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# Impact of Covid-19 on incidence and survival of Hodgkin's lymphoma in Northern Ireland

(A comparison between April-December of 2020 and 2018-2019)

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## Further information

Further information is available at: [www.qub.ac.uk/research-centres/nicr](http://www.qub.ac.uk/research-centres/nicr)

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## Acknowledgements

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NICR uses data provided by patients and collected by the health service as part of their care and support.

The incidence, prevalence and survival statistics in this publication are designated as official statistics signifying that they comply with the Code of Practice for Official Statistics.



# INCIDENCE

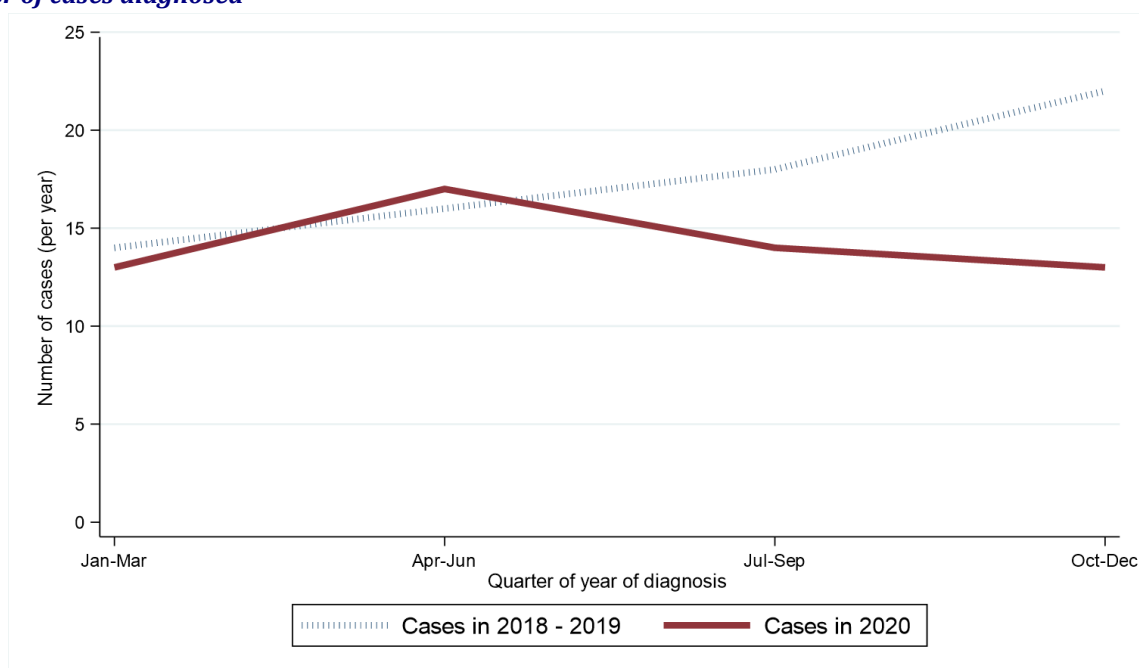
During the April-December period when Covid-19 was present the number of cases of Hodgkin's lymphoma diagnosed decreased by 21.4% (12 patients) from 56 per year in 2018 - 2019 to 44 in 2020.

