

North East London

Impact of COVID on Newham healthcare activity, LTC diagnosis and LTC monitoring

18 February 2022

NEL CCG Insights Team

Tower Hamlets, Newham and Waltham Forest

This report aims to help shape Newham's system priorities around addressing covid impacts and inequalities

Key questions addressed are:

- To what extent have different population groups had **lower healthcare activity** during the pandemic than we would normally expect?
- To what extent have long term conditions (LTCs) been underdiagnosed during the pandemic compared to levels we would normally expect and for which population groups?
- To what extent have **health checks in primary care been done less frequently** than we would normally expect and for which population groups?

The drop in activity in the first year of the pandemic and the level of recovery have varied by service and population segment

Primary care	Not yet recovered to pre-pandemic levels. The group with the largest missing activity since March 2020 is children (0- 17), who have had 22% less activity than we would have expected based on pre-covid activity. White ethnic groups have also had 12% less activity than expected.
Elective inpatients	Recovered to 7% above pre-covid levels but there is a backlog of unmet need particularly for white ethnic groups and people with no LTCs. This may indicate that elective care has been appropriately focused on more complex patients.
Outpatient	Recovered to above pre-covid levels but there has been less activity than we would have expected since Mar-20 for children, people with type 2 diabetes and people with 2+ LTCs.
A&E	Recovered to 5% over pre-covid levels overall, though is below pre-covid levels for children and people with 2+ LTCs. Recovery to well over pre-covid levels for mixed, black and asian ethnic groups, 18-64 year olds and people with no LTCs. This may reflect primary care access challenges with A&E seen as an alternative.
Non- elective inpatients	Still slightly below pre-covid levels overall, though it is above pre-covid levels for age 65+ (26% above pre-covid levels). This may reflect the direct impact of covid.

Along with missed activity we have seen a reduction in diagnosing and monitoring long term conditions

New LTC diagnoses	Recording of new LTC diagnoses in primary care reduced sharply at the start of the pandemic and in most cases has not recovered or continues to decline. This is likely to be driven by removal of QOF incentives. Incompleteness of data on LTC cohorts poses a challenge to the system's ability to understand patient needs and target support to these groups
Health checks	Recording of the key health checks focused on complex patients – BMI, blood pressure and HbA1c - also reduced in the acute phase of the pandemic (Mar 20 – Apr 21) and has not yet recovered to pre-covid levels

Key findings in numbers

Since March 2020 we have seen:

- **70,068** Fewer outpatient appointments than we would have expected (based on pre-covid activity levels) **9%** less than pre-covid levels.
- **10,755** Fewer elective admissions than we would have expected **18%** less than pre-covid levels.
- **22%** Fewer primary care appointments for children (0-17) than we would have expected
- 5% More non-elective admissions for people with diabetes than we would have expected. Also 3% more for people with 2+ LTCs. Some of these will be covid-related
- 2,453 Fewer people with obesity recorded by their GPs than we would have expected. This may be an underestimate of unrecognised need, given a less activelifestyle for many could have increased rates of obesity
- 657 Fewer people diagnosed with COPD by their GP than we would have expected. COPD diagnosis requires spirometry at a face to face appointment
- 64% Fewer blood pressure measures recorded than we would have expected

Our analytical approach

- We analysed data for people either GP-registered or resident in Newham and looked at the monthly rates of three metrics:
 - Healthcare activity in primary care, A&E, outpatient, elective inpatient and non-elective inpatient services (Discovery and SUS)
 - New diagnoses of 8 long term conditions (QOF indicators) recorded in primary care: COPD, Atrial Fibrillation, Heart Failure, Type 2 Diabetes, Coronary Heart Disease, Stroke and TIA, Obesity and Mental Health diagnosis (primary care data)
 - **Number of physical measurements** routinely used as part of LTC management as recorded in primary care data: BMI, blood pressure, HBA1C (blood glucose) (primary care data)
- We explored inequalities by segmenting the data on these metrics in terms of: ethnicity, age band, number of LTCs, whether they had type 2 diabetes, ward of residence and GP practice
- As well as visualising and reviewing the full data we focused on four summary metrics¹:
 - **Cumulative missing activity/diagnoses/checks** since the start of the pandemic (i.e. the difference between the total actual activity/diagnoses/checks since March 2020 and the total amount that we would have expected based on pre-covid averages this is the net impact of activity falling below pre-covid norms and (in some cases) recovering to above pre-covid norms)
 - Lowest monthly activity/diagnoses/checks compared to pre-covid monthly average
 - Drop in monthly average of activity/diagnoses/checks between pre-covid period and acute pandemic phase
 - Recovery in monthly average of activity/diagnoses/checks in early recovery phase compared to pre-covid monthly average

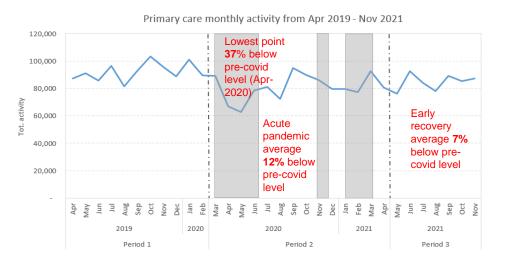
^{1.} The time periods we defined for use in these metrics are:

[•] Pre-pandemic (Period 1), from Jan-2019 to Feb-2020 (primary care appointments data only available from Apr-2019)

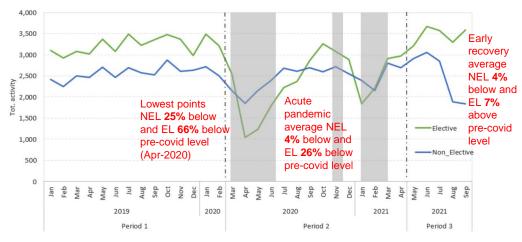
Acute pandemic (Period 2) from Mar-2020 to Apr-2021

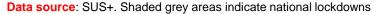
Early recovery (Period 3) from May-2021 to Sep-2021

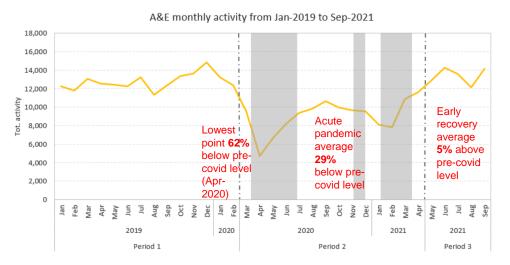
How has activity changed during the pandemic for the Newham population as a whole?



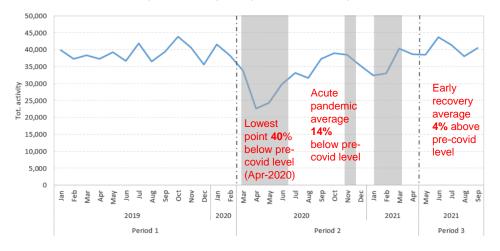
Inpatient Elective / Non-Elective monthly activity from Jan-2019 to Sep-2021







Outpatient monthly activity from Jan-2019 to Sep-2021



How has activity been affected for different groups?

