Data Presentation
7 October 2022

• Infections rising in England (ONS survey to 24 September)
• Hospitalizations and Patients in Hospital increasing
• Omicron variant ‘soup’ – no clear variant but many with significant growth potential
• In-hospital transmission
• New Long Covid data
INFECTIONS
Percent Testing Positive by Nation: 3 Sep 2021 to 24/26 Sep 2022
(Source: ONS Coronavirus (COVID-19) Infection Survey results)

Thanks to Bob Hawkins for the chart

<table>
<thead>
<tr>
<th>Nation</th>
<th>Date</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>England (Sep 24)</td>
<td></td>
<td>1 in 50</td>
</tr>
<tr>
<td>Wales (Sep 26)</td>
<td></td>
<td>1 in 50</td>
</tr>
<tr>
<td>Northern Ireland (Sep 26)</td>
<td></td>
<td>1 in 40</td>
</tr>
<tr>
<td>Scotland (Sep 24)</td>
<td></td>
<td>1 in 45</td>
</tr>
</tbody>
</table>
Percent Testing Positive by Region: Recent Trend
(Source: ONS Coronavirus (COVID-19) Infection Survey results)

Thanks to Bob Hawkins for the chart
Percent Testing Positive by Age for England: Recent Trend
(Source: ONS Coronavirus (COVID-19) Infection Survey results)

Thanks to Bob Hawkins for the chart
RELEASED ON FRIDAY

- SLIDES FOR COVID DASHBOARD
- AND
- ONS SURVEY
Figure 3: The percentage of people testing positive for coronavirus (COVID-19) continued to increase for those aged 2 years to School Year 6, and for those aged 35 years and over in the week ending 24 September 2022.

Modelled daily percentage of the population testing positive for COVID-19 on nose and throat swabs by age group, England, 14 August to 24 September 2022.

HOSPITAL DATA
Weekly overall hospital and ICU/HDU admission rates per 100,000 of new COVID-19 cases reported through SARI Watch, England since week 12 2020
Daily Hospital Admissions by Age for England
May 1 2021 – Oct 3 2022
(Source: Covid Daily Update)
7 day rolling average of hospital admissions per million people to 3 Oct 2022, by Region

Data from https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-hospital-activity/
Number of daily hospital admissions with Covid in England for adults to 26 Sept 2022

Data from https://www.england.nhs.uk/statistics/statistical-work-areas/covid-19-hospital-activity/
Patients in hospital

Daily count of confirmed COVID-19 patients in hospital at 8am. Data are not updated every day.
Number of people in hospital with Covid in England by primary reason to 4 October 2022

Covid NOT primary diagnosis
These are patients whose Covid diagnosis not primary reason for their admission – but it could still be a contributing cause. And needs infection control.

Data from https://www.england.nhs.uk/statistics/statistical-areas/covid-19-hospital-activity/
COVID-19 as primary reason for admission among SARS-CoV-2 positive patient by week of admission

Notes
1) Case-level sentinel data from SARI-Watch, form week 35 2021 (commencing 30 August 2021) to week 39 2022 (ending 2 October 2022) inclusive
2) Total 28,452 records in period of analysis, of which 34% (n=9,727) had COVID-19 as primary reason for admission ('Yes').
3) SARS-CoV-2 patients with evidence of COVID-19 treatment but have 'No' or 'Unknown' for COVID-19 as primary reason for admission (n=960) are reassigned to COVID-19 as primary reason of admission ('Yes').
4) Reassignment increases COVID-19 as primary reason for admission ('Yes') from 9,727 to 10,687
5) 24% (6,804/28,452) of total records in this period have missing data on the 'Admission due to COVID-19' indicator – these are excluded from analysis
6) Caveats: London trusts under-represented and most recent weeks are subject to retrospective updates
HOSPITAL KPIs
Overall - Percentage HAI by day for English Acute Trusts combined

