

NHS Board Meeting
26 May 2021

Lanarkshire NHS Board
Kirklands
Fallside Road
Bothwell
G71 8BB
Telephone: 01698 855500
www.nhslanarkshire.scot.nhs.uk



SUBJECT:
INFECTION PREVENTION AND CONTROL COVID-19 UPDATE REPORT

1. PURPOSE

The purpose of this paper is to provide Board Members with an update on the IPC response to COVID-19, and associated nosocomial transmission in NHS Lanarkshire and across Scotland.

For approval	<input type="checkbox"/>	For Assurance	<input checked="" type="checkbox"/>	For Information	<input checked="" type="checkbox"/>
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2. ROUTE TO THE BOARD

This paper has been prepared by Christina Coulombe, Head of IPC.

3. SUMMARY OF KEY ISSUES

NHS Lanarkshire, as well as the majority of central belt boards, experienced a considerable surge in suspected and confirmed cases of COVID-19 presenting to acute hospitals during the second and third wave of the pandemic. A significant number of wards across Lanarkshire were affected by outbreaks and clusters of infection which resulted in wards and bays being closed to admissions and transfers. This was increasingly demanding as services had remobilised and strains on capacity remained at their greatest. From March 2021, COVID-19 community prevalence began to reduce, in part due to government measures, and the vaccination programme provided gains in the reduction of hospital admissions due to severe infection. The number of COVID-19 cases referred to IPC are now minimal, ranging from one to two cases per day.

At the last meeting a request was made for further information on under 16's with COVID. There is no community data on this cohort, but Hospital data shows the following. A total of 19 children aged 0 -16 were admitted to hospital with COVID-19 from March 20 – May 21, breakdown as follows:

The children's age range was 3 days – 12 years. No inter hospital transmission was identified (no linked cases). No epidemiological linked cases either to nurseries, schools (that Infection Control are aware of) or any specific locality. There has been no associated mortality. The majority of cases were positive when circulating COVID community prevalence was high.

4. STRATEGIC CONTEXT

This paper links to the following:

Corporate objectives	<input checked="" type="checkbox"/>	AOP	<input checked="" type="checkbox"/>	Government policy	<input checked="" type="checkbox"/>
Government directive	<input checked="" type="checkbox"/>	Statutory requirement	<input checked="" type="checkbox"/>	AHF/local policy	<input type="checkbox"/>
Urgent operational issue	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>		

5. CONTRIBUTION TO QUALITY

This paper aligns to the following elements of safety and quality improvement:

Three Quality Ambitions:

Safe	<input checked="" type="checkbox"/>	Effective	<input checked="" type="checkbox"/>	Person Centred	<input checked="" type="checkbox"/>
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Six Quality Outcomes:

Everyone has the best start in life and is able to live longer healthier lives; (Effective)	<input type="checkbox"/>
People are able to live well at home or in the community; (Person Centred)	<input type="checkbox"/>
Everyone has a positive experience of healthcare; (Person Centred)	<input checked="" type="checkbox"/>
Staff feel supported and engaged; (Effective)	<input type="checkbox"/>
Healthcare is safe for every person, every time; (Safe)	<input checked="" type="checkbox"/>
Best use is made of available resources. (Effective)	<input checked="" type="checkbox"/>

6. MEASURES FOR IMPROVEMENT

As detailed in the report.

7. FINANCIAL IMPLICATIONS

The organisation carries financial pressures as a direct result of Healthcare Associated Infection (HCAI). The severity of these pressures are dependent on a number of variables including length of stay, associated treatment required etc.

8. RISK ASSESSMENT/MANAGEMENT IMPLICATIONS

Not applicable

9. FIT WITH BEST VALUE CRITERIA

This paper aligns to the following best value criteria:

Vision and leadership	<input checked="" type="checkbox"/>	Effective partnerships	<input checked="" type="checkbox"/>	Governance and accountability	<input checked="" type="checkbox"/>
Use of resources	<input checked="" type="checkbox"/>	Performance Management	<input type="checkbox"/>	Equality	<input type="checkbox"/>
Sustainability Management	<input checked="" type="checkbox"/>				

10. EQUALITY IMPACT ASSESSMENT / FAIRER SCOTLAND DUTY

Not Applicable.

11. CONSULTATION AND ENGAGEMENT

Not Applicable.

12. ACTIONS FOR THE BOARD

Approve	<input type="checkbox"/>	Accept the assurance provided	<input type="checkbox"/>	Note the information provided	<input checked="" type="checkbox"/>
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The Board is asked to note this report and highlight any areas where further clarification or assurance is required.

