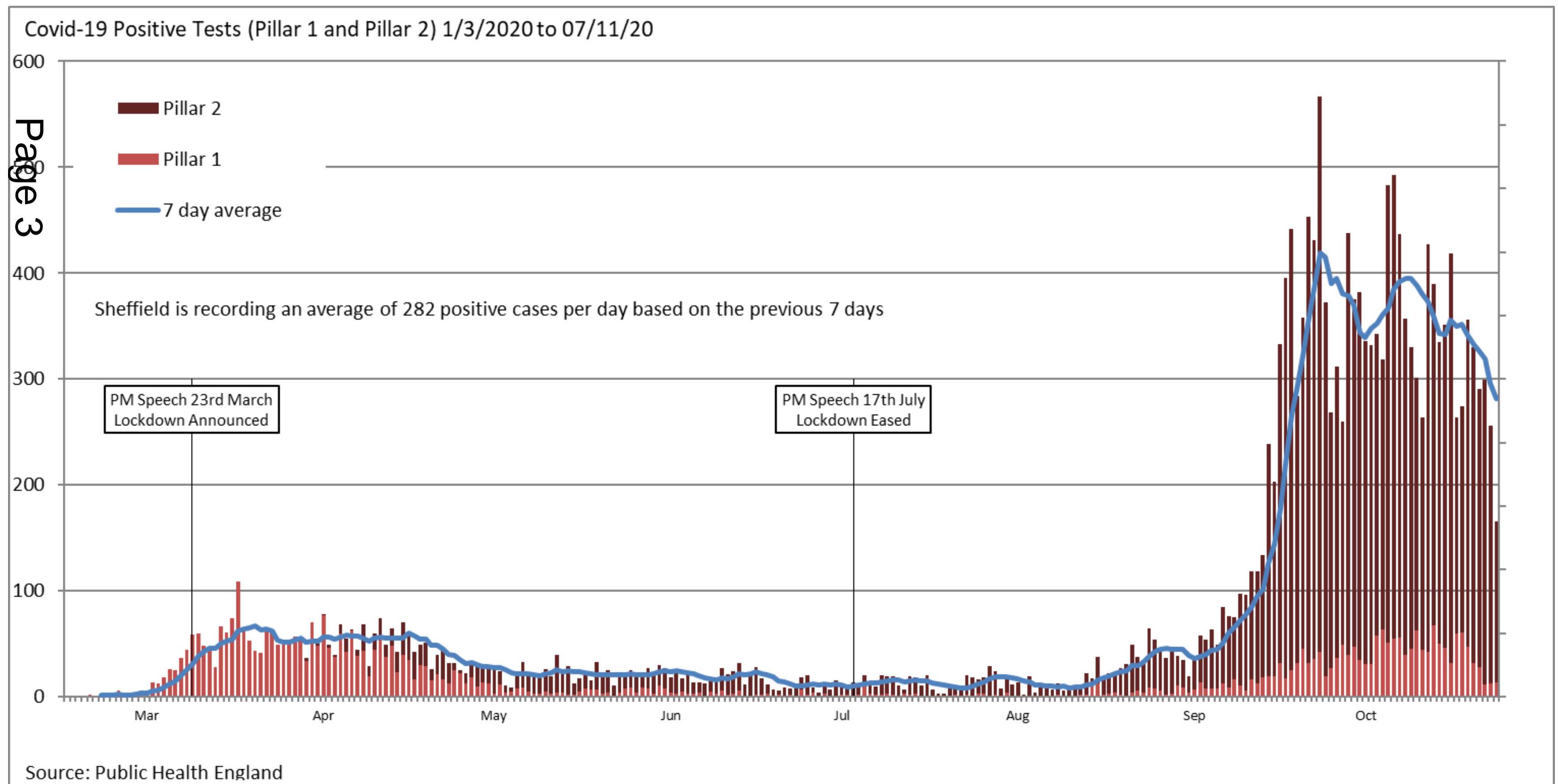
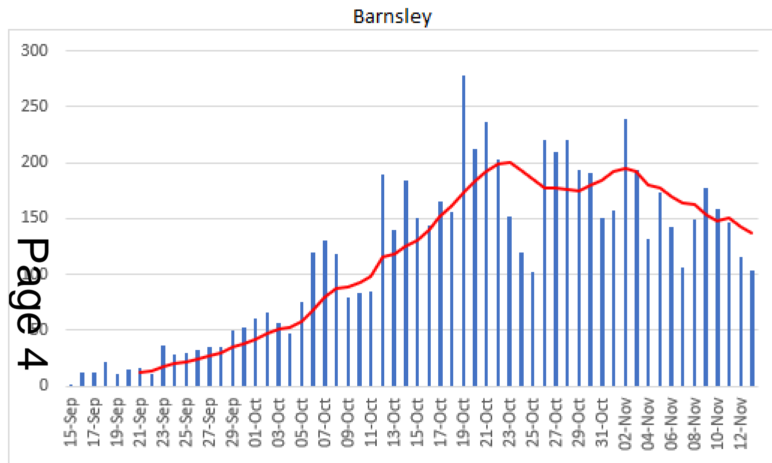
Situation report.
18/11/20
Greg Fell

