

Situation report.

18/11/20

Greg Fell

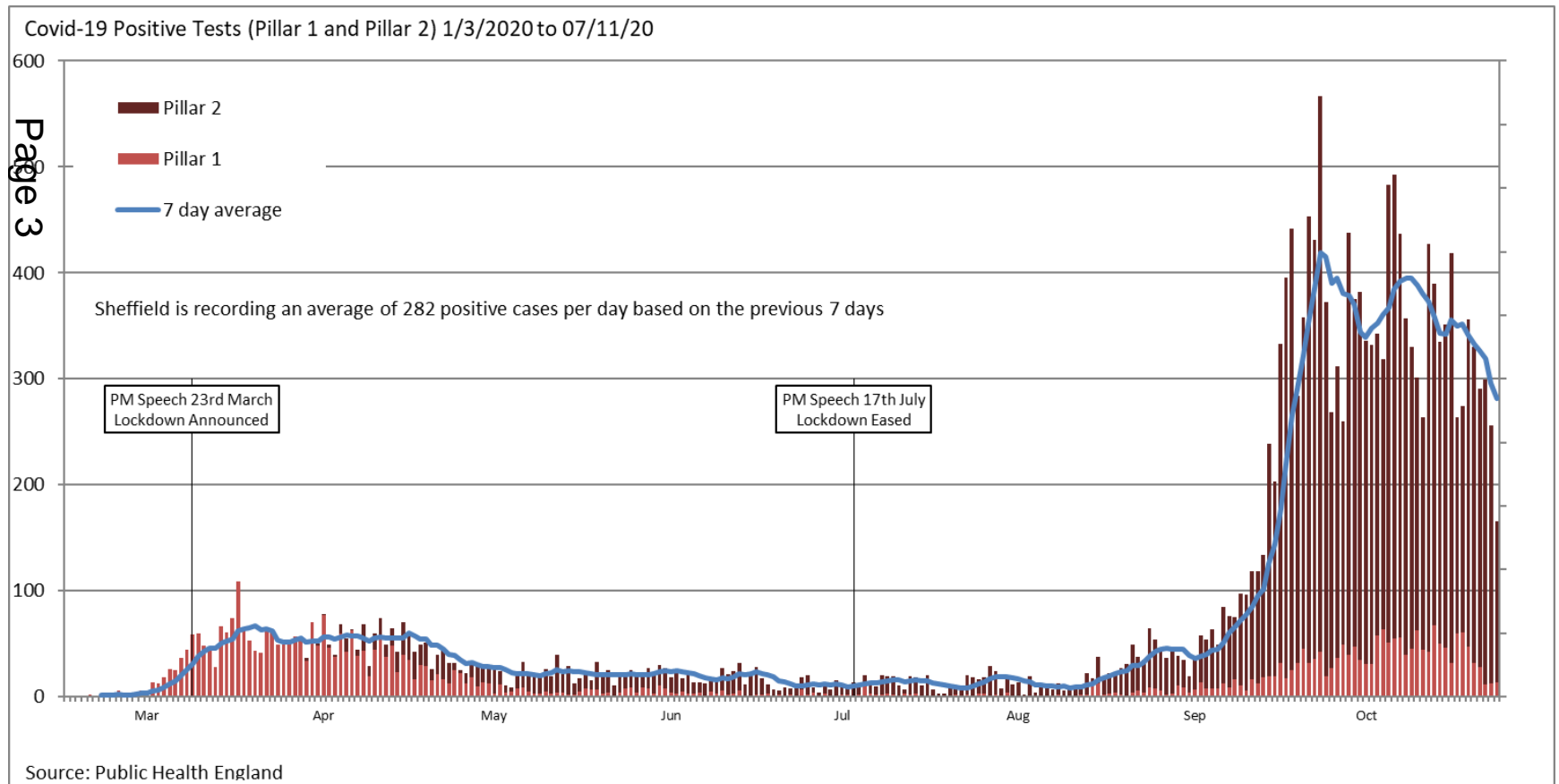
1 epidemiology

Epidemiology in one slide

HIGH & fluctuating / falling rate. 300

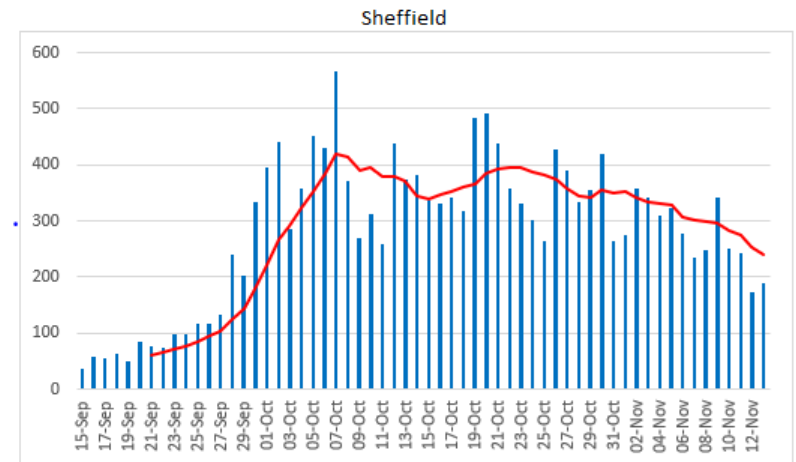
