC.
- Prison health care staff should participate in relevant practice networks operating in NHSGGC.

### **Access to services**

The referral process was identified as problematic for prisoners with learning disability or literacy issues and the use of coloured referral forms for mental health potentially stigmatising. In general access to health care services was very good and in some cases, for example access to the mental health team for people with an existing diagnosis of severe and enduring mental illness, far better than the community based equivalent. Nevertheless prisoners perceived there to be unacceptable delays in accessing a GP. Prisoners felt it would be valuable to deliver an informal drop in style clinic in the Halls. This was not identified by health care staff and therefore the practicality of introducing such a service was not explored.

We recommend:

- The referral system should be reviewed and adapted to ensure that this is inequalities sensitive.
- Health care staff should, with prisoner and SPS involvement, explore the feasibility of delivering drop-in clinics in the Halls.

### **Pharmacy services**

Pharmacy services are currently limited to technical services. Both staff and prisoners and staff were generally satisfied with the repeat prescription system. The timely provision of medication was an area of great concern for prisoners. This occupies a considerable amount of health care staff's time. Lack of consistency with prescribing in the community was reported by prisoners. The paper based Kardex system was identified as a possible risk in HMP Barlinnie. Current contract with Lloyds Pharmacy will continue for 18 months. During this time Lead Pharmacists are reviewing the service delivered and making recommendations on improvements. These should take account of the following:

- Expansion of pharmacy services to reflect a community based model
- The dispensing of supervised medications; an examination of the risks associated with the use of the current paper based Kardex system. Health care staff prescribing in prison adhering to NHSGGC formulary.
- Regular audit.

### **Information Technology**

Use of IT to support the delivery of health care was extremely limited. In addition, health care staff report limited access to computing facilities to support ongoing education and training (for example access to Athens and web-based learning resources) and electronic communication (staff email, access to Staffnet).

We recommend:

- An electronic clinical information system should be used to support the delivery of health care. This will facilitate timely information exchange with primary and secondary care, improve chronic disease management and facilitate regular audit and service evaluation. This area will be informed by forthcoming national development.
- Measures should be in place to ensure systematic quality assurance (completeness and accuracy) of health information recorded electronically.

- Staff training in the use of electronic clinical information systems should include confidentiality, data protection and data management. [Since this report training has been provided]
- Staff should have access to computing facilities to enable effective communication and support continued professional development [Since the completion of this report this is now in place].

### **Resources**

Levels of need in prison are very high; demand for health care services reflects need. However resources are limited. This affects the quality and quantity of health care available. A strategic approach to addressing limited resources, taking account of forthcoming national guidance, for example the National Framework for Health Improvement in Prisons, and informed by this HNA, should be adopted.

We recommend:

- A strategic approach is required to address very high levels of need and demand for health care in the prison population, in the context of limited resources and recognizing the need for equalities sensitive delivery of health care and equivalence of outcome. This should be considered in a coordinated way in conjunction with health service planners with an assessment of the impact of changes in resource allocation and service delivery on outcomes.

### **Continuous quality improvement**

Very limited local data were available to describe the health needs of the prison population and a corresponding paucity of evidence of robust audit and/or service evaluation. These data are crucial to inform the planning and delivery of safe, effective health care services.

We recommend:

- For core services delivered by NHS staff in prisons data should be collected to demonstrate safe, effective, equalities sensitive practice.
- NHSGGC Public Health and Health Improvement team should establish a minimum monitoring dataset for use in prisons that will provide robust health information to support service planning, delivery and evaluation. The possibility of this work being carried out at a national level supported by the Information Service Division (ISD) of NHS Scotland should be explored.
- NHSGGC Public Health and Health Improvement team should collaborate with prison based NHS teams and partner organisations (SPS, voluntary sector and academic) to support service evaluation and identify opportunities contribute to the evidence base.

### **Throughcare**

Throughcare provision is variable nationally and regionally. A large number of service providers contribute to throughcare, including the SPS and voluntary sector. Many prisoners expressed a need for immediate support on liberation, for example having appointments with a general

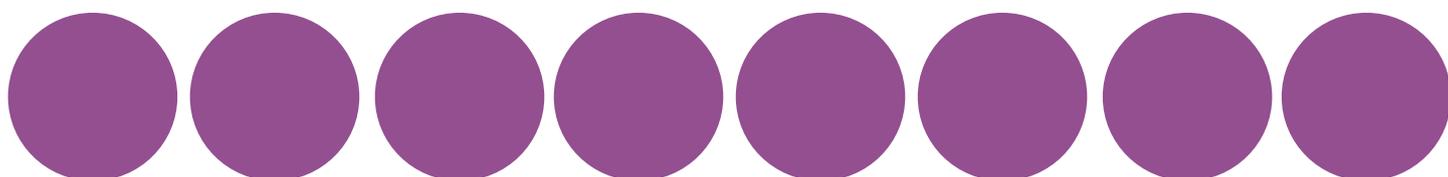
practitioner in place prior to liberation. In both prisons there were many examples of staff, health care and SPS, going above and beyond to try to support prisoners through the gate

