

Greater Glasgow and Clyde NHS Board

Board Meeting

21 April 2015

Board Paper No: 15/13

Director of Public Health

Public Health Screening Programmes Annual Report 1 April 2013 to 31 March 2014

RECOMMENDATION

Members are asked to **note** a summary of the *Public Health Screening Programmes Annual Report from 1 April 2013 to 31 March 2014*. The full Annual Report is 208 pages long and is available [via this link](#).

INTRODUCTION

This annual report presents information about the following screening programmes offered to residents across NHS Greater Glasgow and Clyde (NHSGGC) for the period 2013/14:

1. Cervical Screening
2. Breast Screening
3. Bowel Screening
4. Pregnancy Screening:
 - Communicable Diseases in Pregnancy
 - Haemoglobinopathies screening
 - Down's syndrome and other congenital anomalies
5. Newborn Screening:
 - Newborn Bloodspot
 - Universal Newborn Hearing
6. Diabetic Retinopathy Screening
7. Pre-School Vision Screening
8. Aortic Abdominal Aneurysm Screening

The report includes analysis on uptake among people with learning disabilities.

We cannot provide screening activity by ethnicity as the data is not available.

Table A shows the number of people eligible in NHS Greater Glasgow and Clyde in 2013/14 that were offered screening tests, the number of people who had taken up the offer of screening and the uptake rates for each of the screening programmes.

Table A: NHSGGC screening programmes uptake rates for the period 1 April 2013 to 31 March 2014

Screening programme	Total eligible population	Total number Screened	HIS Target	2013/14 % Uptake ⁵
Cervical screening ¹	368,362	261,713	80%	74.0%
Breast screening ²	143,419	96,214	70%	67.1%
Bowel screening ³	381,529	196,322	60%	51.5%
Pregnancy screening: Communicable diseases in pregnancy ⁴	14,547	13,384	n/a	99.5%
Down's syndrome	14,547	11,274	n/a	77.5%
Haemoglobinopathies	14,547	13,999	n/a	96.2%
Newborn bloodspot Screening	13,322	13,186	n/a	99.0%
Universal newborn hearing screening	13,657	13,215	n/a	96.8%
Pre-school vision screening	13,638	11,728	n/a	85.9%
Diabetic retinopathy Screening	65,265	55,282	80%	84.7%
Abdominal Aortic Aneurysm Screening	5,526	4,486	70%	81.2%

Sources: NHSGGC bowel Screening IT system; West of Scotland Breast Screening; Scottish Cervical Call Recall System; PNBS; National Newborn Screening Laboratory; West of Scotland Prenatal Screening Laboratory; eSP; Visionworks, AAA

Notes:

1. Target population – number of women screened within 5.5 years
2. Target population – number of people screened within 3 years
3. Target population – number of people screened within 2 years
4. Percentage uptake of each of the tests has been calculated by dividing the number requesting tests by the total number of samples.
5. Screening activity covers the period 1 April 2013 to 31 March 2014

1. CERVICAL SCREENING

- 1.1. Women aged 20 to 60 who live in Greater Glasgow and Clyde areas are invited to have a smear test taken every three years.
- 1.2. 353,527 women were eligible to be invited to participate in the programme over three years.
- 1.3. In 2013/2014, the 5.5 year uptake up for NHS Greater Glasgow and Clyde was 74%. This was below the Scotland wide average of 77.3% and the NHS HIS target of 80%.

