

**Measuring outcomes from NHS
Health checks in Sheffield....
What does this tell us and how
can we use the data to meet
population needs?**

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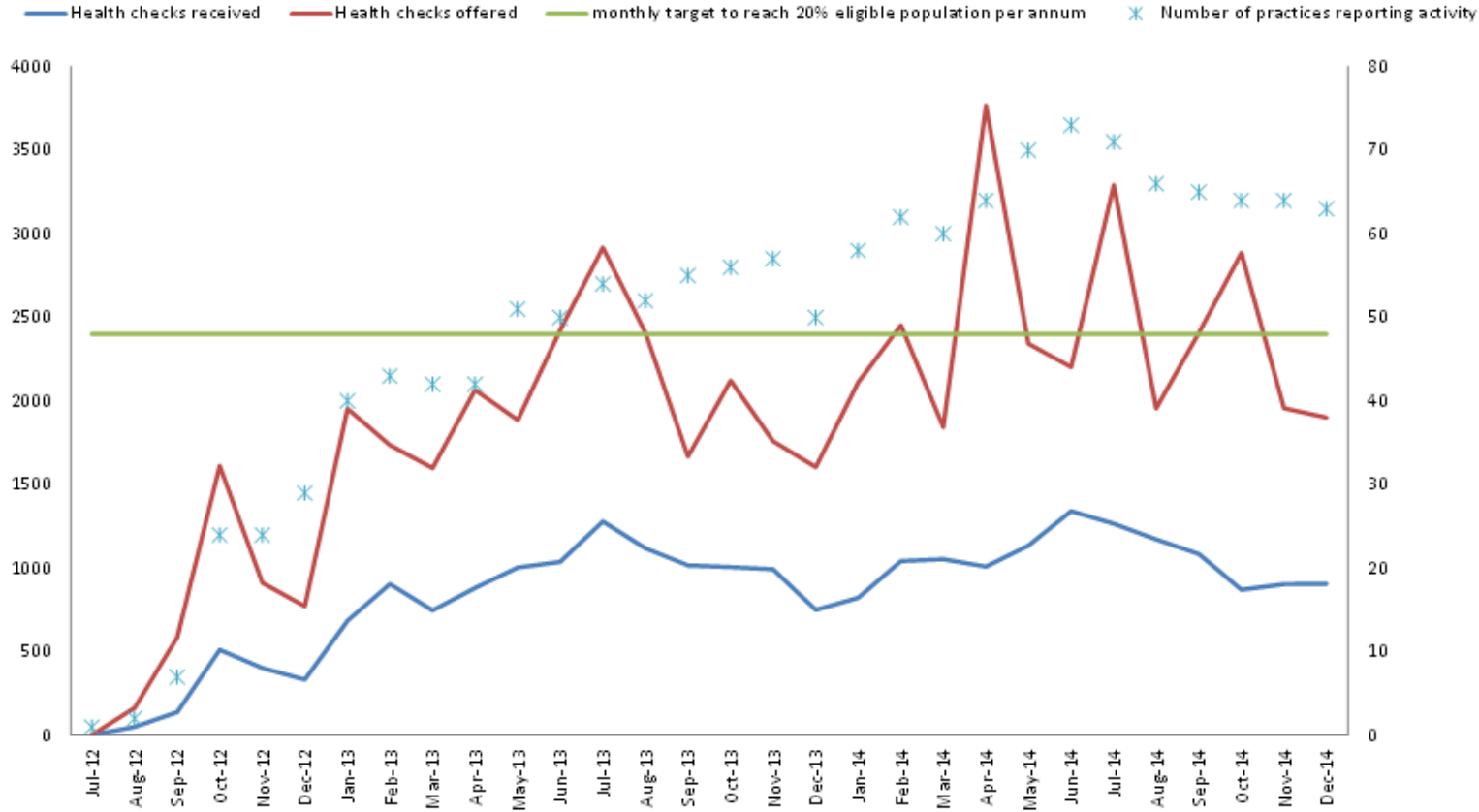