		Monthl	y missed activi	ty as % of pre-	covid level (a	verage)		Cumulative r	missed activity	(contacts)	
	Breakdown	Primary Care	A&E	Outpatient	Elective	Non-elective	Primary care (appts)	A&E (attendances)	Outpatient (appts)	Elective (spells)	Non-elective (spells)
White group with	Asian	-9%	-21%	-9%	-16%	-6%	- 75,768	- 18,599	- 21,402	- 3,006	- 1,130
biggest deficit in activity (%) in	White	-12%	-17%	-6%	-20%	0%	- 60,520	- 10,451	- 9,557	- 3,184	42
Primary and	Black	-10%	-18%	-4%	-7%	-3%	- 30,125	- 6,869	- 4,598	- 680	- 278
Elective Care	Mixed	-10%	-16%	-2%	-14%	6%	- 4,243	- 875	- 270	- 139	77
	Other	-7%	-18%	-7%	-15%	0%	- 4,209	- 3,451	- 3,660	- 625	- 6
0-17 show the	Unknown	-16%	-28%	-19%	-27%	-11%	- 2,082	- 8,607	- 30,584	- 3,121	- 504
largest drop in health care	0-17	-22%	-39%	-17%	-16%	-16%	- 62,540	- 26,217	- 12,929	- 888	- 2,303
service use	18-64	-7%	-13%	-8%	-17%	-4%	- 85,615	- 20,401	- 42,249	- 7,308	- 1,114
	65+	-10%	-10%	-13%	-18%	19%	- 28,848	- 2,234	- 14,894	- 2,559	1,617
• 2+ LTC high	O LTC	-	-22%	-7%	-25%	-6%	-	- 32,742	- 27,353	- 4,204	- 1,557
missed activity in Outpatient	1 LTC	-	-19%	-7%	-9%	-8%	-	- 8,428	- 10,506	- 3,663	- 717
Outpatient	2+ LTC	-	-17%	-15%	-16%	3%	-	- 7,681	- 32,213	- 2,245	474
Type 2 diabetes	Type 2	-	-16%	-17%	-18%	5%	-	- 4,346	- 20,716	- 1,928	436
with biggest drop	No_diabetes	-	-21%	-8%	-17%	-6%	-	- 44,505	- 49,356	- 8,709	- 2,236
(%) in OP and saw an increase	Total population	-10%	-20%	-9%	-18%	-4%	- 176,998	- 48,851	- 70,068	- 10,755	- 1,800
in Non-elective			Much less A&E than expected, bu mainly due t younger and healthier people	0		Growth in volume of activity for Non- Elective care. Possibly Covid- 19 hospitalisation		mis pla	nificant majority ssing activity is in nned care: prima e and outpatients	iry	

How have LTC diagnosis have been affected for different groups?

			Monthly	missed dia	agnosis % o	of pre-covid	level (av	erage)			Cu	imulative miss	ed diagnosi	s (potential	patients)		
	Breakdown	Type 2 diabetes	Obesity	HF	AF	Stroke & TIA	CHD	COPD	Mental Health	Type 2 diabetes	Obesity	HF	AF	Stroke & TIA	CHD	COPD	Mental Health
White and Black	Asian	4%	-34%	-29%	16%	-12%	-31%	-93%	-25%	67	- 519	- 53	15	- 21	- 155	- 151	- 42
group are the most affected by missed	White	-14%	-52%	-34%	-21%	-37%	-34%	-93%	-43%	- 71	- 950	- 56	- 50	- 71	- 89	- 389	- 69
diagnosis in the	Black	4%	-58%	-36%	-38%	-20%	-16%	-95%	-45%	19	- 453	- 38	- 26	- 22	- 17	- 75	- 77
majorities of LTCs considered	Mixed	33%	-38%	-47%	-33%	-7%	8%	-67%	-47%	12	- 41	- 4	- 2	- 1	1	- 4	- 11
	Other	-2%	-53%	11%	-44%	-51%	-31%	-85%	-56%	- 2	- 163	1	- 8	- 12	- 11	- 12	- 20
 18-64 with higher number of potential 	Unknown	-60%	-63%	-38%	-33%	-43%	-38%	-90%	-52%	- 206	- 531	- 8	- 6	- 9	- 17	- 29	- 42
patients missing	18-64	-4%	-49%	-29%	-4%	-17%	-29%	-92%	-45%	- 109	- 2,499	- 59	- 5	- 46	- 186	- 335	- 260
(Obese and Mental Health in particular)	65+	-12%	-52%	-34%	-23%	-36%	-31%	-94%	-13%	- 69	- 159	- 96	- 71	- 88	- 101	- 322	- 6
	1 LTC	-22%	50%	-41%	17%	-27%	-35%	-88%	-45%	- 265	580	- 15	7	- 28	- 73	- 145	- 165
2+ LTC most	2+ LTC	-2%	-32%	-32%	-21%	-27%	-32%	-94%	-42%	- 39	- 209	- 143	- 84	- 114	- 238	- 515	- 111
affected by COPD drop	Total population	-6%	-49%	-30%	-17%	-26%	-29%	-93%	-41%	- 180	- 2,658	- 147	- 76	- 135	- 273	- 665	- 260
		Small reduction in Type 2 diabetes diagnosi s since the start of the pandemi c						Biggest dropped i COPD diagnosis since the start of th pandemic 90%	e		Highest number of potential patients missing 2,658	of					

How have health checks have been affected for different groups?

		Monthly missed	health checks % o	f pre-covid level	Cumulative n	nissed health che	cks (potential
			(average)			patients)	
Comments:	Breakdown	Blood pressure	BMI	HbA1c	Blood pressure	BMI	HbA1c
Highest volume of	Asian	-60%	-39%	-31%	- 130,379	- 53,981	- 32,584
health check missed for Asian	White	-66%	-50%	-39%	- 84,763	- 43,075	- 18,174
group but White	Black	-66%	-49%	-38%	- 60,694	- 25,681	- 14,821
and Black groups	Mixed	-63%	-47%	-30%	- 5,371	- 2,890	- 931
with the highest dropped in %	Other	-65%	-46%	-38%	- 10,143	- 4,986	- 2,411
	Unknown	-68%	-47%	-39%	- 1,932	- 846	- 438
Adult 18-64 with	0-17	-60%	-61%	-11%	- 3,073	- 8,098	- 316
significant higher	18-64	-64%	-44%	-33%	- 231,193	- 102,037	- 51,580
volume of health	65+	-63%	-46%	-39%	- 69,101	- 26,567	- 19,490
checks missed	O LTC	-67%	-48%	-33%	- 113,841	- 60,819	- 23,535
• 0 LTC's saw the	1 LTC	-62%	-44%	-33%	- 82,308	- 36,425	- 19,829
largest drops in	2+ LTC	-61%	-41%	-34%	- 106,780	- 39,166	- 26,973
Blood pressure and BMI checks	Type 2 Diabetes	-57%	-34%	-32%	- 77,065	- 26,962	- 23,645
	No_diabetes	-66%	-48%	-35%	- 226,303	- 109,740	- 47,743
	Total population	-64%	-45%	-34%	- 303,367	- 136,702	- 71,388

