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Promoting Sport and Physical Activity in Medway

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Executive Summary

This report examines the promotion of sport and physical activity in the Medway region. The report summarises existing data, analyses it to create new insight, presents perspectives from local people, and reviews examples of best practice and innovative work from the UK and abroad. The report concludes by examining the specific issues for the effective promotion of sport and physical activity in Medway.

It is widely appreciated that sport and physical activity provide a number of economic and social benefits for individuals and the wider community. In recent years, the Department of Health and the Chief Medical officer have particularly emphasised the importance of diet and physical activity as key determinants of health. Whilst Medway has diverse levels of deprivation, the levels of health and mortality are worse than average in comparison with the rest of England. Currently with a population of approximately 255,000, Medway is expected to grow by 10% over the next two decades. The majority (80%) of this increase is expected to comprise of older people, which will likely provide further challenges to those seeking to promote sport and physical activity in the future.

The number of people in Medway who are physically active regularly is reported as low (16-18%), however the number of people who are completely inactive is also low (20%). The inactive group are typically older (>65 years) and have a greater number of health issues than average for Medway. Half of this inactive group want to become more active and identify walking, swimming and gym (keep fit) as their preferred activities. The majority of people in Medway do take part in sport and active recreation, but not sufficiently regularly to meet minimum recommended guidelines for health. When surveyed, the primary reasons given for not being more active are insufficient time, poor health or a disability, and cost. To explore further these issues of physical under-activity and inactivity in Medway, focus group work was conducted. This work helped identify additional factors that would encourage people to become more active. In summary, convenient, attractive and welcoming (indoor and outdoor) facilities that provided an opportunity to be active with friends and family in a safe environment were found to be paramount.

The previous governments' target-based approach of recommending exercising 5 times for 30 minutes per week has not worked in Medway; therefore a different approach is required. Promoting a wide range of sporting and physical activities by emphasising their energy expenditure and calorie balancing potential may provide an effective alternate strategy. This approach has the benefits of reinforcing the important health links between nutrition and physical activity, permitting a much wider range of day-to-day activities to be "counted", and is likely to be more easily understood and promoted. Furthermore, an analysis of how people in Medway currently expend energy provided useful insight. The analysis revealed that sporting activities such as golf, football and running, accounted for far more of Medway's energy expenditure than walking, swimming and cycling.

Increasing sport and physical activity levels in Medway cannot be achieved without focused, concerted and co-ordinated efforts. Lessons learned from other successful programmes highlight the need to employ local, focused promotion strategies that identify and work with the needs of the various target groups. The profile of these groups and their particular needs and challenges in Medway need to be identified and better understood. In addition, sport and physical activity promotion works best when different organisations collaborate in a relevant and co-ordinated manner. Accordingly, there is an important need to establish a means of co-ordinating such sport and physical activity initiatives in the Medway region. Finally, regular impartial evaluation and dissemination of good practice from all sport and physical activity promotion initiatives should be completed. This evaluation and dissemination will provide important lessons on how to increase Medway's levels of sport and physical activity in the future.

Why Be Physically Active?

Sport and physical activity, in addition to being fun and sociable, provide numerous benefits for individuals and their wider community. These benefits include a diverse range of economic and social benefits, for example: health, community cohesion and safety, social exclusion, sustainable physical and economic development, productivity and lifelong learning can all be enhanced by sport and physical activity (NICE, 2006; Sport England, 2008). Of these benefits perhaps the most important is health. Recently, the coalition government published its white paper on health (Department of Health, 2010), and an associated review on the health and wellbeing of people in England (Department of Health, (2010a). Both papers underline the importance of physical activity as a key determinant of health.

In many areas of concern for health, whether major diseases, obesity, poor mental health, or the ageing population, there is evidence that increasing physical activity can offer an effective part of the strategic response. Increasing levels of physical activity in the population reduces the incidence of and costs associated with many of the UK's most common diseases. For example, physically active individuals are at approximately half the risk of developing coronary heart disease compared to those who are sedentary (Department of Health, 2004). Similarly, current low levels of physical activity are contributing to the increasing prevalence of obesity and high blood pressure. The Department of Health (2010a) notes that more than two thirds of the population are either overweight or obese. Moreover, this incidence of obesity is only expected to increase further in the future. Another major area of concern is the extent of poor mental health in England. Even for this new priority health area, the positive impacts of being physically active have been established (Paluska & Schwenk, 2000). Lastly, the implications of maintaining physical activity across a person's life span are set out in the white paper. Children are encouraged to engage in physical activity to promote healthy growth and development (Department of Health, 2004). In older adults, physical activity is associated with increased functional capacity and independence (Mazzeo & Tanaka, 2001).