Outcomes

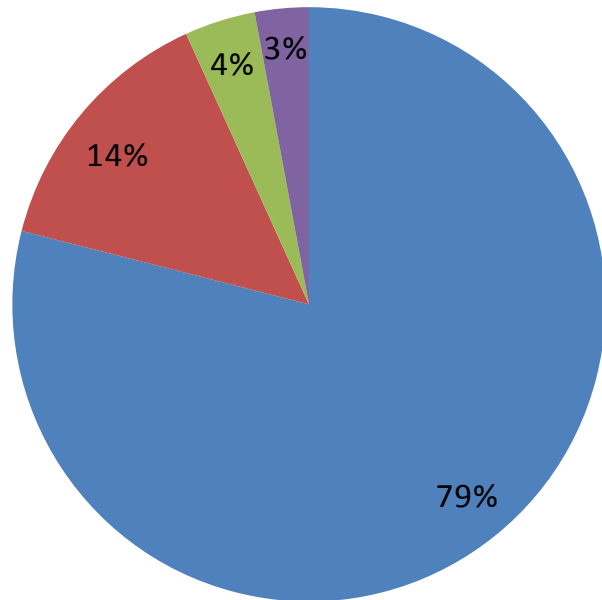
	2015/16 Qtr 1	2015/16 Qtr 2	2015/16 Qtr 3	2015/16 Qtr 4		
Month	Qtr 1	Qtr 2	Qtr 3	Qtr 4		
2015						
4					Year to date	Total recorded
2015						
Apr	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar		
Population						
Total registered population (aged 40-74 years) as at April 2013	223667	223667	223667	223667	225464	224116
Total eligible population (aged 40-74 years)	119660	122569	132470	121441	149414	131474
Total eligible population who are offered a Health Check	2598	8514	9707	6759	7016	31996
Total high risk eligible population who are offered a Health Check	359	2006	1401	998	2833	7238
Outcomes						
Total eligible population who are receiving a Health Check	1083	3209	3567	2648	3194	12618
Offered a programme of weight management	30	84	82	70	111	347
Referred for investigation of possible CHD	17	38	40	33	33	144
Diagnosed with Diabetes II	8	23	21	25	15	84
Referred for investigation of possible PAD	1	2	6	1	0	9
Diagnosed with CKD	1	2	2	2	3	9
Diagnosed with Hypertension	12	50	37	49	44	180
Identified with impaired glucose regulation (Either IGT or IFG)	6	18	11	13	9	51
Identified with 10 year CVD risk => 20%	34	92	136	78	85	391
Started on Statin therapy	14	36	42	39	54	171
Strated on anti-hypertension therapy	19	56	74	62	79	271
With BMI >27.5	269	828	805	639	836	3108
Audit C Completion	267	849	788	556	687	2880
Dementia Awareness (aged 65-74 years)	63	170	138	117	136	561
Health Inequalities						
Males	443	1301	1565	1225	1489	5580
Females	609	1828	1964	1432	1901	7125
Living in a deprived area NOT in a high risk, self assigned ethnic cate	177	484	593	387	347	1811
From a high risk, self-assigned ethnic group NOT living in a deprived	34	118	170	97	110	495
From a high risk, self-assigned ethnic group AND living in a deprived a	25	83	101	74	107	365
Number of smokers	101	290	294	227	252	1063
Referred for NHS stop smoking service (after Health Check)						



Identify trends



Health Inequalities



- standard risk
- Living in a deprived area NOT in a high risk, self assigned ethnic category
- From a high risk, self-assigned ethnic group NOT living in a deprived area
- From a high risk, self-assigned ethnic group AND living in a deprived area



Comparison with National evaluation

	Sheffield total 15/16	% of people receiving a health check in Sheffield	National evaluation outcomes of people receiving a health check	National evaluation outcomes of people not receiving a health check
Total Registered population (aged 40-74 years) as at April 2013	224116			
Total eligible population (aged 40-74 years)	131474		214295	1464729
Total eligible population who are offered a Health Check	31996			
Higher risk eligible population who are offered a Health Check	7238			
Outcomes				
Total eligible population who are receiving a Health Check	12618			
Offered a programme of weight management	347	11.16	38.7	11.2
Referred for investigation of possible CHD	144	1.14		
Diagnosed with Diabetes II	84	0.67	0.9	0.4
Referred for investigation of possible PAD	9	0.07		
Diagnosed with CKD	9	0.07	0.4	0.2
Diagnosed with Hypertension	180	1.43	3.7	1.1
Identified with impaired glucose regulation (Either IGT or IFG)	51	0.40		
Identified with 10 year CVD risk => 20%	391	3.10	12.9	2.2
Started on Statin therapy	171	1.36	5.1	1
Started on anti-hypertension therapy	271	2.15	3.9	1.8
With BMI >27.5	3108	24.63	21.2	27.5
Audit C Completion	2880	22.82		
Dementia Awareness (aged 65-74 years)	561	4.45		
Health Inequalities				
Males	5580	44.22		
Females	7125	56.47		
Living in a deprived area NOT in a high risk, self assigned ethnic category	1811	14.35		
From a high risk, self-assigned ethnic group NOT living in a deprived area	495	3.92		
From a high risk, self-assigned ethnic group AND living in a deprived area	365	2.89		
Number of smokers	1063	8.42		
Referred for NHS stop smoking service (after Health Check)	44.6	4.2	6.8	3.2