- Blood pressure checks have
- fallen the most since the start
- of the
- pandemic

Questions for discussion or further analysis

- How much of the increase in non-elective admissions for some groups (age 65+, 2+ LTCs, diabetes) is due to admissions for covid?
- To what extent is the fall in recorded LTC diagnoses and health checks merely a change in reporting (due to removal of QOF incentives)?
- Is the missing activity for people with unknown ethnicity due to improvement in the completeness of ethnicity recording since the start of the pandemic?
- Could we improve our understanding of ethnicity inequalities by replacing 'unknowns' with ethnicity data recorded about the patient in other data?

Appendix

Deep-dive into the impact of Covid-19 in Newham by:

- Primary and Secondary care activity
- Diagnosis of Long Term Conditions
- Number of health checks performed

The drop during the acute phase of the pandemic have been recovered in recent months but the cumulative deficit it's still significant

The colour coding highlights which group have experienced the biggest drop in activity in Primary and Secondary Care settings, darker red where the drop is more significant and green cells with activity higher than period 1 baseline.

The monthly average activity calculated in the three time periods for the 4 settings have been used to estimate the change in activity between Period 2 compared to Period 1 and Period 3 compared to Period 1 (baseline).

The cumulative deficit section of the table report the estimated backlog accumulated since the start of the pandemic. The average change in activity (%) in period 2 and 3 has been multiplied by the total number of months in the two time frames.

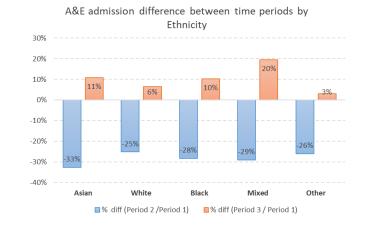
		Change	in activity Pe	eriod 2-1			Change i	n activity Pe	riod 3-1	•		Cur	nulative defi	cit	
Breakdown	Primary Care	A&E	Outpatient	Elective	Non-elective	Primary Care	A&E	Outpatient	Elective	Non-elective	Primary Care	A&E	Outpatient	Elective	Non-elective
Asian	-11%	-33%	-16%	-28%	-8%	-4%	11%	13%	19%	-2%	-191%	-403%	-166%	-301%	-119%
White	-13%	-25%	-13%	-30%	-1%	-11%	6%	15%	9%	4%	-253%	-320%	-107%	-372%	6%
Black	-11%	-28%	-11%	-18%	-6%	-7%	10%	14%	22%	4%	-210%	-343%	-85%	-137%	-63%
Mixed	-13%	-29%	-11%	-29%	7%	-2%	20%	23%	29%	5%	-200%	-309%	-40%	-261%	123%
Other	-8%	-26%	-11%	-19%	3%	-5%	3%	3%	-3%	-9%	-144%	-349%	-140%	-282%	-4%
Unknown	-18%	-30%	-15%	-29%	-3%	-12%	-22%	-31%	-23%	-33%	-343%	-538%	-363%	-520%	-206%
0-17	-31%	-51%	-21%	-23%	-13%	-5%	-5%	8%	4%	-24%	-467%	-738%	-322%	-302%	-306%
18-64	-8%	-22%	-12%	-26%	-6%	-6%	10%	3%	7%	0%	-152%	-255%	-147%	-332%	-82%
65+	-9%	-15%	-20%	-29%	16%	-11%	6%	4%	11%	26%	-208%	-186%	-238%	-351%	360%
O LTC	-	-33%	-12%	-34%	-7%	-	9%	6%	2%	-4%	-	-410%	-141%	-471%	-120%
1 LTC	-	-26%	-11%	-19%	-10%	-	0%	4%	17%	-4%	-	-361%	-128%	-180%	-153%
2+ LTC	-	-21%	-20%	-24%	4%	-	-4%	-2%	7%	2%	-	-315%	-283%	-297%	60%
Type 2	-	-22%	-22%	-28%	5%	-	1%	-2%	11%	6%	-	-308%	-320%	-338%	100%
No_diabetes	-	-30%	-12%	-26%	-6%	-	6%	5%	7%	-4%	-	-392%	-152%	-332%	-105%
Total population		-29%	-14%	-26%	-4%		5%	4%	7%	-2%		-383%	-180%	-333%	-70%

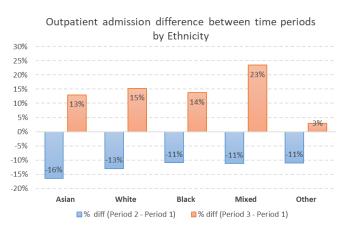
Summary of percentage difference by time period and breakdowns (ethnicity, age band, LTC and Type 2 diabetes)

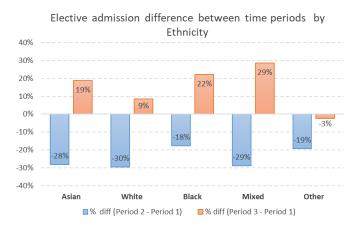
Data caveats: Red cells for the unknown ethnic group which represent a group of patient with not available main ethnic background. LTC and Type 2 diabetes not yet available in Primary Care

Missed activity: biggest drop in the acute phase of the pandemic for A&E and Elective settings across ethnic group

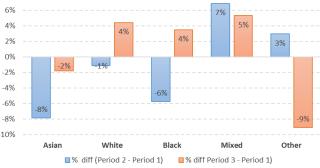
- The reduction of hospital admission during period 2 compared to precovid level was significant for all ethnic groups in A&E, Elective and Outpatient.
- In Non-Elective instead there was an increase of admission for the Mixed group and Others in period 2.
- The recovery in period 3 have interested all settings at different levels except Other ethnic group in Non-Elective with a drop of activity of 9%.