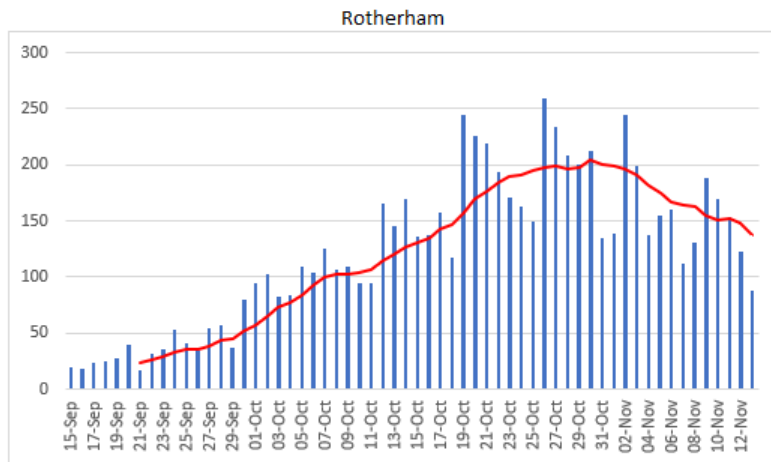
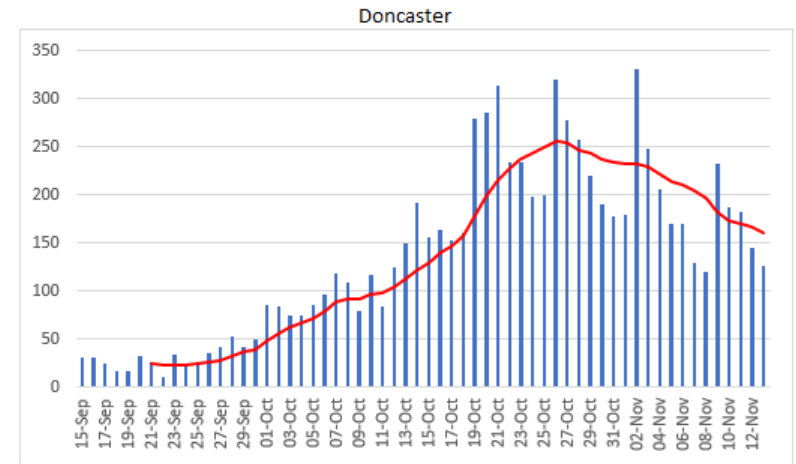
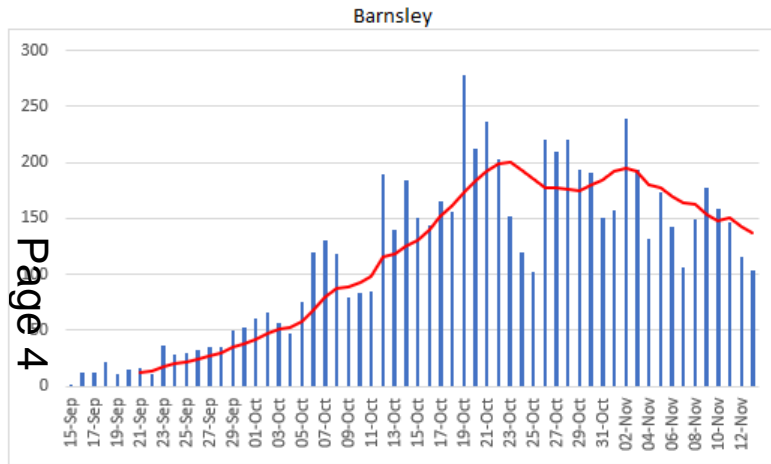
cases in 7 days / 100,000 people

15% positivity.