The NHS Board is also asked to confirm whether the report provides sufficient assurance around NHSL performance on COVID-19, and the arrangements in place for managing and monitoring COVID-19.

13. FURTHER INFORMATION

For further information about any aspect of this paper, please contact:

- Eddie Docherty, Executive Director of Nursing, Midwifery and Allied Health Professionals (NMAHPs) (Telephone number: 01698 858089)
- Christina Coulombe, Head of Infection Prevention and Control (Telephone number: 01698 366309)

Situation

The purpose of this paper is to provide the Board with an up to date report on COVID-19 and associated nosocomial transmission in NHS Lanarkshire and across Scotland.

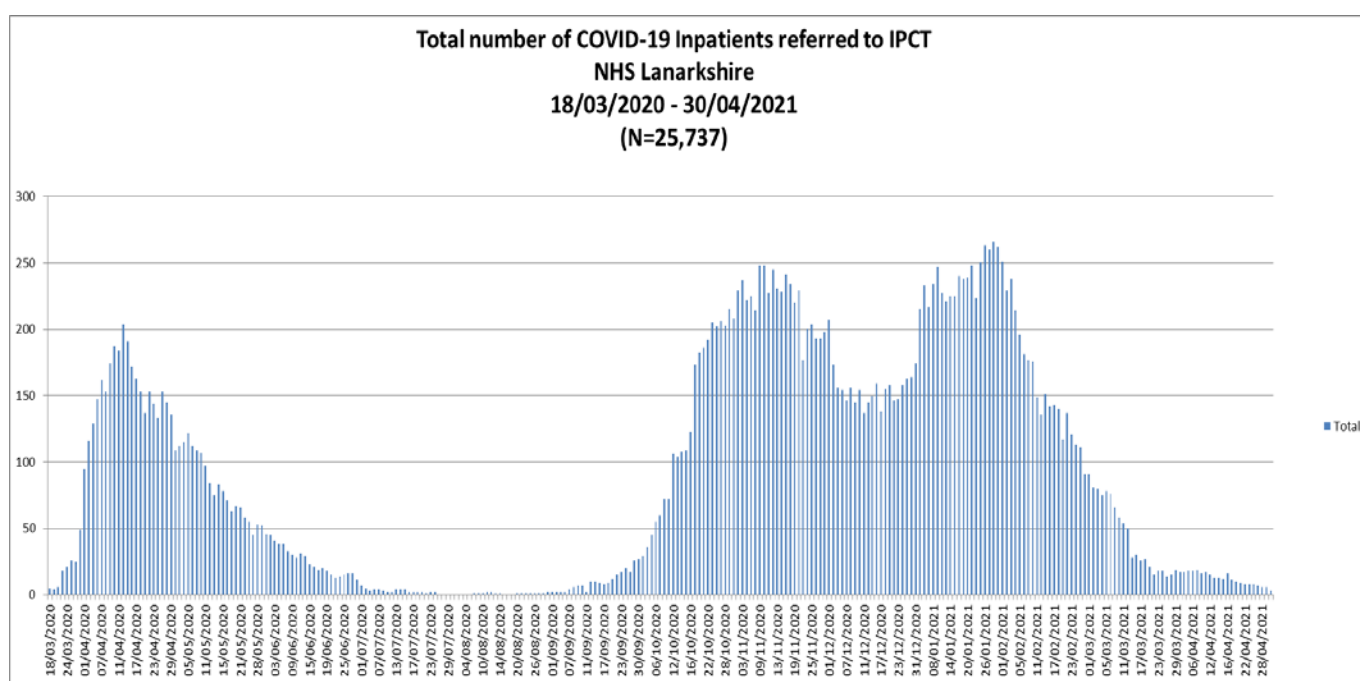
Background

The Board currently receives SARS-CoV2 and COVID-19 infection data from a number sources. IPC also collect, analyse and distribute data daily/weekly/monthly to key partners across the organisation. The purpose of this report is to provide a further update following on from the last board submission in April 2021.

