PHYSICAL ACTIVITY (PUBLIC HEALTH STRATEGY)

Recommendation:-

The Board is asked to support the continuing NHS role in the promotion of physical activity and to note recent developments to increase the impact of these physical activity programmes.

Purpose of Paper:-

The purpose of this paper is to update the NHSGGC Board on the scale of the physical activity challenge across GGC and the NHS role in physical activity provision in line with the current evidence base and policy direction.

Key Issues to be considered:-

In recent years significant progress has been made on delivering the NHS role described within the Health Promoting Health Service framework in relation to physical activity.

Any Patient Safety /Patient Experience Issues:-

N/A

Any Financial Implications from this Paper:-

N/A

Any Staffing Implications from this Paper:-

N/A

Any Equality Implications from this Paper:-

Referral and service participation data are routinely analysed in relation to deprivation and protected characteristics. This analysis has identified areas for further targeting to achieve better reach within identified communities.

Any Health Inequalities Implications from this Paper:-

Inequalities in physical activity levels across the population are well documented and are considered in the ongoing development and improvement of physical activity programmes.
Has a Risk Assessment been carried out for this issue? If yes, please detail the outcome:

Highlight the Corporate Plan priorities to which your paper relates:

Health improvement and early intervention

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PHYSICAL ACTIVITY (PUBLIC HEALTH STRATEGY)

1. Purpose of Paper

The purpose of this paper is to update the NHSGGC Board on the scale of the physical activity challenge across GGC and the NHS role in physical activity provision for adults in line with the current evidence base and policy direction.

2. Introduction

Supporting the population to ‘sit less and move more’ is a recognised public health priority. It is well established that leading a physically active lifestyle is beneficial to physical, mental and social health.

Increasing the level of physical activity at all ages of the population will:

- Reduce risks associated with physical inactivity, which has recently been identified to carry similar levels of risk to smoking
- Protect against the onset and progression of over twenty chronic conditions (most notably cardiovascular disease, Type 2 Diabetes, breast and colon cancers and depression) in which physical activity is recognised as an independent risk factor
- Provide direct benefits in addressing overweight and obesity
- Support the maintenance of functional ability and daily living activities, especially into older age.

At a UK level, inactivity was estimated to have caused 3% of disability-adjusted years of life lost in 2002, representing a direct cost to the NHS of £1.06 billion (Allender et al, 2007; Scarborough et al, 2011). In Scotland, conservative estimates suggest this equates to 7 premature deaths per day with an annual cost to NHS Scotland of over £91 million (Foster et al, 2010).

In 2011, an international, expert review; ‘NCD Prevention: Investments that work for Physical Activity; (Global Advocacy for Physical Activity, 2011) systematic evidence review highlighted areas of intervention where there is strong evidence for approaches which support a population shift in physical activity levels (Appendix 1). This review is reflected in the main Scottish policy drivers; ‘A More Active Scotland - Building a Legacy from the Commonwealth Games’ (2014) and the ‘Active Scotland Outcomes Framework’ (2016).

Public Health and HSCP Health Improvement colleagues across NHSGGC are actively engaged in promoting physical activity across the life course and seeking to influence the cultural and physical environment required to promote activity through community planning, LOIPs and Legacy planning.

This focus of this paper relates to the specific area of NHS responsibility identified within the Toronto Charter; the importance of the systematic inclusion of physical activity within health care systems to achieve population impact. This responsibility is further highlighted in the Health Promoting Health Service Framework (The Scottish Government, 2015). which is combined with a dual focus on staff health.
3. Physical Activity Levels within Greater Glasgow and Clyde

Physical activity measurement and trend surveillance remains a challenge; data rely on individual reporting of activity and both guidelines and measures have varied in the past. Despite these differences, much of the data from across the world are in agreement that an insufficient proportion of the population are active enough to gain health benefits, and that in recent years there has been little or no improvement (Hallal et al, 2012).

For adults, the recommended level of aerobic physical activity is engagement in a total of 150 minutes of moderate physical activity over a week. (Department of Health, 2011). The recommendations are tailored to specific age groups over the life course and are detailed in the Appendix 2.

Levels of physical inactivity are similar in Greater Glasgow and Clyde to the overall levels in Scotland: 37% of adults and 26% of children do not meet the recommended levels of activity, whilst nearly 1 in 4 adults and 1 in 10 children have very low levels of activity (less than 30 minutes per week). Where national trend data are available, they indicate very small improvements in adult physical activity levels within Greater Glasgow and Clyde from the baseline data of 2003 (Scottish Health Survey, 2015).