Medway Profile

According to the latest figures published by Medway Council in July 2010 the population of Medway reached 254,800 in 2009, up by 1,300 people since 2008. This trend of an increasing population is expected to continue with a 10% increase of approximately 27,900 by 2028. Of this increase, older people are expected to account for 81% or 20,400. Medway has relatively diverse levels of deprivation with three wards falling within the 20% most deprived in England and two falling within the 20% least deprived. Relative differences of deprivation are found within small areas; in River ward 35% of people live within neighbourhoods assessed to be in the 20% most deprived neighbourhoods in England and 28% live within the 20% least deprived. Those areas with high levels of deprivation typically suffer on most domains of deprivation: income, employment, health, education, crime and living environment. Recent reports from the Association of Public Health Observatories (2010) state that the health of Medway people is generally worse than the average in England. Life expectancy for males and females has risen in recent years, but is still lower than the England average. Mortality from all causes for people aged less than 75 years is in the highest quartile, with between 324 and 468 deaths per 100,000.

Levels of Physical Activity in Medway

The results of the 2005-6 Active People Survey 1 indicated that participation in sport and active recreation in the Medway region was 18.2%. This ranked Medway in the bottom quartile in the county and country. Nationally, Sport England had a target of increasing adult participation in sport and active lifestyles by 1% per year. In Medway, due to its low ranking, a more demanding target of an increase of 5% to 23.2% by 2011 was agreed. Since setting this target two more recent Sport England surveys (Active People Survey 2/3, 2007-9; and interim results from Active People Survey 4, 2009-10) have been published. These surveys suggest that the percentage of adults participating in sport and active recreation in Medway have remained relatively unchanged (15.8% and 16.4% respectively). As a consequence Medway Council commissioned its own survey of physical activity levels in the region in June 2009.

The Medway Council commissioned survey found levels of physical activity were significantly higher than those for sport and active recreation stated above from the Active People Surveys. The proportion of respondents physically active for 3 x 30 minutes a week was 49.5%. Further, 68.1% had managed 90 minutes or more per week. Consequently, there appears to be ambiguity over the exact level of participation in physical activity in the Medway region. Nonetheless, both levels of physical activity and health in Medway are generally held to be lower than the national average.

Table 1: Age profile of inactive respondents from Medway council’s survey.

| Age | Not Participating in Physical Activity | Not Participating but Would Like To | Total Number in Survey |
|-------|--|-------------------------------------|------------------------|
| 16-24 | 4.3% | 5.6% | 285 |
| 25-34 | 6.6% | 10.1% | 328 |
| 35-44 | 12.5% | 15.7% | 385 |
| 45-54 | 7.9% | 12.1% | 162 |
| 55-59 | 3.3% | 3.0% | 112 |
| 60-64 | 7.4% | 11.1% | 157 |
| 65+ | 57.4% | 42.4% | 568 |

A further analysis of just the responses from those who reported performing little (i.e. less than 3 x 30 minutes per week) or no exercise was conducted. Of those that don’t exercise at all 43.9% were male and 56.1% were female, suggesting that inactivity is not an issue for one particular sex. In contrast, age is a factor as people over 65 years had considerably higher levels of inactivity (Table 1). But almost half (49.5%) of those that were inactive said they didn’t want to change this behaviour. Whilst the greatest health benefits are likely to be found for those who become active, the percentage of completely inactive people in Medway who want to become more active appears to be relatively small (9.9%). There is a much larger proportion of people (30.9%) who are active but achieve less than 3 x 30 minutes per week. Notably, many of these still managed to be active for an equivalent 90 minutes per week. This implies that these people are able to meaningfully increase their weekly energy expenditure through physical activity. Therefore we have examined the

energy expended in different sports and recreational activities by people in Medway below. Unsurprisingly, the number of times people were active over the criterion 4-week period is related to whether they accumulate 90 minutes or more per week.