Assessment

The greatest demands on the IPC service was patient contact tracing, outbreak and cluster management and education and staff support. Following the first wave, the number of COVID-19 patient referrals to IPC increased steadily from October 2020 through to February 2021. In total, IPC have managed 25,737 (cumulative) patient referrals for COVID-19 from mid-March 2020 to end of April 2021,

Figure 1: Total number of cumulative COVID-19 in-patient referrals and case-load 18 March 2020 to 30 April 2021 (n=25,737)

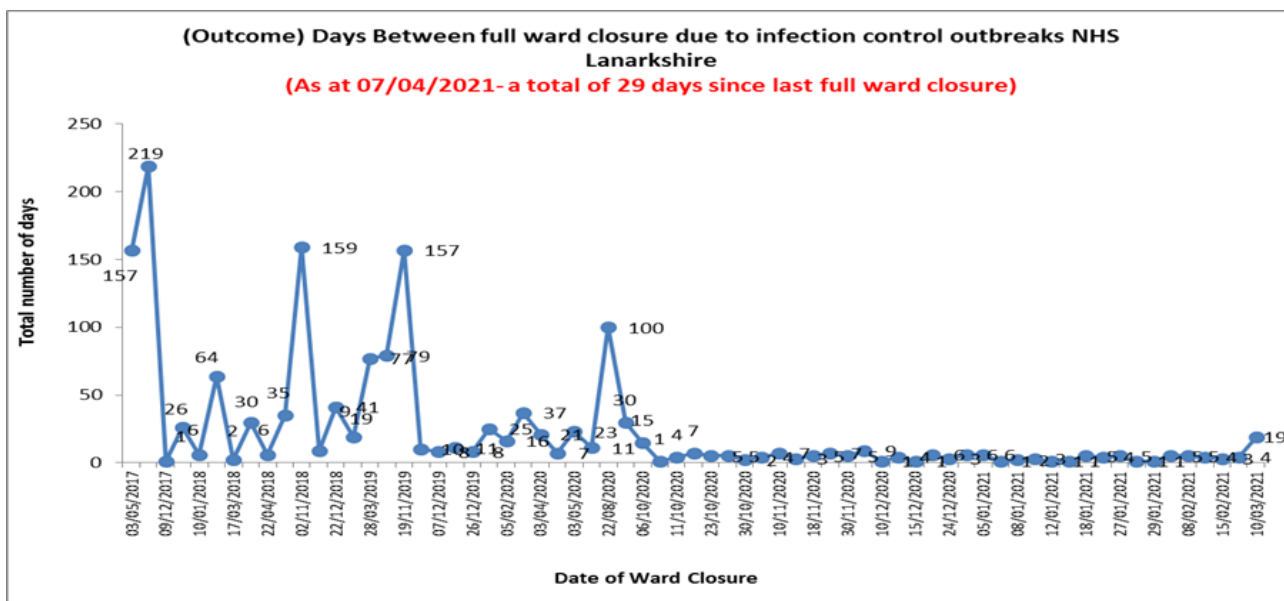


The data in *Figure 1* clearly identifies the pressures on the team throughout the first, second and third wave of the pandemic. Throughout March/April 2021 referrals have decreased significantly allowing IPC to recover and remobilise key priorities within the IPC Work Programme.

Outbreaks and Clusters of Infection

As demonstrated in *Figure 2* below, NHS Lanarkshire experienced ongoing outbreaks during the first wave during April to June 2020 and then again from October through to January 2021. There was one outbreak in April 2021 in UHM. A small number of patients were involved, no deaths were reported and no staff cases were identified.

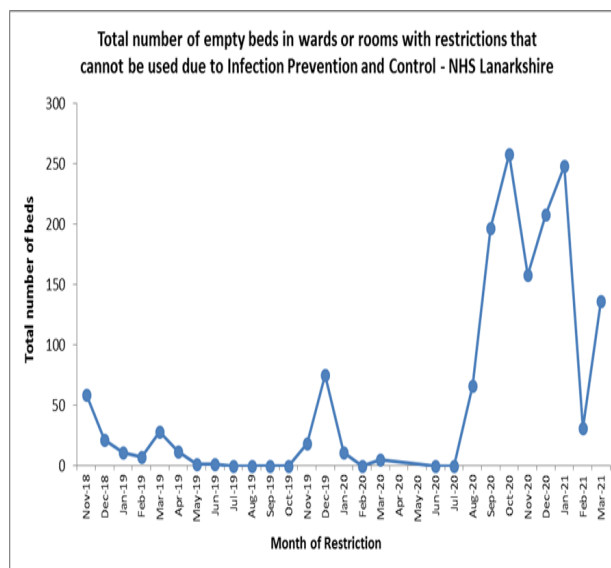
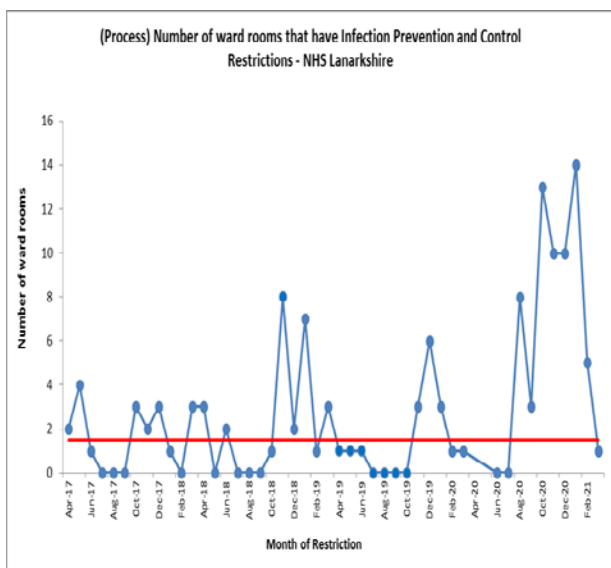
Figure 2: Outcome data on the Days between Full Ward Closure due to outbreaks of COVID-19