- 1.4. This represents an overall 0.6% decrease in uptake since 2012/2013. The lowest uptake of 63.4% was in Glasgow North West sector. East Dunbartonshire, East Renfrewshire, and North and South Lanarkshire exceeded the minimum standard of 80%.
- 1.5. 63,344 (17.3%) did not take up the invite to have a smear despite a prompt letter and two reminders being sent and were classified as defaulters.
- 1.6. The lowest 5.5 year uptake was among the 21 to 24 year olds at 54.6% when only no cervix exclusion was applied. This represents a 2.4% decrease on previous year's uptake of 57%.
- 1.7. The uptake of cervical screening among women residents in the most deprived areas has decreased by 0.5% from 73.6% in 2012/13 to 73.1% in 2013/14. Uptake for women resident in the most affluent areas has decreased by 1.2% from 79.6% to 78.4% over the same period.
- 1.8. The total number of smear tests processed in 2013/14 was 98,959 and represents a decrease of 5.3% from the 104,507 smears processed in 2012/13. The decrease in smears is primarily a result of change of screening pathway.
- 1.9. The overall percentage of unsatisfactory smears was 2.8% and above the Scottish average of 2.7%.
- 1.10. 10.2% of smears were reported as abnormal in 2013/14 representing a decrease of 3.1% since 2012/13.
- 1.11. 87.2% of smears processed were reported to be negative; 4.2% were borderline squamous; 4.3% mild dyskaryosis and 1.3% to have moderate to severe dyskaryosis.
- 1.12. The performance of colposcopy units against benchmarking standards is reviewed annually at the NHSGGC Colposcopy User Group. Where standards are not within the interquartile range, measures are identified and action plans introduced to improve performance.
- 1.13. 4,473 patients were referred to colposcopy for treatment, 3,558 (79.5 %) were seen within 8 weeks. 128 (2.86%) were seen over the 8 week period. 785 (17.5%) either cancelled or did not attend their appointment.
- 1.14. In 2013, we reviewed the notes of 71 women who developed invasive cervical cancer and had a pathology diagnosis made in NHS Greater Glasgow and Clyde laboratories.
- 1.15. 30 of the 71 cases were screen detected.
- 1.16. Over the six years audited, 61 (14.1%) women out of the 432 that developed cancer had never had a smear; 171 (39.7%) had complete smear histories and 195 (45.1%) of women had incomplete smear histories.

- 1.17. In 2012, the most recent year for which completed data is available, the number of new cervical cancers registered among NHS Greater Glasgow and Clyde residents was 92. This gives a standardised incidence rate of 14.7 per 100,000 per population which is higher than that for Scotland at 10.9.
- 1.18. In 2013, 20 women with a diagnosis of cervical cancer died in NHS Greater Glasgow and Clyde. This gives a standardised rate of 3.3 per 100,000 population equal to the Scotland rate of 3.3 per 100,000.
- 1.19. Since 2008, all girls aged 12 to 13 years in their second year of secondary school are routinely offered vaccinations to protect them against the Human Papilloma Virus (HPV).
- 1.20. Overall uptake across NHSGGC for the first dose of the HPV vaccination was 95%, and 93.3% for the second dose. This was above the Scottish averages of 93.6% and 91.7% respectively. Uptake for the third dose was 79.9% which was below the Scottish average of 81.4%. Final uptake rates one year later for the S2 routine cohort of girls in 2013/14 will be published in September 2015.
- 1.21. From April 2016, the age range and frequency of the cervical screening programme will change for routine screening to three years from age 25 and 5 yearly from age 50 – 64. Women on non routine screening will be invited up to the age of 70 years, a change from current arrangement of 68 years.

2. BREAST SCREENING

- 2.1. This report represents interim screening round data from 1 April 2009 to 31 March 2014
- 2.2. 143,419 women registered with a practice in NHS Greater Glasgow and Clyde area were invited to attend breast screening over three years.
- 2.3. 96,214 (67.1%) women attended breast screening during the previous three years. This represents a decrease of 3% since 2006/09 when uptake was 70.1%. The minimum standard is 70%. There were 617 (0.4%) women who were diagnosed with breast cancer following screening.
- 2.4. The uptake for the three year rounds 2004/07 to 2009/12 remained slightly above the minimum standard of 70% at 71%, compared to the Scottish average of 74%. In the three year round 2009/2012, uptake decreased to 69.8% in NHS Greater Glasgow and Clyde and in 2010/2013 decreased to a further 68.8%.
- 2.5. In 2012, the number of new breast cancers registered in NHS Greater Glasgow and Clyde was 1,082 This gives a standardised incidence rate of 178.1 per 100,000 per population which is higher than that for Scotland (167.9).
- 2.6. Simple lifestyle changes by exercising, maintaining a healthy weight and reducing alcohol intake can reduce the risk of breast cancer.