Approximately 55% of those who are inactive and wish to change indicated poor health as a factor, 34% said they did not have enough time, and 9.6% said it was too expensive. The reasons for not being active provided by this specific group who don't exercise is somewhat different to those for all respondents that are summarised in Table 2. The greater emphasis on poor health for the inactive group should be remembered when developing strategies to increase their activity. There is a predominance of people aged 65+ in the inactive group (57.4%) and this probably accounts for their focus on poor health. When asked what activity they would like to take part in those who are currently inactive identified walking (48.5%), swimming (28.8%), and keep fit exercises (12.1%) as their top 3 choices. These are similar to the responses for the overall survey group shown below in Table 3.

Table 2: Reasons given for not being more active, from Medway Council's survey.

| Reason for Not Doing More | Percentage |
|---------------------------|------------|
| Not enough time | 52.4% |
| Poor health/disability | 19.7% |
| Too expensive | 19.3% |
| Don't have a car | 11.6% |
| No facilities nearby | 10.0% |
| Childcare issues | 8.1% |
| No one to go with | 2.3% |
| Caring issues | 1.6% |
| Laziness/lifestyle | 1.3% |

Table 3: The preferred activities of people who would like to be more active, from Medway Council’s survey

| Activity | Percent Who Would Like to Do More |
|--------------------|-----------------------------------|
| Swimming | 35.8% |
| Walking | 29.4% |
| Cycling | 17.6% |
| Keep fit exercises | 15.5% |
| Football | 5.5% |
| Running | 4.9% |
| Yoga/Pilates | 4.8% |
| Badminton | 4.8% |
| Tennis | 4.7% |
| Gym | 3.8% |

Focus Group: Getting Active

To explore in further detail the barriers to increasing sport and active recreation for people in Medway a focus group was conducted. Focus group participants consisted of Medway locals who were either inactive or had very low levels of physical activity. Analysis of the focus group discussions identified three key themes or issues that the participants highlighted as limiting their current physical activity levels. These three themes were:

1. **Accessibility** - defined as problems encountered when wanting to engage in physical activity
2. **Infrastructure** - defined as the facilities (e.g. buildings, services, sessions, natural resources, physical environments) available for physical activity
3. **Daily life issues** - defined as the pressures of everyday living / lifestyle

Sub-themes or further issues that are identified below also influenced the three key themes.

1. **Accessibility Sub-themes:**
 - **Cost** - of accessing resources / facilities for physical activity

- **Transport** - getting around – time constraints
- **Locality** - geography of Medway Towns having too many hills or roads being too busy
- **Perception of fitness** – not having the functional capacity to do certain physical activities
- **Lack of support for childcare** – difficulties faced by parents securing child supervision / babysitters for ‘time out’

2. Infrastructure Sub-themes:

- **Safety** – perceived or actual safety of physical environment around where the physical activity is performed
- **Maintenance** – the perceived attractiveness of the physical resources (i.e. upkeep of buildings)
- **Management of facilities** - how easy it is to use resources for physical activity (e.g. swimming pool timetabling)

3. Daily Life Issues Sub-themes:

- **Time / opportunity** – constraints on available time due to work or other formal / informal obligation
- **Family commitments** – constraints on time due to childcare obligations

The focus group also explored the issues relating to changing and becoming active or increasing active recreation and sport participation. Four key themes emerged here which were:

1. **Infrastructure** - defined as the facilities (buildings, services, sessions, natural resources, physical environments, etc.) available for physical activity
2. **Environment** - defined as the perceived threat or safety associated with an environment where physical activity takes place
3. **Accessibility** - defined as the ease, or ability of an individual or group to access opportunities for physical activity
4. **Social Support** - defined as an individual’s perceptions of comfort / discomfort, assistance, information, approval / disapproval and / or pressure from formal / informal contacts with individuals, groups or collective others

1. Infrastructure Sub-themes:

- **Well-maintained facilities** – perceived attractiveness of buildings and other physical resources
- **Cost** – affordability and value for money

2. Environment Sub-themes:

- **Intimidation** – having a welcoming physical environment that is not perceived as threatening, e.g. due to presence of other people
- **Safety** – perceived harmful threats from physical environment (e.g. busy and dangerous roads)

3. Accessibility Sub-themes:

- **Locality** – easy for local community to access (community focus)
- **Availability** – opportunity and perceived attractiveness for adult participation

4. Social Support Sub-themes:

- **Friends** – opportunity to do physical activities with friends / peers
- **Family** – opportunity for families to do physical activities together

The issues raised by the focus group were generally consistent with the factors listed in Table 2 of the Medway survey above. In particular, the survey and focus group both identified time, expense, and travel as significant issues. Not having nearby facilities, childcare, and people to go with were also cited as reasons for not exercising.