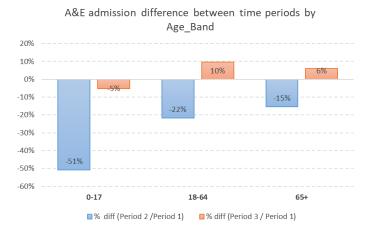


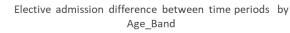
Non Elective admission difference between time periods by Ethnicity

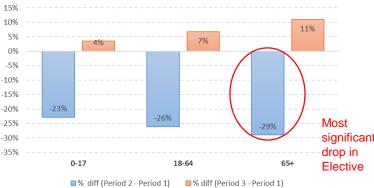


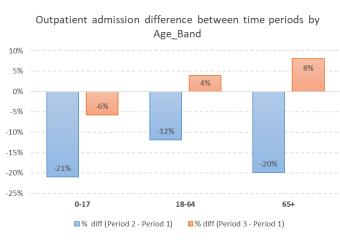
Missed Activity: Variation in the volume of hospital care in the 3 time period by age band is higher for 0-17 patients but 65+ suffered more admissions in Non-Elective

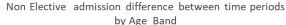
- Biggest reduction in period 2 for 0-17 patients in A&E and Outpatient. For 65+ biggest reduction in Elective admission but also significant reduction in Outpatient.
- Period 3 still negative recovery for 0-17 patients.
- Non-Elective settings with an increase of activity for 65+ since the start of the pandemic.

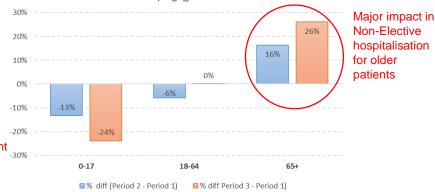






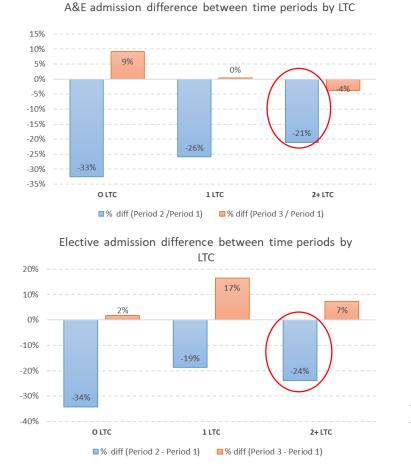


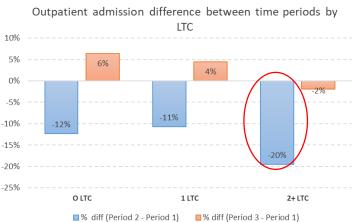


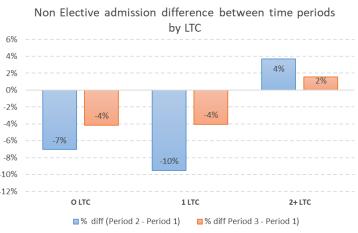


Missed activity: Variation in the volume of hospital care by LTC show patients with 2+ LTC with less planned care but higher rate of hospitalisation in Non-Elective since the start of the pandemic.

- Most significant reduction in period 2 for patients with 0 LTC in Elective and A&E.
- The significant reduction in A&E, Outpatient and Elective for patients with 2+ LTC is contrasting with an increase in the admission in Non-Elective care, in clear contrast of 0 LTC and 1 LTC.



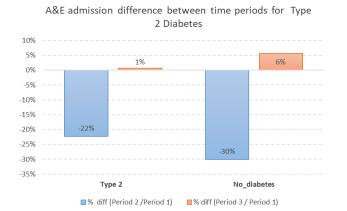


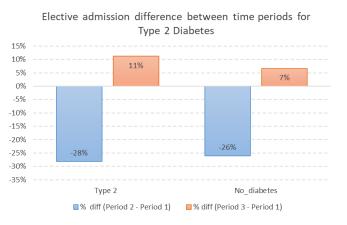


Patients with 2+ LTC with the greatest reduction in Outpatient with -20% and also significant in Elective -24% and A&E -21%.

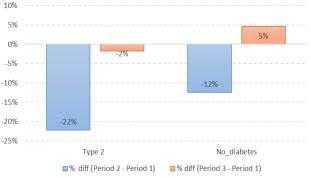
Missed activity: Major reduction of planned Secondary Care for patient with Type 2 diabetes but higher rate of hospitalisation in Non-Elective

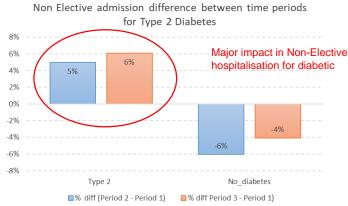
- In Elective settings similar reduction in admission for patients with Type 2 diabetes and without.
- Diabetic patients with most significant reduction in Outpatient.
- Increase in admission for diabetic patients in Non-Elective care since the start of the pandemic in contrast with patients not diabetic.









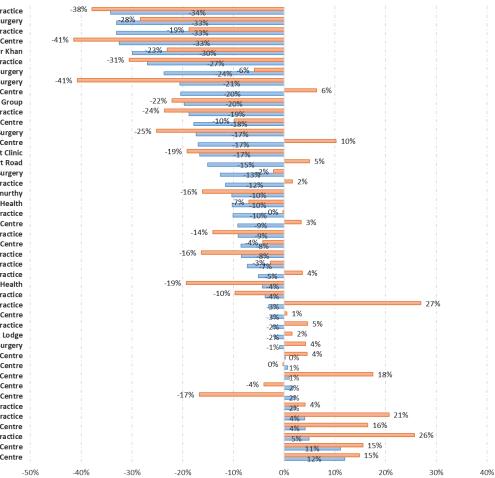


Missed activity: Variation in the volume of Primary Care appointments by GP practice in Newham

- 9 out of 45 practices in Newham have not seen a reduction in GP appointment since the start of the pandemic. Some also increase during recovery by 20%.
- However majority dropped considerably during the acute phase (period 2) and they still have not recovered.



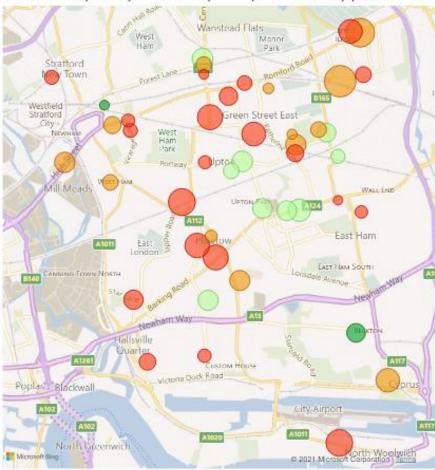
Primary Care appointmets variation by GP practice



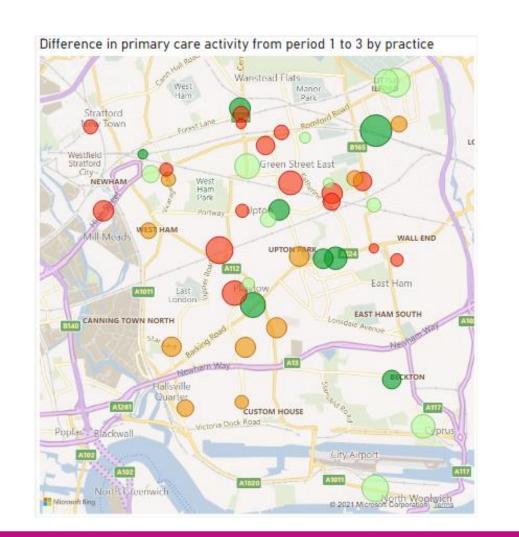
Data source: Discovery

% diff (Period 3 / Period 1)
% diff (Period 2 / Period 1)