As demonstrated in Figures 3 & 4, the impact of ward and bay closures was significant and far reaching. As the number of restrictions increased so did the number of bed days lost which placed further pressure on capacity across the board. Incident Management Team meetings were held for every ward closure with representation from the multi-disciplinary teams. These meetings placed greatest importance on managing the risks of transmission i.e. patient and staff safety with the risk of restricted capacity. Due to the reduction in the number of outbreaks during March and April 2021, bed days lost has decreased significantly.

Figure 3: Number of Bay closures up to February 2021

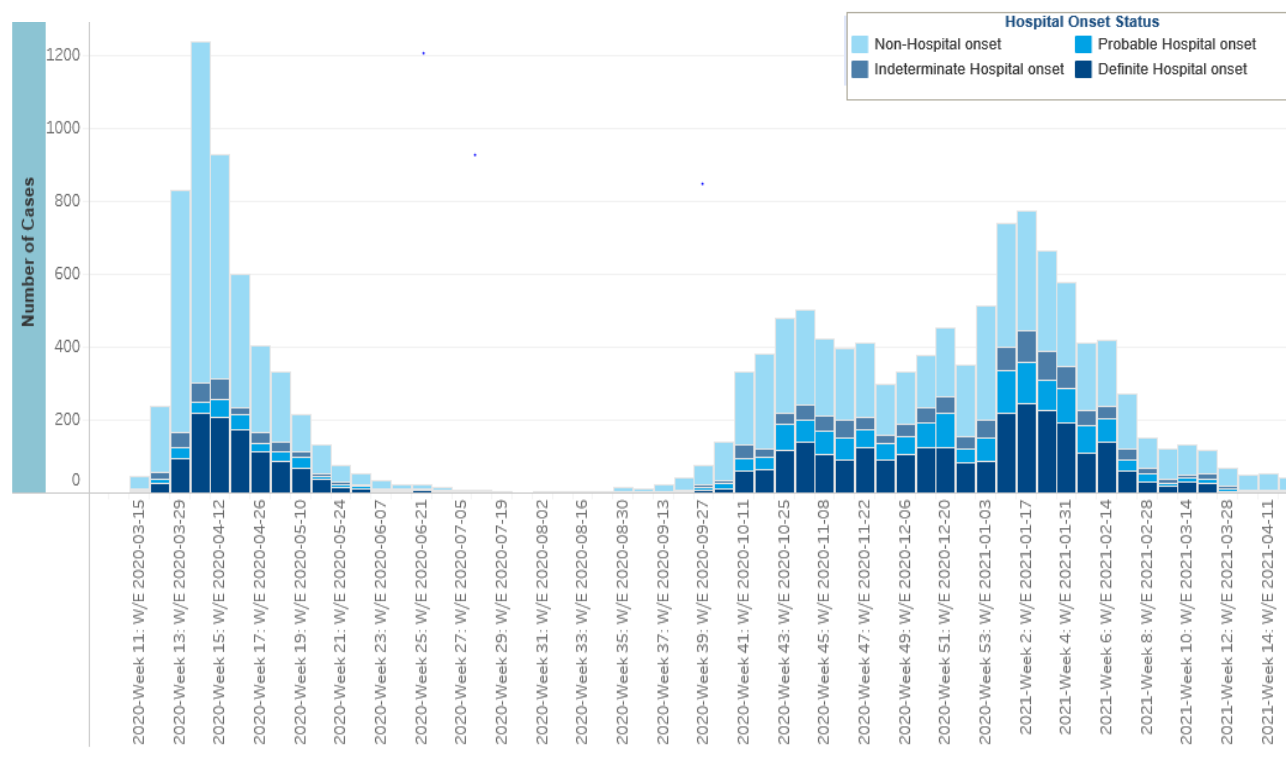
Figure 4: Number of empty beds due to ward/bay closures up to Mar 2021