**Table 1: Number of Hodgkin's lymphoma cases diagnosed in 2018-2020 by quarter and year of diagnosis**

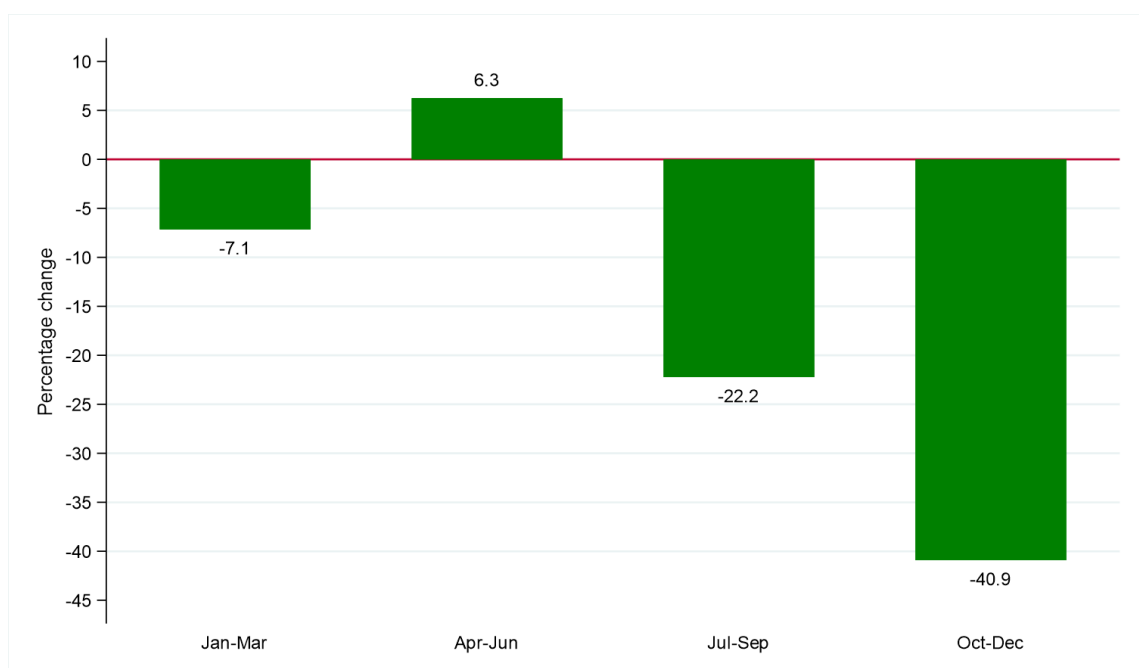
Period of diagnosis	Annual total	Quarter of year diagnosed			
		Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec
2018-2019*	69	14	16	18	22
2020	57	13	17	14	13

\* Average cases per year rounded to the nearest integer. Row sums may thus differ slightly from the total.

**Figure 1: Number of Hodgkin's lymphoma cases diagnosed in 2018-2020 by quarter and year of diagnosis**  
**(a) Number of cases diagnosed**



**(b) Percentage change from 2018-2019 to 2020 in number of Hodgkin's lymphoma cases by quarter of year of diagnosis**



## GENDER

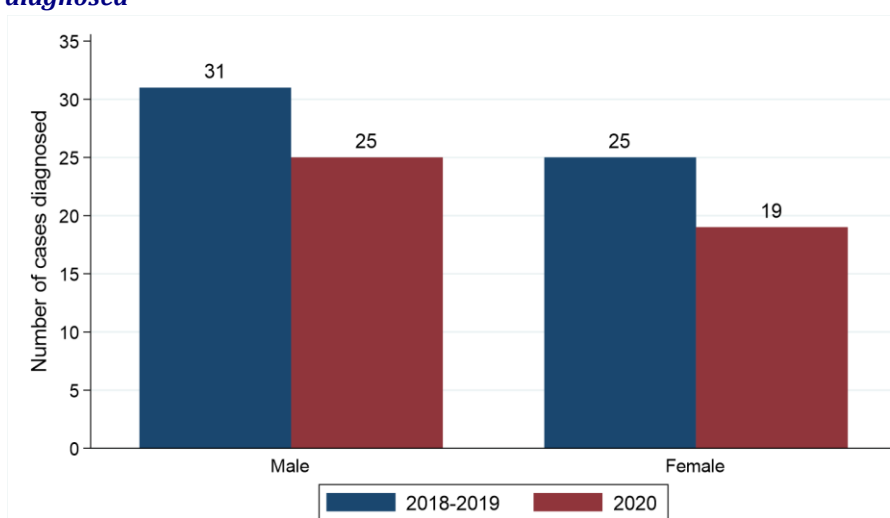
Excluding the first quarter of each year among males the number of cases of Hodgkin's lymphoma diagnosed decreased by 19.4% from 31 per year in 2018 - 2019 to 25 in 2020. Between the same two time periods the number of cases among females decreased by 24.0% from 25 per year to 19. The change in case distribution by gender between 2018 - 2019 and 2020 was not statistically significant.

**Table 2: Number and proportion of Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by gender and period of diagnosis**

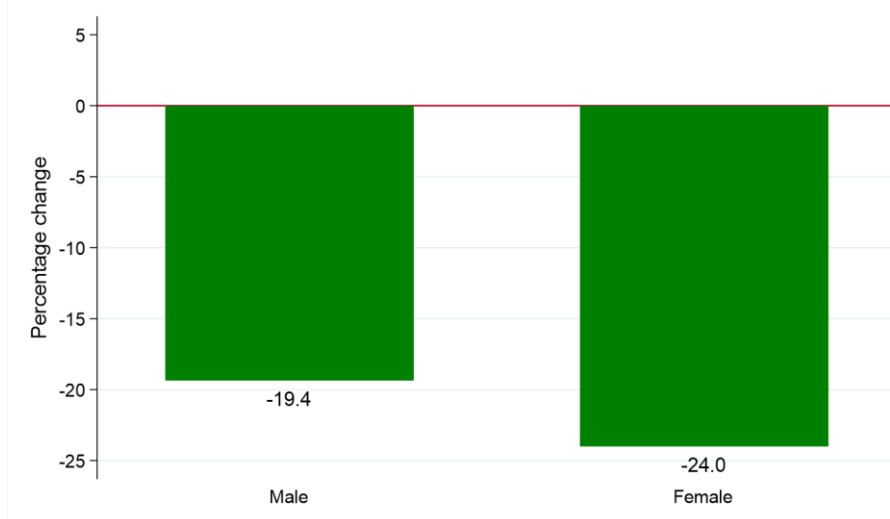
Gender	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Male	31 (55.4%)	25 (56.8%)	-19.4% (6 patients)
Female	25 (44.6%)	19 (43.2%)	-24.0% (6 patients)
All persons	56	44	-21.4% (12 patients)