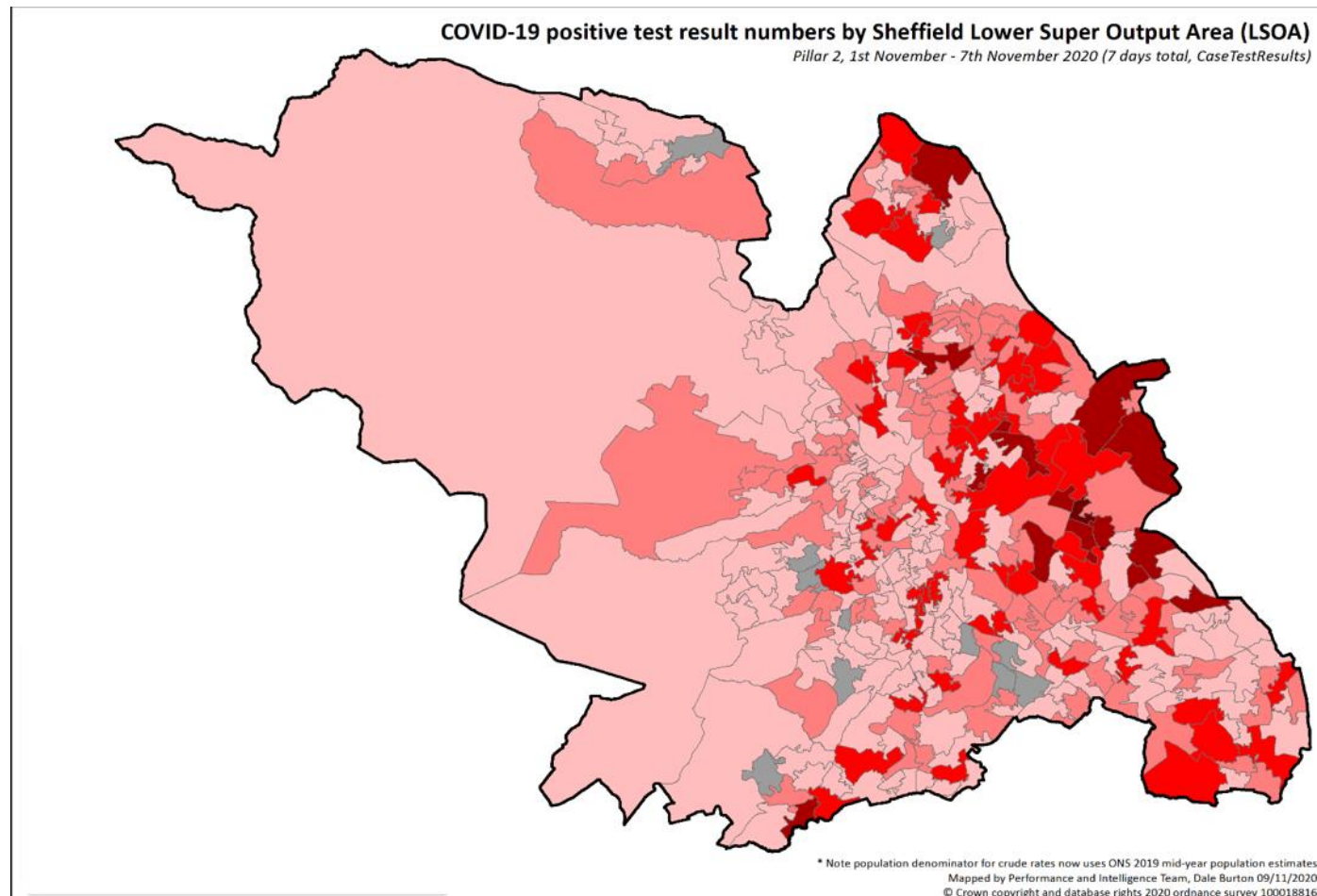
Trends – daily cases

Settling at a new cruising altitude



Still principally household transmission
Across the city.
E of Sheffield becoming a concern (same
pattern as we saw before)