We recommend:

- The role of health care staff in throughcare should be clearly articulated.
- Integrated care pathways should be developed to ensure information sharing with community service providers and continuity of health care for prisoners at liberation.
- NHSGGC Public Health and Health Improvement should, in conjunction with partner agencies such as the Criminal Justice Authorities, undertake a wider review to examine throughcare moving beyond signposting to community based services. Prison based NHS staff's experience should inform this.

### ***Feedback to stakeholders***

The findings from this HNA should be fed back to stakeholders in an accessible format.



## Appendix 1. Medications and corresponding chapters in BNF 62

### *Anti-depressants*

#### 4.3 Antidepressant drugs

### *Anti-psychotics*

#### 4.2.1 Antipsychotic drugs

#### 4.2.2 Antipsychotic depot drugs

### *Anxiolytics*

#### 4.1.2 Anxiolytics

### *Anti-epileptics*

#### 4.8.1 Control of the epilepsies

### *Asthma*

#### 3.1.1.1 Selective beta2 agonists

### *Diabetes*

#### 6.1.1 Insulins

#### 6.1.2 Antidiabetic drugs

### *CHD*

#### Anti-platelet and anti-coagulant

#### 2.8.2 Oral anti-coagulants

#### 2.9 Antiplatelet drugs

### *Diuretics*

#### 2.2 Diuretics

### *Anti-arrhythmic*

#### 2.3 Anti-arrhythmic drugs

### *Nitrates, calcium-channel blockers and other anti-anginals*

#### 2.6 Nitrates, calcium-channel blockers, and other antianginal drugs

### *ACE-Inhibitors and ARB*

#### 2.5.5.1 Angiotensin-converting enzyme inhibitors

#### 2.5.5.2 Angiotensin-II receptor antagonists

### *Alpha and beta blockers*

#### 2.5.4 Alpha-adrenoceptor blocking drugs

#### 2.4 Beta-adrenoceptor blocking drugs

### *Lipid-regulating drugs*

#### 2.12 Lipid-regulating drugs

## Appendix 2. Details of literature Search Strategy

The search strategies written for use in Medline accessed via OVID are outlined below. These were adapted for use in other databases (Embase, HMIC, Cochrane, ASSIA, Cinahl, PsychInfo, ISI Web of Knowledge). Searches were limited to English language studies published from 1995 through December 2011 examining the UK prison population. A supplementary search of the grey literature was carried. Titles and abstracts of documents were screened and the full texts of potentially relevant articles reviewed. Bibliographic and citation searches on relevant articles were carried out to indentify further material of interest. .

### Health Needs of Prisoners

- 1 prisons/
- 2 jail.tw.
- 3 penitentiari\$.tw.
- 4 incarcerat\$.tw.
- 5 "penal system".tw.
- 6 "criminal justice system".tw.
- 7 "correctional facilities".tw.
- 8 prison\$.tw.
- 9 prisoners/
- 10 inmates.tw.
- 11 convicts.tw.
- 12 offenders.tw.
- 13 "health services needs and demand".tw.
- 14 "health services needs and demand"/
- 15 needs assessment/
- 16 "health needs assessment".tw.
- 17 "health care need".tw.
- 18 (health adj3 (need or requirement)).tw.
- 19 exp Great Britain/
- 20 "United Kingdom".tw.
- 21 Uk.tw.
- 22 ((or/1-8) or (or/9-12)) and (or/13-18) and (or/19-21)
- 23 limit 22 to (english language and humans and yr="1995 -Current")

### Health care delivery in prison

- 1 prisons/
- 2 jail.tw.
- 3 penitentiari\$.tw.
- 4 incarcerat\$.tw.
- 5 "penal system".tw.
- 6 "criminal justice system".tw.
- 7 "correctional facilities".tw.
- 8 prison\$.tw.
- 9 prisoners/
- 10 inmates.tw.
- 11 convicts.tw.
- 12 offenders.tw.