\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

**Figure 2: Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by gender and period of diagnosis**  
**(a) Number of cases diagnosed**



**(b) Percentage change from 2018-2019 to 2020 in number of Hodgkin's lymphoma cases by gender**



## AGE

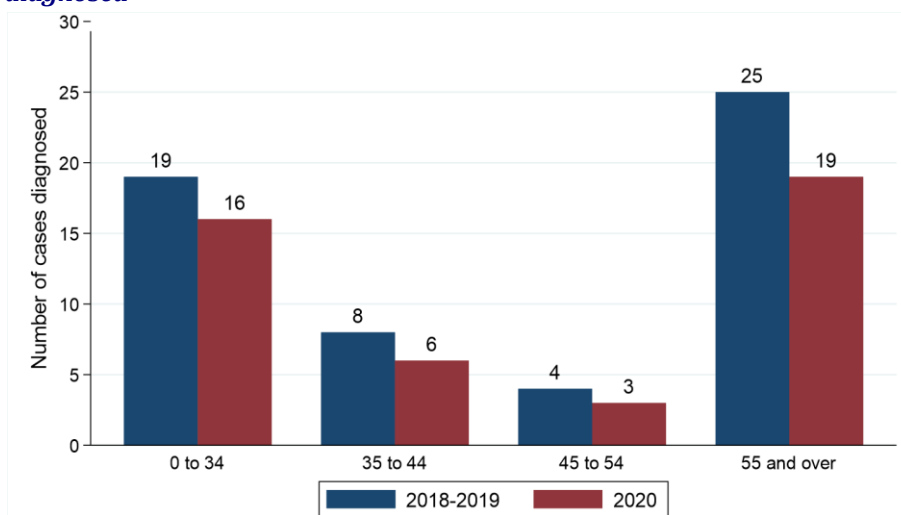
Excluding the first quarter of each year among people aged 45 to 54 the number of cases of Hodgkin's lymphoma diagnosed decreased by 25.0% from 4 per year in 2018 - 2019 to 3 in 2020. Between the same two time periods, the number of cases among people aged 0 to 34 decreased by 15.8% from 19 per year to 16. The change in case distribution by age between 2018 - 2019 and 2020 was not statistically significant.

**Table 3: Number and proportion of Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by age and period of diagnosis**

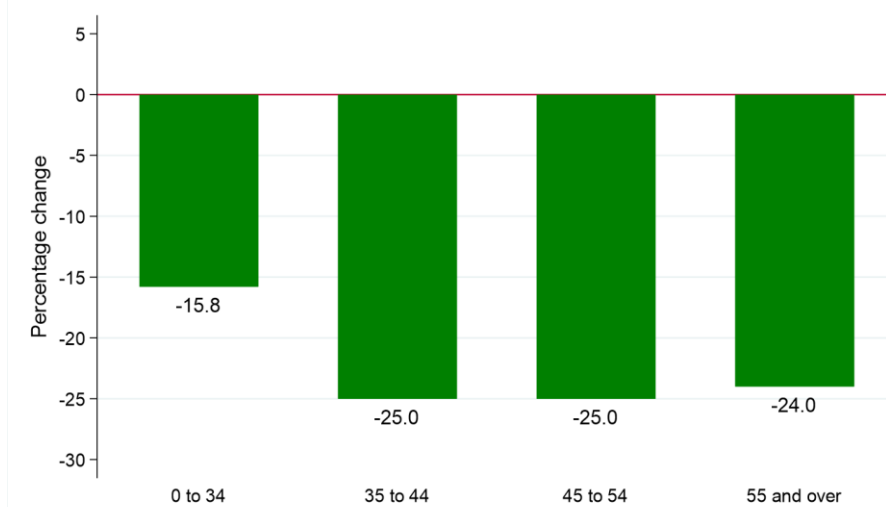
Age group	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
0 to 34	19 (33.9%)	16 (36.4%)	-15.8% (3 patients)
35 to 44	8 (14.3%)	6 (13.6%)	-25.0% (2 patients)
45 to 54	4 (7.1%)	3 (6.8%)	-25.0% (1 patient)
55 and over	25 (44.6%)	19 (43.2%)	-24.0% (6 patients)
All ages	56	44	-21.4% (12 patients)