Page 5



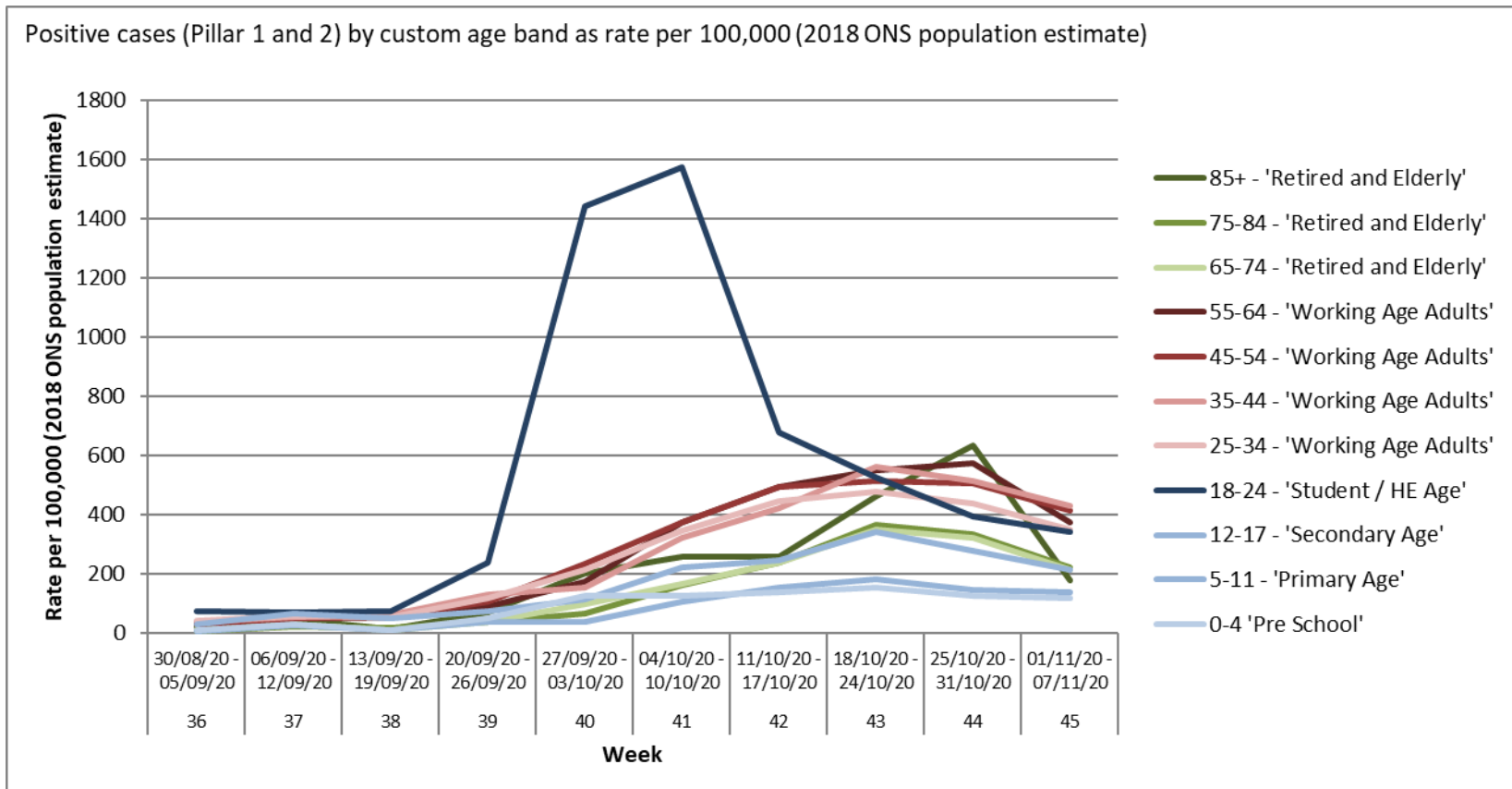
Age specific rates increasing across the board.

