# Evaluation of Keep Well in Prisons

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Clare Sharp, Susan McConville and Claudia Martin with Charlotte Tompkins, Irene Miller, Anne Birch, Susan MacLeod and Susan Reid;

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# **Executive summary**

#### Background

Prisoner populations have poor physical and mental health compared with other groups in society and, in particular, have health behaviour profiles which may increase their risk of cardiovascular disease. The Equally Well report (Scottish Government 2008) noted that improving the health of offenders could contribute towards a reduction in health inequalities associated with violence, alcohol and drugs.

'Keep Well' is a Scottish Government initiative which aims to increase the rate of health improvement in deprived communities by:

- identifying those who are at risk of developing preventable serious health issues,
- providing suitable interventions and services to these people, and
- providing them with follow-up care.

#### Keep Well in Prisons

In 2009, as part of the Scottish Government's agenda to reduce health inequalities by targeting particularly vulnerable groups, the Scottish Prison Service (SPS) secured funding from the Scottish Government to implement a 12 month Keep Well programme for prisoners. An option appraisal exercise (SPS, 2009) considered three substantive options for the delivery of health checks to prison populations: delivery via a dedicated team who would travel around prisons in Scotland; building capacity into each prison health centre; and delivery via a third party contractor. SPS concluded that delivery via a dedicated Keep Well team would provide best value for money and meet the clinical objectives of this initiative. Keep Well in Prisons (KWiP) is delivered by two peripatetic teams, each comprised of a Team Leader and two nurses, all of whom are seconded to KWiP from the Scottish Prison health service.

The SPS Keep Well teams received training to provide a screening health check, which has been adapted to the specific needs of the prisoner population. The delivery of the Keep Well in Prisons health checks began in May 2010 in all prisons across Scotland and was offered to prisoners aged 35 or more.

#### The evaluation of KWiP

In September 2010, the Scottish Centre for Social Research (ScotCen) was commissioned by NHS Health Scotland to evaluate the first six months of KWiP's initial 12 month period of operation. The overall aim of the evaluation was to assess the delivery and impact of the Keep Well programme in prisons. In so doing, it sought to:

- a) Describe the development, implementation and delivery of Keep Well health checks to the prison population,
- b) Assess the short term impacts on prisoners, prison staff and NHS staff in terms of both experiences of the programme, raised awareness and changes in knowledge and attitudes,
- c) Identify factors facilitating or acting as barriers to achieving progress towards health behaviour change,
- d) Provide a baseline and evaluation framework for a longer term follow-up study,
- e) Assess the financial costs of the delivery of Keep Well in Prison.

The evaluation had three phases:

- An initial scoping phase, carried out in September 2010, which included documentary analysis and interviews and group discussions with key informants within Scottish Government, NHS Lothian, NHS Health Scotland, and the Scottish Prison Service,
- Quantitative analysis of national SPS Keep Well monitoring data, including analysis of financial costs of Keep Well delivery,
- Qualitative research in four prisons which included semi-structured interviews face-to-face with 32 prisoners (8 per prison) and 20 prison staff (5 per prison).

# Results

## The development and implementation of KWiP (May-October 2010)

The routine monitoring data collected by the KWiP programme includes information about all those invited to attend a health check, those who accepted the invitation and more limited information about those who did not attend or declined the health check. In order to assess uptake and explore variations in engagement, the monitoring data for the first six months of the programme's operation, May to October 2010, were analysed. During that period, the data showed that:

- More than two thirds (69%) of eligible prisoners had attended a health check on receiving their first invitation letter, but participation varied by prison, by age and proximity to expected liberation date,
  - Participation rates varied between prisons, from 58% to 100% of those attending a health check after receiving their first invitation letter,
  - Older prisoners (45+) were somewhat more likely to accept the Keep Well invitation than younger prisoners (aged 35-44),
  - The majority of health checks were attended by prisoners close to their expected release date.
- Over 90% of those who had received a health check were offered advice, most commonly in relation to smoking, diet and/or exercise,

- Over a third (38%) of prisoners who had received a health check were given a referral to a specific service, but this varied by prison, age and by gender of prisoners:
  - Those aged 55 and over were likely more than younger prisoners to have been referred to other services,
  - 40% of male prisoners were referred to other specialist services compared with 22% of the female prisoners.

## Experiences of KWiP

Qualitative research with prisoners and prison staff (health care and operational) was carried out in four prisons in October and November 2010. The prisons included a women's prison, a long-term facility, a local prison and an open prison.

Within each prison, semi-structured interviews were conducted with eight prisoners and five prison staff, which in most prisons comprised one operational manager, two operational staff and two health care staff, including one nurse plus a clinical manager/health care manager or a doctor. In total, 32 interviews with prisoners and 20 with prison staff were conducted. In addition, a group discussion with the KWiP nursing teams and a paired interview with the KWiP team leaders were carried out. All of the prisoners interviewed had attended a Keep Well health check.

In relation to prisoners' experiences of Keep Well:

- Prisoners who reported that they had been well informed in advance about KWiP were clearer about their reasons for attending the health check and motivated to attend and respond to the advice received than those with poorer recall of the information they received,
- Prisoners reported a greater awareness of personal health issues and a more positive attitude to personal health improvement as a result of the health checks,
- There were reports from prisoners and from prison staff that attempts to make behavioural changes were made by prisoners which included:
  - attending smoking cessation groups,
  - using the gym more,
  - using their own money (earned in prison) to purchase additional fruit and vegetables.
- Prisoners valued the health checks as evidence of concern on the part of the prison service for their well-being beyond routine health care.

In relation to health care professionals' and operational prison staff experiences of Keep Well:

- Prison health care staff members received briefings from their health care manager and attended information sessions in advance of the programme's implementation,
- There was initial concern among prison health care workers that their role might be undermined by the KWiP health checks, but this view did not persist
- Prison staff generally supported a greater focus on health promotion within the prison.
- The KWiP nurses:
  - valued the opportunity and the protected time with individual prisoners that the programme afforded,
  - felt that they had gained valuable skills and knowledge during their secondment to Keep Well.

# Facilitators of behavioural change

The interviews with prisoners and prison staff explored perceptions of the factors which either facilitated or inhibited health-related behavioural change in prisons. Structural, interpersonal and individual factors which might both hinder or support behavioural change were highlighted by prisoners and staff.

Structural factors that facilitated change included:

- The ready availability of equipped gyms and instructors to encourage exercise,
- The potential to purchase additional fruit and vegetables using money earned in prison via 'sundry purchases' was perceived to be a choice that was open to prisoners,
- Referrals to smoking cessation groups and support.

Interpersonal factors identified by prisoners included:

- Support and advice from prison staff, including personal training
- Informal peer support from other prisoners, particularly in relation to exercise/gym use,
- Encouragement from friends and family who wanted the prisoner to be healthier.

Personal and individual factors perceived to facilitate change included:

- Being better informed about health issues which, in turn, helped prisoners make healthier choices,
- An interest on the part of prisoners in assessing whether abstinence from drugs and/or alcohol had had a positive impact on their health,
- A desire by prisoners to get healthy for life after release and, particularly, to be healthy to enjoy their family.

#### Barriers to behavioural change

Prisoner and staff perceptions of the barriers to behavioural change were similarly focused around structural, inter-personal and personal/individual factors. However, the evaluation found that the physical and structural reality of incarceration was a key inhibitor to behavioural change.

Structural factors perceived to be barriers to change included:

- The routines, regimes and physical limitations of prison life,
- Perceived limited choices at mealtimes with, what were regarded to be, unappealing 'healthy' options and a perceived limited access to fruit and vegetables,
- Access to gyms which was perceived to be restricted to specific time slots or days.

Inter-personal factors cited by prisoners included:

- Perceptions that gym use was affected by the presence of dominant prisoners,
- Mixing with prisoners who did not have the same interest in getting healthy.

Personal and individual issues cited by prisoners as factors that deterred change included:

- Using one's own money to purchase additional fruit and vegetables was seen to compete with other items of personal spend,
- Being incarcerated was experienced as stressful and perceived to be a deterrent to change,
- Smoking and high sugar or fat diets were regarded as personal pleasure which prisoners were reluctant to give up.

## The future of KWiP

The prison (operational and health care) staff and the Keep Well nurses were asked to reflect on the future of Keep Well delivery in prisons and to consider how health promotion could be supported in prison settings.

There was a clear and shared view among the Keep Well in Prison nurses that when they returned to their former role in supporting prisoner health:

- The skills and knowledge acquired in the course of their seconded placement could be utilised in their own practice,
- The learning could be shared with prison health care colleagues.

Despite some initial misgivings, the view of prison staff (health care and other) was that a distinct and external team provided greater protection for the delivery of health promotion within the context of the pressured work environment of prison health care delivery.

#### The costs of delivering KWiP

The evaluation has made an assessment of the known costs of delivering KWiP, based on the first six months of delivering the health checks to prisoners. Potential additional costs to SPS are also listed, although it was not possibly to quantify these. Data on attendance at referrals and follow up care was not available within the timeframe of the study, and could therefore not be used in any cost estimates.

#### Conclusions

The programme was well-received by prisoners, prison staff and the Keep Well nurses with good participation by prisoners and evidence of modest attitude and behavioural change. While prisoners expressed a willingness to address their smoking and poor diet, there is a continuing need for:

- Timely access to smoking cessation support in order to reinforce their post-health check motivation,
- Greater opportunities for prisoners to influence their diet beyond what are perceived to be relatively limited and unappealing 'healthy' menu choices,
- Creative approaches to persuade prisoners who still have long sentences to serve of the value of the health checks.

The seconded KWiP nurses appreciated their role, enjoyed the different focus on health promotion that the programme afforded, and anticipated learning transfer on their return to the prison health care service.

If prisons are to become more health promoting environments there is a need to ensure that prison settings become facilitators rather than barriers to change. This includes ensuring that there is a prison-wide approach which is supported and communicated by all prison staff and supported by structural changes in the delivery of opportunities to make health related behavioural changes. Keep Well in Prisons can play an important role in contributing to a shift in the prevailing norms and cultures within prisons. The more that Keep Well is regarded as a mainstream service and its profile is reinforced over time through sustained activity within prisons, the potential to inform attitudes and practices at all levels of the prison service is likely to be enhanced.

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# 1. Background and introduction

The Keep Well in Prisons (KWiP) Anticipatory Care programme has been operating in Scottish prisons since May 2010. In September 2010 the Scottish Centre for Social Research was commissioned by NHS Health Scotland to evaluate the programme. The evaluation has focused on the first six months of KWiP's initial 12 month period of operation.

#### 1.1 Health inequalities in Scotland

Inequalities in health in Scotland are reflected in a lower life expectancy, especially a lower healthy life expectancy, and in higher rates of a range of health conditions among those living in the most deprived areas compared with those residing in more advantaged areas. Coronary heart disease (CHD), one of the most common causes of death in Scotland, is most prevalent in areas of deprivation. Results from the Scottish Health Survey 2008 showed that men and women living in the most disadvantaged areas of Scotland had the highest rates of any cardiovascular disease (CVD), Ischaemic Heart Disease (IHD) or stroke, while those living in the least deprived areas showed the lowest rates for these health conditions (MacGregor, 2009).

The Scottish Government's National Performance Framework Indicators (Scottish Government, 2007b) have a specific focus on CVD and recent policies have called for health improvement programmes and resources to be targeted at the most disadvantaged individuals, as well as providing early interventions in order to prevent the development of more serious health conditions. This has resulted in a shift in emphasis from reliance on episodic acute care in hospitals towards a system of preventive medicine, support for self care and greater targeting of resources.

In its action plan Better Health, Better Care (Scottish Government, 2007a), the Scottish Government identified anticipatory care measures as a major vehicle to reduce health inequalities. Anticipatory care programmes aim to tackle health inequalities through screening individuals for key risk factors for a range of different long-term conditions such as CVD, heart disease and diabetes which, if identified at an early stage, provide an opportunity for people to be offered appropriate advice and treatment in order to minimise the further development of these conditions.

#### 1.2 The Keep Well Anticipatory Care Programme

The Keep Well programme aims 'to increase the rate of health improvement in deprived communities by enhancing primary care services to deliver anticipatory care' (see web reference for NHS Health Scotland, 2010). It aims to do this through three key approaches: identifying those who are at risk of developing preventable serious health issues; providing suitable interventions and services to these people; and providing them with follow-up care. The Health improvement, Efficiency, Access and Treatment (HEAT) targets reflect the Scottish Government's NHS performance targets. Keep Well specifically

contributes towards achieving the national H8 HEAT target to 'Achieve agreed number of inequalities targeted cardiovascular health checks during 2010/11' (Scottish Government, 2010).

Keep Well focuses on cardiovascular disease (CVD) and the main risk factors associated with CVD, in particular, high blood pressure, cholesterol, smoking and diabetes. CVD has major consequences for individuals and also NHS resources. Despite a decrease in CVD-related visits to GPs in recent years, a relatively high prevalence of CVD in the population continues to place significant demand on services. An estimated 177,000 patients with coronary heart disease (CHD) (ISD Scotland, 2009b) and 46,000 patients with stroke or transient ischaemic attack visited their GP or practice nurse in 2007-08 (ISD Scotland, 2009c) and CHD and stroke are two of the major causes of admission to Scottish hospitals. Furthermore, diabetes care is estimated to account for 10% of NHS expenditure in Scotland (Scottish Government, 2009a). It is within this context of prevalent, but potentially preventable illness that the increasing emphasis on anticipatory care approaches is predicated.

In community settings, GPs and other primary care providers are increasingly attempting to identify people at risk of developing CVD, diabetes and other long-term conditions before the onset of any illness through such initiatives as the Keep Well programme. This programme aims to screen people aged 45-64 in deprived communities using the risk assessment tool ASSIGN to calculate a person's future risk of CVD and offer advice and treatment where necessary. ASSIGN, the preferred tool for CVD risk assessment as set out in the NHS Quality Improvement Scotland clinical standards for CHD (see NHS Health Scotland, 2008a), differs from previous risk assessments by taking account of area deprivation as well as a range of lifestyle factors and family history which may impact on an individual's risk profile.

The Keep Well programme has been piloted across all Board areas targeting those living in the 15% most deprived areas (defined using the Scottish Index of Multiple Deprivation, Scottish Government, 2004) in Scotland over the past four years and an external national evaluation was carried out by the Universities of Glasgow and Edinburgh. Earlier this year, the Scottish Government announced its continuing support for the programme by expanding it from 2012 onwards. It also plans to make Keep Well available to all those living in the most deprived areas in Scotland, to make the checks available to those aged over 40 (currently available to those over 45 years) and to repeat the health checks every five years (NHS Health Scotland, 2010).

#### **1.3** The health of prisoner populations

Prisoners have a higher risk of poor physical and mental health compared with other groups in society. This is, in part, due to the fact that prisoners are more likely to have one or more of the risk factors associated with poor health. For example, 76% of prisoners in Scotland report being smokers (Scottish Prison Service, 2009) compared with only 25% of the population of Scotland as a whole,

as reported in the 2007/8 Scottish Household Survey (Scottish Government, 2009b). Men in the most deprived areas in Scotland, compared to those in the least deprived areas, are more likely to have a CVD condition (MacGregor, 2009). In Scotland there is a strong relationship between the male imprisonment rate and the level of area deprivation, with the imprisonment rate rising in line with an increase in the level of area deprivation (Houchin, 2005).

A number of studies have been conducted more widely which further demonstrate the poor health and health behaviour of prisoner populations. For example, research in different prisons across the UK suggests that prisoners are likely to be at particularly high risk of future CVD because of the prevalence of five key risk factors: smoking, physical activity levels, diet, weight and body mass index and blood pressure. In one study involving female prisoners, 85% were smokers, 87% did not exercise enough to benefit their health, 86% did not eat at least five portions of fruit and vegetables a day and 30% were either overweight or obese (Plugge et al, 2009). Research with male prisoners in Cardiff Prison showed fewer than half (44%) reported taking vigorous exercise and almost a third took no exercise at all. Although the menu allowed prisoners to eat five portions of fruit and vegetables a day, 62% reported eating less than three a day Although 29% reported that they had better health since being in prison, a similar proportion rated it as worse (Lester et al, 2003). While prison systems may vary in the different UK countries, the evidence suggests that prisoner populations share poor health behaviour profiles which may increase their risk of cardiovascular disease.

A further risk factor particularly prevalent among prisoners is the high level of drug and alcohol problems. The Scottish Prisoner Survey (Scottish Prison Service, 2009) shows that 67% of prisoners stated that they had used drugs in the twelve months prior to coming into prison and 22% admitted they had used drugs whilst in prison in the previous month. Moreover, Equally Well (Scottish Government, 2008) reported that 98% of the female prisoners in HMP Cornton Vale had 'addiction' problems. The Equally Well report does not distinguish between alcohol and drug addiction in this context, and no source for this figure was provided. Almost half (45%) of all prisoners were found to be dependent on alcohol prior to their most recent imprisonment (ISD Scotland, 2009a),

Mental health problems are prevalent in prisoner populations. Studies in English prisons and analyses of data for Scotland cited by Graham (2007) suggest that rates of depression, anxiety and psychotic illness are elevated in prisoner populations. One in five prisoners in Scotland state that they have seen mental health staff (Scottish Prison Service, 2009). A review of 62 studies conducted in Western countries revealed that typically, about one in seven prisoners has a psychotic disorder or major depression, and half of male prisoners and a fifth of female prisoners have a personality disorder (Fazel et al, 2002).

The ability to make healthier choices whilst in prison can be difficult. Research carried out in English prisons found that some prisoners reported that smoking

was a way of coping with prison life (Condon et al, 2008) and the 2009 Scottish Prisoner Survey reported that 43% of prisoners shared a cell with a smoker. In the English study (Condon et al, 2008) prisoners felt that they were not always able to make the healthy eating choices they wanted, for example, one prisoner described how difficult it was to get access to skimmed milk and brown bread. However, the study also pointed out some perceived benefits for prisoners - that being in prison had given them the opportunity to access health-related services, such as smoking cessation services, and to have access to three meals a day (something they were unable to do on the outside) (Condon et al, 2008). There is, however, evidence that prisoners want to make healthier life choices, for example in relation to smoking. In one study carried out in Cardiff prison, 79% of male prisoners who smoked said they wanted to quit, although those who smoked more than 20 cigarettes a day were less likely to want to quit than more moderate smokers (Lester et al, 2003).