\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

**Figure 3: Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by age and period of diagnosis**  
(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of Hodgkin's lymphoma cases by age at diagnosis



## HEALTH AND SOCIAL CARE TRUST

Excluding the first quarter of each year among residents of Belfast HSCT the number of cases of Hodgkin's lymphoma diagnosed decreased by 46.2% from 13 per year in 2018 - 2019 to 7 in 2020. Among residents of Southern HSCT there was no change in the number of cases per year between 2018 - 2019 and 2020, with an average of 11 cases each year. The change in case distribution by HSCT between 2018 - 2019 and 2020 was not statistically significant.

**Table 4: Number and proportion of Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by Health and Social Care Trust and period of diagnosis**

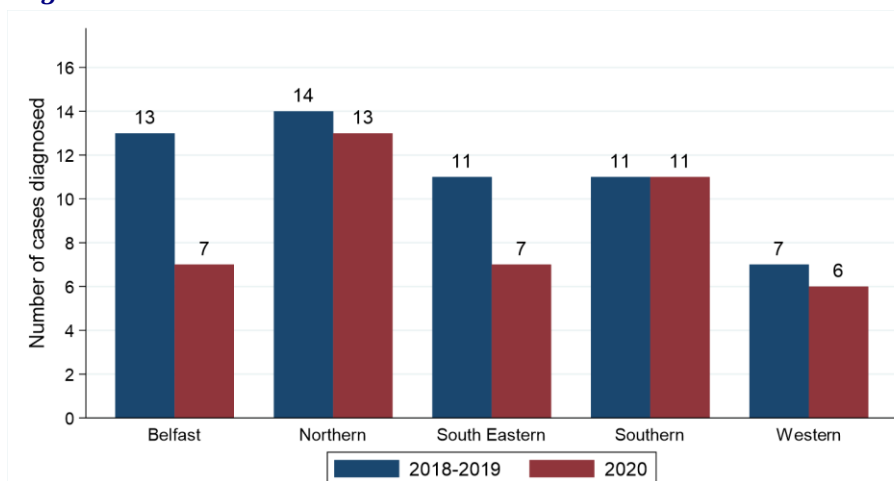
Health and Social Care Trust	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Belfast HSCT	13 (23.2%)	7 (15.9%)	-46.2% (6 patients)
Northern HSCT	14 (25.0%)	13 (29.5%)	-7.1% (1 patient)
South Eastern HSCT	11 (19.6%)	7 (15.9%)	-36.4% (4 patients)
Southern HSCT	11 (19.6%)	11 (25.0%)	0.0% (0 patients)
Western HSCT	7 (12.5%)	6 (13.6%)	-14.3% (1 patient)
Northern Ireland	56	44	-21.4% (12 patients)

\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

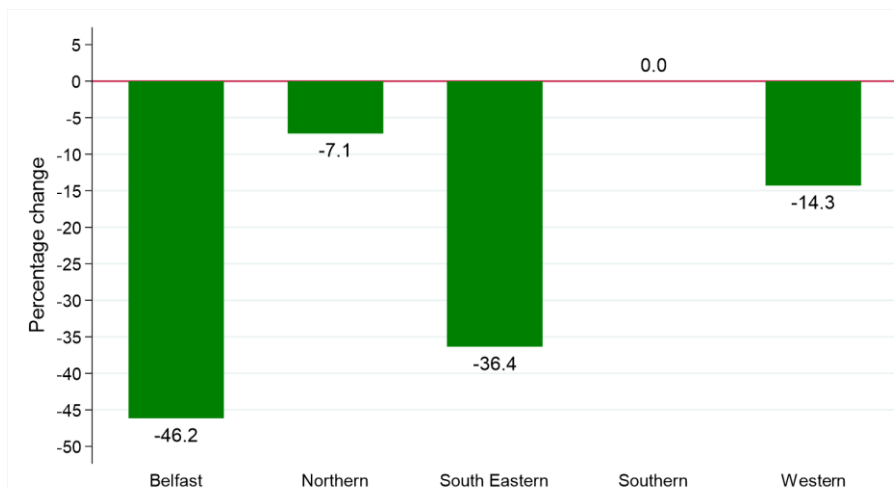
Note: Cases with unknown Health and Social Care Trust are included in totals

**Figure 4: Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by Health and Social Care Trust and period of diagnosis**

(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of Hodgkin's lymphoma cases by Health and Social Care Trust



## DEPRIVATION

Excluding the first quarter of each year among residents of the most deprived areas the number of cases of Hodgkin's lymphoma diagnosed decreased by 50.0% from 14 per year in 2018 - 2019 to 7 in 2020. Between the same two time periods the number of cases among residents of the least deprived areas decreased by 40.0% from 10 per year to 6. The change in case distribution by deprivation quintile between 2018 - 2019 and 2020 was not statistically significant.