Average age of a case is increasing steadily

Taking out 18-24 we are like S Yorks

The rate is decreasing in all age bands

Page 6

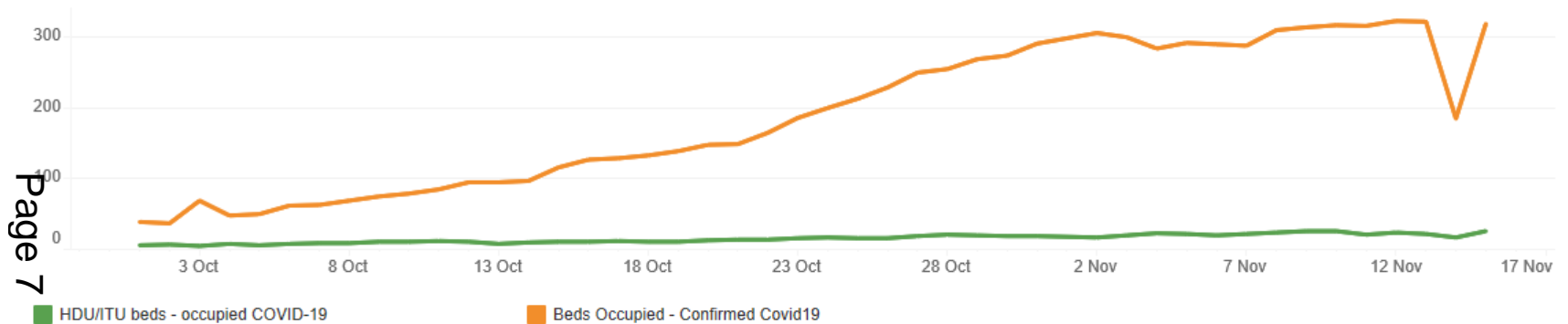


Hospital activity flattening?

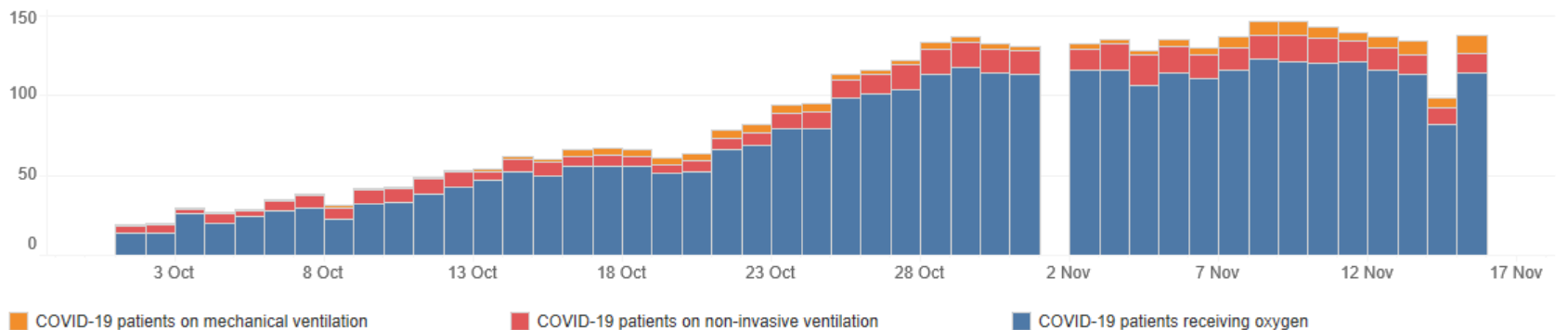
The interpretation of this is nuanced.

Region Name: North East And Yorkshire | STP Name: South Yorkshire And Basselaw ICS | Trust_Name: SHEFFIELD TEACHING HOSPITALS NHS FOU... | Select Period: 01/10/2020 | 15/11/2020

Number of beds occupied by confirmed Covid patients - SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST



Patients on respiratory support - SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST



Epi Summary

- 300 cases / 100k population in 7d – 2000 per week
(Number being tested is coming down?)

- Poss we will get to 200 by 2 Dec

Page 8

Positivity above 14%

- Significant proportion of STH beds have a patient with COVID. Flat but at this level is still VERY difficult to manage.
- Thus the messaging needs to reflect we mustn't do anything that will make it worse. Numbers far too high for comfort.