# 1.4 Keep Well in Prisons

#### 1.4.1 The rationale for Keep Well in Prisons

The Scottish Government Equally Well report published in 2008 on health inequalities highlighted the higher levels of risk faced by a range of disadvantaged groups including those with physical and learning disabilities, mental health problems, people from ethnic minorities and offenders. The report noted that improving the health of offenders would contribute towards a reduction in health inequalities associated with violence, alcohol and drugs. The report highlighted the need for Keep Well to consider the needs of these disadvantaged groups, who may have different health patterns compared with the general population and may experience difficulties accessing health services. It was concluded that their needs should, therefore, also be considered within the Keep Well programme).

As part of the Scottish Government's agenda to reduce health inequalities by targeting particularly vulnerable groups, it was decided to extend the Keep Well programme to prisons, a group identified as being at particular risk of adverse cardiovascular health outcomes because of their socio-economic status, poor health behaviours and limited engagement with health services. In 2009, the Scottish Prison Service secured funding from the Scottish Government to run a Keep Well programme for prisoners.

#### 1.4.2 Models of delivery

An option appraisal exercise (SPS, 2009) considered three substantive options for the delivery of health checks to prison populations: the first would be to establish a peripatetic clinical team, which would travel around the prisons delivering the Keep Well screening programme and health promotion clinical services which would include all aspects of the Keep Well programme; the second option would be to build capacity into each health centre; and the third would be to deliver the Keep Well screening programme via a third party contractor. Following an analysis of each option SPS concluded that the development and deployment of a peripatetic team would deliver best value for money and meet the clinical objectives of this initiative. Although key informants were not explicitly asked about these alternative models of delivery, preferences for how the programme should be delivered were discussed in the qualitative interviews with prison staff and prisoners and the discussions with Keep Well nurses (see Chapter 7).

The Keep Well in Prisons programme aims to offer screening and prevention services to all prisoners over 35 years of age across Scotland. The lower age limit for screening of prisoners (compared to 45 years in the community), reflects the higher level of risk factors amongst this group. Another element of the programme is the potential to refer prisoners on to services in the community, including those run by the NHS, social services and the voluntary sector, and to follow-up these prisoners on their release.

Two models of the Keep Well in Prisons programme are currently operating. The first model offers Keep Well health checks to prisoners sentenced to six months or more. It is delivered by two peripatetic Keep Well teams, each comprising a Team Leader and two Keep Well nurses, all of whom are employed by the Scottish Prison Service. The work of the two SPS Keep Well teams is managed by the Keep Well in Prisons Project Manager. The teams provide a screening health check, which has been adapted to the specific needs of the prisoner population and also includes a sexual health risk screen and a mental well-being screen (General Health Questionnaire -12; Goldberg, 1982). In addition, the SPS Keep Well teams provide advice and interventions on a range of factors including smoking, exercise, healthy eating, mental health and sexual health. They also make referrals to other prison-based health, benefits, and educational services (e.g. alcohol addiction services). The delivery of the Keep Well in Prisons health checks began in May 2010 in prisons across Scotland.

The second model offers Keep Well health checks to prisoners on short-term sentences (sentences of less than six months). It is delivered by NHS Health Board Keep Well Teams, who provide Keep Well health checks to prisoners on an in-reach basis. This second model is currently being delivered by NHS Lothian to eligible prisoners in HMP Edinburgh and a similar model is being developed by NHS Lanarkshire for eligible prisoners in HMP Addiewell.

The evaluation was asked to focus on the first model of delivery.

#### 1.4.3 The health checks

Prisoners are informed about KWiP in a number of ways, including posters and information sessions presented by KWiP staff. Those eligible for KWiP are also sent a letter by the KWiP administrator explaining the health checks and notifying them of the times when the KWiP clinics will be held so that they can attend if they wish. In order to encourage prisoners to attend, a reminder letter is sent by the KWiP administrator to those who fail to attend on the first occasion. They

then receive a second reminder letter and if they have still not attended, they are taken off the KWiP list. However, KWiP nurses also make direct personal contact with prisoners who fail to attend, in order to find out their reasons for not going to a clinic and to encourage them to attend.

The KWiP health check consists of collecting a number of key health measurements from prisoners in order to assess their risk of developing cardiovascular disease and any associated conditions such as stroke or diabetes. As part of the health check, prisoners are routinely asked about their smoking, diet, and exercise levels. Alcohol consumption is also assessed using the Fast Alcohol Screen Test (FAST) and brief interventions delivered where necessary. Assessments for drug use are not included in the health check for a number of reasons: prisoners will have already been assessed for drug addiction on entry to prison; to avoid prisoners seeing the health check as a possible route to Methadone or drug services; and because the focus of the health check is on cardiac risks equivalent to the community Keep Well health check. The following measurements are routinely included in the health check:

- Blood pressure/pulse,
- Peak flow,
- Blood test for cholesterol and glucose levels,
- Height,
- Weight,
- Waist measurement,

Based on the initial assessment, the nurse may provide the prisoners with advice or other forms of brief intervention relating to a particular health concern. The nurse may also make a referral for that prisoner to a specialist service provided through the prison healthcare team, a contracted service such as smoking cessation support, or to an NHS provider such as a dietician. Where a health concern has been identified, the Keep Well nurse will inform the prison based health care team and document this in the prisoner's health care records. Prisoners are asked for their consent to hold their personal and clinical details and to release this information to their GP and prison health care staff if required. They are also asked for their consent to be contacted in the future to assess their progress.

The NHS Lothian in-reach service offered to eligible prisoners in HMP Edinburgh includes access to outreach workers in the community. A 'preparing for release summary', which was devised by NHS Lothian, outlines whether the individual requires help with a number of different areas such as finding accommodation, registering with a GP, improving their literacy, liaising with community drug and alcohol services or other health promotion/health improvement inputs as required. The outreach worker may meet prison leavers at the gate on their release and accompany them to visit a specific service, such as registering with a GP if they do not already have one.

# 1.5 Evaluation aims and objectives

The overall aim of the evaluation was to assess the delivery and impact of the Keep Well programme in prisons. In so doing, it sought to:

- Describe the development, implementation and delivery of Keep Well health checks to the prison population,
- Assess the short term impacts on prisoners, prison staff and NHS staff in terms of both experiences of the programme, raised awareness and changes in knowledge and attitudes,
- Identify factors facilitating or acting as barriers to achieving progress towards health behaviour change,
- Provide a baseline and evaluation framework for a longer term follow-up study,
- Assess the financial costs of the delivery of Keep Well in prison.

The more detailed objectives of the evaluation were to:

- Describe the development and implementation of the model(s) of delivering Keep Well health checks to the prison population,
- Identify the factors informing these models and the implications for implementation,
- Assess the reach of Keep Well among the prison target population in terms of the proportion being offered and receiving a health check while in prison,
- Identify possible factors informing this/these patterns of reach in the early stages of implementation,
- Conduct quantitative analysis on the data to describe the outcomes of the Keep Well checks,
- Explore the views and experiences of the SPS Keep Well programme among prisoners, prison staff and SPS and NHS Keep Well teams, and perceptions of short-term outcomes,
- Assess the impacts of delivering KWiP at an organisational level in terms of understanding of, and actions to address the health needs of the target population (by SPS and by community services); and in terms of joint working between these organisations,
- Assess the broad financial costs of Keep Well delivery to the target population, including costs to SPS, Scottish Government, and as far as practicable, to the NHS in terms of future prescribing patterns and clinical interventions post-release,
- Generate learning on the factors facilitating or acting as barriers to achieving progress towards health behaviour change among prisoners, prison staff and organisationally within the prison context,
- Provide learning for any future longitudinal evaluation of outcomes.

#### 1.6 Report structure

The remainder of this chapter outlines the background and policy context for the Keep Well in Prisons programme.

Chapter 2 describes the objectives and methods used for the evaluation. The evaluation findings are presented in a series of chapters.

Chapter 3 explores the development, implementation and delivery of the KWiP programme from the perspective of key stakeholder informants and outlines their anticipated outcomes of the programme and perceptions of issues affecting its implementation.

Chapter 4 then presents analyses of the monitoring data collected for the first six months of KWiP's operations in relation to uptake of the service.

Chapters 5 and 6 draw on prisoners' and prison staff experiences of KWiP and explore their perceptions of the programme. They explore changes in prisoner behaviour, knowledge and attitude which might be associated with KWiP and the factors perceived to facilitate or inhibit health-related behavioural change in prisons and views about the future of the programme.

Chapter 7 considers the future of the programme from the perspective of KWiP nurses and prison based staff.

Chapter 8 considers the costs of delivering the mobile (peripatetic) service and provides preliminary data for estimating costs per prisoner check.

Finally, Chapter 9 discusses the evaluation findings and presents our conclusions.

# 2. Methods

The research was divided into a number of phases which used a range of methods to explore both national and local perspectives of the Keep Well in Prisons programme. The phases and methods associated with each are outlined below.

## 2.1 Phase 1: Scoping

An initial scoping phase was carried out in September 2010 and largely comprised documentary analysis and interviews with key informants in relation to Keep Well in Prison which informed the development of interview schedules.

## 2.1.1 Documentary analysis

A desk-based overview of key documents relating to background information on the design, development and implementation of Keep Well in Prisons was conducted. Key documentation was requested from NHS Health Scotland and from the Scottish Prison Service (SPS). Minutes from the Prisons Anticipatory Care Steering Group and the SPS outline business case for the Keep Well in Prisons initiative were also obtained. Some of the background information in these documents was used to help inform the development of the topic guides for the stakeholder interviews and the in-depth interviews with prisoners and prison staff during the main qualitative interview phase of the evaluation.

## 2.1.2 Key informant interviews

Semi-structured interviews were conducted with individuals in key strategic or policy positions in relation to Keep Well in Prison. This included two individuals working in Scottish Government with responsibility for Keep Well policy, the Project Manager for Keep Well in Prisons and the Co-ordinator for the NHS Lothian in-reach service. The interviews focused on:

- How the models of anticipatory care have been designed, developed and implemented and what the key issues and challenges have been
- How the Keep Well in Prisons programme operates, including perceptions of how this is working across different areas
- Factors which have acted as barriers or have facilitated implementation
- Other relevant issues that stakeholders feel may need to be considered.

## 2.1.3 Prisons Anticipatory Care Steering Group

It had been hoped that a group discussion with the Prisons Anticipatory Care Steering Group which brought together representatives of stakeholder organisations within NHS Health Scotland, Scottish Government and the Scottish Prison Service would be part of the scoping exercise. However, as the earliest date that could be arranged for the research team to meet with the Group was November 2010, this was considered too late for the scoping stage of the study. Instead the meeting was used as an opportunity to explore some of the initial findings from the case study work with the group and seek their feedback. This, in turn, allowed the research team to rehearse the key findings and gain some additional context to understanding the data.

# 2.1.4 Discussion group with SPS Keep Well Teams

The research team attended the meeting for SPS Keep Well nurses at the end of September 2010 at which the teams who had delivered the programme for the first six months 'handed over' to the teams seconded for the next six month period. The purpose of this meeting was for the nurses who had worked on KWiP to talk about their experiences and brief the new team of nurses. The research team was given a one hour slot during this meeting to conduct the discussion group with the out-going and in-coming teams. The discussion was digitally recorded (with informants' consent) and transcribed. The discussion covered the following broad areas:

- Training and recruitment of KWiP nurses,
- Key issues in the last six months of delivering the programme,
- Issues around engaging with prisoners for KWiP and initiatives used to improve this,
- What has worked well and what has worked less well in delivering KWiP,
- How their KWiP role compares with their prison health role,
- How well the programme has been received by prisoners,
- Issues around follow-up care and referrals for prisoners,
- How wider prison staff have responded to the KWiP programme.

The group discussion with the KWiP teams contributed to the scoping phase, but is also referred to in the chapters focusing on the qualitative research in prisons.

Because of the competing demands of the KWiP teams' workloads and the timetable for the evaluation, this was the only opportunity to meet with the KWiP nurses before data gathering in prisons and the initial reporting of findings. The research team attempted to address this via an informal meeting with team leaders and, although only limited data could be included at this late stage, these discussions have informed the final report.

# 2.2 Phase 2: Considering National Level Data

Research focusing on the implementation of the initiative at a national level followed which included:

2.2.1 Quantitative analysis of national SPS Keep Well monitoring data

The purpose of this part of the evaluation was to assess the reach of KWiP among the prison target population by examining the proportion of eligible prisoners being offered and receiving a health check whilst in prison. Routine monitoring data collected for the first six months of the Keep Well in Prisons programme (May to October 2010) were provided in the form of Microsoft Excel spreadsheets by the Scottish Prison Service. This included a range of data on prisoners who had received a health check, which consisted of:

- Unique Keep Well ID number,
- Prison in which the check took place,
- Gender,
- Age,
- Estimated date of liberation,
- Length of sentence (Less than four years/four years or more),
- Date of health check,
- Elements received in the health check (for example, advice, referrals),
- ASSIGN scores.

A separate database was also provided with details of those offered a health check, but who did not attend after the first invitation letter. This included:

- Unique 'Did Not Attend' ID number,
- Prison,
- Age,
- Length of sentence (less than four years/four years or more),
- Whether or not a prisoner still failed to attend after a first and second reminder letter,
- Dates of health checks for prisoners who were known to have subsequently had a health check.

On receiving data from SPS, the research team merged the spreadsheets to produce one dataset covering checks carried out in all prisons across the first six months of the programme. For this report, the analysis has focussed on the data outlined above and covers the following:

- The number and percentage of prisoners invited who actually attended a KWiP health check, overall and by prison,
- The age profile and length of sentence of prisoners who did not attend for a KWiP health check ,
- The proportion of prisoners (attending health check after first invitation) who received any advice or referrals as a result of the health check, by prison,
- The types of advice and referral received as a result of the health check, overall, by age and by sex (attending health check after first invitation).

#### Monitoring data limitations

It has not been possible to conduct any analysis based on socio-demographic data - such as Scottish Index of Multiple Deprivation (SIMD) scores or previous employment history - as these data were not available in a disaggregated form. However, it is clear that the Scottish prison population is over-whelmingly drawn

from a narrow, materially and economically impoverished section of the population (Graham, 2007). Similarly, analysis based on ethnicity was not included as the number of prisoners from minority ethnic groups was too small.

One of the objectives of the evaluation was to conduct quantitative analysis of the monitoring data to describe the 'outcomes' of the KWiP check. However, these data are still being collected and recorded, it was not, therefore possible to report the number or type of conditions that were diagnosed as a result of the check or whether prisoners actually saw the specialist service to which they may have been referred.

Where possible within the reporting of the findings that follows in subsequent chapters, a thematically integrated approach to analysing quantitative and qualitative data gathered across settings and informant groups was adopted.

# 2.2.2 Assessing financial costs of Keep Well delivery

The research brief asked for an assessment of the broad costs associated with the delivery of Keep Well to the Scottish Prison Service, the Scottish Government and the NHS. However, it was acknowledged by the Scottish Government that, while it would be of great interest to have data relating to spend and costs outwith the dedicated budget, there were no data available to allow an assessment of additional costs to the SPS for referrals such as to health care or mental health services or gym facilities.

Information in relation to each element of the budget for the SPS Keep Well programme was obtained from SPS. The overall budget covers a 12 month period, and includes spend during the first six month period of the programme's operation on:

- Staffing,
- Training,
- Escorting officers,
- IT,
- Travel and subsistence (accommodation, lease cars, petrol, mileage),
- Materials (testing kits, medication, health promotion).

# 2.3 Phase 3: Qualitative research in prisons

Qualitative research was conducted with prisoners and prison staff within four prisons and also with the out-going and in-coming seconded SPS Keep Well teams. This latter element consisted of one group discussion which was intended to be part of the scoping exercise, but because we draw on the data from the discussion in the chapters focusing on experiences of the programme (Chapters 4 and 5), it is described here. However, we also drew on this discussion in our descriptions of the development and delivery of KWiP in Chapter 3.

Qualitative research was carried out in four prisons in order to explore the experiences of prisoners and prison staff in relation to KWiP. These prisons were selected to provide diversity in relation to the prison settings, prisoners, length of sentence and prison staff and to ensure that the evaluation could take account of the range of issues that may have a bearing on the impact of the programme. The four prisons included:

- A women's prison,
- A national prison which houses long term prisoners,
- A prison which houses prisoners from the local area/authority,
- An open prison.

One of the selected prisons was in an area where the NHS Keep Well Team was operating an in-reach service for prisoners on short term sentences. This allowed exploration with both the relevant SPS and NHS staff of issues relating to through-care and joint working. The final selection of prisons was agreed in consultation with the Project Advisory Group. The qualitative prison case studies involved semi-structured interviews with:

- Prisoners,
- Prison staff (health care and operational),
- NHS Keep Well Team (in one case study area only).

#### 2.3.1 Access to prisons

Introductory letters and leaflets were sent to the prisons via the Keep Well in Prisons Project Manager, who facilitated access to the prisons in a number of ways. This included contacting each case study prison to inform them of the evaluation and what would be required from them; to identify an individual to act as a key contact person for the research team; and to confirm fieldwork dates. Once key contact people had been identified, the research team contacted them to provide further details of the evaluation and the support required to conduct it. After initial set up work, the prison fieldwork started. This was carried out over a four week period (October-November 2010), with interviewers spending one or two days in each prison. All prison interviews were conducted by experienced qualitative interviewers who received security training and were also briefed about disclosure issues. Interviewers were issued with a copy of the disclosure policy that had been drawn up in agreement with SPS and NHS Health Scotland.

#### 2.3.2 Sampling prisoners

Prisoner respondents who had been offered and accepted an invitation to have a Keep Well health check were identified for interview using monitoring data for the prisoners who had received a Keep Well health check between May and September 2010. An initial sample of eight prisoners (identified only at this point by their unique KWiP number) from each prison was selected by the research team. It was not possible to sample in relation to ethnicity as the number of prisoners from minority ethnic groups was too small.