To overcome the barrier of cost, focus group participants suggested the provision of free or significantly subsidised activities (as in Finland see further below). Helping people to identify available time slots for physical activity can tackle the time issue. As discussed further below, the incorporation of physical activity into daily routines (e.g. more active forms of commuting), and the promotion of activities that require minimal time commitment (e.g. walking, jogging or stair climbing) could all be valuable parts of a wider strategy. The focus group also suggested regularly reviewing timetabling of key activities, like swimming, to ensure access at suitable times for those who want to swim for exercise.

In addition to the above barriers to increasing physical activity, the focus group did highlight that people attach particular importance to issues related to infrastructure. The provision of

attractive, safe, easy to use and well-maintained facilities was consistently identified by the focus group as critical. Well-maintained facilities were held to be key to attracting people and ensuring they did not drop out. It was suggested that outdoor recreational facilities are regularly monitored. The strategic use of CCTV monitoring, or park wardens may help to resolve the intimidating environment that groups of youths sometimes project.

Another issue identified by Medway residents, particularly those with children, was the lack of support for childcare. An innovative approach that could prove effective is to hold individual family physical activity planning sessions. Helping those with families could either include providing subsidised crèche facilities at local leisure centres; or, helping people to trade babysitting time with friends, neighbours or family who also have small children; providing education or opportunities to exercise with their children (e.g. walking, cycling, aerobic dance games). These latter suggestions may prove to be more economic and sustainable interventions and may also cultivate better adherence.

Measuring Physical Activity

The Chief Medical Officer (Department of Health, 2004) recommends that the adult population (i.e. ages 16 years and over) should complete as a minimum 30 minutes of physical activity of at least moderate intensity 5 days per week ('5x30'). Tasks performed as part of everyday life (e.g. brisk walking, some gardening and DIY tasks) can be counted towards the '5x30' target if of a moderate and vigorous intensity. Light intensity activities of daily living (e.g. casual walking, shopping, and many domestic chores) do not count towards this target. Sport England's Active People Survey assesses levels of sport and active recreation undertaken in England. Confusingly, the Active People Survey only records participation in activities classified as sport and active recreation. Therefore, several common types of physical activity such as active transport (e.g. cycling and walking to work), gardening and DIY tasks are not included in this survey. Because of these exclusions the Active People Survey does not measure the percentage of the adult population meeting the Chief Medical Officer's guideline of '5 x 30' but instead uses a lower '3 x 30'. The Medway

Council commissioned survey used a modified version of the questions and methods of Sport England's Active People Survey. As mentioned above, one difference between the Active People Survey and the Medway Council survey was that respondents were asked whether they had completed 90 minutes a week of sport and active recreation over the past 4 weeks. Importantly, this question revealed that 18.6% of respondents did not meet '3 x 30' criterion, but did achieve an equivalent 90 minutes per week.

Energy Expenditure During Physical Activity

As an alternative to adopting time and intensity based targets (e.g. '3 x 30' or '5 x 30', minutes of at least moderate intensity exercise per week), an energy expenditure based approach can be used instead. For example, the American College of Sports Medicine (2006) recommends that adults should expend at least 150-400 kcal of energy per day through sport and/or physical activity. This equates to a recommended minimum level of energy expenditure of 1050 kcal per week.

Describing physical activity levels in terms of calories (see Table 4) may provide several advantages in comparison with the current '5x30' approach. Three main advantages are envisaged to adopting a calorie-based approach. In short, it may:

1. prove easier to promote and for the public to understand;
2. provide a more realistic and flexible method for the public to approach their physical activity;
3. allow a more accurate and complete evaluation of physical activity levels in the population.

From the perspective of training theory, there is no inherent reason why people should specifically follow a '5 x 30' strategy rather than any other. Competitive athletes normally adopt a much more varied approach to their training (Passfield et al., 2009). Therefore the ease with which a particular approach to physical activity can be communicated, employed and evaluated becomes a critical aspect. As discussed previously there is already confusion over '3 x 30' and '5 x 30'. Perhaps the most significant advantage of an energy expenditure based approach is that it allows for more flexible and achievable recommendations. Many

individuals find it difficult to fit five dedicated 30-minute periods of physical activity into their weekly routine. However, these individuals might meet their weekly energy expenditure target (1050 kcal) in a different manner; for example, by completing two or three longer sessions of physical activity typical of many sporting activities, or in shorter more frequent bouts of exercise as active transport or active daily living. An energy expenditure approach may therefore be easier to implement.