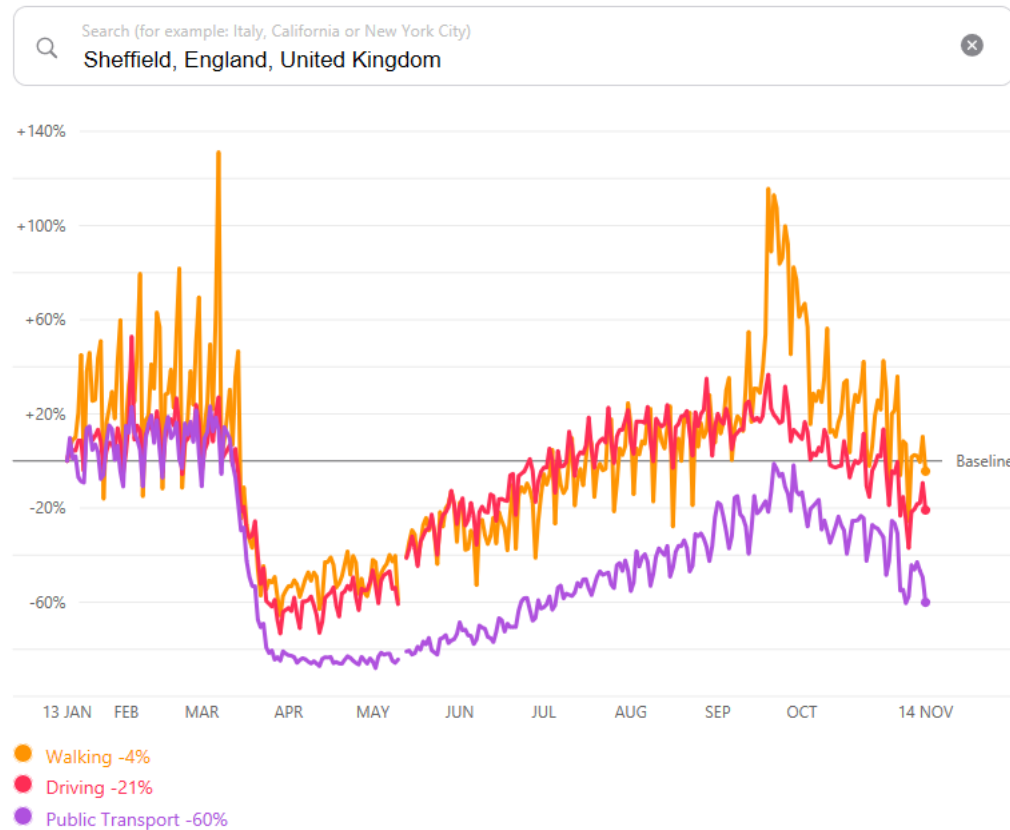
2 Two weeks into lockdown

The tiered system prior to this HAS helped

Mobility falling. Likely 2w left of lockdown will get to May levels of mobility, currently June

Mobility Trends

Change in routing requests since 13 January 2020



Purpose

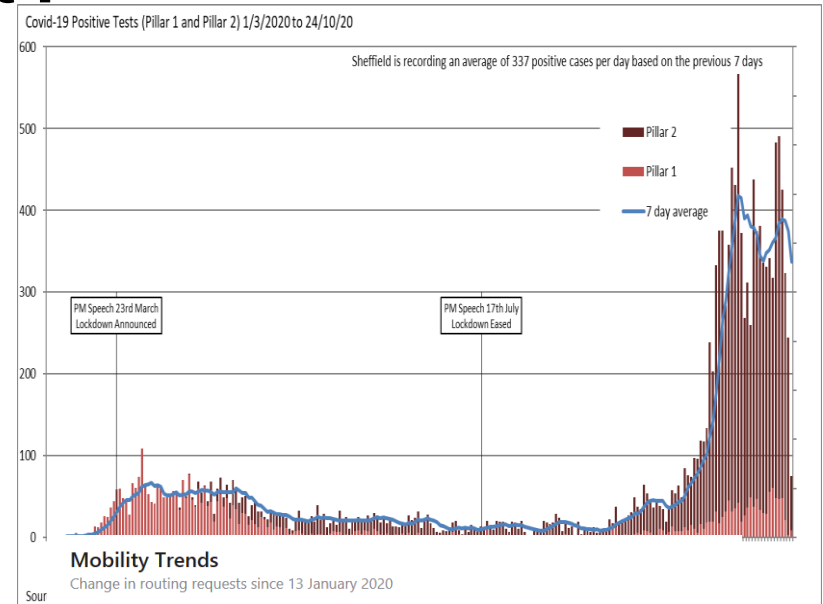
- Get $R_0 < 1$
- Get level of infection back to mid May levels
- R_0 driven by out of household contacts and lockdown will make a difference to this
- Reduce mean number of contacts per case
- May reset expectations and behaviour?
- Some caveats – when people get fed up!
- Doesn't change the fundamentals

How long for?4 weeks?

What happens next?