Within each prison, the sample of eight prisoners was purposively selected to include male and female prisoners in two age groups (35 to 45 years and 46+ years), and to include prisoners who had received one or more reminders before attending for a check. The number of reminders issued was to be a proxy indicator of willingness to participate in the Keep Well checks.

For each of the eight selected prisoners within each prison, a further two prisoners were identified who matched that prisoner in terms of their age group, gender and number of invitations to health check. This meant that, for each prison, three lists were produced, giving a total potential pool of respondents of 24 prisoners in each prison. These additional prisoners were selected to act as a back-up in case it was not possible, on the day, to interview any of the initial list prisoners who had been sampled.

Letters explaining the research were then sent on behalf of the research team by the Project Manager for KWiP to the initial sample of prisoners, inviting them to participate in the research. The Health Care Manager in each establishment identified the staff to be interviewed and organised the prisoners to be interviewed.

On the day of the interviews, prison staff escorted prisoners who had agreed to take part to the interview room. If a prisoner did not wish to take part or was unable to be interviewed for any other reason, prison staff were instructed to seek participation from the matched prisoner on the second and, if necessary, the third lists. Those on the second and third lists (B&C) did not receive advance letters. Before each interview, including those with the initially sampled prisoners, the interviewer gave the prisoners a copy of the letter and also read it to them and explained further the purpose of the interview.

As is always the case with qualitative research, the sample is not statistically representative, and it is not possible to generalise to the wider prison population. However, within the sample, the range and diversity of views and experiences are explored.

#### 2.3.3 Interviews with prisoners

Before commencing the interview, participants were made aware of the voluntary nature of the interview and were asked to sign a consent form. Interviewers talked through the main points on the form to ensure participants understood what was required of them. Prisoners were reminded that confidentiality would be respected, but that if they disclosed information indicating a breach in prison security, the interviewers were obliged to report that to a designated member of the SPS. All participants were willing to sign the consent form and for the interviews to be digitally recorded. The prisoner topic guide covered the following areas:

• Awareness and understanding of the Keep Well health check,

- Reasons for attending/not initially attending a KWiP health check,
- Views and experiences of health services prior to prison,
- Views on the KWiP health check,
- Short term outcomes related to the KWiP Well health check,
- Facilitators and barriers to behavioural change,
- Satisfaction with the Keep Well health check.

The interviews ranged in duration from 20 to 30 minutes. See Appendix A for a copy of the full topic guide. The interviews were digitally recorded (with consent) and fully transcribed.

In total, 32 interviews with prisoners were conducted in the four prisons (eight interviews per prison). Of these, 17 were with prisoners initially sampled for their prison (List A) and 15 were with prisoners from the back-up lists (12 from List B and three from List C). The interview team were not always provided with a reason for the substitutions which were made by prison staff, but there was only one recorded refusal. In some cases, the prisoner had recently been liberated or moved to another prison, while in other cases it appeared that the prisoner was not available at the time of the interview.

Three prisons were all-male institutions and one prison housed only female offenders which meant that 24 interviews were conducted with male and eight interviews with female prisoners. In relation to age, three-quarters (24) of the prisoners interviewed were in the younger (35-45) age-group. At the open prison, however, half of the respondents were in an older (46+) age-group.

#### 2.3.4 Interviews with prison staff

Semi-structured face-to-face interviews were also held with 20 prison staff, five from each of the four prisons. The purpose of the interviews with prison staff was to explore staff views and experiences of the programme, including perceptions of impact on prisoners, on themselves personally and on the prison as a whole. The health care managers in each prison assisted in the selection and recruitment of staff for interview. For most prisons this included:

- One operational manager,
- Two operational staff,
- Two health care staff (including one nurse plus a clinical manager/health care manager or a doctor).

A topic guide (see Appendix B) was used in the interviews which covered the following broad areas:

- How staff became aware of the KWiP programme,
- Understanding of the KWiP programme,
- Impact of KWiP on their understanding of prisoner health issues,
- Impact of KWiP on their role in relation to supporting prisoner health,

- Impact of KWiP on knowledge, understanding and behaviour in relation to their own health,
- Short term outcomes for prisoners, including referral to other services; impact on knowledge, understanding and behaviour,
- Any unintended consequences resulting from the KWiP health check,
- Factors which have facilitated or acted as barriers to achieving health behaviour change following the health check.

2.3.5 The management, analysis and reporting of qualitative interview data The interviews with prisoners and prison staff were digitally recorded and transcribed, word for word and in the vernacular (that is, including slang words and local expressions). This meant that, on occasion, respondents used words or expressions which may not be familiar to people outside Scotland. Rather than altering what people have said, we have inserted a definition in brackets beside the actual word used. We use quotes throughout to illustrate our interpretation of the data, rather than as a tool to make a point about individual respondents.

## The analytical process

The first step in the analysis process required the research team to read through all the transcripts. A coding frame was then developed which would allow a descriptive label to be attached to what people had said about different topics. The coding frame was made up of a number of broad themes and sub-themes. For example, for the prisoner interviews there was a theme relating to short-term outcomes, which was comprised of a number of sub-themes including 'knowledge', 'behaviour' and 'referrals' (see below).

The next step entailed testing the coding framework. This was achieved by members of the research team each coding the same transcripts, comparing the coding and then revising the coding framework to ensure that all responses could be meaningfully encapsulated.

The third step involved summarising all the interview data under an appropriate descriptive sub-theme. In this way, we were able to divide each interview transcript into comparable sections and bring together what different respondents had said about – for example – how they found out about the programme. The data can be displayed in a matrix which shows the summaries for every respondent by theme and sub-theme. These thematic data were then further summarised into briefer descriptions and, from these, categories were developed which grouped responses within and across themes in meaningful ways which encapsulated all respondents. The aim throughout is:

- To map the range and diversity of all responses within the prisoners' and prison staff interviews,
- To capture that range, regardless of how many respondents gave particular responses, and

• To explore patterns of responses – for example in relation to age, gender or any other factor which helps us to explain and understand the data.

#### Reporting

The samples were purposively selected and it is therefore not possible to express the data in a way that implies statistical representativeness. The approach taken, however, ensures that all views and experiences are represented and contribute to grounded descriptions and interpretations of the data. In terms of reporting the interview data, that means that qualitative responses are not quantified. Additionally, it is not possible to say that one factor is more important quantitatively than another as this is simply not known.

The task when reporting qualitative data is to show the scope of views or experiences. There is rarely a single perspective which represents an entire group of respondents. It is also important to be aware that respondents' accounts reflected their perceptions of events or situations: they may or may not have been 'factually' accurate or have accorded with other respondents' or stakeholders' perceptions or views, but they did nevertheless represent that person's reality and were therefore equally valid. While this may at times seem to be at odds with what is 'known' about a situation or setting, the key issue is that it is these individual perceptions and meanings which help in understanding whether and how – for example – the KWiP health checks influenced (or did not influence) prisoners' behaviour.

## 2.4 Limitations of the evaluation

The evaluation of KWiP was commissioned at the end of August 2010 when KWiP had been in operation for just four months. It was agreed that the evaluation would focus on the first 6 months of the initiative, May to October 2010 and would report - in the first instance - by mid-December 2010 with the final report draft due mid-February 2011. This had a number of important implications which affected the data that could be collected.

First, it was inevitable that the evaluation would identify early implementation issues which may well have been resolved or ceased to be a concern as Keep Well teams and prison staff become more familiar with the programme. As a result, the accumulated and cumulative learning for the KWiP teams and the impact of this on professional practice, on relationships with SPS health care teams, prison staff and on prisoners' attitudes and behaviours would be difficult to discern. There were only limited cost data with no information, at this point, for unrecorded costs or costs associated with longer term outcomes.

Second, certain categories of prisoners could not be included. Because of ethical and access issues, interviews were conducted only with prisoners who had accepted a Keep Well health check which, in turn, excluded the views and experiences of those prisoners who may have declined a health check. It was also beyond the scope and remit of the evaluation to follow up prisoners or to identify longer term outcomes. Finally and significantly, it was not possible to conduct interviews with the KWiP nurses and team leaders other than a brief group discussion group on the day that the initial KWiP teams handed over to the newly seconded team. This meant that only the views of the first team could be obtained and, even then, there was a very limited opportunity to explore their experiences in detail. While this was rectified to some extent via an informal meeting with the current team leaders, it should be acknowledged that the KWiP nurses' views and experiences remain under-represented within this report.

# 3. The development and early implementation of KWiP

# 3.1 Introduction

This chapter focuses on the development and implementation of Keep Well in Prisons (KWiP) and on the first six months of its operation from the perspectives of key informants in Scottish Government and the Scottish Prison Service and Keep Well nurses.

# 3.2 The evaluation context

The evaluation of KWiP was commissioned at the end of August 2010 when KWiP had been in operation for just four months. It was agreed that the evaluation would focus on the first six months of the initiative, May to October 2010, and would report, in the first instance, by mid-December 2010 with the final report draft due mid-February 2011. This had a number of important implications which affected the data that could be collected. In particular, the issues detected were likely to reflect early implementation (perceived) difficulties which were subsequently addressed or which receded in importance for respondents.

# 3.3 Models of delivering health checks to prisoners

In Chapter 1 the models of KWiP delivery were outlined and it was noted that this evaluation would focus on the dedicated SPS model of KWiP health check. As prison health care will shortly be delivered by the NHS rather than SPS, the evaluation also considered the NHS in-reach service which targets short-term prisoners. Relevant commentary from key informants about this service in relation to issues of follow-up and through care is included (section 3.5.2).

## 3.4 Aims and anticipated outcomes of KWiP

The key informants interviewed identified a number of short-term outcomes that they anticipated (or hoped would be realised) for the programme:

- That the health checks would be completed with a high level of engagement among prisoners,
- For prisoners to report a positive experience with Keep Well in Prisons and that they were happy to engage with services in the community,
- For staff and prisoners to have an increased awareness of health issues and risk factors,
- Better through-care for prisoners between SPS and the NHS,
- An increased attendance at smoking cessation groups among prisoners who attend a KWiP health check,
- A greater compliance with medication among prisoners who attend a KWiP health check.

Longer-term expectations focussed on the potential of the programme to lead to changes of attitude among those working in prisons and, more widely, to 'a

culture change within the prison service' which would energise and support efforts within prisons to:

- Have a more holistic view of prisoner health care,
- Become proactive health promoting environments (for example, by providing healthier food).

The key informants hoped that the programme would help to change prisoners' attitudes to their health and responsibility for health, and signpost them to appropriate services which, in turn, would be reflected in:

- A reduction in smoking and other health-risk behaviours,
- Fewer health problems once prisoners were released into the community,
- A reduction in their offending behaviour,
- Increasing engagement post-release with health/social care services,
- Sharing of health promoting values and behaviour in their wider community.

With the transfer of the health care of prisoners to the NHS planned for October 2011, data relating to the health needs of prisoners will be essential to help the NHS develop its services within prisons.

In terms of professional development, stakeholders hoped that the programme would lead to:

• The KWiP nurses returning to their previous role within prison health care services with a greater health promotion perspective and more alert to the need for data collection on throughcare and statistics on prisoner health.

And, finally, that:

• The NHS would use Keep Well data on prisoner health needs to determine services and funding when prisoner health is transferred to the NHS.

A range of factors was perceived by stakeholders to be important to the success or failure of the programme and its ability to achieve their hoped for outcomes:

- Continued funding (from Scottish Government),
- Goodwill and buy-in from prison staff,
- Co-operation of prison staff in trying to facilitate healthier behaviour e.g. prisoners having a healthier diet,
- The skills and competency of the Keep Well in Prison staff who deliver the programme,
- Word of mouth encouraging people to attend a check,

- Prisoners believing that the organisation is concerned for their well-being and not just their incarceration,
- Opportunities within prisons for prisoners to make healthy behavioural choices and changes,
- Sufficient supply of services (such as smoking cessation) to meet demand/need.

# 3.5 How has KWiP worked in practice?

3.5.1 Perceptions of factors influencing implementation and engagement The key informants and KWiP nurses themselves suggested that early implementation and engagement with the programme was influenced by both operational and attitudinal factors, including:

- More complex and lengthier negotiations to gain access to private prisons,
- Differences between prisons and prisoners:
  - 'macho prisons' (and their prisoners) which were perceived to be more resistant to the health checks,
  - prisoners from particularly deprived backgrounds and those with drug problems were perceived to regard health as a low priority,
  - female prisoners and sex offenders regarded as more open to engagement around health issues.
- Differences in the attitudes and support of prison staff which, in turn, were perceived to influence prisoners' willingness to participate in the programme (including perception of non-delivery in some prisons of invitation letters),
- The very short timescale in which to engage with some prisoners, especially those serving shorter sentences, and ensure they were directed to the appropriate services was felt to be challenging,
- The need to develop good working relationships with in-house SPS health care staff, who may have felt that their role was being de-valued or taken over by the KWiP teams or by a nurse from the NHS coming in to deliver the health checks.

There was a general perception among key informants, based on the feedback they had received from SPS and from prisoners, that the implementation of Keep Well in the prisons has been positive and successful with, ultimately, good access across the prison estate, including private prisons. Despite the early concerns listed above, there was a strong view among the key informants that KWiP had been successful in engaging with prisoners with, after an initially slower start, comparable uptake in the private prisons. The following chapter provides a statistical analysis of actual engagement with KWiP health checks and factors associated with engagement. In the subsequent chapter, the views of prisoners and prison staff (health care and operational) are considered.

## 3.5.2 Pathways, follow-up and through care

While the key aim of KWiP (and the NHS KW in-reach service) is to ensure that eligible prisoners are given a health check, they also strive to ensure that prisoners are directed to appropriate follow-up care both inside prison and on release. This is a particular feature of the NHS in-reach service which carries out checks with short-term prisoners and endeavours - through links with an out-reach service - to support prisoners to register with and visit a GP. At this point, there are no data relating to prisoners once they have left prison. However, there is a potential for follow-up as prisoners can be traced through their GP or, in the case of those who have received the in-reach service, via their Keep Well outreach worker.

All follow-up care provided within the prison is currently being audited by the KWiP nursing teams. While there was thought to be adequate provision of follow-up care for those still in prison, there were concerns about:

- Prisoners' ability and willingness to access the health services they need on release from prison,
- Variations in relation to the types of services provided in the community by health board and community justice authority areas.

The up-coming transfer of responsibility for prisoner health care from SPS to the NHS in October 2011 was perceived to raise specific issues for Keep Well in relation to:

- Liaison and communication between health boards and, in particular, how this affects continuity of care for prisoners who receive a KW service and move back to their own/different health board area on release from prison,
- Resourcing a KW service for national prisons which have prisoners from all over the country, such as Cornton Vale women's' prison.

These issues are being considered by the National Programme Board for Prisoner Healthcare.

## Summary

This chapter has outlined key informants' expectations of the Keep Well in Prisons programme and has described their perceptions of the early implementation of the programme. While there were clear hopes that KWiP would be well-received and result in high levels of uptake among prisoners, there was an awareness that longer term outcomes on prisoners' health, behaviour and future use of services would not be discernable at this early stage of implementation. There was a view that the Keep Well nurses had been able to deliver the checks and, despite some initial problems and differences in engagement on the part of the prison staff in some prisons, that prisoners had engaged with the health checks and that the in-house prison health care staff and Keep Well teams had worked effectively together to ensure that the programme was delivered.

The next chapter presents an analysis of the routine monitoring data for KWiP in relation to uptake, factors associated with uptake and recorded outcomes of the health checks. Chapter 5 then presents the views and experiences of prisoners themselves and of health care and operational staff in four prisons.

# 4. Analysis of Keep Well in Prison monitoring data

This chapter focuses on the monitoring data collected by the Keep Well teams on prisoners included in the programme between 1<sup>st</sup> May and 31<sup>st</sup> October 2010.

#### 4.1 Attendance rates

As outlined earlier, an objective of the evaluation was to assess the reach of KWiP among the prison target population by examining the proportion of eligible prisoners being offered and receiving a health check while in prison. This section provides analysis of the KWiP routine monitoring data provided by the Scottish Prison Service.

4.1.1 Attendance rates (after first invite) for Keep Well health checks by prison

Table 1 shows KWiP attendance rates by prison for prisoners who attended after receiving their first invitation letter.

Prison	Number of prisoners invited	Number of prisoners who refused/did not attend on first invite	Number who attended on first invite	% of prisoners who attended on first invite
Aberdeen	54	9	45	83
Addiewell	139	40	99	71
Barlinnie	228	91	137	60
Castle Huntly <sup>3</sup>	62	0	62	100
Cornton Vale <sup>1</sup>	105	6	99	94
Dumfries	117	24	93	79
Edinburgh	199	72	127	64
Glenochil	311	137	174	56
Greenock	93	16	77	83
Inverness	53	4	49	92
Kilmarnock	122	51	71	58
Noranside <sup>3</sup>	31	1	30	97
Perth	126	56	70	56
Peterhead <sup>2</sup>	113	19	94	83
Shotts	137	52	85	62
All	1890	578	1312	69

Table 1: Attendance rates	(after	first	invite)	for	KWiP	by p	rison	(May t	to October	
2010 data)										

1. All prisoners in Cornton Vale are women

2. All prisoners in Peterhead prison are sex offenders

3. Castle Huntly and Noranside are part of the Open Estate

In all, 1,890 prisoners were invited for a Keep Well in Prisons health check between May and October 2010. Of these, 1,312 (69%) attended for a check during this period after receiving their first invitation letter. This varies across prisons from 56% in Perth and Glenochil to 100% in Castle Huntly. The highest rates of attendance on first being invited for a KWiP check are seen in the two open prisons (Castle Huntly and Noranside). As we show later (see Chart 1), proximity to liberation date appears to be a factor influencing participation rates and prisoners within the open prisons are likely to be close to liberation. Moreover, within the qualitative interviews, prisoners commented that the prospect of leaving prison in the near future was a motivating factor for tackling their health. The range of reasons and motivations which prisoners gave for attending their health check are discussed further in Section 5.2. In addition, the challenges for health services in engaging with certain groups of the population are discussed more generally in the Discussion chapter.