Missed activity: Difference in GP appointment between time periods and practice list size



Difference in primary care activity from period 1 to 2 by practice



Legend	Primary Care			
	Less than 10%			
	-10% to 0%			
	0%			
	0% to 10%			
	More than 10%			



Missed activity: Variation in the volume of care in Elective settings by GP practice in Newham

The volume of patient in Elective care varies significantly by GP practice, with some practice having more patients in planned care compared to period 1 baseline:

- Lucas Avenue +100%
- Birchdale Road Medical Centre +55%

When others are still below pre-covid average:

- E12 Medical Centre -24%
- The Ruiz Medical Practice -25%

Plashet Road Medical Centre The Ruiz Medical Practice -44% Dr Cm Patel's Surgery -44% Upton Lane Medical Centre -42% E12 Medical Centre -41% 4% **Balaam Street Practice** -38% -14% Claremont Clinic -37% The Azad Practice 5% -37% Dr T Krishnamurthy -11% -36% **Boleyn Medical Centre** -35% -17% Newham Transitional Practice -34% St. Bartholomews Surgery -32% Lathom Road Medical Centre -31% Stratford Village Surgery -30% 4% Sangam Practice -30% The Graham Practice -30% 19% Star Lane Medical Centre -29% 💻 Dr Samuel and Dr Khan -8% -29% E12 Health 16% -28% 12% The Project Surgery -28% East End Medical Centre -27% **Carpenters** Practice -26% Market Street Health Group -26% 19% The Shrewsbury Centre -26% 12% Woodgrange Medical Practice -23% Greengate Medical Centre 22% -23% Newham Medical Centre 16% -23% 8% **Tollgate Medical Centre** -22% 6% Custom House Surgery -20% The Summitt Practice -20% 4% Stratford Health Centre -19% 43% The Vicarage Lane Surgery -19% 27% Glen Road Medical Centre -18% 15% The Forest Practice -18% Abbey Road Medical Practice -17% 17% Cumberland Medical Centre -17% Royal Docks Medical Practice 11% -16% Westbury Road Medical Practice -14% -16% -16% -14% The Manor Park Practice 18% Liberty Bridge Road Practice -16% 20% The Practice Albert Road -15% 43% Essex Lodge -14% First 4 Health Group - E7 Health 26% -3% 🗖 Birchdale Road Medical Centre 55% Lucas Avenue Practice 100% -60% -40% -20% 20% 40% 60% 80% 100% 120%

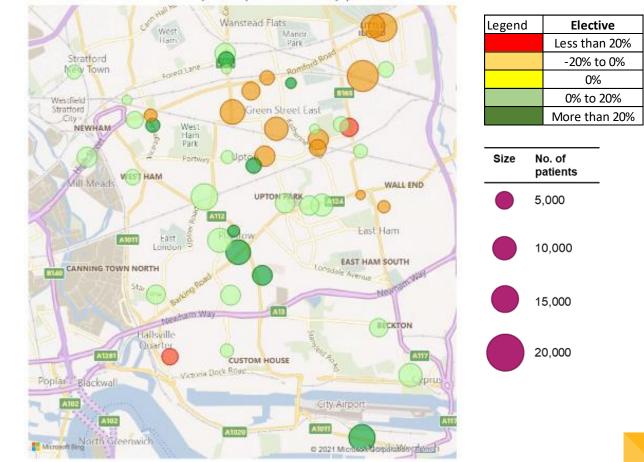
% diff (Period 3 / Period 1)

Missed activity: Difference in Elective activity of GP registered patients between time periods and practice list size



Difference in elective activity from period 1 to 2 by practice

Difference in elective activity from period 1 to 3 by practice



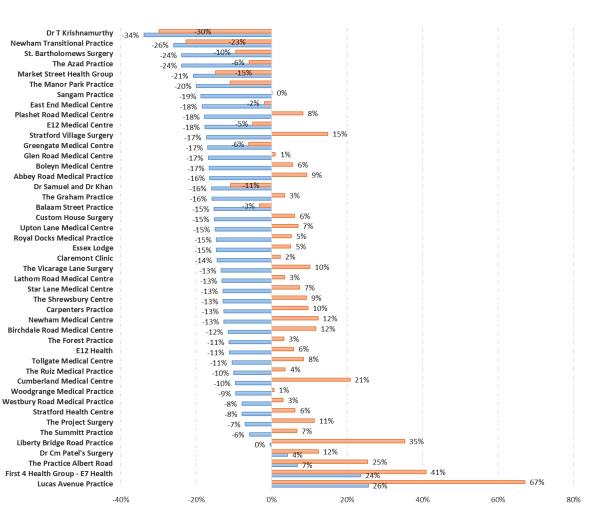
Missed activity: Variation in the volume of care in Outpatient settings by GP practice in Newham

The volume of patient referred to Outpatient varies significantly by GP practice, with some practice showing great recovery compared to pre-covid baseline:

- Lucas Avenue +67%
- First 4 Health Group +41%
- Liberty Bridge Road Practice + 35%

When others are still below baseline:

- Dr. T Krishnamurthy -30%
- Newham Transitional Practice -23%
- Market Street Health Group -15%



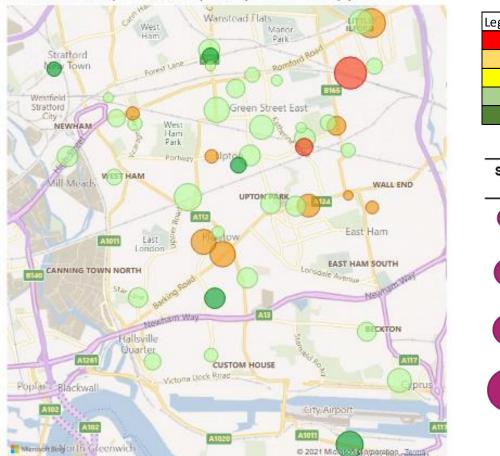
Data source: SUS+

% diff (Period 3 / Period 1)
% diff (Period 2 / Period 1)

Missed activity: Difference in Outpatient activity of GP registered patients between time periods and the size of the circle practice list size



Difference in outpatient activity from period 1 to 2 by practice



Difference in outpatient activity from period 1 to 3 by practice

egend	Outpatient
	Less than 15%
	-15% to 0%
	0%
	0% to 15%
	More than 15%

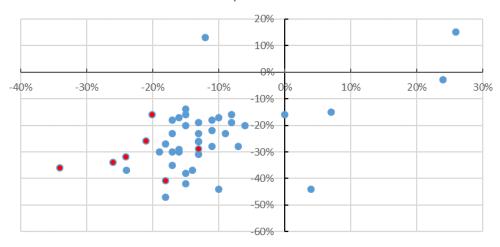


Missed activity: The GP practice that still have not recovered in period 3 are between the most affected during period 2.