- 2.7. In 2013, there were 200 deaths from breast cancer, giving a standardised rate of 32.3 per 100,000 population. This is slightly lower than that for Scotland (36.4).
- 2.8. During 2009 to 2012, 4,145 breast cancers were detected. Of the eligible women, 1,182 (52.8%) were detected through the breast screening programme and 1,055 (47.2%) breast cancers were symptomatic presentations.
- 2.9. Of the 4,145, 507 (12.2%) were potential interval cancers; 1,250 (30.2%) were screen detected and 2,388 (57.6%) were symptomatic.
- 2.10. A telephone/text reminder service will be piloted to encourage women to attend their screening appointment.

3. BOWEL SCREENING PROGRAMME

- 3.1. The programme invites all men and women between the ages of 50 – 74 years registered with a General Practice. This chapter presents the full two year screening round 2012 - 2014.
- 3.2. 381,529 residents in NHS Greater Glasgow and Clyde were invited to participate in the Bowel Screening programme
- 3.3. 196,322 screening kits were completed and returned to the Bowel Screening laboratory for analysis. This gives an estimated uptake of 51.5%, representing an increase of 1.9% compared to data reported in 2012/2013 when uptake was 49.7%.
- 3.4. The increase in uptake was due to the efforts of the national Detect Cancer Early Bowel Screening social marketing campaign.
- 3.5. Overall, the lowest uptake was among residents living in the most deprived areas at 42.6%.
- 3.6. The lowest uptake for bowel screening was among residents living in the most deprived areas in the Glasgow CHP sector North East (41.2%). Highest uptake was among residents living in the more affluent areas of West Dunbartonshire and East Dunbartonshire (64.3%).
- 3.7. The percentage uptake among females at 53.9% was higher than the male population at 48.9%. The lowest uptake of 40% was among the 50-54 year old male population group.
- 3.8. Of the 4,958 patients screened positive, 4,478 patients were pre-assessed prior to colonoscopy. 264 patients declined and 216 patients did not respond to the offer of a colonoscopy pre-assessment.
- 3.9. The overall positivity rate was higher among men at 3.1% compared to women at 2.0% which is comparable to Scottish national average (ISD, 2013). Compared to all other groups, the male population aged 70 to 74 had the highest positivity rate of 4.3%.

- 3.10. 4,459 (86.4%) patients completed colonoscopy investigations by 31 March 2014.
- 3.11. 2,122 people with learning disability that were invited to take part in the bowel screening programme, 30.3% (642) completed the bowel screening test. 22 patients received positive results representing a positivity rate of 3.4%. No cancer was diagnosed following investigation.
- 3.12. Of the total eligible population invited to take part in bowel screening, 198 cancers were detected.
- 3.13. In 2012, the most recent year for which completed data is available, the number of new colorectal cancers registered in NHS Greater Glasgow and Clyde was 438 for men and 422 for females. This gives a standardised incidence rate of 98.4 and 71.0 respectively per 100,000 populations and is higher than that for Scotland at 97.8 and 64.0 respectively
- 3.14. In 2013, the number of deaths from colorectal cancer in NHS Greater Glasgow and Clyde was 203 for male population and 176 in the female population. This gives a standardised rate of 48.5 and 28.7 respectively per 100,000 populations which is higher than the Scotland rates of 42.3 and 25.2 respectively.
- 3.15. Of the 4,192 colorectal cancers diagnosed from 2009 to 2013, 3,060 were symptomatic and 757 were detected through the bowel screening programme. 375 were interval cancers giving a rate of 89.5 per 1,000 colorectal cancers.
- 3.16. In 2014, Glasgow was chosen as the launch venue for the National Detect Cancer Early Bowel Screening social marketing campaign. The campaign targeted men living in deprived areas and involved television, radio and newspaper advertising, roadshow events, poster and leaflet campaigns.
- 3.17. Funding has been identified to implement two health improvement projects:
- Telephone engagement project that will contact people new to the bowel screening programme to complete the kit and gain an understanding of the reasons people don't complete their kits in order to inform future work.
- 3.18. A three year joint partnership between Cancer Research UK and NHSGGC to improve the prevention and earlier diagnosis of cancer. Primary care engagement facilitators will actively support practices to raise the profile of cancer, identify activities to improve uptake of bowel screening and cancer outcomes more generally and make change happen at a local level.