Attendance rates were also notably higher for some other prisons (94% for the women's prison Cornton Vale and 92% for Inverness) than for others.

#### 4.1.2 Refusals/non attendance

Table 2 shows the number of prisoners who did not attend a health check on receiving their first invitation letter.

Prison	DNA after Letter 1	DNA after letter 2	DNA after letter 3
Aberdeen	9	2	0
Addiewell	40	5	0
Barlinnie	91	12	0
Castle Huntly	0	0	0
Cornton Vale	6	0	0
Dumfries	24	14	11
Edinburgh	72	1	0
Glenochil	137	33	5
Greenock	16	2	0
Inverness	4	0	0
Kilmarnock	51	9	2
Noranside	1	0	0
Perth	56	14	8
Peterhead	19	7	0
Shotts	52	9	6
All	578	108	32

 Table 2: Number of prisoners who 'did not attend' (DNA) a KWiP check (May to October 2010) by prison (n)

A total of 578 (30% of those invited) prisoners did not attend a KWiP health check between May and October 2010 on receiving their first invitation letter. It is important to note that further invitation letters are still in the process of being issued to some of these 578 who did not attend after the first invite letter.

Consequently, it is not possible to present final figures on the numbers who have attended on receiving a second or third invite letter based on the data most recently available at October 2010. Another point to note is that a considerable number (just over a third) of the 578 prisoners were either released, transferred, or on home detention curfew between receiving their first and second invite letters (n=158), and between their second and third invite letter (n=39).

From the data that was most recently available at October 2010, 108 prisoners still had not attended after receiving a second invite, and 32 had still not attended after receiving a third invite. It is known that nine prisoners to date went on to have a health check after their second reminder letter, although it is likely that this number will increase once all the reminder letters have been issued and the monitoring data updated. Based on current figures and taking account of the nine prisoners who attended after receiving a second invite letter, the level of uptake of KWiP among prisoners between May and October 2010 would increase slightly from 69% to 70% of those invited.

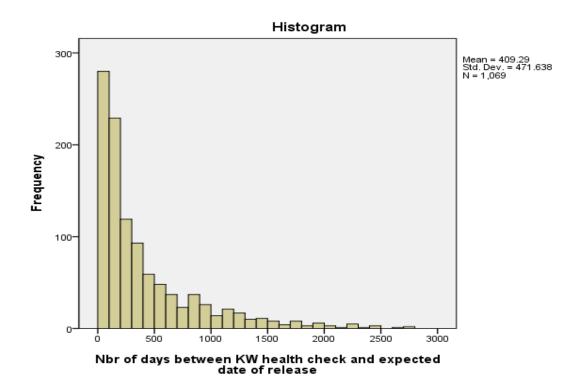
Table 3 presents the overall attendance rates, by age and length of sentence for those prisoners who received a health check as a result of their first invitation letter.

	Age g	roup	Length of	Total	
	35-44	45 +	Short term (less than 4 years)	Long term (4 years or more)	
N attended	784	546	809	503	1304
% attended	(67%)	(76%)	(69%)	(70%)	(69%)
Base (Number Invited)	1170	719	1172	718	1890

Table 3: Overall attendance rates (at first invitation) for KWiP by age and length of sentence

The table shows that while prisoners aged 45 and above appear to be more likely to attend on first invitation than prisoners aged 35 to 44 (76% compared with 67%), there was no difference in attendance rates between prisoners serving short term and long term sentences (69% and 70%).

What appears to be a more important consideration in terms of prisoner motivation to attend a health check is the proximity to a prisoner's expected release/liberation date. Chart 1 illustrates that, of those prisoners who have received a health check, the vast majority of them tend to be closer to their release date. Chart 1: Distribution of prisoners who have received a health check between May and October 2010, based on the approximate number of days from health check to their release date



Note: prisoners with no release date in the data have been excluded from this analysis. These include those serving life sentences (n=87), those who have already been liberated (n=111), and a further 43 who were waiting to be sentenced and did not therefore have a release date at this time. Two extreme outliers among those who had an expected release date were also excluded, giving a total included sample size of 1069.

### 4.2 Advice and referrals

The monitoring data indicated whether a prisoner who had had a KWiP check had received 'Advice', a 'Referral' or 'Both advice and a referral'. For the purposes of this analysis, 'Both' has been included as a 'Referral'. All 'advice' and brief interventions are delivered by the Keep Well in Prisons nurses, while the referral services include the following:

- Smoking Cessation this is a series of 12 one-hour sessions which are delivered by Phoenix Futures, a company contracted by SPS to deliver enhanced addictions case work services. Each session is delivered in partnership with a member of the SPS health care team who has been trained in smoking cessation,
- Alcohol Addiction support delivered by Phoenix Futures

- Weight Management these courses are currently delivered in a limited number of establishments and vary in length. Some are delivered through the prison health centre in partnership with the gym and catering department, and include weight checks, healthy eating advice and personally tailored fitness regimes,
- Dietician the SPS dietician is seconded from the NHS and provides advice to catering departments, health care staff, as well as individual prisoners. Prisoners are also referred by the prison based doctor to the NHS dietician,
- Mental Health delivered by the prison based mental health team,
- Doctor delivered by the prison based Doctor,
- KW nurse prisoners are referred to the KW nurses in the community where they are nearing their liberation date and require follow up; where they require additional referrals to community services and it has been identified that they need support; and where they are referred to a service that may be provided by the KW team in the community (such as smoking cessation or weight management),
- Gym/Exercise these sessions are delivered by the prison gym staff
- Benefits counselling delivered by the in-reach benefits counsellor service within the prison,
- Blood borne viruses (BBV)/sexual health all prisons provide a range of sexual health and BBV services, including: prevention and education, health risk screening, counselling, testing and treatment and selfmanagement of long term conditions.

Table 4 shows the percentage of prisoners who had received advice or referrals as a result of their health check. An important point to note in comparing rates of advice and referral between prisons is that the number of health checks on which these are based is fairly low in some prisons (fewer than 50 in Aberdeen, Inverness and Noranside). Caution should therefore be used in interpreting any differences in these rates.

Table 4. This hers receiving Advice of a Referral as result of Rivin , by prison (76)					
Prison	% who received Any	% who were given	Base (number who		
	Advice	Any Referral	received a check)		
Aberdeen	100	22	45		
Addiewell	98	30	99		
Barlinnie	99	52	137		
Castle Huntly	100	23	62		
Cornton Vale	98	20	99		
Dumfries	100	48	93		
Edinburgh	97	28	127		
Glenochil	98	57	174		
Greenock	95	47	77		
Inverness	98	16	49		
Kilmarnock	94	49	71		
Noranside	97	23	30		

### Table 4: Prisoners receiving Advice or a Referral as result of KWiP, by prison (%)

#### Table 4 continued

Prison	% who received Any Advice	% who were given Any Referral	Base (number who received a check)
Perth	100	27	70
Peterhead	99	22	94
Shotts	98	60	85
All	98	38	1312

The table shows that the vast majority (98%) of prisoners who had received a health check had been given some sort of advice about their health. Looking at the rates across individual prisons, the pattern is similar, with at least 9 out of 10 prisoners having received some advice.

Over a third (38%) of prisoners who had received a health check were given a referral to a specific service. This varied considerably across prisons, ranging from 16% in Inverness to 60% in Shotts. Referral rates appear particularly low for a number of prisons - Aberdeen, Cornton Vale, Inverness, Noranside and Peterhead all had a referral rate of less than 25%.

Referral rates from KWiP appear to be relatively higher for a number of prisons including Barlinnie, Glenochil and Shotts, where more than 50% of prisoners were referred as a result of their Keep Well health check.

### 4.2.1 Types of advice and referral received

Table 5 shows the proportion of prisoners receiving advice or referrals as a result of their health check.

Intervention	% who received Advice	% who were given Referral	% who were given Advice or Referral <sup>1</sup>
Smoking	61	13	74
Alcohol	32	2	35
Exercise	79	2	81
Diet/Dietician	87	0	87
Weight Management	39	3	42
Benefits Counselling	7	5	12
Mental Health Team	3	6	9
Prison Based Doctor	3	7	10
Hospital	3	0	3
BBV/Sexual Health	3	3	6
SPS Health Care Team	2	10	11
NHS Keep Well Team	0	14	14
Base (number who received a check)		1312	

Table 5: Prisoners receiving	Advice	or a	Referral	as	result	of	KWiP,	by t	ype o	f
intervention (%)										

1. This totals column may not always add exactly due to rounding of percentages.

In terms of the type of advice given by the KWiP nurses, Table 5 illustrates that this tended to relate mostly to smoking (61% of those who had received a health check), exercise (79%) and diet (87%). Relatively higher rates of advice and referral for smoking are not surprising given the large proportion of prisoners who smoke (KWiP data show that around 80% of those who have received a health check are current smokers). Advice for weight management was given to 39% whilst around a third (32%) was given advice for alcohol issues.

That only a third of prisoners received advice for alcohol problems and only two per cent have received a referral as a result of KWiP may appear surprising given the recent research showing that almost three quarters of prisoners in Scotland had an alcohol problem, and that just over a third were considered dependent on alcohol (Parkes et al, 2011). At least part of this discrepancy may be due to the different screening tools used and the populations screened. As part of their prison health needs assessment for alcohol problems, Parkes et al (2011) screened all new prisoners entering one male prison over a 12 week prison using the AUDIT screening tool. Of the 259 screened, 62% were aged under 30 years and over one-third aged under 25 years. As noted earlier KWiP is targeted at sentenced prisoners aged 35 years and uses the FAST screening tool to assess alcohol consumption. In addition, it was suggested by Keep Well nurses that these prisoners are likely to be already engaging with addiction services because all prisoners are screened for addictions on entry to prison and referred to appropriate services. Referrals by the Keep Well team were most commonly made for smoking (13%) and to the NHS Keep Well Team (14%), with very few being made to other services.

# 4.2.2 Types of interventions received by age

Table 6 (see over) shows advice and referral rates for each intervention, by three different age groups.

There appears to be little difference across age groups in terms of the proportions of prisoners receiving advice or referrals as a result of their health checks. Some exceptions, however, are listed below.

- Older prisoners (aged 55 and above) were on the whole more likely to have received a referral (46% compared with 37-38% of the two younger groups), possibly reflecting the increased prevalence of ill-health with increasing age,
- Those aged 55 years and over were less likely to have received a referral for smoking (7% compared with 14% of those in the two younger age groups). This may reflect age differences in rates of smoking among prisoners.
- Those aged 55 years and over were also less likely to have received a referral to the Benefits Counselling service (2% compared with 5-7% of

those in the two younger age groups), to the Mental Health Team (3% compared with 6% of those in the two younger age groups) and for prisoners within the purview of NHS Lothian, to the NHS Keep Well Team (9% compared with 14-15% of those in the younger age groups). This may reflect differences in prisoners' financial needs and in age-related differences in the prevalence of mental health problems among prisoners or, alternatively, to a willingness to engage with mental health services.

 Older prisoners (aged 55 years and above) however, were more likely to have received a referral to the SPS health care team (19% compared with 8-10% of those in the two younger age groups); a referral for exercise (6% compared with 1-2% of younger prisoners); a referral to the prison doctor (19% compared with 5-7% of younger prisoners). Again, it is likely that this age difference in these referrals is linked to a higher risk of ill-health among older prisoners.

		Age group		
Intervention	35 to 44	45 to 54	55 +	All
	(%)	(%)	(%)	(%)
Smoking				
Advice only	64	59	52	61
Referral	14	14	7	13
Alcohol				
Advice only	32	32	32	32
Referral	3	2	1	2
Exercise				
Advice only	79	80	77	79
Referral	1	2	6	2
Diet/Dietician				
Advice only	86	88	89	87
Referral	0	1	0	0
Weight Management				
Advice only	37	43	44	39
Referral	3	3	4	3
Benefits Counselling				
Advice only	6	8	7	7
Referral	5	7	2	5
Mental Health Team				
Advice	2	4	6	3
Referral	6	6	3	6
Prison Based Doctor				
Advice only	2	4	6	3
Referral	5	7	19	7
Hospital				
Advice only	2	4	6	3
Referral	0	0	1	0

 Table 6: Prisoners receiving various types of intervention, by age group (%)

#### **Table 6 continued**

		Age group		
Intervention	35 to 44 (%)	45 to 54 (%)	55 + (%)	All (%)
BBV/Sexual Health				
Advice only	2	4	6	3
Referral	4	2	1	3
SPS Health Care Team				
Advice	1	2	2	2
Referral	8	10	19	10
NHS Keep Well Team				
Advice only	0	0	1	0
Referral	14	15	9	14
Any intervention				
Advice only	98	98	98	98
Referral	37	38	46	38
Base (number in age group)	783 <sup>1</sup>	367	162	1312

1. There are 4 prisoners aged under 35 years. For analysis purposes they have been included in the 35-44 age group. These prisoners were seen by the KWiP nurses either due to their family history which made them a high risk or at the request of the prison health care team.

# 4.2.3 Types of interventions received by gender

The type of intervention received by male and female prisoners as a result of the health check is presented in Table 7.

Table 7: Prisoners receiving various types of intervention, by gender (%						
Intervention	Men (%)	Women (%)	All			
Smoking						
Advice only	60	75	61			
Referral	14	3	13			
Alcohol						
Advice only	33	25	32			
Referral	2	2	2			
Exercise						
Advice only	78	84	79			
Referral	2	2	2			
Diet/Dietician						
Advice only	87	91	87			
Referral	0	0	0			
Weight Management						
Advice	39	45	39			
Referral	3	1	3			
Benefits Counselling						
Advice only	7	6	7			
Referral	6	2	5			
Mental Health Team						
Advice only	3	0	3			
Referral	6	5	6			

Table 7: Prisoners receiving various types of intervention, by gender (%)

Intervention	Men (%)	Women (%)	All
Prison Based Doctor			
Advice	3	0	3
Referral	7	8	7
Hospital			
Advice only	3	0	3
Referral	0	0	0
BBV/Sexual Health			
Advice only	3	0	3
Referral	3	0	3
SPS Health Care Team			
Advice only	2	0	2
Referral	9	11	10
NHS Keep Well Team			
Advice only	0	0	0
Referral	15	2	14
Any intervention			
Advice only	93	97	98
Referral	40	22	38
Base	1196	116	1312

#### Table 7 continued

The table shows that women were less likely to have received a referral as a result of their health check (22% compared to 40% of men): in particular, female prisoners appear to be less likely to have received a referral for smoking (3% compared with 14% of men), a referral for benefits counselling (2% compared with 6% of men), and a referral to the NHS Keep Well Team (2% compared with 15% of men).

### Summary

This chapter has outlined findings from the analysis of monitoring data collected on prisoners who have been included in the KWiP programme between 1<sup>st</sup> May and 31<sup>st</sup> October 2010. Advice, including brief interventions was provided to 98% of those who received a health check, and was most commonly provided in relation to smoking, diet and/or exercise. Over a third (38%) of prisoners who had received a health check, were given a referral to a specific service, but this varied by prison, age and by gender. Older prisoners (55 years and over) were more likely to have had a referral than younger prisoners (less than 55 years). Whereas 40% of male prisoners were referred to other specialist services, this was the case for only 22% of the female prisoners. However, it is likely that these differences reflect a higher incidence of ill-health among older prisoners, and, as suggested by the KWiP staff, a perception that female prisoners are more likely to already be engaging with other services prior to the Keep Well health checks.

# 5. Prisoner and prison staff experiences of KWiP

Qualitative semi-structured interviews were carried out in four prisons with 32 prisoners and 20 prison staff. This chapter explores their experiences of Keep Well. The interviews with prisoners explored their awareness of the health checks, their reasons for participating, their attitudes in relation to taking care of their health, whether they had made any changes as a result of the health check and, finally, what if anything they perceived had helped or hindered attempts to make behavioural changes. Staff members were asked to reflect on their own experiences, including whether and in what ways the programme impacted on their work role, their own knowledge, attitudes and behaviour. They also spoke about their perceptions of the impact of the programme on prisoners and expressed opinions about the future development of the programme. It is perhaps worth reiterating that the accounts reflect respondents' perceptions of events or circumstances. These may not always accord with what is believed or assumed to be the case. The aim throughout is to explore these, sometimes very different, perceptions in order to build up a picture of how the programme was perceived, understood and experienced.

# 5.1 Awareness and understanding of KWiP

Both prison staff and prisoners were asked how they had found out about Keep Well, what information they had received, what their understanding of the programme was and whether they felt that they had received sufficient information for their needs.

### 5.1.1 Information and communication about KWiP

There were obvious differences between prisoners and staff in terms of the information they might need: for prison staff there was, in broad terms, a need to know how the programme might impact on their own work role and how and why Keep Well might affect the prisoners in their care. This, in turn, will vary for prison health care and those with other roles. Prisoners, on the other hand, were being asked to make a decision about attending for a health check and, therefore, were likely to need information about why they had been selected and what the implications might be for them in terms of their health and future health care needs.

Prisoners had found out about the programme in a variety of ways. The letter of invitation was a common source, but prisoners also reported seeing posters around the prison, hearing from other prisoners and through the Keep Well nurses who had come to discuss the health checks with them. Similarly, there was a range of views in terms of how well informed (or, in some cases, misinformed) prisoners felt they had been about the health checks, how much they understood about the rationale for the programme and the extent to which they understood why they had been invited to take part.

Staff respondents had also heard about the programme in a number of ways and this too influenced satisfaction with information about Keep Well. While some had become aware of the programme through communications to all health care managers and senior managers at the implementation stage of the project, the sources for others were informal and, at times, incidental. The formal routes through which prison staff found out about KWiP included information imparted by the prison health care manager at regular meetings and/or through emails and leaflets, and via a two-day information session. This provided information about the background, funding, remit and operation of Keep Well in Prisons, and its impact on their own role. Finally, others were informed through meetings with the 'head of Keep Well'.