The Active People Surveys demonstrate that the previous target setting approach based around evaluation of '3 x 30' has not worked in Medway. Encouraging people to burn more calories through physical activity and providing information on how to achieve this through a wide range of physical activities may provide an effective alternative strategy. This is supported by the findings of Crum and Langer, (2007) who examined the effects of providing information about being physically active during work with hotel cleaners. As a consequence of the information these researchers found the hotel cleaners perceived they were getting more exercise, lost weight, and lowered their blood pressure. Similar guidelines for a wide range of physical activities including sports, active travel and other daily living tasks could be devised and promoted to a wider population. Notably, this approach is also consistent with that of the recent health white paper (Department for Health, 2010), which seeks to encourage wider and personal responsibility for health.

When evaluating whether or not individuals meet a '5x30' target the answer must be either 'yes' or 'no'. Clearly, such an approach provides a very blunt evaluation tool. By describing levels of physical activity according to the number of calories expended, it is possible to determine the degree to which a population is physically active. Thus, whilst ideal levels of activity may not be achieved in a given area, it is still preferable to show that they have been met to some lesser extent. Such information may, for example, show how much a local policy need be modified (e.g. to maximise the impact of a given initiative). The current approach, can lead to a 'failure' to meet targets (e.g. '5x30') implying that wholesale policy restructure is required. An energy expenditure approach may therefore provide a more robust evaluation tool.

Table 4: Calories expended during physical activity sessions (typically 30 minutes).

| Activity | Energy Expended In Calories |
|------------------------|--|
| Aerobics step training | 204 |
| Badminton | 210 |
| Basketball | 308 |
| Bicycling (13 mph) | 280 |
| Football | 273 |
| Gardening | 126 |
| Golf | 98 |
| Jogging (5 mph) | 259 |
| Rowing machine | 252 |
| Road running (6.5 mph) | 296 |
| Running fast (8 mph) | 428 |
| Squash | 287 |
| Swimming | 168 |
| Tennis | 224 |
| Vacuuming | 105 |
| Walking (3 mph) | 112 |
| Weight training | 266 |

Energy Expenditure in Medway

Using the data from the Active People Survey 2, we were able to calculate the energy expenditure as reported by people in Medway during their sport and physical activity. Standard metabolic calculations and values were used to calculate energy expenditure for each day of sport/physical activity completed. The compendium tables of Ainsworth *et al.* (2000) were used to prescribe energy expenditure equivalents for each sport/physical activity. Caloric expenditure was calculated for each sport/physical activity session (Ainsworth, 2000; American College of Sports Medicine, 2006). Taking account of the

number of sessions completed in the previous 4 weeks, this data was averaged to produce weekly calorie expenditure values. The UK Chief Medical Officer (Department of Health, 2004), and Haskell *et al.* (2007), have both used this method previously. Table 5 presents this data based on activity levels in Medway for the seven most popular activities in England.

Table 5: Medway People Energy Expenditure for the 7 Most Popular Activities in England, from Sport England’s Active People Survey

| Activity | Percentage Participating in Activity | Energy Expenditure kcal $.week^{-1}$ | Rank Order of Activity for Energy Expenditure |
|----------------|--------------------------------------|--------------------------------------|---|
| Walking | 70.5% | 359 | 5 |
| Swimming | 12.4% | 206 | 7 |
| Cycling | 10.6% | 255 | 6 |
| Gym Activities | 9.7% | 533 | 4 |
| Football | 3.8% | 713 | 2 |
| Golf | 3.7% | 1092 | 1 |
| Road Running | 2.7% | 567 | 3 |

Table 5 shows that walking, swimming and cycling accounted for 93.5% of all physical activity, and that walking was by far the most popular of these. The energy expended during these three most popular forms of activity is considerably less than other sports-based activities. The activities associated with the three highest rates of energy expenditure (golf, football, road running) were only completed by between 2.7% and 3.8% of Medway people. From the table above, it is also possible to calculate which activities contribute most to the total energy expenditure of people in Medway. Unsurprisingly, walking comes out top because of the large percentage of people participating in this activity. The activities in which the second and third most calories are expended in Medway are gym and golf respectively. This analysis highlights the important contribution that physical activities with higher energy expenditure rates already make in Medway. The data also demonstrates that on their own the most popular forms of physical activity (walking, cycling, swimming) do not currently enable people in Medway to achieve recommended levels of energy expenditure. Thus, future strategies for Medway could usefully consider not only the popularity of

physical activities, but also their contribution to total energy expenditure. Additionally, it is likely that individuals may need to engage in more than one type of physical activity to provide an effective stimulus for health and fitness.