4. PREGNANCY SCREENING

- 4.1. There were 16,312 women booked to attend antenatal clinics across NHS Greater Glasgow and Clyde.

- 4.2. 14,547 (89.2%) women booked into antenatal clinics were NHS Greater Glasgow and Clyde residents.
- 4.3. 76.1% (11,072) of first antenatal booking appointments were offered within 12 weeks gestational age and 15.7% (2,289) between 13 to 16 weeks gestational age.
- 4.4. 49.2% of pregnant women were overweight at the time of their first antenatal booking appointment. 21.8% (3,561) of women were classed as obese or severely obese.
- 4.5. 14,547 women booked for their first antenatal screening. 96.2% (13,999) had taken up haemoglobinopathies screening.
- 4.6. Uptake across NHS Greater Glasgow and Clyde is greater than 99% for all four of the screening tests (HIV, Hepatitis, Rubella and Syphilis).
- 4.7. The overall uptake for Down Syndrome was 77.5%.
- 4.8. 9,193 (63.2%) samples were taken from women in their first trimester and 2,081 (14.3%) samples were taken from women in the second trimester.
- 4.9. 77.1% of pregnant women had taken up congenital anomalies screening
- 4.10. 1.8% of women were assigned to the 'higher chance' of Down Syndrome group. Following the second trimester Down Syndrome screening, 4.3% of women were assigned to the 'higher chance' of Down Syndrome group.
- 4.11. 11,184 fetal anomaly scans performed, 142 anomalies were detected and of that number 51 were confirmed. The outcomes for 51 anomalies are not known.
- 4.12. 224 amniocentesis samples were analysed by the Cytogenetics Laboratory. 32 abnormalities were detected (14.29% of samples) and 22 of those (9.8% of total tests) had a diagnosis of trisomy (Down Syndrome).
- 4.13. 114 chorionic villus biopsies were analysed by the Cytogenetics Laboratory in 2013/14. 27 abnormalities were detected (31.57% of tests) and 27 of those (23.7% of tests) had a diagnosis of trisomy (Down Syndrome).

5. NEWBORN SCREENING

- 5.1. 13,332 babies were eligible for newborn bloodspot screening in NHS Greater Glasgow and Clyde. 13,332 were screened, that is 97.2% of the total eligible population.
- 5.2. Results were not available for the 378 (1.7%) babies that moved into the NHSGGC Board area.
- 5.3. Live births have gradually increased year on year from 12,409 in 2002/03 to 13,792 in 2012/2013. This represents an increase of 10%.
- 5.4. Following screening, five babies were diagnosed with congenital hypothyroidism, four babies with cystic fibrosis; seven babies with sickle cell disease, 1 baby with MCADD

and 91 babies were identified as carriers for haemoglobinopathies. All babies received appropriate management within the timescale of the set NHSQIS standards.

- 5.5. 73% of babies screened had white UK ancestry, 6.9% had South Asian ancestry and 3.7% had mixed background ancestry.
- 5.6. 205 (1.4%) bloodspot specimens could not be analysed due to insufficient amounts of blood on the bloodspot card and required repeat bloodspot screening tests to be carried out on babies.
- 5.7. 120 (0.8%) samples received had taken more than seven days to arrive at the laboratory.
- 5.8. 13,657 babies were eligible for newborn hearing screening. 13,215 were screened for hearing loss giving an uptake of 96.8%.
- 5.9. 442 (3.2%) babies did not complete the screening programme. These included babies who did not attend for screening, are deceased or have moved away from their current home address or transferred to another Board area.
- 5.10. 1,105 (9.2%) babies required a second stage follow up and, of these, 162 (1.2%) babies were referred to audiology.
- 5.11. 55 babies were confirmed with a hearing loss (0.4% of the screened population).