Hospital onset Infections

The epidemiological review and validation exercise for all positive COVID-19 cases continues to determine the number of hospital onset cases in relation to the total number reported overall. *Figure 5* highlights the epidemic curve for all COVID-19 inpatient cases in NHS Scotland from March 2020 to middle of April 2021. The greatest number of hospital onset infections occurred during the first wave in the month of April and began to decrease thereafter and then increased again in the second wave in October through into February 2021.

Figure 5: Epidemic curve of COVID-19 cases with first positive specimen taken during an inpatient stay, by onset status: week-ending 1 March 2020 to week-ending 11 April 2021 (n=14,761)



Of note, NHS Lanarkshire continues to demonstrate lower levels of probable and definite hospital onset infections than a number of other boards in Scotland as detailed in *Table 1* below; 0.7% probable hospital onset cases and 1.2% definite hospital onset cases up to 18 April 2021.

Table 1: Number of COVID-19 cases, by onset status and NHS board: specimen dates up to 18 April 2020

NHS board	Total COVID-19 cases (n)	Non-hospital onset (n)	Indeterminate hospital onset cases (n)	Probable hospital onset cases (n)	Definite hospital onset cases (n)	Non-hospital onset (%)	Indeterminate hospital onset cases (%)	Probable hospital onset cases (%)	Definite hospital onset cases (%)
Ayrshire & Arran	16,756	770	121	227	388	4.6%	0.7%	1.4%	2.3%
Borders	2,864	134	12	17	50	4.7%	0.4%	0.6%	1.7%
Dumfries & Galloway	4,136	198	16	6	7	4.8%	0.4%	0.1%	0.2%
Fife	11,173	462	31	33	253	4.1%	0.3%	0.3%	2.3%
Forth Valley	12,524	508	77	77	173	4.1%	0.6%	0.6%	1.4%
Golden Jubilee	23	12	5	3	3	-	-	-	-
Grampian	14,811	384	48	56	179	2.6%	0.3%	0.4%	1.2%
Greater Glasgow & Clyde	69,936	3,042	472	565	1,327	4.3%	0.7%	0.8%	1.9%
Highland	4,967	136	12	8	28	2.7%	0.2%	0.2%	0.6%
Lanarkshire	40,425	1,209	201	269	490	3.0%	0.5%	0.7%	1.2%
Lothian	31,201	1,161	169	286	567	3.7%	0.5%	0.9%	1.8%
Orkney	68	4	0	0	0	5.9%	0.0%	0.0%	0.0%
Shetland	234	13	0	0	0	5.6%	0.0%	0.0%	0.0%
Tayside	14,611	607	110	128	263	4.2%	0.8%	0.9%	1.8%
Western Isles	292	12	1	4	3	4.1%	0.3%	1.4%	1.0%
Scotland	224,021	8,652	1,275	1,679	3,731	3.9%	0.6%	0.7%	1.7%

COVID 19 cases by age November 2020-April 2021

The IPCT have produced Pareto charts of Hospital onset COVID-19 by Age for Lanarkshire and each hospital site using national standardized definitions. ARHAI Scotland have not yet produced this information by age therefore the reporting period has been taken from November 2020 for UHW, UHM and December 2020 for UHH. IPCT started recording nosocomial categorization for each individual COVID-19 case from these dates.