Whilst physical activity levels appear relatively positive, the challenge in GGC is that reported levels of physical activity and sport the drop off at an earlier age for adults than in the rest of Scotland with implications for healthy life expectancy. (Figures 1 and 2).

Figure 1 – Proportion of people meeting 2011 physical activity recommendations by age, Greater Glasgow and Clyde, Scottish Health Survey 2012/13/14
Women, older people, people from a poorer socioeconomic background, those with a disability or long-term condition and people from an ethnic minority are less likely to meet physical activity recommendations. The challenge within Greater Glasgow and Clyde is further compounded by the significant association of deprivation with lower levels of recreational physical activity and further compounded by the impact of unemployment associated with reduced levels of physical activity as part of commuting and job roles. Figure 3 shows the impact of various inequalities on levels of walking and sport, suggesting that recreational walking interventions (such as Health Walks) are less likely to widen health inequalities than sport programmes.
4. The role of the NHS

The systematic inclusion of physical activity within health care systems is firmly embedded within the action set out in the HPHS framework to; Encourage and support staff and patients to be more physically active, including the provision of advice to staff and patients on the importance and benefits of physical activity being included in patient pathways.

NHSGGC role in relation to this aspect of physical activity can therefore be described as:

As a service provider:
   I. To provide robust evidence based physical activity (core) programmes for patients in all areas of Greater Glasgow and Clyde in partnership with local authorities
   II. To brief health professionals in order that physical activity should be recognised as a risk factor for chronic disease and staff are able to provide physical activity to patients
   III. To develop integrated pathways (including screening, brief intervention, signposting and referring to interventions) to engage patients as a routine part of primary and secondary care services

As an employer:
   IV. To develop an ‘Active Staff’ programme to increase staff participation in physical activity

5. NHS led Physical Activity Services

5.1 Core Physical Activity Programmes

There are 3 core physical activity services provided for adults across NHSGGC; Health Walks, Vitality and the Live Active Exercise Referral Scheme. NHSGGC, in partnership with our 6 Local Authorities’ Leisure Trusts (Glasgow City, East Dunbartonshire, West Dunbartonshire, East Renfrewshire, Renfrewshire and Inverclyde) deliver these core programmes as well as wider public health initiatives to promote physical activity. Service Level Agreements are in place for the core programmes to ensure quality and activity standards and met.

Health Walks
Walking has been described as “near perfect exercise”. It remains the intervention least likely to widen health inequalities. The Health Walks programme is in part funded by the Paths for All charity. Health Walks are short, safe, social, fun, accessible, low level walks led by trained volunteers. Almost all patients can take part in Health Walks, and there is no formal referral process required.

Health professionals across NHS GGC are able to signpost patients to over 75 free, weekly health walks across all six Local Authority areas of the Health Board area.

During 2016/17; 43,101 recorded health walk attendances from 75 weekly walks, with 724 new walkers and 115 new volunteer walk leaders trained.
**Vitality**

Vitality is a programme of exercise classes for people with varying functional ability. People with different physical abilities and medical conditions such as coronary heart disease (CHD), multiple sclerosis (MS), chronic obstructive pulmonary disease (COPD) or Parkinson’s Disease can participate in regular classes tailored to suit level of functional ability of participants.

There are four levels of classes conducted by specially trained instructors. Figure 2 outlines the different types of classes within the Vitality programme and links with wider NHS and community programmes.

**Figure 3 – Vitality Programme Classes and Links to Wider Opportunities**

During 2016/17; 97,575 attendances were recorded across 160 weekly classes. A ‘census’ in 2015 suggested around 1277 participants generate these attendances.

**Live Active**

The Live Active Referral Scheme is an evidence based, quality assured physical activity service and operates in line with the *National Quality Assurance Framework for Exercise Referral Systems best practice guidelines* (Department of Health, 2001). It includes an evidence based, one-to-one, behavioural change counselling component which is enhanced compared to many other schemes. Recent reviews recommend exercise referral schemes for those with health conditions or chronic disease, who will benefit most from increased activity, but may require the additional support to make a behaviour change (Pavey et al, 2011; NICE, 2014).

Live Active is targeted to patients who require one-to-one support to become more active, or are considered ‘high-risk’ e.g. due to recent history of heart disease or stroke. Evaluation has demonstrated health benefits for patients participating in the scheme, including increased physical activity levels, reduced blood pressure, weight loss, improved mental health and improved social health. Over two thirds of patients felt that participation in the scheme had given them the confidence to exercise independently. Even 18 months after their first Live Active appointment, most patients reported maintenance of physical activity behaviour and felt that the
scheme had a positive impact on their physical and mental health, and on their ability to exercise independently. (FMR Research Ltd, 2002, 2011).