‘Calorie Balancing’

A further potential benefit of adopting an energy expenditure model of physical activity is it helps focus on the important contribution of energy expenditure in determining body weight. The maintenance of a healthy body weight is dependent upon an appropriate balance between energy intake and energy expenditure (the ‘energy balance equation’). Tipping this ‘balance’ to favour expenditure will lead to weight loss, whilst tipping it to favour intake will lead to weight gain. The ‘balance’ metaphor therefore provides a simple tool to understand a core component of public health. The rising levels of obesity in the UK are a consequence of insufficient levels of physical activity and overconsumption of calories. The balance has been tipped the wrong way in a sustained manner.

Most individuals have a broad understanding of the concept of energy balance. Losing weight by expending more calories than you consume, or gaining weight by consuming more calories than burnt are relatively simple concepts to grasp. To apply this approach in a quantitative manner requires that an individual be able to compare intake and expenditure using the same units. Given the public familiarity with the calories contained within food (intake) and the fact that we can describe energy expenditure using calories (see previous section above), the calorie would seem to provide the ideal unit. ‘Calorie balancing’ therefore describes an easily understandable method of quantifying energy intake and expenditure.

A number of authors have used components of a calorie balancing approach in the context of public health. For example, researchers have used METs (rather than calories) to track and evaluate physical activity levels (Balducci et al., 2010; Kosma & Ellis, 2010; Waller et al., 2010; Meadows & Jobson, 2009). But it should be noted that a growing number of commercial tools are now available to ‘map’ how many calories are expended during physical activity (e.g. MapMyWALK). Several components of the calorie mapping approach have been

combined in a non-academic context. For example, Ordnance Survey compare the energy intake from a large meal to the energy expended whilst walking (<http://www.ordnancesurvey.co.uk/oswebsite/media/features/greengym.html>). Clearly, such an approach provides helpful information. It nevertheless falls short of providing a complete tool that a member of the public can use to manage their body weight (and, by extension, their health).

A complete calorie balancing tool would provide individuals with the information required to manage body weight. Information on the calories consumed in food and the calories expended by the physical activity that takes place within Medway enables this balance to be determined. By combining within one concept energy intake and expenditure, there would be no need to 'juggle' separate messages from agencies that provide recommendations for levels of food intake and those that provide recommendations for levels of physical activity. Indeed, moving beyond a simple education tool, an interactive version would allow individuals to determine their balance of intake and expenditure according to their specific characteristics and life commitments rather than according to generic government guidelines. To our knowledge, this approach has not been promoted widely at local or national government level before.

Promoting Physical Activity

Despite the potential benefits, some of the population of Medway (and the UK) display resistance to becoming more physically active. Collins (2004) argues that the attitude and behaviour change expected from UK Government's 2004 Game Plan is huge. People need to find two-and-a-half hours a week to meet its recommendations that can have considerable financial and social implications. Many exercise promotion campaigns do not reach required sectors of the population, i.e. those that most need to increase their activity levels, or show the greatest resistance to behaviour change. Where people do become more active, dropout after the initial exercise programme or promotion finishes, is common. People then typically fall back into their old inactive habits (Robinson & Rogers, 1994 and Rhodes et al. 1999). Getting people not only to initiate but also to maintain the necessary lifestyle change and physical activity habits are key challenges.