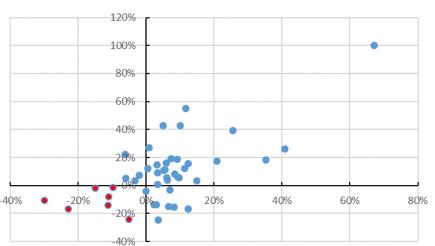
Comparing the change in activity for period 2 and 3 with pre-pandemic levels (period 1), seven practices are still below baseline monthly average for both Outpatient and Elective activity in Period 3, and are also between the ones most affected during the acute phase of the pandemic (period 2). The positive outlier dot in both graphs corresponds to Lucas Avenue Practice.

The seven practice are marked with red dots and in period 3 scatter plot are showing the following values:

- Dr T Krishnamurthy (OP: -30%, EL: -11%)
- Newham Transitional Practice (OP: -23%, EL: -17%)
- The Manor Park Practice (OP: -11%, EL:-14%)
- Dr Samuel and Dr Khan (OP: -11%, EL: -8%)
- Market Street Health Group (OP: -15%, EL: -2%)
- St. Bartholomews Surgery (OP: -10%, EL: -2%)



Period 2: Outpatient vs Elective



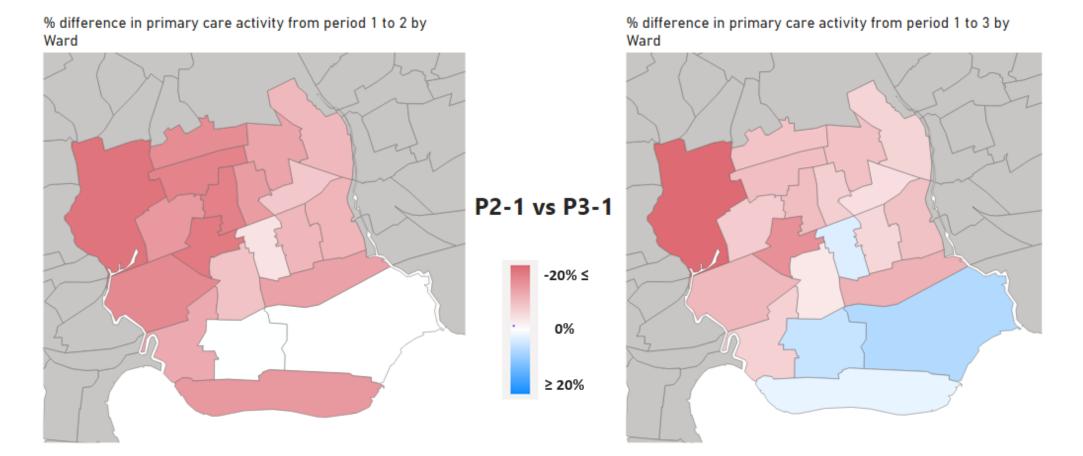
Period 3: Outpatient vs Elective

Data source: Discovery

Missed activity: Newham wards all dropped significantly during period 2 but the recovery has been inconsistent across the patch and for different care settings

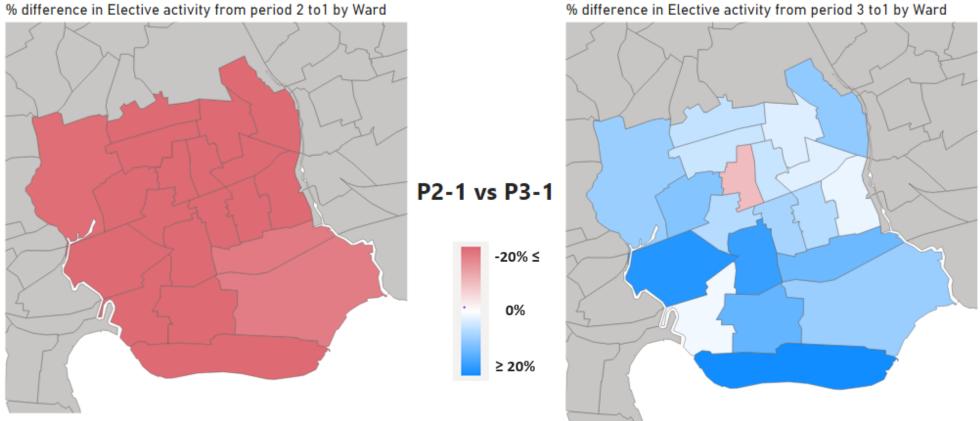


Missed activity: Difference in primary care appointments between periods 2-1 and periods 3-1 by Ward

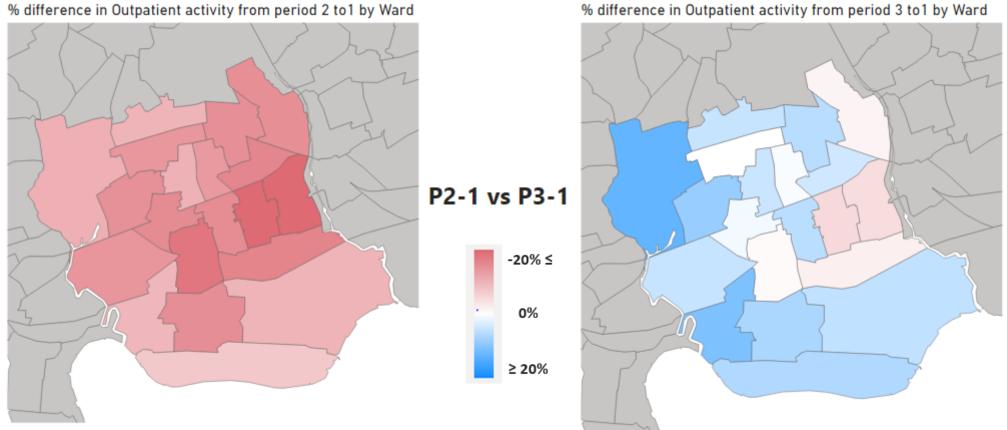


Data source: Discovery

Missed activity: Difference in Elective activity between periods 2-1 and periods 3-1 by Ward