6. PRESCHOOL VISION SCREENING

- 6.1. 13,638 children aged between four to five years old were identified using the Community Health Index System as being eligible for pre-school vision screening. This represents a 2.2% decrease from previous year 2012/13.
- 6.2. 39.7% (5,418) of children live in the most deprived areas, with the largest proportion living in the Glasgow area.
- 6.3. 74.9% (10,215) of children were registered with a nursery. Of the 3,423 (25.1%) children not registered with a nursery, 1,950 (57.9%) were from Glasgow City CHP sectors.
- 6.4. 11,728 were screened for a visual abnormality, giving an overall uptake of 85.9%.
- 6.5. 74.1% of children registered with a nursery were screened while only 11.9% of children not registered with a nursery took up screening
- 6.6. 8,620 (73.5%) had a normal result. 2,290 (19.5%) children were referred for further assessment. 1,041 (23.1%) were from the most deprived areas.
- 6.7. 294 (2.5%) children were recalled back to be screened due to difficulties screening children's vision during their first screen. 524 (4.5%) children are currently under follow up by ophthalmology service

- 6.8. Uptake rate for the programme across the CH(C)P areas varied from 80.3% in Glasgow North East to 91.2% in East Renfrewshire.
- 6.9. The highest proportion of children screened that were referred for further investigation was in Glasgow North East (24.3%) and Glasgow North West (23.5%). The lowest was 14.3% in East Renfrewshire.

7. DIABETIC RETINOPATHY SCREENING

- 7.1. There were 65,265 NHS Greater Glasgow and Clyde residents with a diagnosis of diabetes in 2013/14, representing an increase of 3.4% from 2012/13.
- 7.2. The prevalence of diabetes among NHS Greater Glasgow and Clyde adult residents has gradually increased from 4.3% in 2007/08 to 5.7% in 2012/13.
- 7.3. 26,505 (40.6%) are known to be resident in the most deprived areas compared to 9,273 (14.2%) who live in the least deprived areas.
- 7.4. The largest proportion of people with diabetes was among the 50 – 79 year olds. This represents 68.9% (44,950) of the total population with diabetes.
- 7.5. Of the 65,265 patients with diabetes, 55,282 (84.7%) were eligible for screening. Of those, 90.6% (50,070) were screened. This means that 76.6% of the total population with diabetes in NHS GGC was screened in 2013/14.
- 7.6. 9,983 (15.3%) people were not eligible for screening because they were either permanently or temporarily suspended from the programme.
- 7.7. Of the total number of residents screened (50,070), 1,911 were referred to Ophthalmology for further investigation.
- 7.8. All CH(C)P areas exceeded the minimum standard of 80% uptake for diabetic retinopathy screening.

8. ABDOMINAL AORTIC ANEURYSM SCREENING

- 8.1. 5,526 male residents aged 65 in NHS Greater Glasgow and Clyde were invited to participate in the AAA Screening programme.
- 8.2. 4,486 (81.2%) took up screening.
- 8.3. The lowest uptake was 74.7% among men resident in the most deprived neighbourhoods compared to all other deprivation areas where uptake was above 80%.
- 8.4. Lowest uptakes were found in Glasgow North East 74.8%; Glasgow West at 78.6% and Glasgow South at 78.7%.

8.5. 48 men were found to have an aneurysm measuring between 3.00 and 5.4 cm and are currently on surveillance. 5 men had an aneurysm measuring over 5.5 cm that required surgical assessment and intervention. 1.1% required surveillance and 0.1% were referred to secondary care for assessment.