Figure 6 COVID-19 cases by age NHS Lanarkshire November 2020-April 2021

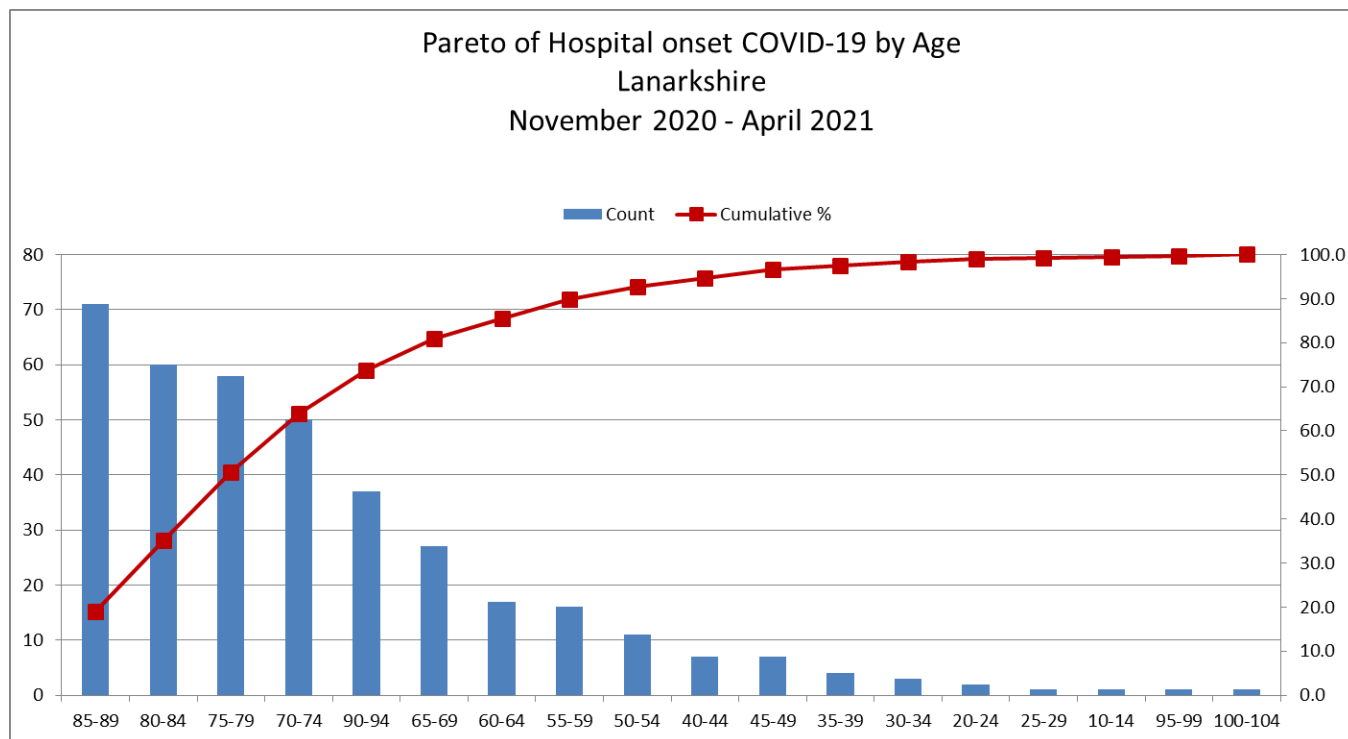


Figure 7 COVID-19 cases by age University Hospital Hairmyres November 2020-April 2021