**Table 5: Number and proportion of Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by deprivation quintile and period of diagnosis**

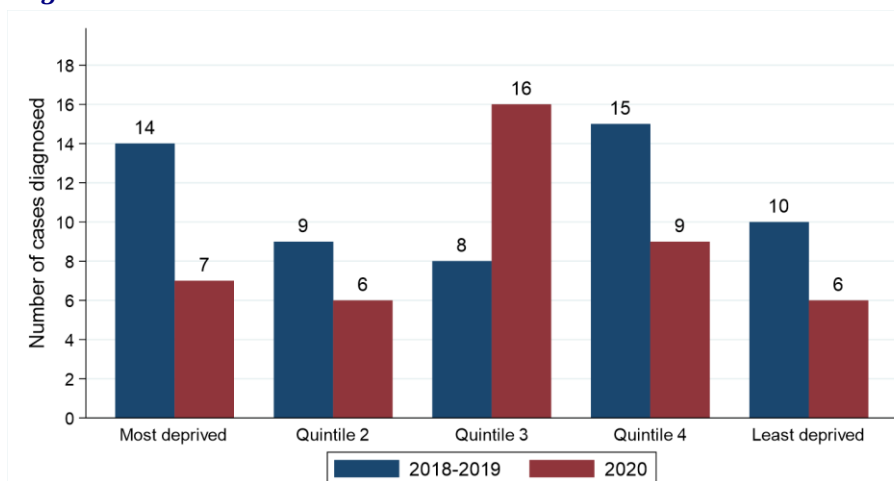
Deprivation quintile	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Most deprived	14 (25.0%)	7 (15.9%)	-50.0% (7 patients)
Quintile 2	9 (16.1%)	6 (13.6%)	-33.3% (3 patients)
Quintile 3	8 (14.3%)	16 (36.4%)	+100.0% (8 patients)
Quintile 4	15 (26.8%)	9 (20.5%)	-40.0% (6 patients)
Least deprived	10 (17.9%)	6 (13.6%)	-40.0% (4 patients)
<b>Northern Ireland</b>	<b>56</b>	<b>44</b>	<b>-21.4% (12 patients)</b>

\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

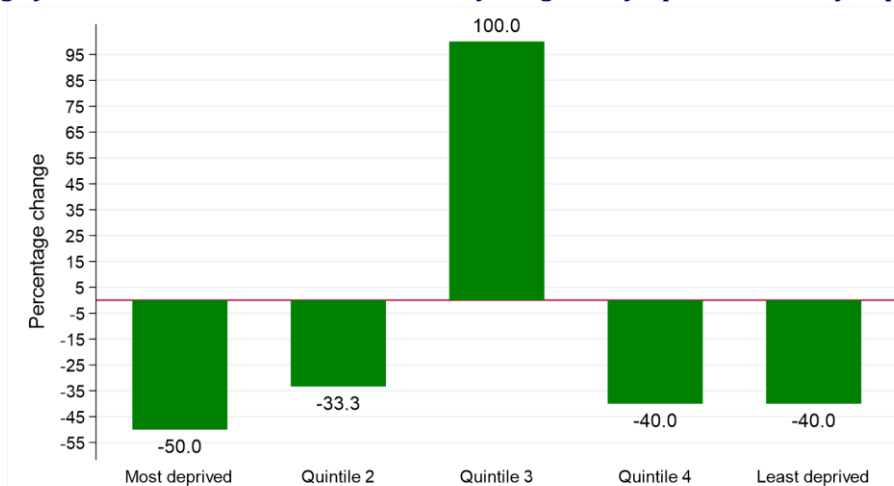
Note: Cases with unknown deprivation quintile are included in totals

**Figure 5: Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by deprivation quintile and period of diagnosis**

(a) Number of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of Hodgkin's lymphoma cases by deprivation quintile