Staff also described finding out about KWiP in rather less structured ways – seeing the recruitment materials and/or receiving a letter about the new KWiP posts and an invitation to apply, or hearing about it from colleagues who were applying for the Keep Well nurse posts. Prison staff also reported finding out that there was to be a new programme from seeing the posters around the prison, while others reported only finding out when they received the letter about the evaluation.

# 5.1.2 Understandings of KWiP

Among prisoners, there were three distinct categories of awareness and understanding of the Keep Well health checks.

Firstly, there were prisoners who had no recall of receiving a letter about the health checks, did not feel that anything had been explained, could not recall what had happened during the health check and were not necessarily sure that they had even had a Keep Well check.

'I know it wasnae [wasn't] a Keep Well check because I had asked for a... I had asked for one since May' [PR04<sup>1</sup>]

Secondly, there were prisoners who were not clear about the fact that they had received a Keep Well health check, but showed an understanding of who the target population for checks were in terms of age 'for people over 35' and being from a 'high risk area'. These prisoners all recalled receiving a letter explaining the interventions and had seen posters about it around the prison. There was awareness of the reason for the health check – 'to get cholesterol and other things checked', but also a view that the health check was concerned with 'your well-being'. Apparently this had sparked discussion amongst prisoners as to 'what well-being really means'. This group of informed prisoners were likely to be clear about their reasons for attending the health check and were particularly motivated to attend and respond to the advice received.

<sup>&</sup>lt;sup>1</sup> PR= Prisoner respondent

'Because I like to know aboot [about] my cholesterol and my blood pressure and things like that, and basically what my wellbeing is like' [PR03]

Between these two groups, there were prisoners who recalled receiving materials about the health checks, but had somewhat limited awareness of the content of the letters or leaflets or of the purpose of the health check, believing for example, that it was only for 'new prisoners'.

Prison staff also had differing levels of awareness about the programme. On the one hand, prison health care staff had attended an information session and/or been given information about Keep Well from the prison's health care manager and generally had a clearer understanding of the rationale and operation of the programme than those with a non-health care role. On the other hand, the non-health care staff expressed a degree of puzzlement about the need for the programme and how it related to the in-house health care team's role: 'I didnae [didn't] quite understand why it was needed because there was nurses already here'.

Among prison health care staff there was also some confusion about how the Keep Well health checks differed from the 'cardiovascular clinics' run in by inhouse teams: 'It would be good to know what they are doing as there might be some cross-over' and, indeed, some concern that there was duplication.

Staff members who knew about the programme were largely aware that the aims of the programme were preventive - that the health checks would identify those at risk of developing a serious health condition in the future (particularly 'cardiac disease and stroke'), would offer treatment for an underlying problem (examples given included statins for high blood pressure) and provide advice in relation to lifestyle. It was largely understood that the health checks were intended to identify predictors of potential future health problems such as 'smoking, drinking, drug abuse and poor diet' and that prisons house a large number of people who 'fit into these different high risk categories', live in 'your socially deprived areas' where there is more ill-health, and are the 'most non-compliant outside'.

'They don't go really near doctors, and that age group are of the type where you are going to find the symptoms starting to arise' [PS19]

The target age-groups were not always understood, with staff respondents suggesting that the checks were variously for 'over 35s', '35-64', '25/30 up to 55' and '40+'. However, among health care staff, there was an awareness that the target population for KWiP was younger than in the Keep Well programme in the community. Finally, there were prison staff who believed that an additional aim of the programme was to provide data for research purposes and to provide more information about prisoner health.

For the most part, however, both health care and operational prison staff felt that they had sufficient information and understanding of the programme to fulfil their

particular role in relation to KWiP, which in some cases simply entailed 'collecting, supervising and returning prisoners to their area' However, there were staff members who felt that further information about the programme 'once it kicked in' would have been helpful and that there could have been more effective sharing of information, including better communication with health care staff about the team's findings and the implications for individual prisoners.

# 5.2 Engagement with KWiP

# 5.2.1 Attendance at health checks

Most prisoners across the prison estate attended the health checks after receiving the first letter of invitation. If a prisoner had not attended at that point, they might receive another letter, but more commonly would be visited by a Keep Well nurse. However, it is noteworthy that as the monitoring data clearly show, most prisoners attended after receiving just one letter of invitation.

The reasons prisoners gave for not attending after the first invitation ranged from wanting more information before making a decision, to feeling that it was not relevant as they were - in their view - already in good health and kept fit, to more mundane reasons such as not receiving the letter, not being 'a morning person' or being missed out when the Keep Well team came round.

The KWiP nurses commented that non-attendance was sometimes linked to sporting events that prisoners were watching at the time they were due to have a check. The nurses also speculated that there were misunderstandings among prisoners of what the check was about with, for example, some prisoners thinking it was a Well Man Clinic and they had already attended. There was also a perception among the Keep Well nurses that prisoners often had a negative attitude to preventive health care which was a reflection of their often chaotic lives and indifference to taking care of their health. The Keep Well teams said that they approached non-attendance in different ways, including trying to speak with the non-attendees to find out why they did not attend and providing prisoners with magnetic appointment reminders in with the reminder letter.

From the prisoner interview data, we identified four main reasons for attending the health checks:

- Specific health concerns,
- Reassurance and advice,
- Motivation to be healthy (or healthier) on release,
- Non-health-related reasons.

Specific health concerns mentioned by respondents as their reason for attending the checks included: an awareness that a range of health problems might increase with age; concerns about their weight; family histories of poor health such as diabetes, high cholesterol and heart attacks were further triggers to attend and, finally, about an already diagnosed health condition. Reassurance emerged as a pressing factor and seemed to be a particular concern for those who had a prior history of drug and alcohol abuse and who wanted to see, first, whether they had caused long-term harm to their health, but also to see whether their drug and/or alcohol-free time in prison had led to improved health.

'when you've been out taking drink and drugs and stuff like that, you have a tendency not to care about yourself, you know so things could lie undetected you know and then can advance onto something a bit more serious' [PR16]

Prisoners also sought advice, including – for example - how to prevent having a second heart attack, how to lower cholesterol or blood pressure and how to make behavioural changes which might improve health such as stopping smoking or eating more healthily.

The monitoring data suggested that prisoners may have been more likely to attend the health checks the nearer they were to their expected liberation date. The motivation to be healthier for life outside the prison was apparent, with prisoners invoking, in particular, a desire to be in good health for the sake of their family.

The impetus for attending was not always health-related: there were prisoners who had assumed that the health checks were mandatory, those who felt that by going they would encourage other prisoners to get themselves checked and – perhaps inevitably – there were those who simply saw the health checks as an opportunity to get out of their cell for a while.

Finally, in a population which may have had little contact with health services or who felt disregarded by health professionals, the health check offered an opportunity for 'a proper check without being brushed off by the doctor'. KWiP nurses commented that the health checks allowed them to have 'protected time' with prisoners and that they felt that this was valued by prisoners.

### 5.3 The health check

### 5.3.1 Settings and time

Prisoners reported that the health checks were generally carried out within the health centre - or in rooms perceived to be a doctor's or nurse's office. The prevailing view among the prisoners was that they felt that they had sufficient privacy and time. Although there were at times difficulties associated with finding space within prisons to conduct KW clinics, especially in the older and more cramped prisons, KWiP nurses felt that they have always found a way around problems and that, over time, this has become less of a concern.

# 5.3.2 Tests and advice

Prisoners recounted a long list of tests conducted in the course of the health check which indicated an awareness and understanding of the various assessments, including: 'dietary things', height and weight, 'BMI', blood tests, pulse, blood pressure, cholesterol, tests for diabetes which was variously described as an 'insulin test', 'a pin prick' or 'a wee [small] test on my thumb', a lung function breath test - or as one prisoner said - 'I had to blow into something'. Prisoners who had been unsure about whether they had actually had a Keep Well check gave accounts of the same range of tests as those who were unequivocal that they had had a Keep Well check.

Respondents described being given information and advice about the tests and what different scores meant; including that higher scores indicated a greater risk of a heart attack and how measurements might be related to their behaviours such as diet and smoking. The procedures used appear to have been well explained by the nurse: 'She explained everything she was doing'. While prisoners appeared to appreciate the information and advice they received in the course of the health check, it was not necessarily advice they welcomed or intended to follow. The KWiP nurses were themselves aware that advice about smoking in particular was disregarded. They would, however, provide information to prisoners about the risks of smoking and how it increased their personal risk of cardiovascular disease.

'Well they did [talk about smoking] but I, I soon put a stop to that, that's the only vice I've got' [PR08]

There was a clear perception among prisoner respondents that they could ask questions which would be answered, and that this was 'better than the normal check with a nurse'. Those with a concern about their own or their family history, however, did not necessarily feel that they got the advice and explanations they might have wanted, about how to protect themselves and prevent a recurrence of an existing, or emergence of a possibly inherited, health problem.

# 5.4 Short-term outcomes

Prisoners gave accounts of changes that had occurred as a result of the health checks including changes in their health knowledge, their health-related behaviour, referrals to other services and, finally, perceived changes in their health and well-being. Later in this report, we consider a perceived disjuncture between the advice received or given and opportunities to act on the advice.

# **5.4.1** Impacts on prisoners' attitudes and knowledge

# Health knowledge and advice

Prisoners' accounts of what they had learned as a result of the health checks suggested that they had retained much of the information and advice given to them by the Keep Well nurses. Respondents described being given 'hundreds' of leaflets about diet and other topics, although not everyone had read them.

However, it was clear that the information leaflets had not disappeared into a vacuum and prisoners still had the leaflets given to them by the nurses.

Advice focused mainly on three areas: diet, exercise and smoking. In relation to diet, prisoners recalled being told about vitamins, to eat 'more fruit and veg', how to reduce cholesterol, the value of eating oily fish, cutting down on caffeine and avoiding 'fatty things.'

'Eating that crap clogs up your arteries...' [PR18]

Prisoners were advised about the ways in which stopping or even reducing their smoking could improve their health. One recalled being advised that stopping smoking would 'dramatically reduce' his cholesterol. Similarly, advice was proffered about the benefits of exercise, although one prisoner assured the interviewer that he was told to 'take it easy at the gym because of his age'. As one prisoner said, he knows he needs to look after himself or his 'blood pressure's going to go wacko' and that his cholesterol will 'go the same way'.

Prison staff also commented that prisoners seemed more 'health aware', particularly of preventive measures, were discussing health issues amongst themselves 'discussing weight and cholesterol', and were generally more knowledgeable as a result of KWiP. There was also a clear impression from the prisoners themselves that they felt that they were now more conscious of the ways in which their behaviour can affect their health, were aware of the need to be more active and eat healthily. One prisoner reported that he had a better understanding of the effects of passive smoking and had put up a 'no smoking' sign in his cell and that other prisoners now finished their cigarettes outside his cell before coming in. Others reported that they would not have 'bothered' about their health and would not have made changes, if it had not been for the Keep Well health check:

'I didn't realise what I was doing to my body, and when they've pointed out the facts to me, then... yeah.' [PR11]

There was also a view among health care staff that a significant attitude change amongst prisoners was not particularly obvious and that, as prisons may have their own health promotion activities, any changes in attitudes or knowledge could not necessarily be attributed to KWiP. In Chapter 6, we return in more detail to the issue of the ways in which the prison environment may be perceived to inhibit health promotion.

# **5.4.2** Impact on prisoners' behaviour

### Health and lifestyle behaviours

Prisoners described a greater determination, which they attributed to the health checks, to stop or reduce their smoking, although it was apparent that this was aspirational rather than indicative of any actual behavioural change -'I'll try and stop when I'm out'. One prisoner, for example, explained that there was no point

attending a smoking cessation group as he only had a few months left until he was released, while others were adamant that they would not cut down as they 'liked it too much'. Nevertheless, there was a perception among prisoners and staff of reduced smoking and this is validated by the documented increase in take up of smoking cessation services and perceptions among prisoners that they had cut down their smoking as a result of the advice they had received.

Prisoners reported increased post-check use of the gym and, more generally increases in exercise levels. Examples of this new interest in exercise were reflected in references to wanting to 'get fitter and more cardio-vascular'. Prisoners reported they were 'walking more', 'hammering at the gym' or simply 'doing a wee [little] bit more exercise'.

Prisoners' reports of trying to effect dietary changes were seen as more problematic. Again, this is addressed more fully in the next chapter (Chapter 6), but suffice to say the prison context was perceived to inhibit dietary change. However, despite the difficulties, prisoners did report changes from simply 'trying to eat healthier' to more specific changes such as buying more fruit using their own money (which was earned from work in the prison), eating more cereal and less fatty food – 'all the junk food really' – and eating fewer sweets. This increase in purchases of fruit and vegetables was also noted by prison staff,

'There's a lot of them [prisoners] coming up with loads of fruit and things like that, which is good to see... [] ...It's only been in the last couple of months' [PS14]

Prison staff also commented that they had noticed that prisoners (male and female) were using the gym more - 'a lot of girls going to the gym, so they are conscious of keeping fit' and '...a lot more guys attending the gym and doing weights'.

It was not possible within the timeframe for this study to consider the use of other proxy measures of lifestyle change, such as documenting gym use or prisoner expenditure on 'healthy' food items. However, a future evaluation may wish to consider such measures.

#### Medication and referrals to other specialist services

There was little evidence within prisoners' or prison staff accounts of changes in medication regimes or of referrals to other services as a result of the Keep Well health check. The issue of post-check advice, treatment and referrals was considered in greater detail in the sections focusing on the monitoring data for all prisoners (Chapter 4), but prisoners' accounts did not indicate a surge in referrals to specialist services or an increase in prescriptions for medication for conditions detected by the health checks. Prisoners were, however, referred in greater numbers to, smoking cessation groups and supports and there was evidence of increased uptake and use of these services:

'we could talk in the group [smoking cessation] as well...[] ...how we were finding the difficulty of stopping smoking...[] ...it was like a coping group as well, which was quite good' [PR11]

Access to addiction services outwith prison was deemed deficient, to the extent that a prisoner claimed that he committed an offence in order to 'end up in prison and get clean'.

In what must be acknowledged to be early days for the programme, there were health care staff members who were sceptical of prisoners' willingness and ability to effect health-related behavioural change. This was perceived to be a function of poor motivation on the part of prisoners and an unwillingness or inability to acknowledge that health benefits are likely to take time to be apparent. There was a perception that prisoners did not necessarily maintain changes to diet or exercise regimes. 'They don't turn up because they're sick of it, because they want a fast fix'. Health care staff did not perceive there to be any increases in the numbers of prisoners stopping smoking or attending the post-health check appointments set up for them with specialist services.

### Health and well-being

It would be surprising given the very short time frames since prisoners had their health check for them to report or display health improvements, yet there was a perception of health gain, including feeling fitter, weight loss, less fatigue and not 'out of breath'.

'I got weighed... was it last week? The woman says I had lost a stone... [] ...Good! I want to lose weight, so I think I'm managing' [PR12]

Again, a future evaluation would offer the opportunity to collect more in-depth data on changes in prisoner attitudes and behaviour as a result of the health checks.

### 5.4.3 Prisoners' satisfaction with KWiP

Prisoner satisfaction with the health checks was influenced by: how much information prisoners wanted and received; the amount of time prisoners had with the nurse; their perceptions of the health check as a measure of the Prison Service's concern for prisoner health and well-being.

There was a clear positive view of the Keep Well health checks: prisoners appreciated the information and advice they received:

'She was very good at explaining what she was doing, why she was doing it, and what benefits it is for myself an' [and] that. []...she was [...] very informative, and made you relaxed...[]...She was just totally professional...' [PR03]

Nonetheless, there were discordant voices. Prisoners who had an existing health problem or a family history of health difficulties perceived themselves to be 'discarded' by a health check that they had thought was intended to assess risk of future health problems in the currently healthy. An outcome in which a prisoner perceived that he/she was not 'worth her [the nurse's] time' cannot be deemed positive, even if it was not a common perception across the sample or did not necessarily reflect actual practice. Others, however, hoped that the intervention marked the beginning of a greater focus on prisoner health, in a context in which some prisoners felt that prison staff 'don't care' about prisoners' health.

In relation to changes to KWiP in the future, prisoner views ranged from a perception that nothing needed to be changed 'fine the way it was', to a desire for more time with the nurse, and from wanting a more comprehensive examination, more advice and explanation of the tests and what they meant to wanting more frequent checks:

'...my cholesterol thing was sky high, and she didnae [didn't] really explain much. She just said it was sky high. [...] Then she done that, an' [and] then went to my blood pressure an' that, straight away. Instead o' [of] explaining to us aboot [about] the first one, she's went to the second one' [PR27]

There were no strong views about the gender of the Keep Well nurses who carried out their health check – 'not an issue' - but there did seem to be a preference for the Keep Well team to be comprised of nurses who were not part of the regular prison health care staff, although it has to be acknowledged that prisoners generally did not appear to have given this issue much thought.

"...it's an outsider. It's no one o' [of] the normal nurses and stuff that's here all the time that's dealing wi' [with] the same stuff day in and day out. ... and they're neutral.' [PR22]

Prisoners seem to have felt reassured by the checks which offered 'peace of mind', 'lets you know about your own health and how your body's feeling' and affords opportunities for early detection 'so they can do something about it', but - perhaps more than anything – prisoners appreciated the personal time and attention, that someone was 'taking an interest' in them.

'They made you feel like they wanted to listen to you' [PR18]

Among the Keep Well nurses there was a view that most prisoners appreciated having the health check, enjoyed the one-to-one session and the chance to sit with someone listening to them within 'protected time'. Nurses described a range of ways that different prisoners reacted to their health assessment - some were shocked, some were motivated to change their behaviour, whilst others simply appeared not to care. Those nearer their liberation date were perceived to be more motivated to change their behaviour than those at the beginning of a long term sentence, and this certainly accords with evidence from the monitoring data.

# 5.5 Impact of KWiP on professional roles and activities

### 5.5.1 Prison staff views of KWiP programme

Prison staff were generally positive about Keep Well, which was seen as a 'worthwhile project', but were at times sceptical about whether prisoners would or could sustain a healthier outlook and behaviour.