Finland has achieved its current activity level following three decades of hard and consistent policy application. From the late 1970s to mid-1990s, Finland recorded an overall increase in the proportion that was active twice a week from approximately 40% to 60%. Extensive policy development linking sports and health was undertaken in the early 1990s. This led to the development of three successive national physical activity programmes that increased and introduced new local opportunities to participate in physical activity (Cavill, et al. 2006; Vuori et al. 2004). The Finnish national physical activity framework became broad based, with separate aspects for children, the over 40's and the aged. Each programme was carefully evaluated, and successive programmes refined according to the lessons learned. The evaluation resulted in improving local environmental conditions for physical activity, and an emphasis on lifestyle activity such as active transport and domestic work (Vuori et al. 2004). Another part of the success of the Finns was that they capitalised on their strength, which was a love of outdoor sports and activities. It is not clear if the UK has an equivalent mass participation activity? Evaluation of Finnish physical activity initiatives, consistently suggests that successful outcomes were associated with grass-roots projects, driven by local needs, expectations, possibilities and limitations. Competition for seed funding helped to generate numerous local ideas, which were required to have a consumer focus and collaborative working. Vuori et al. (2004) note that Finnish adults perceived this public physical activity promotion to be a success. In one survey 70-75% agreed that they had many possibilities to be active in their vicinity, that sports clubs and other organisations offered many opportunities, and that they have enough information on measures promoting physical activity. However, these researchers also comment that no generally applicable model for an effective project can be identified.

A physical activity review conducted by the Cochrane database of Systematic Reviews (Foster et al. 2005) suggests that the best way to increase people's physical activity levels may be through co-ordinated professional guidance and support. This can take the form of opportunistic advice and discussion about increasing activity levels involving GPs, nurses and other primary care health professionals. These approaches have been shown to be effective both in terms of getting more people active and cost. An example of this in Medway is the Medway Exercise Referral Scheme. This scheme extends and co-ordinates exercise referral opportunities providing accredited and non-accredited exercise opportunities for those

wanting to become more active. However, NICE recommends that such exercise referral schemes, and community-based exercise programmes always include controlled research study to evaluate their effectiveness. We contacted key Medway personnel in public health promotion and exercise referral programme development for details of previous programme evaluation. However, we could not find evaluation of any previous or current exercise promotion campaigns in Medway.

A variety of initiatives have been shown to provide cost effective benefits. Recent evidence from Australia has supported the positive health outcomes and value for money of pedometer use to promote public health (Cobiac, et al. 2009). Other strategies that have also proven cost effective in Australia include primary care prescription for exercise, an Internet-based intervention to encourage activity, and a community-wide programme to get people out of their cars. In Finland the authorities experienced some success in targeting inactive and difficult to reach groups. For example to target middle-aged men, teams were assigned to visit pubs and negotiate forms of exercise they might be interested in. As a result bicycles were lent, men were taken on tours, tempted into swimming pools, introduced to ball games and cross-country skiing. The National Centre for Physical Activity and Health piloted a similar approach in the UK. This approach would appear to follow previous successful experiences, being locally based and engaging directly the target population. Although, it confirmed that middle-aged men thought exercise was a good idea, unfortunately they were also adamant they would not use their cars less and walk more. Exploratory survey or focus group work could be usefully test alternative initiatives in a similar manner prior to piloting in Medway.

NICE (2006) highlighted the need to develop comprehensive, multi-agency strategies to promote physical activity effectively as part of daily life. Our focus group and many health-promoting agencies findings for example, point to the negative impact the environment can have on physical activity. Guidance on creating environments to encourage physical activity (NICE, 2008) include:

- Ensure pedestrians, cyclists and users of other modes of transport that involve physical activity are given the highest priority when developing or maintaining streets and roads.

- Plan and provide a comprehensive network of routes for walking, cycling and using other modes of transport involving physical activity. They should be built and maintained to a high standard.
- Ensure public open spaces and public paths can be reached on foot, by bicycle and using other modes of transport involving physical activity. They should be safe, attractive and welcoming to everyone.
- Campus sites, including hospitals and universities, should have different parts linked by appropriate walking and cycling routes.
- During building design or refurbishment, ensure staircases are designed and positioned to encourage people to use them.

These examples cover a wide-range of organisations and settings. Implementing these recommendations or broader strategies in Medway requires the co-ordinated work of several different departments and agencies. A physical activity co-ordinator and/or strategy group could be formed to provide a single point of reference for all Medway based initiatives.