Tom Lawton @LawtonTri https://twitter.com/LawtonTri/status/1578015872920465412/photo/1
HAI = Hospital Acquired Infection
VACCINATIONS
England Aut 2022 Booster

Graph showing vaccination rates:
- **65 to 74 Years**
- **Over 75's**

- 06-Sep: 0%
- 13-Sep: 20%
- 20-Sep: 35%
- 27-Sep: 37%
- 04-Oct: 35% (65 to 74 Years), 49% (Over 75's)

Graph labeled with dates and percentage increments.
**Figure 60: Cumulative weekly COVID-19 vaccine uptake by ethnicity in those living and resident in England, aged 18 and over**

<table>
<thead>
<tr>
<th>Ethnicity / Background</th>
<th>% Vaccine uptake at least 1 Dose</th>
<th>% Vaccine uptake at least 2 Doses</th>
<th>% Vaccine uptake at least 3 Doses or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>White - British</td>
<td>77.8%</td>
<td>89.1%</td>
<td>91.1%</td>
</tr>
<tr>
<td>White - Irish</td>
<td>70.6%</td>
<td>86.6%</td>
<td>82.9%</td>
</tr>
<tr>
<td>White - Other</td>
<td>47.0%</td>
<td>63.5%</td>
<td>66.1%</td>
</tr>
<tr>
<td>Mixed - White and Black Caribbean</td>
<td>37.5%</td>
<td>57.7%</td>
<td>62.1%</td>
</tr>
<tr>
<td>Mixed - White and Black African</td>
<td>40.8%</td>
<td>66.1%</td>
<td>70.8%</td>
</tr>
<tr>
<td>Mixed - White and Asian</td>
<td>57.2%</td>
<td>75.0%</td>
<td>78.6%</td>
</tr>
<tr>
<td>Mixed - Any other mixed background</td>
<td>49.8%</td>
<td>68.5%</td>
<td>72.4%</td>
</tr>
<tr>
<td>Asian or Asian British - Indian</td>
<td>49.8%</td>
<td>66.1%</td>
<td>70.8%</td>
</tr>
<tr>
<td>Asian or Asian British - Pakistani</td>
<td>35.9%</td>
<td>73.4%</td>
<td>78.4%</td>
</tr>
<tr>
<td>Asian or Asian British - Bangladeshi</td>
<td>47.6%</td>
<td>61.8%</td>
<td>79.3%</td>
</tr>
<tr>
<td>Asian or Asian British - Any other Asian background</td>
<td>35.6%</td>
<td>55.0%</td>
<td>67.6%</td>
</tr>
<tr>
<td>Black or Black British - Caribbean</td>
<td>35.6%</td>
<td>55.0%</td>
<td>58.7%</td>
</tr>
<tr>
<td>Black or Black British - African</td>
<td>35.6%</td>
<td>64.3%</td>
<td>69.4%</td>
</tr>
<tr>
<td>Black or Black British - Any other Black background</td>
<td>32.3%</td>
<td>57.5%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Chinese</td>
<td>47.0%</td>
<td>64.3%</td>
<td>66.6%</td>
</tr>
<tr>
<td>Other ethnic groups - Any other ethnic group</td>
<td>43.5%</td>
<td>63.0%</td>
<td>67.0%</td>
</tr>
<tr>
<td>Not Stated/Unknown</td>
<td>45.1%</td>
<td>58.1%</td>
<td>62.7%</td>
</tr>
</tbody>
</table>

% Vaccine Uptake
LONG COVID
ONS have changed methodology – now 100% online responses.

Difficult to compare to previous ONS reports on Long Covid.

Duration reported from first infection (so may be due to reinfection)
Impact on People Living with Self-Reported Long Covid in the UK
Aug 5 - Sep 3, 2022
(Source: ONS Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK Reports)

Extent to which long COVID reduces ability to undertake day-to-day activities

Thanks to Bob Hawkins for the chart
https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/datasets/alldatarelatingtoprevalenceongoingsymptomsfollowingcoronaviruscovid19infectionintheuk
Percentage of population living with “Long Covid” (symptoms lasting at least 4 weeks) by age for infections up to 1 Aug 2022 (100% online responses).