Prison health care staff acknowledged that currently they were a 'fire fighting service' and that, as a result, they may not be able to give prisoners time to talk about 'lifestyle factors' and that 'designated time' for the Keep Well checks provided a service that was not currently available. They also regarded it as 'a good thing' for prisoners that provided an opportunity 'to keep an eye on things'. Perhaps not surprisingly, there had been some initial concerns and some hostility.

"...at first we thought it was... a bit like an invasion really. When I was in [ ], they came en-masse and just basically sort of took over all of our room and it was just hard when you have limited space ...[] ...the other team kind of sort of thought 'we have the right to be in this area this time' which... [] ...could potentially get your back up a bit' [PS20]

There were also health care staff members who felt that the in-house health care teams were already doing the job to a high standard, and that the arrival of the Keep Well team was 'undermining'. The KWiP nurses commented that, while relationships had undoubtedly improved over the first six months, there were still some prisons where prison health care staff were 'resistant to change' and were perceived to resent the Keep Well teams. It was also the case that the extra service put pressure on limited accommodation space within prison health centres.

There were concerns too among prison health care staff about what they perceived to be the brief period spent in each prison and that, as a result, there was no 'continuity of care'.

'It's not long enough to get an overall picture, to get a good assessment, to get good planning' [PS05]

However, the KWiP nurses themselves expressed a strong view that a clear benefit of the programme was that they were able to spend much more time with each prisoner than was possible within their prior role as prison health care nurses. There was a view among prison health care staff that, with additional funding, the in-house teams could have actually provided the service, although it was acknowledged that if there was pressure on the service, health promotion would be the first thing to go. Nevertheless, there was a consensus that it was preferable for the Keep Well teams to be comprised of SPS nurses rather than an NHS team who might be regarded as the 'Cavalry' coming in. SPS nurses who had all worked in prisons prior to their secondment to KWiP, were perceived to understand the security systems and the structure of health care within prisons.

In Chapter 7, we consider prison and KWiP staff views about the future of KWiP.

# 5.5.2 Impact of KWiP on prison staff work roles

The current roles of the prison health care staff interviewed included: carrying out routine health checks on prisoners after they arrive from court or another prison; providing point of care services including administration of prescribed medication (including methadone and anti-psychotics); management of long-term conditions; dealing with newly diagnosed health problems and injuries. However, the health care teams may also already be involved in health promotion work. This may be in the form of providing health promotion advice about diet, exercise, smoking, alcohol and drug use, and they may also run health promotion and 'Well Man' groups. Cardiovascular clinics are also run by the in-house health care team in some prisons, which may include some similar elements to the KWiP checks.

The prison health care workers identified a number of ways in which the programme was felt to have impacted on their own work role. These included referrals and follow-up for repeat blood tests or blood pressure measurement. There were reports too of prison health care workers feeling that they had to deal with 'fall out' from prisoners who were anxious or worried about something they had been told in the course of a KW health check – for example, about their potential CVD risk. In the early days of the programme, there was resentment among health care staff that the Keep Well checks entailed - what were perceived by health care respondents - to be KWiP's one-off contacts with the prisoners. For example, it was suggested that if a prisoner did have concerns after his/her health check, it was the in-house nurses who would have to manage prisoners' stress.

The checks were also perceived to be leading to more frequent reviews of prisoners' files, additional administrative work which was reported to include handing out letters to prisoners, ensuring that rooms were available, making sure prisoners received their mail so they would know when the clinics were running and supporting the KW team by allowing them access to the facilities they might need. In some cases, it was clear that the perceived additional workload on administrative staff within the prisons was greater than anticipated and that the time-scales to make arrangements for prisoners were regarded by some as 'not feasible at all'.

### 5.5.3 Impact on prison staff health-related attitudes and behaviour

There was little evidence in the interviews with prison staff informants (both health care and operational) of any real impact of the programme on their own health related attitudes or behaviours.

### Summary

This chapter has described the information prisoners and prison staff said that they had received and how well-informed they felt themselves to be about KWiP. There were prisoners who had no recall of receiving any prior information and this group seemed to have a relatively poor understanding of the programme. On the other hand, prisoners who reported that they were well informed were likely to be clearer about their reasons for attending the health check and were particularly motivated to attend and respond to the advice received. In between, there were those who recalled receiving materials about the health check, but seemed unaware of their contents and of the purpose of the health check. For the most part, prison staff respondents regarded the information they had received about the programme to be sufficient for their particular needs, with prison health care staff more knowledgeable and aware of the programme.

Prisoners gave accounts of the behavioural changes that they had – or had not – made as a result of their involvement with Keep Well. It was clear that although prisoners reported a motivation to make changes - such as eating more fruit, going to the gym, losing weight and attempting to quit smoking – this was not necessarily translated into sustained behavioural change. There was, however, evidence that prisoners' attitudes to health were influenced by the health checks. Prison staff supported a greater focus on health promotion within the prison. While the programme is targeted primarily at prisoners, there was an expectation among staff of a secondary impact on the awareness and behaviours of prison staff. At this early stage, there was no evidence from prison staff that they had themselves made any changes in their own personal health-related behaviour as a result of Keep Well.

In the next chapter, we consider prisoners' and prison staffs' perceptions of the factors which might facilitate or hinder health-related behaviour change in prisons.

# 6. Facilitators and barriers to behavioural change

This chapter consider prisoners' and prison staff perceptions of factors which influenced whether prisoners (and, indeed, members of staff) had been able to make health-related behavioural changes – what facilitated and what hindered change.

There were three perceived categories of influence: structural factors which included the prison setting, its regimes and practices; inter-personal factors which included the attitude of prison staff and fellow prisoners and relationships between prisoners and staff; and, finally, personal factors which included issues of motivation, acceptance and understanding of the need to possibly make health-related changes and individual attitudes.

# 6.1 Structural barriers and facilitators to behavioural change

# 6.1.1 The prison environment

By their very nature, prison settings inhibit the degree of control a prisoner has over his or her daily life. There are inevitable restrictions about what prisoners can do at any time of the day, where they can go and how they can spend their time. Food is prepared centrally and, while there are choices, these remain limited. Within the context of standards set out in the prison rules which ensure that all prisoners have access to outside exercise, opportunities for exercise are also affected by local conditions and gym facilities.

The prison setting itself and its inevitable routines and regimes can contribute to boredom and stress. Staff and prisoners acknowledged that being in prison and the restrictions in place acted as a barrier to behavioural change. Boredom was considered by staff and prisoners to be a significant issue within a prison, and was also seen as a barrier to behavioural change and contributed to unhappiness and mental health problems. Despite opportunities to use a gym, to work or participate in educational programmes, the prison environment was not necessarily seen as stimulating by prisoners who may be locked up for a period of time each day, have low mood and may struggle to be motivated to do anything – be it to use the gym when they can or to eat more healthily:

'Boredom makes you eat rubbish food. [...] When you're in your cell, you... you kinda [kind of] comfort eat.' [PR32]

However, it was also the case that although boredom was invoked by prisoners as a hindrance, it was also seen as a motivator to make behavioural changes after having a KWiP health check.

"...when you're stressed and you're bored and stuff you're just no [not] motivated enough to... to go and dae [do] stuff. But, in saying that, it's

through boredom now that I go into the... We've got a gym in the hall. We've got the big main gym, which I go to maybe three or four times a week, [...] rather than lying in my cell all afternoon or all night...' [PR22]

While the structure and strictures of the prison setting may disadvantage further those prisoners who may not have the personal or economic resources to make healthy choices, the issue mirrored debates about access to healthy lifestyles in non- prison settings (Whitehead et al, 1988). Nonetheless, both prison staff and prisoners were able to identify factors that facilitated change.

### 6.1.2 Dietary change

Prisoners perceived there to be limited access to fruit and vegetables within the prison. Nevertheless, there was a willingness to use their own money to purchase extra fruit and vegetables and prison staff had noted the increase in requests for healthy produce. KWiP nurses commented that although menus do include the possibility for prisoners to have the recommended portions of fruit and vegetables, if these are not the particular foods that a prisoner likes, he or she does not have any opportunity to have produce they do prefer.

However, although there were prisoners who valued the opportunity to buy fruit and vegetables, for others it was regarded as an unreasonable barrier to a healthier diet and prisoners perceived it to be unfair that their own money had to be used to eat healthily:

'Basically, if you want like bananas, fruit, some vegetables, you can buy it yourself, but it's no [not] always an option that's open to everybody. [ ]... but obviously the financial restraints get... If you've no got enough money for it, you're no gonna be able to do it.' [PR04]

In particular, prisoners resented what they saw to be a forced choice to spend their money on more fruit or to use it for other luxuries.

"...if it's a toss-up between a fiver on fruit and a fiver on your phone card to contact your family there's no contest there." [PS14]

While there was acknowledgement from both prisoners and staff that it was possible to choose healthier meal options, there was a strong view from prisoners that the prison diet served as a powerful disincentive to behavioural (dietary) change and was in itself health-damaging. There was frustration among prisoners that the set menus offered only limited choice and had what was believed to be a high fat and salt content. Moreover, even the 'healthy' options were deemed to be unappetising and not necessarily that healthy with 'fifth grade' fruit offered.

"...the food in here is diabolical, and even the healthy option I wouldn't touch with a barge pole" [PR08]

Prison staff agreed with prisoners' perceptions that there was a lack of choice, and conceded that the healthy option may not be something the prisoners (or that they themselves) might want to eat.

'...the food's no [not] that good [...] if you're wanting a healthy diet [...] I wouldn't touch it. I wouldn't eat it' [PS04]

# 6.1.3 Exercise

Opportunities to exercise in prisons are available and all the prisons have gym facilities, although access appeared to vary between prisons. In some prisons, there may also be opportunities to have personal exercise plans devised for them by the Physical Training Instructors (PTIs). In the open estate, prisoners also have access to the grounds which it seems are widely used for running or walking. There was a view among the prison staff that access to exercise facilities is, in fact, much easier in prison as prisoners do not have the same work or travel related constraints.

'Whole system is geared up to improve health [...] I think this setting does provide huge opportunities to make significant positive changes, if the person wants to do it' [PS17]

This view was echoed by the prisoners themselves who appreciated the access they can have to gyms, whether in the main gym or halls.

'We get plenty access to the gymnasium' [PR21]

'Every block's got their timeslot. And you can go to yoga.' [PR10]

However, both prisoners and prison staff mentioned that there can be limited spaces and a limited number of staff available at the gym. Prisoners' perceptions of being visible when using running machines in the halls was felt to be inhibiting.

# 6.1.4 Smoking

In terms of providing support to prisoners who may want to quit smoking, there has been a documented increase in referrals to smoking cessation services in the wake of KWiP and it is clear that there are prisoners who want to quit and recognise that they need help. However, waiting times for smoking cessation support were seen as a barrier to change by prisoners and a referral was apparently necessary before getting 'patches' or the nicotine 'nasal spray'.

Prisoners acknowledged the health risks associated with smoking, but as we suggested earlier, preferred to reduce their level of smoking rather than quit altogether.

"...basically you have to get a meeting before you're allowed patches, and it's... the anti-smoking people... and it's quite hard to get the meeting" [PR04]

Thus, although prisoners may be referred in greater numbers to smoking cessation services as a result of Keep Well, the services may struggle to meet this additional demand. Prison health care staff suggested that successful quitting might be better supported if there were a greater range of pharmacological supports available, such as inhalators and nicotine chewing gum.

# 6.2 Inter-personal barriers and facilitators to behavioural change

The relationships between prisoners, between prisoners and staff and relationships with family and friends outside the prison played a role in supporting or hindering health-related behavioural change. The Keep Well health checks mostly entail a single contact with prisoners (although as the programme has developed, there may now be increased opportunities for follow-up checks) and will therefore have a limited role in fostering relationships which might support behavioural change.

# 6.2.1 Informal peer influences

Staff commented that informal peer group influences can serve as either a facilitator or a barrier to behavioural change, depending on who the prisoners 'hang out' with '...they do get encouraged by other prisoners'.

Some groups of prisoners were clearly interested in keeping fit and used the gym regularly, while others (perceived to be 'the drug using circles') were regarded by prison staff as showing no interest in getting healthy while still drug dependent. The prisoners agreed that there was mutual support which motivated gym use. The 'jokes and banter' was seen as motivating.

'if you've got a couple o' [of] decent guys aboot [about] you who are going to the gym and keeping you going, you can just work off each other'. If someone's feeling a bit fed up, you can cheer them up a bit' [PR24]

However, the behaviour and attitudes of other prisoners could also deter use of gym facilities in particular, and may also inhibit health-related behavioural change in general. The negative attitudes of prisoners who struggled with others' successes inhibited prisoners from taking action towards getting healthy – negative peer pressure rather than positive peer support. There were also prisoners who were reluctant to use the hall facilities which may be used by mixed groups of prisoners, some of whom were seen as domineering.

"...there are people who just fool about all the time, and you can'nae [can't] really concentrate on what you're doing. Um... or there are certain people they're not stopping, nobody can get a shot on anything you know?" [PR05]

### 6.2.2 Prisoner and prison staff relations

There seemed to be genuine enthusiasm on the part of prisoner respondents who had participated in Keep Well for opportunities to increase exercise levels. Prison staff were generally seen as encouraging and supportive and made it easier to use the gym facilities.

'The staff are all right, it's a lot of the staff are ok like ken [you know] the, ken if you were to approach them they speak to you about things but do they listen to you [...] yeah they take a lot of time for you and that' [PR29]

Conversely, there were also prisoners who viewed some staff as very unapproachable and did not think they cared about prisoner health.

'You can talk to some of the staff, some of the staff, other staff are very, very unapproachable, you don't know whether you are coming or going with them, rules tend to change for different members of staff' [PR13]

However, there was also a staff view that interacting with prisoners directly was an effective way of communicating about health issues.

'If a prisoner feels supported and motivated and that there is some continuity in the input he's receiving, they maintain their motivation better.' [PS13]

### 6.2.3 Preparing for release

Prisoners expressed a particular wish to lose weight before they got out of prison, but more generally to get healthy for their family which, in turn, appeared to reflect a desire to live differently on their release from prison. It is not clear whether this is directly linked with the Keep Well health checks.

'I plan on being as healthy as I, as I can possibly be, for my wife and my kids, for when I dae [do] come home.' [PR21]

Prisoners reported that support from their partner or family helped them to improve their health and this was also noted by prison staff. In the open estate prison, there were efforts by smoking cessation group practitioners to include families as much as possible in discussions about quitting smoking. For example, prisoners who spent time at home were encouraged to give smoking cessation information to a smoking partner if the prisoner was trying to quit. With a greater number of prisoners referred to smoking cessation services as a result of their Keep Well health check, this may increase the chance of more prisoners succeeding in their quit attempts. However, it was also clear that not all prisoners necessarily have supportive families waiting for them.

# 6.3 Personal barriers and facilitators to behavioural change

# 6.3.1 Attitude and motivation

Prisoners identified their own attitudinal set and motivation as personal factors that could either stimulate or inhibit behavioural change following their Keep Well health check. While the conditions in prison were regarded as barriers to change, prisoner respondents who had been part of Keep Well appeared to acknowledge that they would have to take the initiative to improve their own health:

'I'm one of they people who obviously and if... I want to do something I do it anyway so I dinnae [don't] listen to other people' [PR28]

Emotional well-being affected prisoners' willingness and, possibly their perceived capacity to embrace changes:

'I think it depends on the frame of mind that you're actually in at the time whether you're willing to take that step forward' [PR13]

# 6.3.2 Choice

Attitude and motivation may influence the extent to which prisoners perceive there to be choices that they can make. Although prison staff respondents were not necessarily themselves always positive about the food in prison, they acknowledged that there were 'healthy options' on the menu, but that prisoners may not choose those dishes.

'...that's their own personal choice. That's very much in their hands. [...] We can only advise.' [PS05]

Nevertheless, prison staff were sympathetic to prisoners who may struggle to choose healthy options when there was always what might be deemed an 'unhealthy' and possibly more appealing food option sitting next to it. There was a view that the less healthy choices should be available for prisoners who, for example, do not currently have problems with cholesterol.

# Summary

There were three categories of influence on prisoners' ability and willingness to embrace health-related behavioural change: structural factors which included the prison setting, its regimes and practices; inter-personal factors which included the attitude of prison staff and fellow prisoners and relationships between prisoners and staff; and, finally, personal factors which included issues of motivation, acceptance and understanding of the need to possibly make healthrelated changes and individual attitudes.

The routines, regimes and physical limitations of the prison setting were perceived to be significant barriers to behavioural change. In particular, limited choices at mealtimes with, what were regarded to be, unappealing 'healthy' options and a perceived limited access to fruit and vegetables were experienced as an obstacle to changes in diet. Similarly, while there were opportunities for exercise, access to gyms may be restricted to specific time slots or days. Finally, simply being incarcerated was experienced as stressful and a deterrent to quitting smoking, something prisoners may regard as a personal pleasure.

However, the potential to purchase additional fruit and vegetables using money earned in prison or prisoners' personal money was perceived to be a choice that was open to prisoners and one which was perceived to have been more often used in the wake of the Keep Well health checks as prisoners have become more aware of the importance of diet to lose weight, lower cholesterol and reduce risks associated with a high fat, low fibre diet. Nevertheless, there was resentment that the choice of using one's own money to purchase additional fruit and vegetables was seen to compete with other items of personal spend. All prisons have gym facilities and, despite some restrictions on access to the gym, this was perceived to be a health promoting resource for prisoners.

# 7. The future of Keep Well in Prisons

This chapter focuses on the views of the Keep Well teams and prison staff about the future development of KWiP.

# 7.1 The views of the KWiP teams

The KWiP nurses felt that their previous experience of working in a prison setting was beneficial: they understood the prison health care service and felt that their awareness of safety and security issues ensured that they knew how to conduct themselves in a prison environment. This was a view shared by the prison health care and operational staff respondents. The Keep Well nurses' prison experience and background was also thought to be helpful as the project evolved in developing good working relationships with the prison based health care staff.