## STAGE

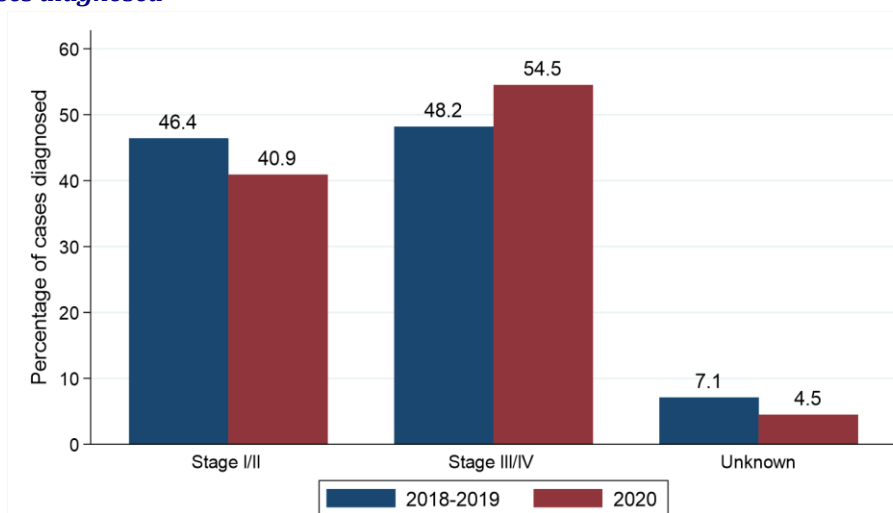
Excluding the first quarter of each year the number of Hodgkin's lymphoma cases diagnosed at Stage I/II decreased by 30.8% from 26 per year in 2018 - 2019 to 18 in 2020. Between the same two time periods the number of cases diagnosed at Stage III/IV decreased by 11.1% from 27 per year to 24. The change in case distribution by stage at diagnosis between 2018 - 2019 and 2020 was not statistically significant.

**Table 6: Number and proportion of Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by stage at diagnosis and period of diagnosis**

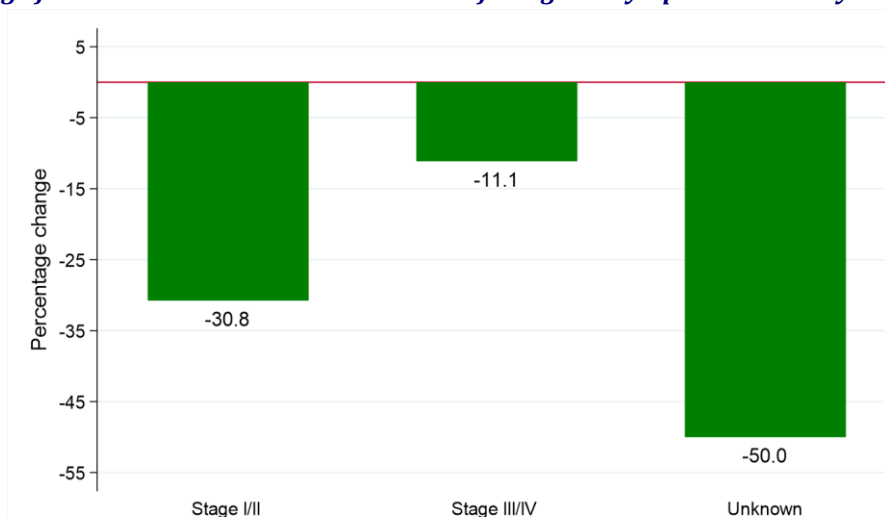
Stage at diagnosis	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Stage I/II	26 (46.4%)	18 (40.9%)	-30.8% (8 patients)
Stage III/IV	27 (48.2%)	24 (54.5%)	-11.1% (3 patients)
Unknown	4 (7.1%)	2 (4.5%)	-50.0% (2 patients)
<b>All stages</b>	<b>56</b>	<b>44</b>	<b>-21.4% (12 patients)</b>

\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

**Figure 6: Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by stage and period of diagnosis**  
(a) Proportion of cases diagnosed



(b) Percentage change from 2018-2019 to 2020 in number of Hodgkin's lymphoma cases by stage at diagnosis



## METHOD OF HOSPITAL ADMISSION

Excluding the first quarter of each year the number of cases of Hodgkin's lymphoma where the patient had an emergency admission recorded as the most recent hospital admission type up to 30 days prior to diagnosis increased by 10.0% from 10 per year in 2018 - 2019 to 11 in 2020. The change in case distribution by hospital admission type between 2018 - 2019 and 2020 was not statistically significant.