In 2016/17; there were 6,153 referrals to Live Active Exercise Referral Scheme, with over 70% attending their first appointment.

Core Programme Participant Profile
The participant profile for our core physical activity programmes when compared to GGC population demographics and groups with known inequality in levels of physical activity are outlined in table 1 below. Many patients in these groups require a targeted approach and increased support to increase physical activity which could not be met by other mainstream physical activity opportunities. Work to further increase referrals from deprived areas and BME communities is underway.

Table 1 – Profile of Physical Activity Programme participants and NHSGGC Board population

<table>
<thead>
<tr>
<th>Population Demographic</th>
<th>Percentage of NHSGGC Board Population (%)</th>
<th>Percentage of Glasgow Health Walk Participants (%)</th>
<th>Percentage of Vitality Participants (%)</th>
<th>Percentage of Live Active Participants (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% most deprived SIMD</td>
<td>36</td>
<td>40</td>
<td>...</td>
<td>43</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>7.5</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Older Adults (60+)</td>
<td>20</td>
<td>...</td>
<td>85</td>
<td>26</td>
</tr>
<tr>
<td>(55+)</td>
<td>27</td>
<td>61</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Female</td>
<td>52</td>
<td>9</td>
<td>64</td>
<td>54</td>
</tr>
<tr>
<td>At least 1 Long Term Condition</td>
<td>23</td>
<td>...</td>
<td>89</td>
<td>63</td>
</tr>
<tr>
<td>Overweight or Obese</td>
<td>58</td>
<td>...</td>
<td>...</td>
<td>86</td>
</tr>
</tbody>
</table>

5.2 Health professionals
In the context of decreasing referrals to the Live Active exercise referral programme the ‘Your Go To Guide To Physical Activity’ was launched in 2016. This guide brought a number of service improvements together with a comprehensive marketing approach for all core physical activity services (in all local authority areas) and provided health professionals with a single briefing document; simplified referral process (sci-gateway); a website and a single-point of access telephone line. A series of ‘Road Shows’ and training events for health professionals have been undertaken to promote the Go to Guide and support patient referral to the service best suited to their needs.

Due to the volunteer led nature of health walk delivery, it is more difficult to collect data on participants than for other core services. As a proxy, we have collected data from health walk participants in Glasgow City which is shown in Table 1.
The impact of this development has been promising with Live Active referrals increasing to levels previously seen in 2014.

**Figure 4: Number of Live Active referrals received by year**

![Bar chart showing number of referrals from 2014/15 to 2016/17](chart.png)

**5.3 Integrated Pathways**

**Primary Care**
Live Active is the principle programme requiring GP or health professional referral. The Live Active programme was established in 1997 but in recent years referral rates significantly declined following the discontinuation of Keep Well, changes in GP contracts and removal of QoF/CDM Local Enhanced Service. A significant barrier in primary care was the non availability of SCI Gateway (Electronic Referral) as the mechanism to refer patients to staff in local authorities. In June 2016, this was addressed and in the first 9 months following implementation 2619 referrals have been made to Live Active via this route alone.

**Acute Settings**
Referral to Live Active from health professionals in secondary care is dependent on access to a patient’s medical history. In conjunction with e-health developments the opportunity for a wider range of staff to access this information and refer is now available. The following clinical settings include physical activity within their current patient documentation and have established referral pathways: Cardiac Rehabilitation; Falls prevention; Rheumatology; Pulmonary Rehabilitation; Mental Health; and Oncology. Paediatrics and orthopaedics are identified as areas for development in 2017/18.

Physical activity pathways have been embedded within the AHP Electronic Patient Record utilised by Physiotherapists and Occupational Therapists. Following review, this pathway will be included for other AHP EPRs in 2017/18.
Following the release of the ‘Go to Guide to Physical Activity’ Resource in August 2016, physical activity referrals from acute settings have increased from 815-1457 (79%) since 2015/16.

6. Active Staff

In 2012 research on staff health was undertaken in NHS Greater Glasgow and Clyde. The research identified a number of issues in relation to physical activity and as a result the Active Staff programme was developed. This programme has been financially supported by the Board Endowments since 2013. Primarily but not exclusively the programme targets lower paid staff groups and includes communication and marketing activities to raise awareness of the programme with staff.

The programme has continued to evolve with ongoing evaluation but incorporates:

**Active Sites:** Currently over 20 structured activities on acute sites per week, ranging from high intensity classes like Metafit and Boot Camp to classes that focus on Strength and Balance like Yoga and Tai Chi. The plan is to increase this provision to 37 per classes per week to reflect the current capacity on each site. This does not include additional walking and jogging groups. In 2016/17, a total of 618 structured exercise activities were delivered resulting in 6430 attendances.