Nurses regarded their time with Keep Well as 'time out' from the pressures of the prison health care system and an opportunity to 'get back to nursing'. The longer time available to spend with prisoners compared with what is usually possible when delivering general health care in prisons was felt to be a particularly valuable aspect of working on KWiP. These longer sessions were seen as facilitating rapport with the prisoners and encouraging them to open up more about their health and related problems. Although part of the job required a considerable amount of travel between prisons, which could be challenging, it was clear that the nurses had enjoyed and valued their six month secondment to KWiP, and were sad to be leaving the teams.

There was a view that the skills and knowledge they had acquired while on secondment - clinical knowledge and practice, experience of team working, experience of different prison practices, and information sharing and negotiation skills - would be beneficial when they returned to their previous role in supporting prisoner health.

Secondment from within SPS was, therefore, regarded as a positive approach which had facilitated implementation of KWiP and would allow learning to be transferred back into the prison health care system.

# 7.2 The views of prison staff

Prison staff were asked to consider the benefits and disadvantages of the KWiP programme. It was clear, despite some initial concerns, that the advantages of the programme were felt to outweigh those concerns.

First, despite some initial concern that their role would be duplicated or undermined, prison health care staff acknowledged the distinct role and remit of the KWiP teams. That KWiP nurses were not required to get involved in other health centre work was seen as beneficial to the programme. In addition, there was a belief that prisoners would be more likely to attend the health check because it was delivered by a different team, and therefore different from the regular health care provided by the prison based team. Second, the respective preventive and health promoting elements were also recognised: it was acknowledged that Keep Well had the potential to detect health problems that had not hitherto come to the attention of health services and that many prisoners, who may otherwise struggle to access health care services or even avoid them entirely, would get help at an early stage of a health problem. Further, the prison staff respondents could see that the health checks might prevent problems in the future, were health promoting, and that KWiP raised health awareness among prisoners and prison staff through its Health Promotion Day.

'It's about self respect as well isn't it and if you believe um...which we all should that prisoners are here to be rehabilitated. Um...you need to be encouraging them, for them to make the best of themselves that they possibly can.' [PS15]

Perceived poor communication between the prison health care staff and the KW teams, particularly in the early days, was seen as contributing to misunderstandings about the service among prison based staff and day-to-day problems in managing space. There were prison health care staff who were also somewhat sceptical about whether the programme had actually reached those most in need (e.g. those people who would not normally access healthcare services). The monitoring data showed that some 30% of prisoners declined to attend the Keep Well health checks after their first invitation letter. It also showed that attendees were more likely to be in the older age-groups and might therefore have a greater number of more pressing health needs than younger prisoners (e.g. CHD and Type 2 diabetes are more common in older age groups, Graham, 2007). In the absence of any information about the health or socio-demographic characteristics of KWiP attendees and non-attendees, it is not possible to draw any conclusion to confirm or refute this perception among prison health care staff.

That the KWiP teams only spend a short time in each prison was viewed as problematic in situations where prisoners might need follow-up, but may have to wait some time for this. There was a view that this perceived lack of continuity might be associated with poor maintenance of behavioural change. The impact of having a health check on prisoners was a further concern for prison health care staff, who felt that they may have to deal with anxious prisoners after their Keep Well health check.

'And the bad points I would just say that I do find that some of them are quite a bit anxious after they've got these meetings 'cause they do think they're dying, being honest with you' [PS18]

Finally, organisational and administrative issues were raised in relation to, for example, a perception that prisoners did not always receive their letters about the health checks.

Despite their concerns, prison health care staff largely wanted the service to continue and, indeed, suggested that there would be expectations from the prisoners that this should continue. However, there appear to be conflicting views, in particular among prison health care staff, about how KWiP should be delivered.

On the one hand there was a view that the programme should be run in-house, that it should evolve as normal practice within the prison (part of the nurses roles) and not be delivered by a separate team coming in. The main reasons given in support of an in-house team were that they thought this would be more cost effective, would enable a rolling programme of checks, and that in-house staff would be more familiar with the prison regime and with the prisoners themselves. In addition, it was argued that the prisoners would prefer seeing someone they knew, therefore providing continuity of care and, therefore – in their view - a better follow-up. On the other hand, there was a very different view that perceived there to be benefits in having an external team deliver the health checks to prisoners. It was suggested that it would be difficult to deliver the KW service, in-house, at that level and within pre-existing resources. Moreover, the distinct identity and remit of the KWiP team providing a different service was regarded as a factor influencing prisoner participation in a positive way.

"...they probably wouldn't participate because they wouldn't feel that they were getting anything different whereas when people are coming in externally, like in this circumstance yeah I think that's, that's quite a positive thing for them' [PS12]

There was also acknowledgement that health promotion might inevitably be the first thing to be sidelined if the prison health care team was short staffed. For example, it was suggested that while giving out medication and methadone was regarded as 'essential', health promotion would or could not be accorded the same priority.

### Summary

The KWiP teams felt that they had gained valuable skills and knowledge during their secondment to Keep Well. The also believed that they would be able to utilise these when they returned to their previous role in supporting prisoner health. According to the prison staff interviews the advantages of the KWiP programme were felt to outweigh any disadvantages, and largely, staff wanted it to continue. The benefits included the distinctive role and remit of the Keep Well team and its preventative and health promoting elements. While there was the view that the in-house prison health care teams could be trained to deliver Keep Well health checks, there were concerns that health promotion would not be protected within the context of the pressured work environment of prison health care delivery and that a distinct and external team provided greater protection for the service.

# 8. The costs of delivering KWiP

# 8.1 The basis of cost estimates

One of the evaluation objectives was to: assess the broad financial costs of Keep Well delivery to the target population, including costs to SPS, Scottish Government, and as far as practicable, to the NHS in terms of future prescribing patterns and clinical interventions post-release.

It was agreed in discussion with NHS Health Scotland and the Scottish Government that the focus of this evaluation would be limited to the known costs to SPS of delivering KWiP. It was agreed that the research team would in addition attempt to list any unrecorded or hidden costs associated with the delivery of KWiP such as additional staff time or NHS inputs. However, it would not be possible within this evaluation to quantify any of these. While it would have been desirable to have obtained data about costs relating to referrals and medication prescribed it became clear that this information would not be available for the evaluation. In terms of additional costs, it was only possible to apply a cost to smoking cessation referrals.

Using the routine monitoring data for the period May-October 2010 and the expenditure to date, it is estimated that:

- The average unit cost of a health check (cost per check),
- The average cost of smoking cessation support (per referral),
- The range and number of referrals to services delivered by non SPS services.

Table 8 shows the budget for the period 2010-2011 and the actual spend on the period May-October 2010.

Account (T)	Amount spent May-Oct 2010	Actual budget for 2010-2011
Training budget	£969.00	£5,000
Team budget	£0.00	£1,000
Escorting officers	£355.76	£30,000
Software development	£3,500.00	£10,000
Lease cars	£4,860.90	£7,170
Petrol/diesel	£3,468.34	£8,000
Travel &Subsistence mileage	£3,997.21	£11,000
Travel & Subsistence accommodation	£7,001.28	£2,500
Testing kits consumables		£22,000
Medication costs	£16,112.35	£1,000
Health promotion material		£5,000
Staffing costs	£164,207.70	£281,500
Total	£204,472.54	£384,170

Source: Scottish Prison Service

# 8.2 Cost per KWiP check-up

The use of an average figure may disguise variable costs between and within prisons and it is also possible that some costs such as training may be lower in future years. However, this provides a 'ballpark' figure which could be used to calculate the likely cost of maintaining the basic Keep Well in Prison programme beyond this first year.

The average cost/check was calculated in very simple terms on the basis of the total operational expenditure (excluding software development costs, but including all KWiP staff, materials, travel and training costs) divided by the number of checks carried out in the six month period (£200,972/1312), which gives a figure of £153 per Keep Well health check. This figure excludes one-off start up costs which, although relatively low, may distort an assessment of delivering the health checks. At the end of the 12 month programme, it should be possible to derive more robust estimates of delivering KWiP.

# 8.3 Identifying higher risk prisoners

Data from SPS suggests that, on the basis of their ASSIGN scores, a total of 128 prisoners (10% of those who were assessed) were identified as being at higher risk of cardiovascular disease, with scores of 20% or more. It is likely that this group of prisoners will incur further costs as they are more likely to be prescribed medication for identified conditions and/or referred for specialist advice or follow-up (59% of the 128 identified as having an ASSIGN score of 20% or more received a referral as a result of their health check compared with 35% of those with ASSIGN scores of less than 20%). At this point, the research team do not

have data which would allow an estimate to be made on what those costs might be.

# 8.4 Referrals to other services and follow-up

A total of 502 prisoners (38% of those who received a health check) were referred to other services of some kind: of these, 174 (13% of all prisoners, but 35% of all referrals) were to smoking cessation services. As Table 5 (in Chapter 4) showed, referrals for smoking cessation were among the most common type of referral. Aside from referrals to the NHS Keep Well Team (14% of all prisoners who received a health check), referrals to other types of service were low (7% or less).

The cost of providing smoking cessation services is based on the staff costs to deliver smoking cessation groups for 12 prisoners at a time over a 12 week period. The cost of providing smoking cessation groups for prisoners, therefore, translates into a figure of approximately £60 per prisoner to attend over the 12 weeks or £5 per prisoner per session. Additional monies have been secured to cover the increased costs associated with meeting the demands for smoking cessation support beyond the existing costs to SPS.

# 8.5 Identifying additional unrecorded or hidden costs

It was not possible within the timeframe of the evaluation to quantify the potential additional costs which might be incurred by the prison service, the NHS, or to prisoners and ex-prisoners themselves as a result of the KWiP programme. However, in discussion with the Project Advisory Group and also drawing on data from the qualitative interviews, a list of likely potential addition costs is suggested which may form the basis of more extensive cost analyses. If KWiP continues to be delivered and if record-keeping mechanisms remain in place (and are enhanced to permit follow-up), it should be possible to gain a clearer picture of how the service impacts on the prison service and on the NHS and to estimate the costs associated with this.

Currently unrecorded potential additional costs include:

- Additional SPS health care staff time (dealing with queries or concerns from prisoners who have had a health check),
- Additional SPS staff time providing follow-up care as a result of health needs identified through the health check. This includes provision of repeat tests such as blood tests, and referrals to services delivered by SPS staff (including gym staff, health care staff, and benefits counselling staff),
- Additional costs to SPS in terms of facilitating health behaviour change among prisoners (staffing and facilities in prison gyms, increasing availability of free healthier food options, training for wider prison staff to encourage health behaviour and attitudinal change in prisoners),

- Additional administrative work for SPS staff to ensure prisoners received their KWiP letter, to ensure that rooms were available for the health check, and to support the KW nurses in accessing the facilities they needed,
- Costs of organising throughcare for prisoners between SPS and NHS.

Currently unknown future costs might include:

- Costs of providing clinical interventions and associated medication as a result of conditions revealed from the health check (including costs to SPS and NHS),
- Costs to ex-prisoners to attend health care services for assessment and treatment,
- Costs to ex-prisoners to eat more healthily and/or use gym facilities.

These lists are not comprehensive, but simply represent areas where costs may accrue as a result of the KWiP health checks. In the longer term, the costs associated with the health checks need to be considered in terms of the cost savings and the benefits – to individual prisoners, to the health service, to welfare services and to society as a whole of a healthier population of prisoners and exprisoners.

It is also the case that costs over time may change as systems within the prisons become more efficient, as relationships between prison staff and the KWiP teams become more embedded, as prisoners become more familiar with the health checks, and as the Keep Well nurses become more proficient in delivering the health checks. The data presented must, therefore, be viewed within the context of the timing of the evaluation. At the end of the 12-month period, when all monitoring data are completed, a greater clarity in relation to actual direct costs would be expected.

### Summary

KWiP was wholly funded by the Scottish Government in the form of a 12-month project grant to SPS. It was not possible within the timeframe of the programme or the evaluation to estimate any costs to agencies or sectors beyond the SPS, other than for smoking cessation services.

Based on the data for the first six months of KWiP, the following estimates of costs were made:

Cost per check-up	£153.00
Cost per prisoner of smoking cessation groups (12 sessions)	£60.00
Cost per prisoner per smoking cessation group per session	£5.00

Estimates of cost effectiveness would need to consider the on-going costs associated with treatment or use of services associated with the identification of conditions, but also long-term savings to the NHS, welfare and other services as a result of conditions detected, treated or prevented.

# 9. Discussion

In this final chapter, the evaluation findings are considered within the context of the study objectives which were:

- Describe the development, implementation and delivery of Keep Well health checks to the prison population,
- Assess the short term impacts on prisoners, prison staff and NHS staff in terms of both experiences of the programme, raised awareness and changes in knowledge and attitudes,
- Identify factors facilitating or acting as barriers to achieving progress towards health behaviour change,
- Assess the financial costs of the delivery of Keep Well in prison.

And, finally, to consider:

• A baseline and evaluation framework for a longer term follow-up study.

The following sections consider each of these objectives in turn. It is worth reiterating the point made earlier in Chapter 2 about the analysis and reporting of qualitative data. Namely, that respondents' accounts are based on their perceptions of events or situations. While this may at times seem to be at odds with what is 'known' about a situation or setting, the key issue is that it is these individual perceptions and meanings which help in understanding whether and how – for example – the KWiP health checks influenced (or did not influence) prisoners' behaviour.

# 9.1 The development, implementation and delivery of Keep Well health checks to the prison population

The evaluation of the Keep Well in Prisons programme explored and described its development, implementation and delivery during its first six months of operation. The evaluation showed that Keep Well was implemented to timetable and within budget across the prison estate in Scotland, with checks delivered to more than1300 prisoners.

Health checks were well-received by prisoners. Not only was uptake good, with 7 in 10 of those invited to participate going on to have a full health check on receipt of their first invitation, it was clear from the prisoners' accounts that the checks were valued. There appeared to be a number of reasons for this: first, prisoners acknowledged that early assessment of health risks offered an opportunity for both treatment and prevention; second, the health checks provided reassurance that they were in good health (or better health than they had feared); third, prisoners valued the advice and information they received; and, finally, there was a sense that the health checks represented a genuine concern by the prison service for their health and well-being.

Prisoners aged 45 years and over appeared to be more likely to accept the invitation to attend a check than younger prisoners. It is not clear why there was a differential, but it may be that the younger prisoners, who may have been less likely to have any overt health problems, did not regard the checks as salient. Older prisoners, on the other hand, may be aware of poorer health and may, therefore, have been more willing or interested in trying to address problems.

However, perhaps the most striking observation was the relationship between proximity to liberation date and check-ups, with most check-ups taking place for prisoners who were close to their expected liberation date. This suggests, on the one hand, that health checks for this group who appear to want to make positive changes once they leave prison may be particularly salient. Efforts to effect change in behaviour may be more likely to succeed with soon-to-be released prisoners, and links with community and primary care services will be important to support and sustain behavioural change. On the other hand, the data suggests that the engagement of longer-term prisoners, who may feel pessimistic about their future and for whom getting healthy is not seen as a worthy goal, remains a challenge for Keep Well.

The National Evaluation of Keep Well (Mackenzie et al, 2010) identified a number of reasons which may underlie the disinclination of some groups to engage with health services. The national evaluation report explored the relationship between health services and their patient groups using the work of Dixon-Wood and colleagues (Dixon-Wood et al, 2005) in relation to the concept of 'candidacy'. Dixon-Woods argued that people make decisions about whether or not their current health state qualifies them as a 'candidate' to use a service based on a number of factors including cultural, personal knowledge and attitudes to risk, and past experience of health care. The report highlights the challenge for preventive health care services in engaging with 'hard to reach' groups who may feel they do not 'qualify' for such services.

Prisoners showed a generally good understanding of the rationale for the health checks and an awareness of the reasons for each of the tests carried out. This, in turn, suggests that explanations to prisoners by the Keep Well nurses were appropriate to their needs. Prisoners who felt themselves to have been well informed about the health checks were likely to be clear about their reasons for attending the health check and were particularly motivated to attend and respond to the advice received.

This suggests that efforts to inform prisoners may need to be re-assessed. For example, prisoners described receiving a lot of leaflets and it may be that this medium is problematic for groups who may have poor literacy skills. It was notable that the Keep Well nurses would often visit a prisoner who had not responded to the invitation letter rather than send them a further written reminder. The personal touch may be more effective for the more hesitant participants, especially in the light of prisoners' appreciation of the time spent by nurses during the health check itself. Although the national evaluation of Keep

Well relates to engaging with individuals in the community, it may offer some key learning in terms of how best to engage with those who are considered more difficult to reach. The Glasgow interim report (Reid et al, 2008) lists the variety of ways that general practices have tried to engage with patients in the community including a blanket mail shot explaining Keep Well and inviting patients to call for an appointment, a fixed appointment letter, telephone calls and opportunistic contact (when patients are already visiting the practice for another reason). Telephone calls in particular were noted as being successful in engaging and developing rapport with individuals.

Given the significance of informal peer pressure, promoting engagement with Keep Well may also benefit from using peer recruitment – that is, using prisoners to encourage fellow prisoners to have a check-up. In the same vein, prisoners may have an important role as champions, encouraging others to make behavioural changes.

Although there was a range of views among prison staff about the amount and quality of prior information, for the most part, non-health prison staff felt that they had received sufficient and timely information which allowed them to fulfil their work roles in relation to Keep Well, while prison health care staff felt well-informed about the programme via their managers and the KWiP project manager.

There were concerns among prison health care professionals, especially in the early days of implementation, that their role was perhaps being undermined by the KWiP teams. There were, again in the early days, concerns about the perceived additional burden on prison staff in terms of administration, organisation (for example, finding space for the health checks) and professionally if, for example, prisoners were concerned after their health check. It may be that the time spent by the Keep Well teams in each prison should be extended so that KWiP and prison staff feel less pressured by the demands placed on them to ensure that prisoners attend within the relatively brief period that the team are in the prison.

Nevertheless, the in-house health care teams and the Keep Well teams appear to have overcome these early difficulties and there was clear evidence, based on the accounts of the prison staff and the KWiP nurses, that the teams worked together effectively to deliver the programme. There was no evidence of residual resentment on the part of the prison health care teams. Over time, one would expect there to be fewer and fewer difficulties between the in-house and peripatetic teams and, indeed, this was the view of the KWiP teams.