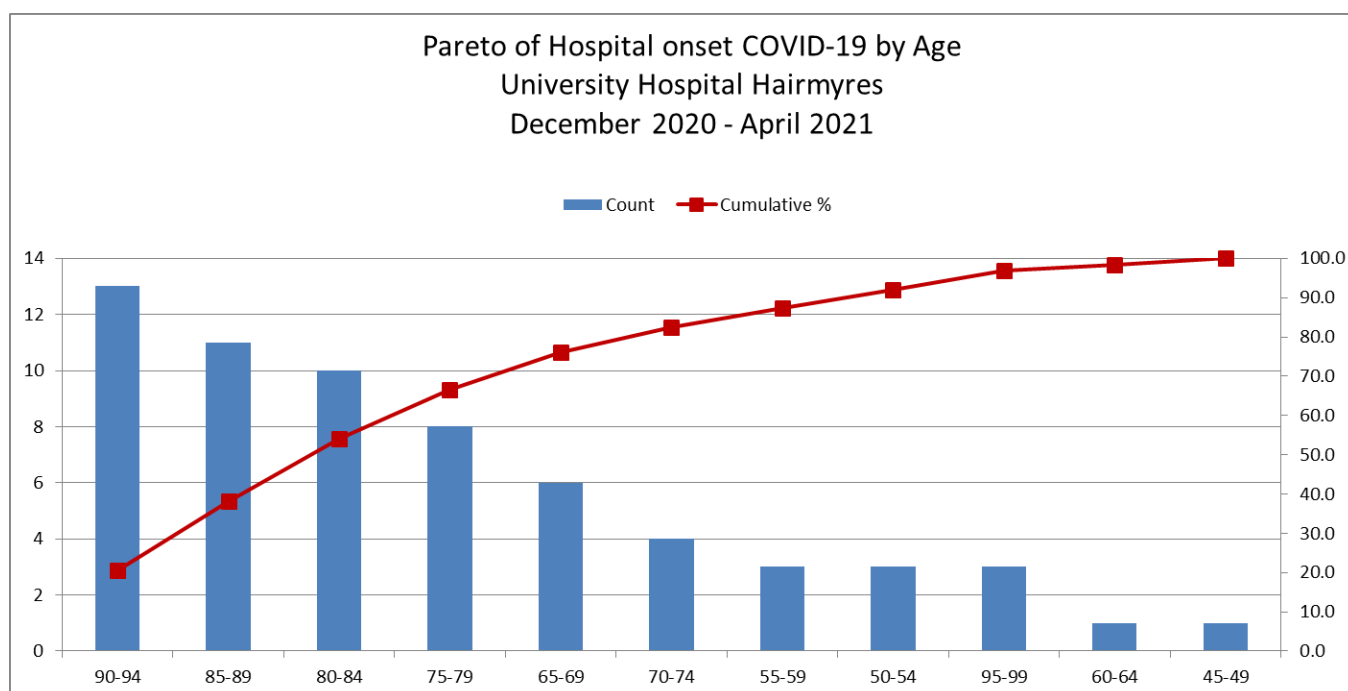


Figure 8 COVID-19 cases by age University Hospital Monklands November 2020-April 2021