Data from https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/datasets/alldatarelatingtoprevalenceofongoingsymptomsfollowingcoronaviruscovid19infecioninuk
Length of Time People Spent Living with Self-Reported Long Covid in the UK: Aug 5 - Sep 3, 2022
(Source: ONS Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK Reports)

Thanks to Bob Hawkins for the chart
https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/datasets/alldatarelatingtoprevalenceofongoingsymptomsfollowingcoronaviruscovid19infectionintheuk
Percent of Deprivation Quintile Living with Self-Reported Long Covid in the UK: Aug 5 - Sep 3, 2022
(Source: ONS Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK Reports)

Thanks to Bob Hawkins for the chart

https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/datasets/alldatarelatingtoprevalenceofongoingsymptomsfollowingcoronaviruscovid19infectionintheuk
VARIANTS
Figure 55. Prevalence of SARS-CoV-2 variants amongst available sequences episodes for England from 1 February, as of 04 October 2022

Table 4. Total distribution of SARS-CoV-2 variants detected in England in the last 12 weeks, up to week 39 (week ending 02 October 2022)

<table>
<thead>
<tr>
<th>Variant</th>
<th>Other names by which this variant is known</th>
<th>Total confirmed (sequencing) cases in the last 12 weeks</th>
<th>Last reported specimen date</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC-21APR-02</td>
<td>Delta</td>
<td>3</td>
<td>15-08-2022</td>
</tr>
<tr>
<td>VOC-21NOV-01</td>
<td>Omicron BA.1</td>
<td>24</td>
<td>13-09-2022</td>
</tr>
<tr>
<td>V-22JAN-01</td>
<td>Omicron BA.2</td>
<td>1,189</td>
<td>21-09-2022</td>
</tr>
<tr>
<td>V-22MAR-02</td>
<td>Omicron XE</td>
<td>2</td>
<td>30-07-2022</td>
</tr>
<tr>
<td>V-22APR-03</td>
<td>Omicron BA.4</td>
<td>5,186</td>
<td>21-09-2022</td>
</tr>
<tr>
<td>V-22APR-04</td>
<td>Omicron BA.5</td>
<td>46,613</td>
<td>23-09-2022</td>
</tr>
<tr>
<td>V-22JUL-01</td>
<td>Omicron BA.2.75</td>
<td>324</td>
<td>23-09-2022</td>
</tr>
<tr>
<td>V-22SEP-01</td>
<td>Omicron BA.4.6</td>
<td>2,667</td>
<td>23-09-2022</td>
</tr>
</tbody>
</table>
GROWTH RATE ADVANTAGE OF SARS-CoV2 VARIANTS

based on multinomial spline fit variant ~ ns(date, df=2)+ns(date, df=2):continent+country,
GISAID & COG-UK data, using data from countries with >=5 BQ.1, BQ.1.1, BJ.1, XBB, BA.2.3.20 or BA.2.75.2
(Australia, Austria, Bangladesh, Belgium, Brunei, Canada, Denmark, France, Germany, India
Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Nigeria, Portugal
Singapore, Slovakia, South Korea, Spain, Sweden, Switzerland, Thailand, United Kingdom, USA)

Growth rate advantage relative to BA.5.2 (% per day)
Proportion of sequenced cases that are one of: BQ.1.1, BQ.1, BA.2.3.20, BA.2.75.2 (all subvariants of Omicron).

Last week incomplete

Allocations from Alex Selby – thank you!
@alexselby1770, http://sonorouschocolate.com/covid19/index.php/UK_variant_comparison
Data Presentation
7 October 2022

• Infections rising in England (ONS survey to 24 September)
• Hospitalizations and Patients in Hospital increasing
• Omicron variant ‘soup’ – no clear variant but many with significant growth potential
• In-hospital transmission
• New Long Covid data