For those appointed to Keep Well nursing posts, there was a view that the secondment afforded opportunities for personal professional development and, moreover, for organisational learning transfer when they returned to their former positions. Consideration may need to be given to how this learning transfer can be supported and facilitated.

## 9.2 The short term impacts on prisoners, prison staff and NHS staff

The evaluation considered the short term impacts on prisoners, prison staff and NHS staff in terms of both experiences of the programme, raised awareness and changes in knowledge and attitudes.

The health checks appear to have stimulated efforts toward healthier behaviour on the part of prisoners. This was reflected in reports of better understanding among prisoners of health and lifestyle issues and in reported efforts to improve diet, increase exercise, quit smoking and a more positive attitude to their own health. Prisoners gave accounts of the behavioural changes that they had – or had not –made as a result of their involvement with Keep Well. It was clear that although prisoners reported a motivation to make changes - such as eating more fruit, going to the gym, losing weight and attempting to quit smoking – this was not necessarily translated into actual behavioural change – at least within the timeframe of the evaluation.

The health checks were directly targeted at prisoners, but there were also 'Health Promotion Days' in each prison. These were said to be very popular among prisoners and staff and aimed to foster a wider focus on health promotion within the prison setting. Although prison staff could acknowledge the benefits of a greater focus on health promotion, there was no evidence from their accounts - at this point - that they had necessarily embraced the messages in relation to their own behaviour.

Nevertheless, there was also a view that the KWiP teams had a useful and distinct role, which was beneficial for prisoners and for the prison as a whole. This wider health promoting role is likely to yield greater success over time as learning within prisons is extended and may be facilitated by the current format, based on secondment from SPS health service and by the move to NHS management of health care in prisons.

## 9.3 Factors facilitating or inhibiting health behaviour change

The evaluation considered the factors that facilitated or served as barriers to achieving progress towards health behaviour change. There were three categories of influence in relation to behavioural change identified by prisoners and prison staff: structural factors which included the prison setting, its regimes, routines and restrictions; inter-personal issues which included the attitude of prison staff and fellow prisoners and relationships between prisoners and staff; and, finally, personal characteristics which included issues of motivation, acceptance and understanding of the need to possibly make health-related changes and individual attitudes.

It was very clear from the narratives of prisoners that, while there are opportunities to make behavioural changes and that they have done so – such as attending smoking cessation groups, using the gym and purchasing fruit – the

infrastructures and routines within prisons can be perceived to frustrate and inhibit those behavioural change efforts.

In particular, a perception of limited choices at mealtimes with, what were regarded to be, unappealing 'healthy' options and a perception of limited access to fruit and vegetables were experienced as an obstacle to changes in diet. Similarly, while there were opportunities for exercise, access to gyms may be restricted to specific time slots or days. Finally, simply being incarcerated was experienced as stressful and a deterrent to quitting smoking or shifting diets from 'unhealthy' sugary and fat-laden foods, which prisoners may regard as small personal pleasures and comforts in an otherwise bleak life.

There is a clear argument that if the prison service wishes to promote healthy eating, it may need to continue to identify creative ways of addressing healthy food provision for prisoners. Certainly, the issue is being addressed by SPS and, to date, includes prisoner focus groups to obtain feedback on the food choices and provide opportunities for prisoners to place requests for specific foods or recipes for consideration in future menu planning. A standardised recipe data base has been developed and the recipes are currently being analysed against Food Standards Agency recommendations (see Levy, 2009) for nutritional content. There are plans for dishes to be colour coded to identify whether they contain a high fat, sugar or salt level. This will allow prisoners to identify 'healthier' recipes. All menus are meant to provide a minimum of one healthier option at breakfast, lunch and evening meal. SPS is currently carrying out a national audit of the menus to monitor the progressive integration of the standardised recipes. SPS has, in addition, encouraged all prisons to apply for the independently assessed Healthy Living Award, which awards catering establishments for providing healthier food and finding ways of helping their customers make better food choices. These are all changes which should address some of the criticisms and concerns expressed by prisoners about the food in prison.

The legislation to prohibit smoking in public places in community settings was associated with culture, attitude and behaviour changes in communities where smoking had, previously, been the norm. On the basis of the interviews conducted as part of the evaluation this legislation appears to have had less influence on prisons where smoking is now restricted to prisoners' own cells, but still seems to be a common behaviour. However, there were signs that the health checks had started to encourage prisoners to consider quitting or reducing their smoking. There were reports of increased interest in and uptake of smoking cessation support, to the extent that SPS has made additional resources available to provide for additional groups.

## 9.4 Baseline and evaluation framework for a longer term follow-up study

The evaluation team was asked to consider an evaluation framework for followup study. The evaluation focused on the first six months of KWiP's implementation. Inevitably this meant that primarily early and most likely short term issues associated with the implementation and delivery of the programme were identified. It also meant that it was too early to assess sustained attitude change and behaviour change associated with KWiP or to assess what additional costs might be incurred as a result of the health checks, let alone whether this represented a cost effective programme.

A future evaluation might include the following items:

Analysis of monitoring data over a longer period of time to allow:

- Assessment of the extent to which engagement increases among those groups of prisoners who appear to have been less inclined to accept the offer of a health check,
- Analysis of data relating to referrals to specialist services following a KWiP health check,
- Analysis of medication prescribed a result of the health check.

Development of mechanisms (some of which are likely to be in place already) to follow up prisoners once they leave prison in order to assess:

- Engagement with primary and specialist care services,
- Use of smoking cessation services,
- The health checks conducted including blood pressure, cholesterol.

Development of mechanisms to record additional costs associated with delivery of the health checks in prison. This might include:

- SPS operational staff time (for example: to escort prisoners, deliver invitations),
- Prison health care staff time (for example: conducting follow-up checks, time with prisoners before or after checks, liaising with KWiP teams),
- Medications prescribed (see above),
- NHS time (specialist) following post health check referrals,
- NHS time for Keep Well practitioners working with ex-prisoners in community settings.

Longitudinal qualitative research with prisoners, prison staff and Keep Well staff (possibly re-interviewing those included in this evaluation) to explore:

- Attitude and behaviour change over time among prisoners,
- Changes in prison-wide culture in relation to health promotion,
- Learning transfer between KWiP nurses and prison health care staff
- Perceptions of enhanced practitioner skills.

## 9.5 Conclusions

The barriers to behavioural change, while in some ways inherent within the specific setting of the prison environment, are also very much evident in wider community settings. Complaints about access to, for example, smoking cessation

supports are not so different from the situation in community settings, but may feel more acute for prisoners who have little else to do. Prisoners acknowledged the health risks associated with smoking, but preferred to reduce their level of smoking rather than quit altogether. Again, this is a common observation of patterns of smoking and smoking cessation in community settings (see, for example, Martin, Ritchie and Amos, 2008).

The potential to purchase additional fruit and vegetables using money earned in prison was perceived to be a choice that was open to prisoners and one which, based on staff and prisoner feedback, it would appear has been more often used in the wake of the Keep Well checks as prisoners have become more aware of the importance of diet to health. However, it was seen also as inherently unfair. Prisoners' access to healthy food is mainly controlled by the structures imposed by the prison and there is little room for prisoners to influence their diet beyond relatively limited menu choices.

The challenge for the prison service may, therefore, be to persuade prisoners that healthy choices are not simply confined to salads and to ensure that they are appealing to prisoners who, even if they have choices, are constrained by the menus available to them on any one day. Efforts to give prisoners a voice in those prior choices may be part of that process.

If the ultimate aim is to help people stop smoking, the prison service must ensure that prisoners have the best opportunity to do so through a wider range and speedier provision of smoking cessation support.

More widely, if prisons are to become more health promoting environments there is a need to ensure that prison settings become facilitators rather than barriers to change. This includes ensuring that there is a prison-wide approach which is supported and communicated by all prison staff and supported by structural changes in the delivery of opportunities to make health related behavioural changes.

Keep Well in Prisons can play an important role in shifting the prevailing cultures within prisons. It is not surprising that impacts were generally of a small scale in the first six months of the programme's operations. However, the more that Keep Well is regarded as a mainstream service and its profile is reinforced over time through sustained activity within prisons, the potential to inform attitudes and practices at all levels of the prison service is likely to be enhanced.

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# Appendices

# A: Prisoner Interview Topic guide

Aims of the interview:

- Explore the respondents reasons for attending the Keep Well health check
- Explore their experiences of health services prior to prison
- Respondents views on the Keep Well health check and what was included in it
- Find out if they were referred to other services as a result of the health check
- To find out if the respondent does anything differently as a result of the Keep Well health check

Introduction/Recap

- Background Information
- Recap purpose of study

Interview Format

- Format of semi-structured interview (mostly open questions, hearing their views)
- No right or wrong answers their views are important
- Confidentiality and limits around disclosures of harm (make sure you have read disclosure policy in the interviewer notes)
- Withdrawal at any time from interview as whole, or in not answering particular questions
- Timing of interview (around 30-45 minutes)

Recording of Interview

- Digital recording of interviews check they are happy with this
- Report, use of quotations, anonymisation
- Check if respondent has any questions?
- Check if happy to proceed?

Consent

- Go through the consent form with the participant.
- If consent is given, leave a copy of the consent form with the participant and return the other signed copy to the office.
- At the end of the interview we will ask them for their consent to pass on their contact details on to NHS Health Scotland for possible follow-up research.
- Go through this consent form with the participant.
- If consent is given, leave a copy of the consent form with the participant and return the other signed copy to the office.

Awareness of the Keep Well health check

- How did you find out about the Keep Well Health Check? Were you given any written information about the Keep Well health check e.g. a letter, an information leaflet? Were there any posters?
- Did anyone speak to you about keep well before you were invited for a health check? If yes, who and when?
- What were you told about it beforehand?
- Did anyone explain why you were invited to a health check? What did they say?

Reasons for attending/not initially attending a health check

- How many times were you invited before you attended the health check?
- Was that by letter or a nurse?
- Why did you decide to attend the health check?
- Did you feel that you had a choice about whether or not to attend?
- Did you have any worries about attending?
- Why you did you not attend when you received the first invitation?
- Why did you decide to attend in the end?
- How did you feel about taking part?
- Were you worried (or not) about your health before attending the health check? Why do you say that?

The health check

- Where did you have the health check? (in the health centre? Somewhere else?)
- What did you think of the room where you had the health check?
- Was it private/did you feel you might be overheard?
- Did you feel that you could ask questions about the check up?
- What was included in the health check? Blood pressure? Weight? Lung function/breath test?
- How did you feel about the length of time you had with the nurse?
- Was it longer than you normally have with a nurse? And so how long was the health check?

Short term outcomes related to the health check

- What happened as a result of the health check?
- Were you given any advice about your health? E.g. how to reduce your risks of health problems?
- Was this about things they (doctors, nurses) could do?
- What about things you could do yourself?
- What advice were you given? E.g. changing your diet (and in what ways)?
- Changing the amount of exercise you take?
- Stopping smoking?
- And are you now doing things differently based on this advice? If yes: How successful so you think this has been? What helped/hindered? If no: Any reasons why you've been unable to make any changes?
- Were you prescribed medication for a health condition? If yes: Are you now taking this?
- Have you had any follow-up checks since you've started on the mediation?
- Were you taken off medication that you had previously been taking? If yes: Have there been any follow-up checks since coming off the medication?
- As a result of the Keep Well check, were you referred to see a doctor for a health problem?
- Have you seen this doctor? If yes: What happened as a result of this? How helpful was it to see the doctor?
- Are you now getting help to deal with this/these problems?
- Did anything else happen? Were you given any other information?
- If not seen the doctor yet: Can you say why?

- And were you referred to a specialist service e.g. a dietician, smoking cessation service, drug/alcohol addiction or any other service?
- [FOR EACH SERVICE REFERRED TO]
- Have you seen this specialist, or attended the service? If yes: What happened as a result of this? E.g. How helpful was it seeing/attending this/these services?
- Are you now getting help to deal with this/these problems?
- [IF APPROPRIATE] Has your use of drugs and alcohol changed as a result?
- Did anything else happen? Were you given any other information?
- If been referred but not seen anyone yet: Can you say why?
- Have you done anything else to improve your health since the check up?
- In general, do you think your health has improved since the check up?
- Do you know more about what things can affect your health now (as a result of the health check)? Do you have any examples?
- Since your health check do you feel differently about your health/taking care of your health? In what ways?
- Have you ever had help with any [of the above] before? Was that in prison or before prison? Tell me a little about that? Did you find that helpful?

Facilitators and barriers to behavioural change

- Thinking of things you can do to improve your health. Since the health check is there anything that has made it easy or difficult?
  - o access to healthy food (diet)
  - o opportunities to exercise
  - o stress, boredom, long sentence
  - o availability of medication
  - Attitude of others other prisoners, prison staff, family?

Satisfaction with the Keep Well in Prisons health check

- What did you like and dislike about the Keep Well check up? Why was that?
- Did you feel comfortable discussing your health with the nurse?
- Did you have a choice about whether you saw a man or a woman?
- Were there things/topics that you did not want to discuss? (note: we do not need to know what the difficult topics were unless respondent spontaneously mentions them and this may be a point when you remind them about the disclosure policy). Why was that?
- Was there anything that you think could have been done differently?
- Do you think the Keep Well in Prisons programme should continue? Why?
- Anything else? Any questions?
- Thank participant for their time
- Reassure re: confidentiality and ask if there is anything they would not like to be discussed/ quoted in the final report
- Explain that NHS Health Scotland would like access to their contact details in order to possibly invite them to take part in follow-up research.
- Go through the consent form with them and if they consent ask them to sign a copy of the form
- Check if participant has any questions re. participation

## B: Prison Staff Interview Topic guide

Aims of the interview:

- Explore the respondents understanding of the Keep Well health programme
- Explore any impact Keep Well has had on the respondents role in relation to supporting prisoner health
- Respondents views on any effect the Keep Well health programme had on their understanding of prisoner health issues
- Explore their views on whether prisoners are doing anything differently as a result of their health check
- To find out what (if anything) has made it easier or more difficult for prisoners to change behaviours that might affect their health

#### Introduction/Recap

Background Information

• Recap purpose of study

Interview Format

- Format of semi-structured interview (mostly open questions, hearing their views)
- No right or wrong answers their views are important
- Confidentiality and limits around disclosures of harm (make sure you have read disclosure policy in the interviewer notes)
- Withdrawal at any time from interview as whole, or in not answering particular questions
- Timing of interview (around 30 minutes)

Recording of Interview

- Digital recording of interviews check they are happy with this
- Report, use of quotations, anonymisation
- Check if respondent has any questions?
- Check if happy to proceed?

Consent

• If given, record verbal consent on the digital recorder.

Awareness and understanding of the Keep Well health programme

How did you find out about Keep Well in Prisons?

- Did someone come and speak to you about it?
- Were you given any written information about Keep Well: e.g. letter, information leaflet, contacted via e-mail?
- HEALTH STAFF ONLY: Did you consider applying for one of the Keep Well in Prisons posts?
- Did you have an information session about Keep Well in prisons? If yes, what did that involve?
- How useful or not did you find that? In what way?
- In general do you feel you were given enough information about the Keep Well in Prisons programme before it began? Why? In what way?
- What could have been done differently?
- What is your understanding of the Keep Well in Prisons programme?
- Who is being targeted?
- Why are they being targeted?

Impact on prison staff role in relation to supporting prisoner health

- What is your role in relation to supporting prisoner health?
- What is your role (if any) in relation to the Keep Well health checks?
- Has Keep Well had any impact on your role in relation to supporting prisoner health? If yes: in what ways?
- How did you initially feel about the Keep Well teams coming into the prison?
- Has your opinion changed over the time that the programme has been running?

Impact on understanding of prisoner health issues

- What kind of health issues do prisoners generally have?
- Has Keep Well in Prisons effected your understanding of prisoner health issues? If yes: has it influenced the way you approach your work? In what way?
- In what ways has Keep Well influenced your own working practices?
- Has anything made it easy or difficult for you to change your working practice?

Short term outcomes related to the health check

- Do you feel that prisoners know more about what things can affect their health now (as a result of the health check)?
- Do you have any examples of things they know more about?
- Are you aware of a change in prisoners' attitudes to their health/taking care of their health as a result of the check up? In what ways?
- In general have prisoners who were referred to a specialist or other services attended these (or not)? (e.g. Smoking cessation, Dietician, Drug and alcohol services, Primary care nurses?)
- Are you aware of the health check having an effect on the prisoners in any way?
- Are they taking new medication to help a health condition?
- Have they stopped taking medication?
- Has their diet changed since the health check? If yes, in what ways?

- Have they tried to stop smoking? How successful was that?
- What, if anything, helped?
- Has the amount they exercise changed since the health check?
- Attending/getting help with an addiction (drugs/alcohol)?
- How successful was that?
- Have they done anything else to improve their health since the check up?
- Do you think their health has improved since the check up?

Facilitators and barriers behaviour change

- Thinking of things prisoners can do to improve their health. Since the health check is there anything that has made it easy of difficult for them?
  - o access to healthy food (diet)
  - o opportunities to exercise
  - o stress, boredom, long sentence
  - o availability of medication
  - o Attitude of others other prisoners, prison staff, family
- What do you think are the main good and bad points (benefits / drawbacks) of the programme?
- Impact on prison staffs knowledge and behaviour about their own health
- Do you think you know more about what things can affect your health as a result of Keep Well? Do you have any examples of things that you know more about?
- Do you feel differently about your health/taking care of your health as a result of the Keep Well programme? In what ways?
- Are you aware of the programme having an effect on how you look after your own health in any way?
- Have you done anything to improve your health (if required) since the Keep Well in Prisons programme began?
- Do you think your health has improved since the programme began?
- Do you think the Keep Well in Prisons programme should continue? Why?
- Anything else? Any questions?
- Thank participant for their time
- Reassure re: confidentiality and ask if there is anything they would not like to be discussed / quoted in the final report
- Check if participant has any questions re: participation