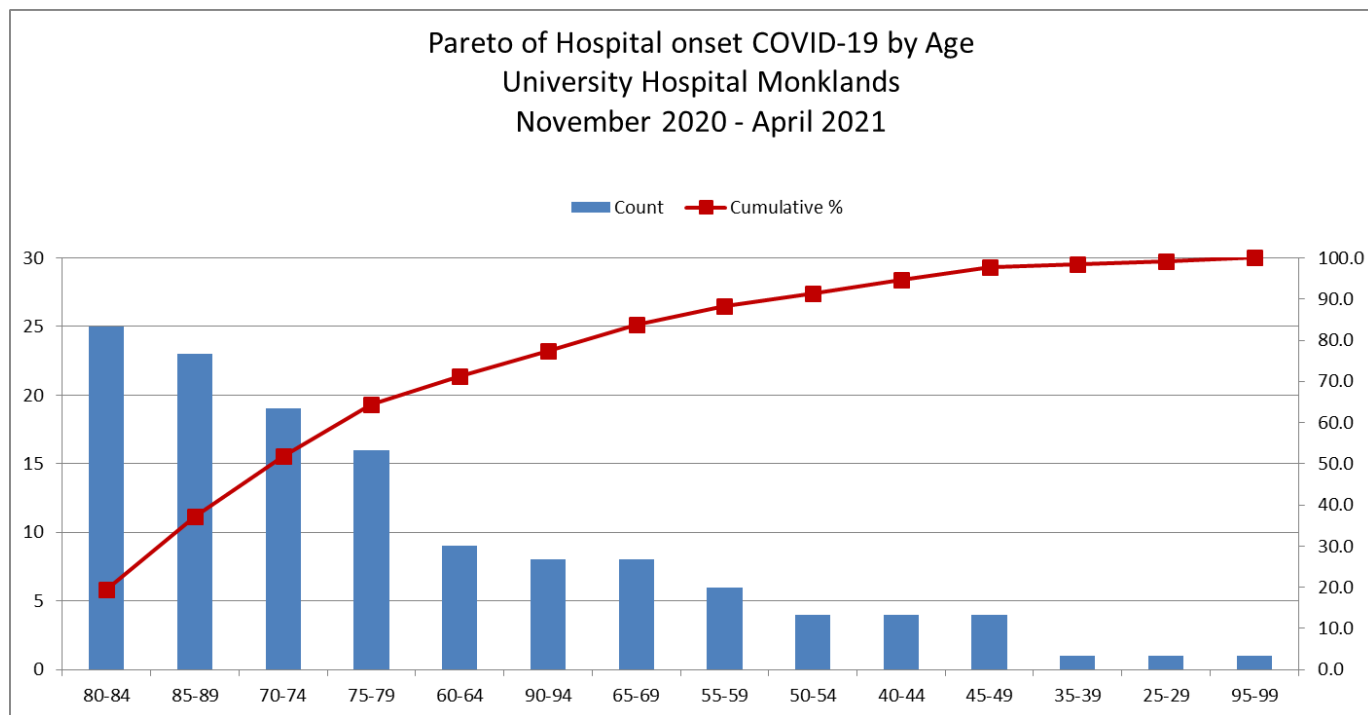
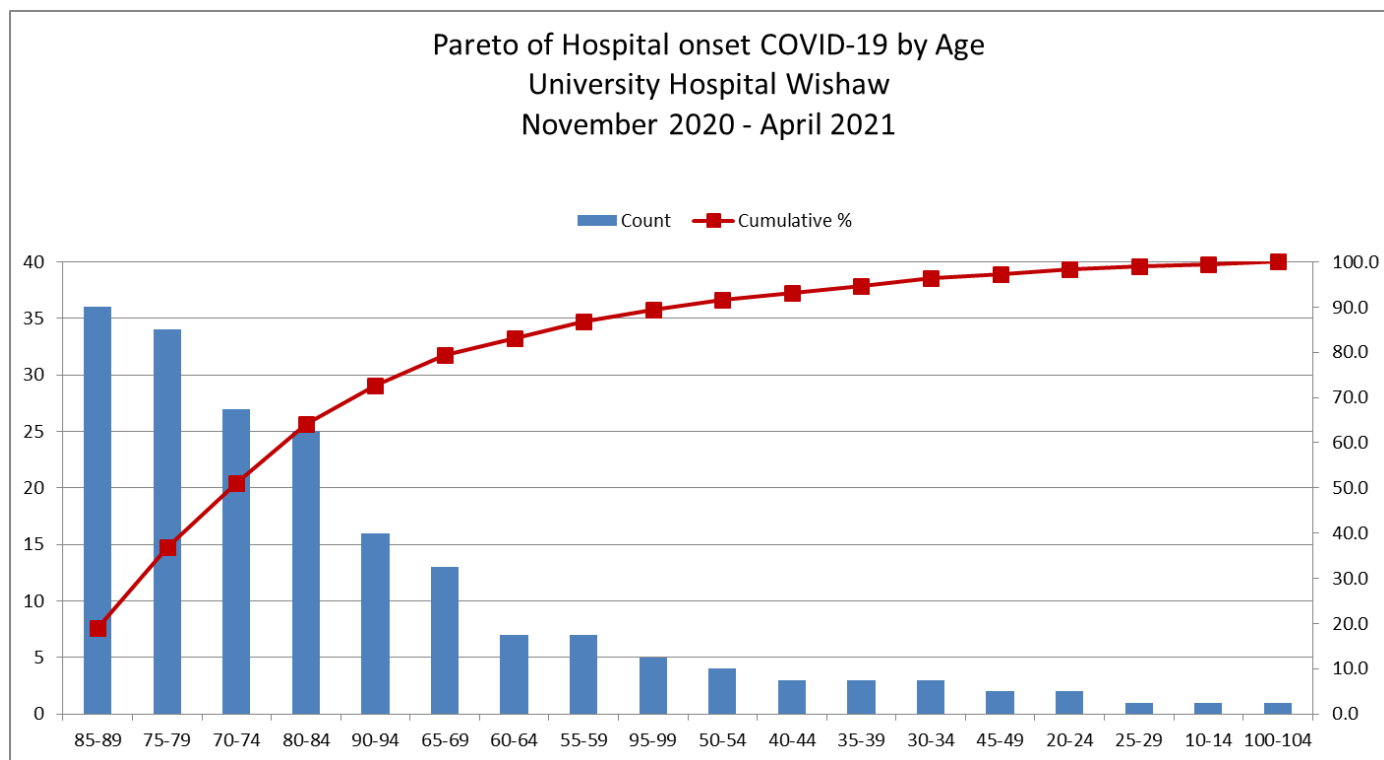


Figure 9 COVID-19 cases by age University Hospital Wishaw November 2020-April 2021



Recommendations

1. IPC has commissioned a De-Brief and lessons learned exercise for both acute and HSCPs in the next few months. This learning, together with national learning, will support preparedness for winter 2021-2022.
2. IPC will continue to work closely with clinical and national teams to support and advise, while providing education and advice. Learning will be reported through Hygiene Groups, ICC and HQAIC.
3. A Quality Improvement Project has been established in Critical Care across the board focusing on hand hygiene, use of Personal Protective Equipment, aseptic procedures etc. to achieve a reduction in SAB and gram negative bacteraemia as a result of key learning from COVID-19 management in critical care. This will be reported and monitored through ICC and progress reported to HQAIC.
4. IPC will continue to contribute to the national data sets and guidance groups to ensure any new learning is shared locally.
5. Monitoring of compliance with key prevention measures will continue via the COVID-19 IPC Assurance Sub Group, Site Hygiene Groups, the ICC and HQAIC.

IPC Outbreak and Clusters Dashboard available for further analysis of the data.