- The measures currently in place have slowed spread (4d in March, 17d now)
- 4 weeks will not, in and of itself, eradicate the virus. Not long enough?? - See the curve shift from lockdown in March.
- This lockdown is less restrictive (education and many forms of employment)

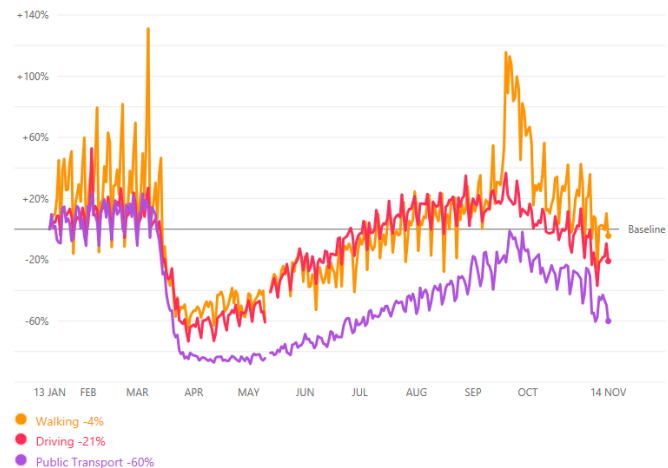
• Page 12 •



Mobility Trends

Change in routing requests since 13 January 2020

Search (for example: Italy, California or New York City)
Sheffield, England, United Kingdom



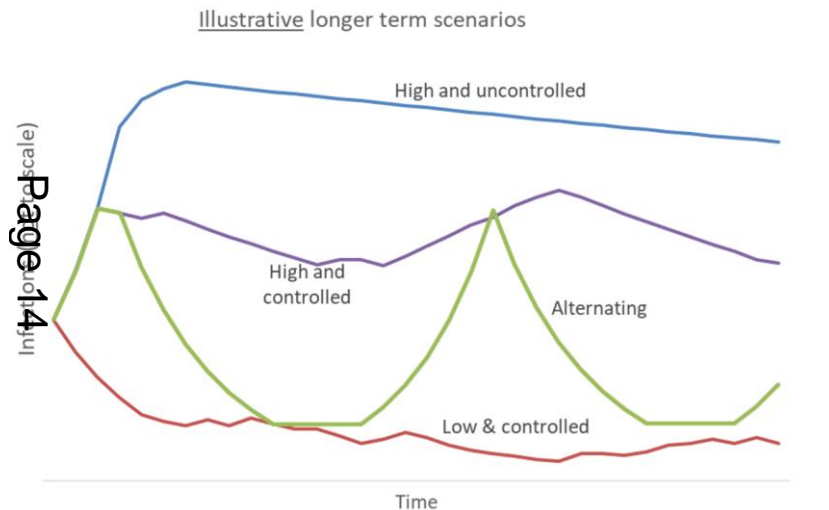
- As restrictions are taken off on 2 Dec, recent positive changes might be lost

• We will be lucky to get R_0 to 0.9 (March lockdown got us to 0.6)

- $R_0 = 0.9$ where case numbers are low vs high. Room for manoeuvre is extremely limited.