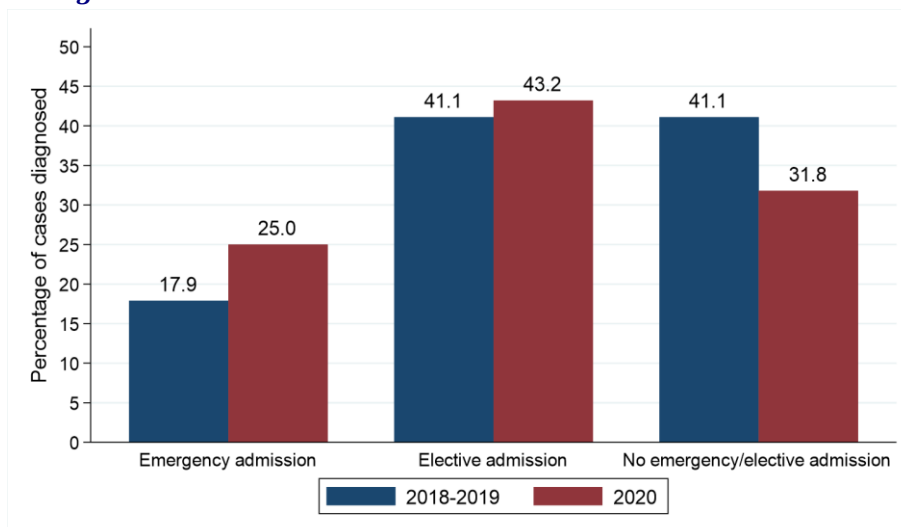
**Table 7: Number and proportion of Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by method of admission to hospital and period of diagnosis**

Method of admission to hospital	Period of diagnosis (Apr-Dec)		Percentage change
	2018-2019*	2020	
Emergency admission	10 (17.9%)	11 (25.0%)	+10.0% (1 patient)
Elective admission	23 (41.1%)	19 (43.2%)	-17.4% (4 patients)
No emergency/elective admission recorded	23 (41.1%)	14 (31.8%)	-39.1% (9 patients)
All persons	56	44	-21.4% (12 patients)

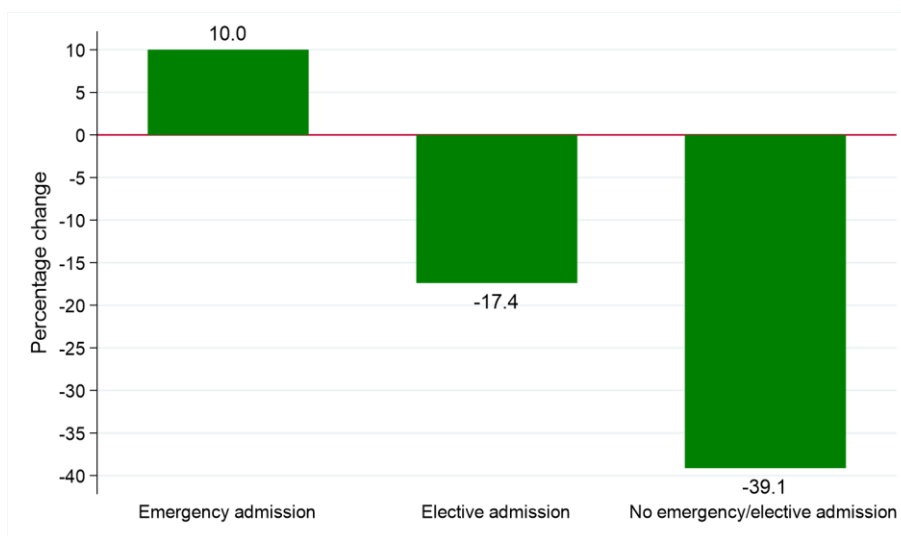
\* Average cases per year rounded to the nearest integer. Column sums may thus differ slightly from the total.

**Figure 7: Hodgkin's lymphoma cases diagnosed in April-December of 2018-2020 by method of admission to hospital and period of diagnosis**

**(a) Proportion of cases diagnosed**



**(b) Percentage change from 2018-2019 to 2020 in number of Hodgkin's lymphoma cases by method of admission to hospital**





## SURVIVAL

Changes in survival are evaluated using two measures. Observed survival examines the time between diagnosis and death from any cause. It thus represents what cancer patients experience, however, due to the inclusion of non-cancer deaths (e.g. heart disease), it may not reflect how changes in cancer care impact survival from cancer. Thus changes in age-standardised net survival are also examined. This measure provides an estimate of patient survival which has been adjusted to take account of deaths unrelated to cancer. It also assumes a standard age distribution thereby removing the impact of changes in the age distribution of cancer patients on changes in survival over time. While this measure is hypothetical, as it assumes patients can only die from cancer related factors, it is a better indicator of the impact of changes in cancer care on patient survival.