- 13 "delivery of health care"/
- 14 "patient acceptance of health care"/
- 15 attitude to health/
- 16 health knowledge, attitudes, practice/
- 17 health services accessibility/
- 18 (("health service" or "health care") adj1 (delivery or provision)).tw.
- 19 exp Great Britain/
- 20 "United Kingdom".tw.
- 21 UK.tw.
- 22 ((or/1-8) or (or/9-12)) and (or/13-18) and (or/19-21)
- 23 limit 22 to (english language and humans and yr="1995 -Current")

### Appendix 3. List of key informant interviewees

HMP Barlinnie
Health centre manager
Clinical Manager (x3)
Mental Health nurse
Addictions nurse
Addictions / Dual diagnosis nurse
Addictions / BBV nurse
Nurses practitioners (x4)
General Practitioner
Forensic psychiatrists (x 2)
Custodial Officer (Day Care Centre)
Employability Manager
Family Contact Officers (x2)
Custodial Officers, residential (x2)
Custodial Officer, First Line Manager
Physical Training Instruction Manager
Custodial Officer, Prison Outcomes Manager
Head Offender Outcomes
Triple P Coordinator
Service Manager (Lifelinks)
Phoenix Futures Enhanced Addictions Services Team Leader
Project coordinator (HOPE)
Lecturer (Education)
HMP Greenock
Health Care Manager
Practitioner Nurse (x2)
Practitioner nurse (Learning Disability)
Addictions Nurse (x2)
Mental health nurse
General practitioner
Health care assistant (pharmacy)
Deputy Governor
Prisoner employment manager
Operations Officer (family contact/visits)
Physical training instructor
Rehabilitation and support officer (Link Centre)
Social worker
Phoenix Futures Enhanced Addictions Services Team Leader

## Appendix 3. Interview schedule and consent form

<b>Public Health &amp; Health Improvement</b>	
	Corporate HQ West House Gartnavel Royal Hospital 1055 Great Western Road GLASGOW G12 0XH
<b>Information and Consent form</b>	
<b>Information</b>	
NHS Greater Glasgow and Clyde (NHSGG&C) is responsible for providing appropriate health care services to prisoners in Barlinnie, Greenock and Low Moss prisons. We are carrying out a health needs assessment (HNA) in these prisons to help us understand the health needs of prisoners and how best to meet these.	
We would like to hear your views about the health needs of prisoners and how these can best be met in this prison. We would be grateful if you would participate in a short structured interview with a member of the Public Health and Health Improvement team from NHSGG&C. This should take 10 -15 minutes to complete.	
All the information that you provide us with will be anonymous and confidential. Please don't provide any person identifiable information during the interview. Please answer the questions as honestly and as fully as possible. Your views will be brought together with the views expressed by other people including prisoners, health care and custodial staff in the prison and NHS staff, in a final report.	
Thank you for taking the time to speak to us.	
If you have any concerns or questions please contact Dr Michelle Gillies by email at <a href="mailto:Michelle.Gillies@glasgow.ac.uk">Michelle.Gillies@glasgow.ac.uk</a> or by telephone on 0141 330 3295.	
<b>Consent</b>	
I agree to take part in this Health Needs Assessment (HNA). I have read the information above.	
I agree to be interviewed by a member of the Public Health and Health Improvement Team from NHSGG&C. The information from this interview will be held and used to inform any reports / publications on the health care needs of prisoners in NHSGG&C produced by the Public Health and Health Improvement Team.	
I understand that:	
<ul style="list-style-type: none"><li>• The information that I provide is confidential</li><li>• No person identifiable information will be disclosed in any reports or publications arising from this work, or to any other party</li><li>• Participation is voluntary</li><li>• I can chose not to answer some, or all of the interview questions</li><li>• I can withdraw at any stage without being penalised or disadvantaged in any way</li></ul>	
Name (print) _____	
Signed _____	
Date _____	

Date \_\_\_/\_\_\_/\_\_\_ Location \_\_\_\_\_ Interviewer \_\_\_\_\_

We would like to ask you some questions about the health care needs of prisoners and how you feel these are being met by the health care service in this prison. The aim is to identify areas of good practice and also to identify areas where there is room for improvement. In the latter case we'd like to hear how you think the service could be changed to better meet the needs of prisoners. There are no right or wrong answers, we'd just like to hear your thoughts. THANKS.