An analysis of participant data indicates:
- 90% of participants were female
- The majority of participants (61%) were aged between 45 and 60
- Most participants (52.%) were from pay bands 5-7 however a significant proportion (39%) were from pay bands 1-4

Feedback provided by participants showed that:
- 88% of participants rated the classes as very good or excellent
- 79% of participants felt that is was important that the classes are free
- 88% of participants felt it was important that the classes are onsite

As part of Glasgow’s Mass Automated Cycle Hire Scheme Expansion, bike hire stations have been installed at Queen Elizabeth University Hospital and Gartnavel General Hospital to make the scheme more accessible to staff.

**Active Local:** A staff salary deduction scheme to local authority leisure providers is provided across 8 local authority providers, thus providing over 90% of staff with discounted access to the leisure provider they reside in. Currently approximately 2,800 staff participate in this scheme.

The full range of local authority community activities including Health Walks and Vitality programmes are promoted to staff via the Active Staff website [www.nhsggc.org.uk/activestaff](http://www.nhsggc.org.uk/activestaff)

NHSGGC staff can access Live Active through primary care or through referral by Occupational Health.
**Active Challenges:** In 2014 Active Staff teamed up with a group of former Live Active participants, Inverclyde Globetrotters, to utilise their virtual walking site, World Walking, as the basis of our online walking challenge platform. The Board’s walking challenge has proved very successful with over 12,000 staff participating over the last 3 years. Last summer the challenge was extended to our 6 local authority partners.

A successful staff football league has been established in partnership with Goals Soccer Centres, with around 80 members of staff participating in a 16 week Wednesday night league.

**Activators:** Eighteen staff physical activity champions, Activators, have been identified within the Acute Division. Activators have promoted and supported the physical activities for staff and the feedback is that these roles have been very useful.

7. **Conclusion**

NHSGGC currently supports a substantial range of physical activity programmes for both patients and staff; programmes are fully integrated into an ever expanding range of patient pathways and provide access to high quality physical activity interventions across Greater Glasgow and Clyde.

6. **Recommendation**

The Board is asked to support the continuing NHS role in the promotion of physical activity and to note recent developments to increase the impact of these physical activity programmes.
References


Appendix 1

Investments that Work is a complementary document to the Toronto Charter for Physical Activity and identifies the seven best investments to increase population levels of physical activity which, if applied at sufficient scale will make a significant contribution to reducing the burden of non-communicable diseases and promote population health. In addition, these investments will contribute to improving the quality of life and the environments in which we live.

It describes interventions across the following seven settings, encouraging multi-agency action:

1. Whole of school programs
2. Transport systems that prioritise walking, cycling and public transport
3. Urban design regulations and infrastructure that provides for equitable and safe access for recreational physical activity, and recreational and transport-related walking and cycling across the life course.
4. Physical activity and disease prevention integrated into primary health care systems
5. Public education, including mass media to raise awareness and change social norms on physical activity.
6. Community-wide programs involving multiple settings and sectors and that mobilize and integrate community engagement and resources
7. Sports systems and programs that promote ‘sport for all’ and encourage participation across the life span
### Appendix 2: UK CMO’s Physical Activity Guidelines for Health (Department of Health, 2011)

<table>
<thead>
<tr>
<th>Age group</th>
<th>Guidelines</th>
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</table>
| **Early years - children under 5 years** | - Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.  
  - Children capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.  
  - Minimise amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping). |
| **Children and young people aged 5 to 18** | - Should engage in moderate to vigorous activity for at least 60 minutes and up to several hours every day.  
  - Vigorous activities, including those that strengthen muscles and bones, should be carried out on at least 3 days a week.  
  - Extended periods of sedentary activities should be limited.  
  - Should be active daily. |
| **Adults aged 19-64**            | - Should engage in at least moderate activity for a minimum of 150 minutes a week (accumulated in bouts of at least 10 minutes) - for example by being active for 30 minutes on five days a week.  
  - Alternatively, 75 minutes of vigorous activity spread across the week will confer similar benefits to 150 minutes of moderate activity (or a combination of moderate and vigorous activity)  
  - Activities that strengthen muscles should be carried out on at least two days a week.  
  - Extended periods of sedentary activities should be limited. |
| **Adults aged 65 and over**      | - In addition to the guidance for adults aged 19-64, older adults are advised that any amount of physical activity is better than none, and more activity provides greater health benefits.  
  - Older adults at risk of falls should incorporate activities to improve balance and coordination on at least two days a week. |