How can we use outcome data?

- To refer people to appropriate services such as stop smoking services; weight management
- To monitor who is receiving a health check
- To monitor the prevalence of CVD, CKD, Hypertension and diabetes
- To target those who are not attending for health checks (change delivery model accordingly)
- To target those at higher risk of CVD
- To reduce Health Inequalities
- To calculate value for money

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Issues encountered

- **Process of data collection and timescales**
- **Data ‘hiccups’**
- **Ensuring same set of read codes is used by all**
- **Incorrect data entry**



Expected impact over time of statin treatments arising from NHS Health Checks from 2012

Cohort effect - non-fatal AMI

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
2012/13	0.1067	0.2135	0.2135	0.2135	0.2135	0.2135	0.2135	0.2135	0.2135	0.2135
2013/14		0.2115	0.4231	0.4231	0.4231	0.4231	0.4231	0.4231	0.4231	0.4231
2014/15			0.1337	0.2673	0.2673	0.2673	0.2673	0.2673	0.2673	0.2673
2015/16				0.1644	0.3288	0.3288	0.3288	0.3288	0.3288	0.3288
Annual equivalent events prevented	0.1067	0.425	0.7702	1.0683	1.2327	1.2327	1.2327	1.2327	1.2327	1.2327
Cumulative events prevented	0.1	0.5	1.3	2.4	3.6	4.8	6.1	7.3	8.5	9.8

Cohort effect - stroke

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
2012/13	0.0721	0.1442	0.1442	0.1442	0.1442	0.1442	0.1442	0.1442	0.1442	0.1442
2013/14		0.1429	0.2857	0.2857	0.2857	0.2857	0.2857	0.2857	0.2857	0.2857
2014/15			0.0903	0.1805	0.1805	0.1805	0.1805	0.1805	0.1805	0.1805
2015/16				0.111	0.2221	0.2221	0.2221	0.2221	0.2221	0.2221
Annual equivalent events prevented	0.0721	0.287	0.5201	0.7214	0.8325	0.8325	0.8325	0.8325	0.8325	0.8325
Cumulative events prevented	0.1	0.4	0.9	1.6	2.4	3.3	4.1	4.9	5.8	6.6

Calculating value for money

Population	Year	Rx	5y NNT non-fatal AMI	5y NNT stroke	Prevented non-fatal AMI	Prevented strokes	£ Rx	Unit £*
Patients with a latest cardiovascular risk score of 20% plus excl sec prevention	2012/13	111	104	154	1.07	0.72	£1,492	£1.12
	2013/14	220	104	154	2.12	1.43	£2,957	* assume all atorvastatin 20mg od
	2014/15	139	104	154	1.34	0.90	£1,868	* BNF 72 tariff
	2015/16	171	104	154	1.64	1.11	£2,298	
		641						

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
2012/13	£746	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492
2013/14		£1,478	£2,957	£2,957	£2,957	£2,957	£2,957	£2,957	£2,957	£2,957
2014/15			£934	£1,868	£1,868	£1,868	£1,868	£1,868	£1,868	£1,868
2015/16				£1,149	£2,298	£2,298	£2,298	£2,298	£2,298	£2,298
	£746	£2,970	£5,383	£7,466	£8,615	£8,615	£8,615	£8,615	£8,615	£8,615
	£746	£3,716	£9,099	£16,565	£25,180	£33,795	£42,410	£51,025	£59,640	£68,255

Thank you for listening

For more information please contact
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