### OBSERVED SURVIVAL

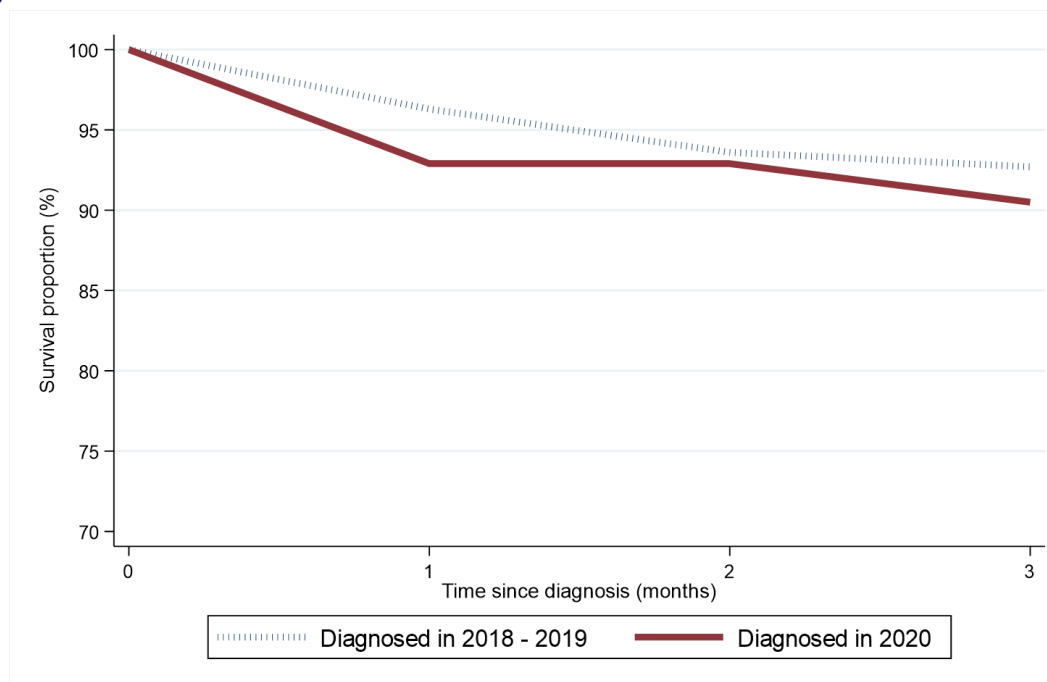
Survival among Hodgkin's lymphoma patients one month after diagnosis decreased from 96.3% among those diagnosed in April-December of 2018 - 2019 to 92.9% among those diagnosed in April-December of 2020. This change was not statistically significant. Between the same two diagnosis periods, three-month survival decreased from 92.7% to 90.5%. This change was not statistically significant.

**Table 8: Observed survival for patients with Hodgkin's lymphoma diagnosed in April-December of 2018-2020 by period of diagnosis**

Survival time	Period of diagnosis (Apr-Dec)	
	2018-2019	2020
<b>1 month</b>	96.3% (90.5% - 98.6%)	92.9% (79.5% - 97.6%)
<b>2 months</b>	93.6% (87.0% - 96.9%)	92.9% (79.5% - 97.6%)
<b>3 months</b>	92.7% (85.9% - 96.3%)	90.5% (76.6% - 96.3%)

*No statistically significant reductions*

**Figure 8: Observed survival for patients with Hodgkin's lymphoma diagnosed in April-December of 2018-2020 by period of diagnosis**



### NET SURVIVAL

Age-standardised net survival (which takes account of deaths from other causes such as Covid-19) among Hodgkin's lymphoma patients one month after diagnosis decreased from 97.5% among those diagnosed in April-

December of 2018 - 2019 to 93.0% among those diagnosed in April-December of 2020. This change was not statistically significant. Between the same two time periods, three-month age-standardised net survival decreased from 94.7% to 90.6%. This change was not statistically significant.

**Table 9: Age-standardised net survival for patients with Hodgkin's lymphoma diagnosed in April-December of 2018-2020 by period of diagnosis**

Survival time	Period of diagnosis (Apr-Dec)	
	2018-2019	2020
<b>1 month</b>	97.5% (95.2% - 99.8%)	93.0% (85.5% - 100.0%)
<b>2 months</b>	95.9% (92.9% - 99.0%)	93.0% (85.5% - 100.0%)
<b>3 months</b>	94.7% (91.1% - 98.5%)	90.6% (81.8% - 100.0%)

*No statistically significant reductions*

**Figure 9: Age-standardised net survival for patients with Hodgkin's lymphoma diagnosed in April-December of 2018-2020 by period of diagnosis**