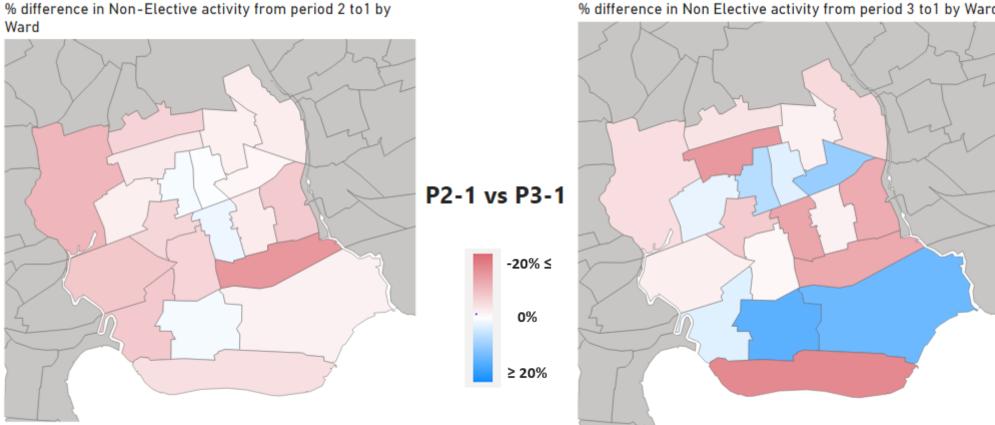


Missed activity: Difference in Outpatient activity between periods 2-1 and periods 3-1 by Ward



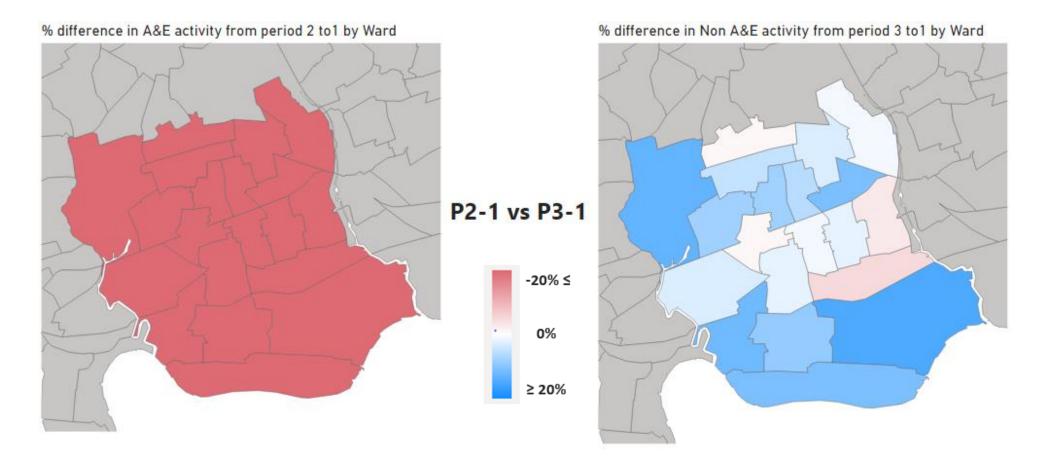
% difference in Outpatient activity from period 3 to1 by Ward

Missed activity: Difference in Non-Elective activity between periods 2-1 and periods 3-1 by Ward



% difference in Non Elective activity from period 3 to1 by Ward

Missed activity: Difference in A&E activity between periods 2-1 and periods 3-1 by Ward



Missed diagnosis: Type 2 Diabetes and Obesity

- First diagnosis for Type 2 Diabetes after a drastic drop in Apr-2020 (-78%) bounced back in the following months and roughly levelled up in period 2. Monthly average for period 3 is 6% lower that pre-covid levels. Since the start of the pandemic, the potential scale of missing diagnosis is estimated of about 134 in Newham.
- Obesity diagnosis dropped more significantly during the pandemic with a reduction of 46% in period 2 and 40% in period 3. The estimated missing diagnosis since the start of pandemic about 2,453.



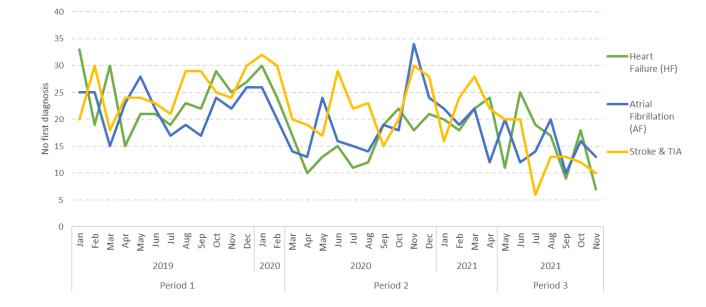
LTC	Change in incidence Period 2-1	Change in incidence Period 3-1	Missing diagnosis since March-2020
Type 2 diabetes	-3%	-6%	-134
Obesity	-46%	-40%	-2,453

Type 2 diabetes and Obesity montlhy incidence diagnosis Jan-2019 to Nov-2021

Missed diagnosis: HF, AF and Stroke & TIA

- The monthly incidence of first diagnosis for HF, AF and Stroke & TIA show similar trends from Jan-2019, with HF dropping the most in period 2 (-27%) and Stroke & TIA during period 3 (-48%).
- Since the start of the pandemic the potential scale of missing diagnosis is about:
 - o Heart Failure: 155
 - Atrial Fibrillation: 132
 - Stroke and TIA: 96

HF, AF and Stroke_TIA montlhy incidence diagnosis Jan-2019 to Nov-2021

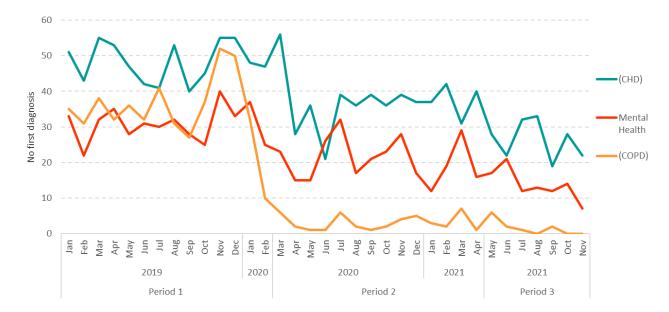


LTC	Change in incidence Period 2-1	Change in incidence Period 3-1	Missing diagnosis since March-2020
Heart Failure (HF)	-27%	-39%	-155
Atrial Fibrillation (AF)	-14%	-33%	-96
Stroke & TIA	-13%	-48%	-132

Missed diagnosis: CHD, COPD and Mental Health

- Between the 8 LTCs considered, COPDs have registered the biggest drop in diagnosis with -91% in period 2 and -92% for period 3.
- Significant drop also for Mental Health diagnosis -32% in period 2 and -56% in period 3
- The potential scale of missing diagnosis since the start of pandemic is estimated about:
 - COPD: 657
 - CHD: 305
 - o Mental Health: 256

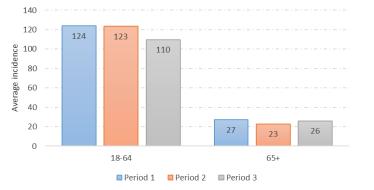
CHD, COPD and Mental Health montlhy incidence diagnosis Jan-2019 to Nov-2021



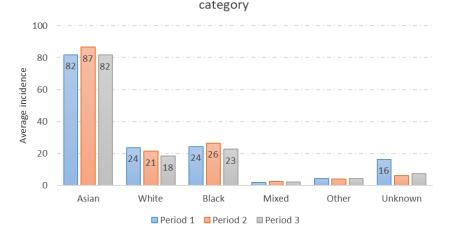
LTC	Change in incidence Period 2-1	Change in incidence Period 3-1	Missing diagnosis since March-2020
CHD	-23%	-46%	-305
Mental Health	-32%	-56%	-256
COPD	-91%	-92%	-657

Missed diagnosis: The major drop in diabetes incidence affected adults patients in period 3 and from white ethnic background

- Majority of type 2 diabetes diagnosis concern patients from Asian background (Asian represent 43% of the population in Newham compared to 29% White) and their incidence remain consistent during the pandemic with a slight increase in period 2.
- The monthly incidence of White cohort dropped during the pandemic, particularly in period 3 with 23% less monthly diagnosis compared to period 1.