Male Female (delete as appropriate)

How long have you worked for the prison service? \_\_\_\_\_

How long have you worked in Barlinnie / Greenock? \_\_\_\_\_

What is your current role? (Specify location) \_\_\_\_\_

**What do you think the main health care needs of prisoners in this prison are?**

**What aspects of the health care service in this prison do you feel work well?**

**What aspects of the health care service in this prison do you feel could be improved?**

**Can you suggest ways in which the health care service in this prison could be improved?**

**What do you see as the barriers to improving the health care service in this prison?**

**What would you say the priorities for improving the health care service in this prison are?**

**Is there anything else that you'd like to add?**

## Appendix 4. Focus group schedule and consent form

<b>Public Health &amp; Health Improvement</b>	
	Corporate HQ West House Gartnavel Royal Hospital 1055 Great Western Road GLASGOW G12 0XH
<b>Information and Consent form</b>	
<b>Information</b>	
NHS Greater Glasgow and Clyde (NHSGG&C) are now responsible for providing health care services to people imprisoned in Barlinnie, Greenock and Low Moss. To help us provide the best health care services we are carrying out a health needs assessment (HNA). This help us understand your health care needs and how best to meet these.	
We would like to hear your views about your health care needs and how these can best be met in this prison. We would also like to hear about your experiences of using health care services both in this prison and in the community. Your opinions are important to us.	
We would like you to take part in a focus group with other prisoners. This might take a couple of hours. It will be led by two members of the Public Health and Health Improvement team from NHSGG&C; one person will ask questions and listen to your thoughts and another will take notes.	
<b>All the information that you provide us with will be treated as confidential.</b>	
Information from this focus group will be brought together with information from a range of other sources in a report that we hope to have finished by March 2012.	
Thank you for taking the time to speak to us.	
If you have any concerns or questions please contact Dr Michelle Gillies by email at <a href="mailto:Michelle.Gillies@glasgow.ac.uk">Michelle.Gillies@glasgow.ac.uk</a> or by telephone on 0141 330 3295.	
<b>Consent</b>	
I agree to take part in this Health Needs Assessment (HNA). I have read the information above.	
I agree to be take part in a focus group with two members of the Public Health and Health Improvement Team from NHSGG&C. The information from this focus group will be held and used to inform reports / publications produced by the Public Health and Health Improvement Team on the health care needs of people imprisoned in the NHSGG&C area.	
I understand that:	
<ul style="list-style-type: none"><li>• The information that I provide is confidential</li><li>• The information that I provide with will be anonymised – individual(s) will not be identified in any reports or publications that come out of this work, or details disclosed to any other party</li><li>• My participation is voluntary</li><li>• I can chose not to answer some, or all of the focus group questions</li><li>• I can withdraw my consent to take part at any stage without being penalised or disadvantaged</li></ul>	
Name (print) _____ Signed _____	
Date ___/___/___	
Location _____ Group _____ Interviewer _____	

## Focus group schedule

### Introduction

- Who are we and where are we from
- Who are they - Name, age and hall

### Why

- What HNA is
- What we hope to get from their input

### Ground rules:

- Confidentiality
- Allow everyone a chance to speak and express their views/opinions/experiences
- Respect each others views/opinions/experiences
- *Don't* provide specific details of their health or criticisms of individuals

### Process

- We have prepared a set of questions for the group
- Two members of PH&HI team; one will ask questions and one will take notes
- Neither will take part in the conversation, we want you to feel free to talk to each other
- It is important that everyone gets a chance to speak and to be heard
- There are no right or wrong answers
- We will keep a written note of the conversation to help us remember the key points *but* they will never be identified from this
- Information from this and other focus groups pulled together with information from other sources to produce a final report in March 2012
- It has not yet decided how this will be disseminated but will look at how we can feed this back to prisoners
- Thanks for taking part
- Any questions?

### Focus Group Questions

Reception	<i>We'd like you to think back to when you first came to this prison.</i> Were you able to tell health care staff about any health problems? Were your immediate health care needs met? If not, why?
Continuity of care	Were there any gaps in your health care (e.g. meds)? How do you think this could be improved?
Services in prison	<i>Thinking now about the health care services that are available in this prison</i> Do you know how to access health care services in this prison? How do you think this could be improved?  Which service(s) do you value most and why? Which service(s) do you value least and why? Are there any services that you think should be provided that aren't?  How do you feel you are treated by the health care staff? (Prompt: GP, nurses, waiting times, meds, appointments, health info)
Priorities	What would you most want to change / improve about the health care here?  What would make the biggest difference to your health whilst in this prison?
Health state	<i>We'd like you to now think about your own health whilst you've been here.</i> Do you think that your health is better / worse / about the same since you've been in this prison and why?
Health Promotion	What would help you be healthier in this prison? How do you think this could be delivered?
Mental Health	Do you feel that you get the support that you need for good mental health? If not, what would you want?
Through care	<i>Finally we'd like you to think ahead to when you leave prison.</i> What would help you stay healthy when you leave prison? How can we help you do this?
Is there anything else that you'd like to talk about?	
Thanks again for taking part.	



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