Promoting Sport and Physical Activity in Medway

This report has presented key issues associated with physical activity levels within the Medway area. As highlighted previously in this report, Medway has diverse levels of deprivation, but is characterised by below national average levels of health and a high mortality rate. The number of people regularly engaged in sport and active recreation in Medway is reported as low. However, the number of people who are completely inactive also appears to be low (20%). Half of those who are inactive indicate that they do not want to become more active. The inactive group are predominantly older (> 65 years) and with greater incidence of health issues than average for Medway. Those currently inactive and wanting to exercise would like to walk, swim and participate in gym (keep fit) activities. A focus group of inactive individuals highlighted that providing attractive and welcoming facilities, at a cost-conscious price point would encourage them to become active. The group also emphasised that opportunities to be active need to be nearby and readily available and ideally provide the chance to be active with friends or family. When being active outside e.g.

walking in parks or cycling on the road, the environment should promote safety and avoid intimidation.

A much larger proportion (30%) of Medway people are active, but at a relatively low level. Whilst time, health and cost are again significant limiting factors, time features more prominently as an issue for this group. Analysis of the focus group discussion indicates that a key factor limiting further physical activity was that of convenience. Essentially the challenge for this group is finding time in a busy life for more physical activity. Accordingly, important factors for this group are the proximity and/or transport to the venue, the ability to manage childcare and other family commitments.

Increasing physical activity in Medway will require focused, concerted and co-ordinated efforts. Previous central government targets (5 x 30) do not appear to have been effective. The recent change of government and the build up to the London 2012 Olympics, may provide an excellent time for a new approach. Although the UK's current economic climate is not positive, Finland was able to achieve much of its progress in promoting physical activity through a recession. The merits of adopting an energy expenditure and calorie balancing based approach to promoting wide-ranging physical activities have been outlined in this report. The review of effective promotion strategies above, and the diverse nature of the region's population suggest that understanding the specific issues of Medway's varied sub-populations is vital. Therefore, identifying a series of demographic and geographic target groups along with their local needs and challenges is suggested. These groups can then help tailor their own physical activity plans.

Within Medway there are, and have been, a number of programmes focused upon promoting physical activity. These programmes have often worked independently and without evaluation. Therefore it has not been possible to determine how effective previous Medway physical activity programmes have been. Nor has it been possible to provide examples of good practice for dissemination. In the future it is suggested that collaborative approaches are preferred where practical. Formal quantitative and qualitative physical activity project evaluation and dissemination of good practice should become mandatory. A starting point for evaluations should be to measure the progress towards the aims and

objectives of the intervention. Dugdill and Stratton (2007) recommend practitioners involved in physical activity interventions use the RE-AIM evaluation framework. This framework allows a reporting structure to be used between collaborative partnerships. So, if different organisations are involved in physical activity promotions one overall report can be constructed for the Medway region. Finally, to enable the effective promotion and necessary collaborations, the identification of a co-ordination point for all physical activity initiatives in Medway seems imperative.

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Appendix

Focus Group Discussion of Barriers and Motivators to Physical Activity

One of the main barriers to physical activity was family responsibilities and commitments. These came in many different forms: collecting children from childminders, family commitments and obligations, completing children's homework and other domestic chores, babysitting or looking after children in the evening. Individually tailored physical activity programmes could benefit some Medway residents, due to variety of factors that impinge upon their ability to access physical activity opportunities.

Promotion of family-based outings (e.g. cycling), volunteering opportunities through children's activities and clubs (e.g. cubs, scouts, brownie or guide leadership) could provide opportunities for adult activity alongside children. Older adults however, tend to prefer adult-only sessions, e.g. swimming. Older exercisers often find crowded and very noisy leisure facilities off-putting.

The issue of women feeling safe when they are out exercising provides a significant challenge, which is well documented. As opportunities for safe exercise are more restricted in urban areas, women are less likely to go outside for physical exercise. Working with women to identify safe venues for exercise would be useful.

Focus group findings suggest that Medway residents are well-informed about where to go for physical activities. There seemed to be a preference for locally-based activity, in the immediate community. However, for family oriented physical activity outings, there was a willingness to drive some distance and pay for access, e.g. to a country park to go cycling. So whilst cost can be a barrier, it is not always the case – particularly for a secure safe family environment.

Bedino-Rung, Mowen & Cohen (2005) presented a conceptual model around the significance of parks to physical activity and public health. From the comments raised by residents, there seems to be scope to better utilise local green spaces for physical activity. Parks and other urban spaces need to be utilised to collect data on park-based

physical activity. A location where this might be undertaken, would be Rainham Recreation Ground, where the outdoor gym equipment has recently been installed.

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