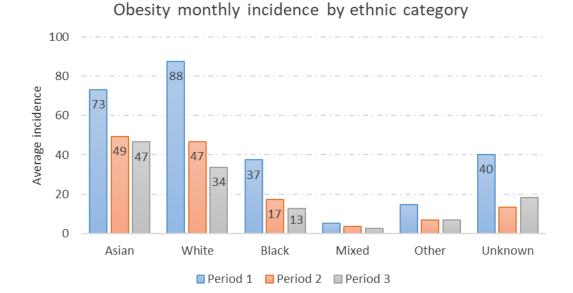
Type 2 diabetes monthly incidence by age group



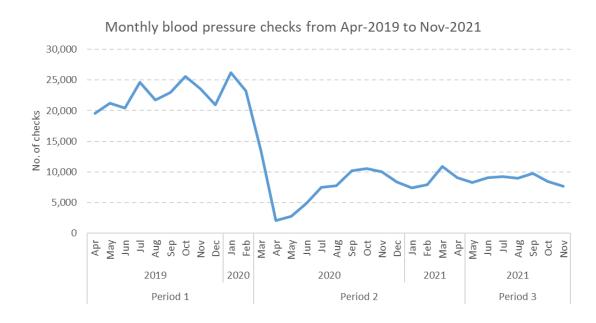
Type 2 diabetes average monthly incidence by ethnic

Missed diagnosis: Biggest drop in Obesity diagnosis for adults from White ethnic background

- The monthly average in the 3 time periods show that adult from white background are the most affected by obesity and the one that have experienced the biggest drop in diagnosis since the start of the pandemic -47% in period 2 and -62% in period 3 compared to period 1 baseline.
- Adult Asian drop 33% and 36% in period 2 and 3 respectively while Black cohort experienced a significant drop of 53% and 66%.



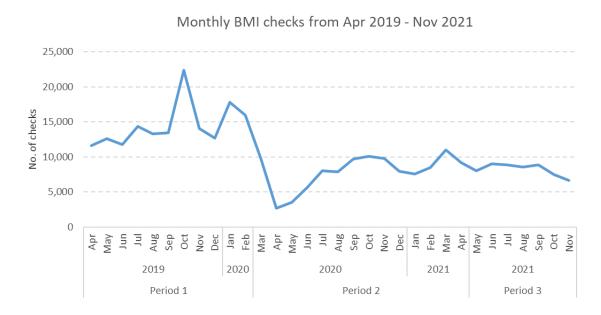
Missed health checks: Blood pressure



Туре	Change in no. of blood pressure checks period 2-1	Change in no. of blood pressure checks period 3-1
0-17	-66%	-48%
18-64	-65%	-62%
65+	-64%	-60%
Asian	-62%	-57%
Black	-66%	-65%
Mixed	-64%	-61%
Other	-67%	-63%
Unknown	-65%	-73%
White	-67%	-66%
Type 2 Diabetes	-57%	-56%
LTC: 0	-69%	
LTC: 1	-64%	
LTC: 2+	-61%	

- The monthly average number of blood pressure checks dropped by 65% in period 2 and showed little recovery in period 3 dropping by 61%.
- Of all the sub categories White and Other ethnicities had the largest drops in period 2, while patients with Type 2 diabetes saw the smallest drops in blood pressure checks.
- 0-17 year olds saw the best recovery of all the sub categories though blood pressure checks still fell by 48% in period 3.

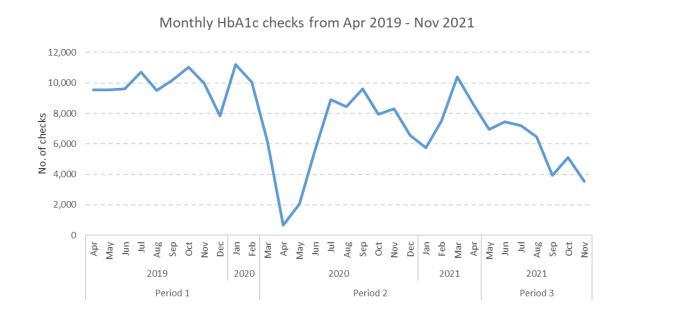
Missed health checks: BMI



Туре	Change in no. of BMI checks period 2-1	Change in no. of BMI checks period 3-1
0-17	-63%	-58%
18-64	-44%	-43%
65+	-48%	-42%
Asian	-41%	-36%
Black	-49%	-49%
Mixed	-47%	-46%
Other	-46%	-45%
Unknown	-41%	-59%
White	-48%	-53%
Type 2 diabetes	-35%	-33%
LTC: 0	-50%	-46%
LTC: 1	-44%	-42%
LTC: 2+	-41%	-41%

- Monthly BMI checks fell by 45% in period 2 and showed no recovery in period 3 falling by 44%.
- 0-17 year olds showed the largest drops in BMI checks in period 2 (-63%), while patients with type 2 diabetes saw the smallest drop in activity in period 2 (-35%).
- Asian ethnicities (-36%) and Type 2 diabetes (-33%) saw the best recovery in period 3, however activity was still below the 2019 baseline.

Missed health checks: HbA1c



Туре	Change in no. of HbA1c checks period 2-1	Change in no. of HbA1c checks period 3-1
0-17	-16%	1%
18-64	-29%	-41%
65+	-36%	-45%
Asian	-28%	-36%
Black	-33%	-48%
Mixed	-23%	-43%
Other	-34%	-46%
Unknown	-29%	-59%
White	-34%	-48%
Type 2 diabetes	-28%	-41%
LTC: 0	-32%	-36%
LTC: 1	-30%	-40%
LTC: 2+	-30%	-43%

- Monthly HbA1c checks fell by 31% in period 2, and fell further in period 3 (-42%) showing no signs of recovery.
- Of all the subcategories 65+ saw the largest drops in period 2 (-36%), while 0-17 year olds saw the smallest fall in monthly HbA1c checks (-16%).
- In period 3, 0-17 year olds saw the best recovery with activity increasing from the 2019 baseline (1%).