Scenarios for next 6m

To get low and controlled



High and controlled
High uncontrolled
Alternating
Low and controlled

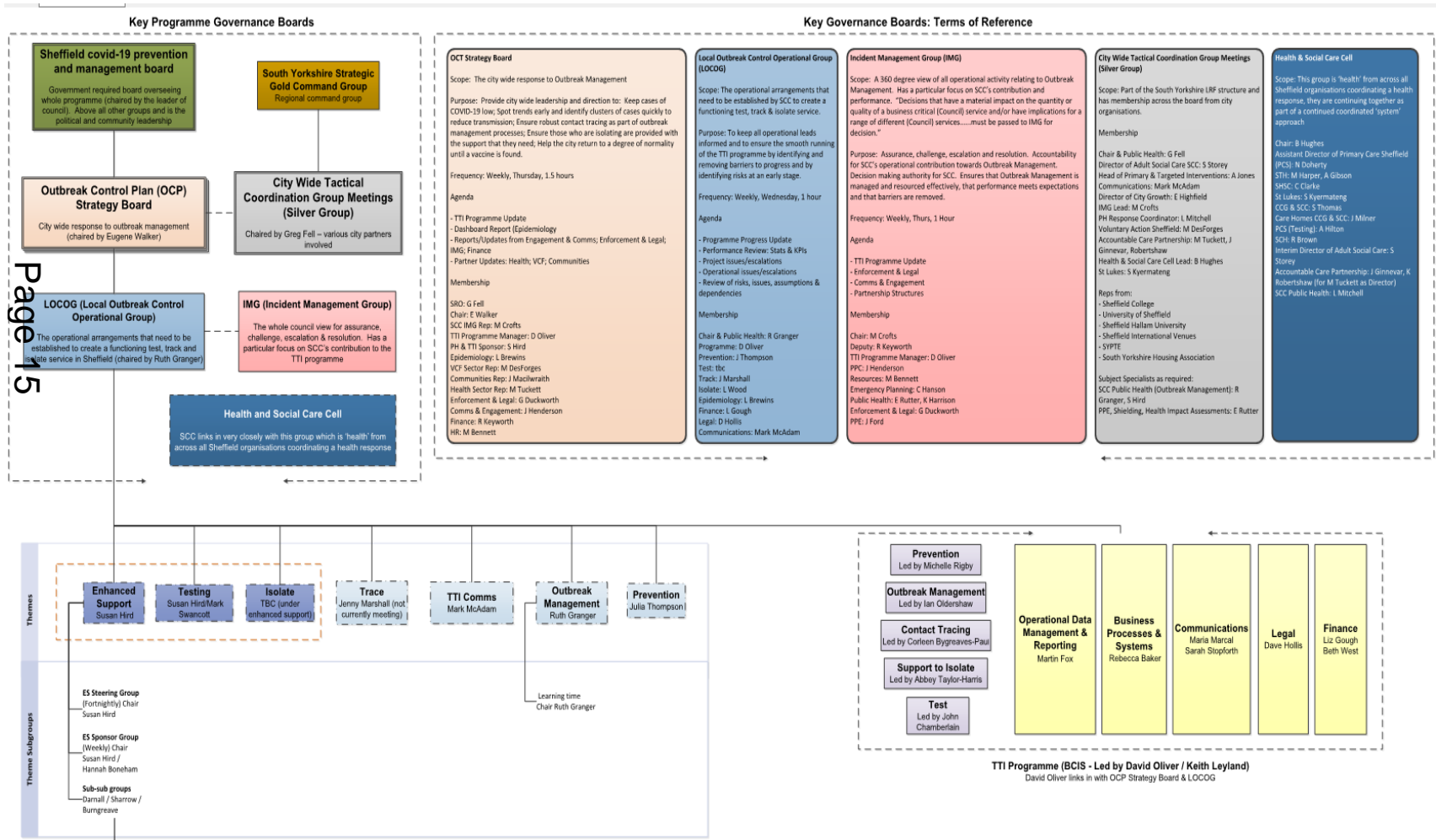
- Rapid and decisive interventions to push R well below 1 and maintain that for some time.
- Measures to hold R below 1 would need to be in place for longer in those areas that currently have higher prevalence
- Once prevalence is low, measures could be eased somewhat.
- Substantial measures would need to be in place over winter in order to keep R around 1.
- Tier 1 is not enough to do so.
- Tier 2 with all the basic universal interventions in place MIGHT be.

<https://www.gov.uk/government/publications/spi-m-o-covid-19-possible-scenarios-for-the-coming-months-28-october-2020>

<https://www.gov.uk/government/publications/potential-trajectories-for-covid-19-in-the-next-6-months-29-october-2020>

Strategy and plan remains in place

- Keep people safe, protect vulnerable, reopen sheff



Page 15

Plan is based on what makes most difference. No single thing.

- **Prevention** – messaging, comms, approach to events and gatherings, enforcement (hard and soft)
- **Managing individual incidents** across multiple settings
- **minimising testing delay** - had the largest impact on reducing onward transmissions. Making testing as accessible as possible.
- **consistent push on getting tested, even mild symptoms** - people need to understand why, and really believe it. How to get a test
- **Optimising testing & tracing speed and coverage** – especially in some of our communities where we know we have rates of infection. These latter three things have potential to prevent up to 80% of all transmissions
- **Optimising isolation** - we know 80% of people recommended to self-isolate don't - supporting people ++
- **Focus on consistent messaging, simplifying communications, consent and consensus.**

Talking points

- Compliance and lockdown v the nature of the illness itself
- Myths – if you go into hospital you will never come out (treatments have improved massively, outcomes among hospitalised cases are hugely better)
- Myths - Its not so bad - Still a serous illness, Incredibly infectious
- Best way to protect Health service capacity to keep community transmission low
- Best way to protect vulnerable loved ones to to keep community transmission low
- Best way to protect the economy to keep community transmission low

Next week or two

1. Post 2nd Dec

- We aren't near what might be considered "exit criteria"
- R_0 will be likely just below 1 (but with high rate of infection)
- people will be fed up

2. Testing

- Testing for those with symptoms most important. Most with symptoms don't get tested.
- Testing in the context of all of the other interventions that need to be in place
- Asymptomatic testing. The Liverpool pilot, use of testing in asymptomatic people within defined cohorts

3. Prep for vaccination.

4. Localised contact tracing and future options for this (take up at 48 hr, maybe move to 24hr, reverse CT)

5. The fundamentals will remain the fundamentals. The basics of the strategy remain intact