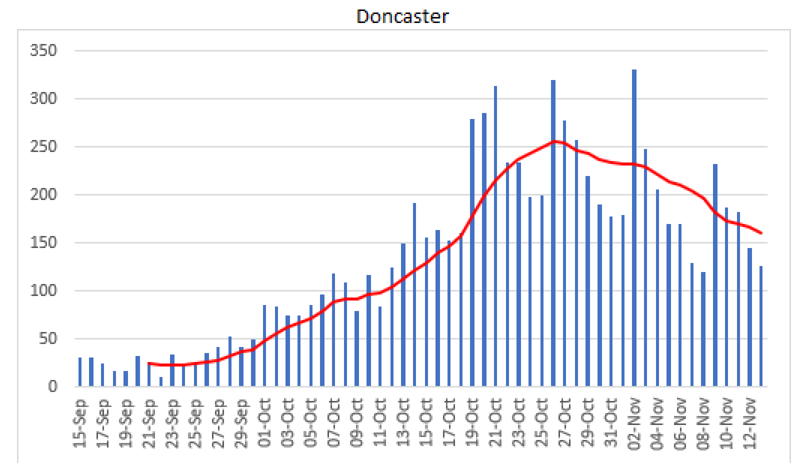
1 epidemiology

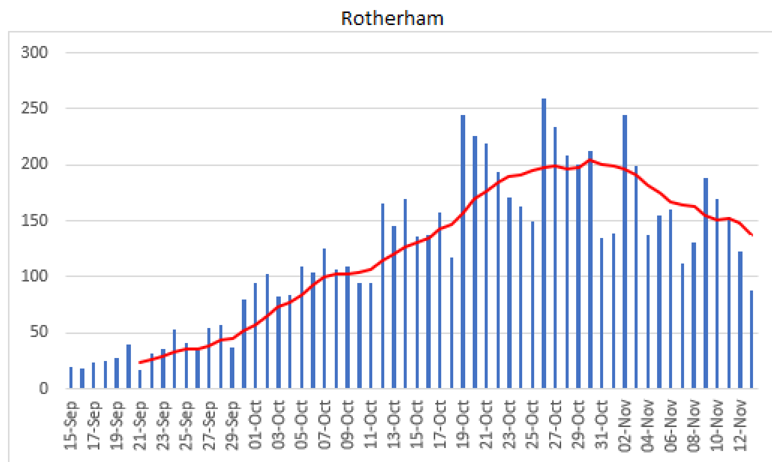
Epidemiology in one slide
HIGH & fluctuating / falling rate. 300 cases in 7 days / 100,000 people 15% positivity.

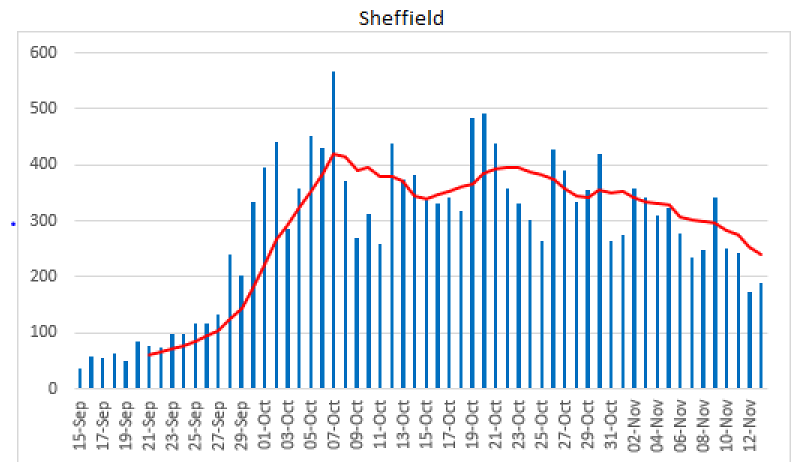


Trends – daily cases
Settling at a new cruising altitude

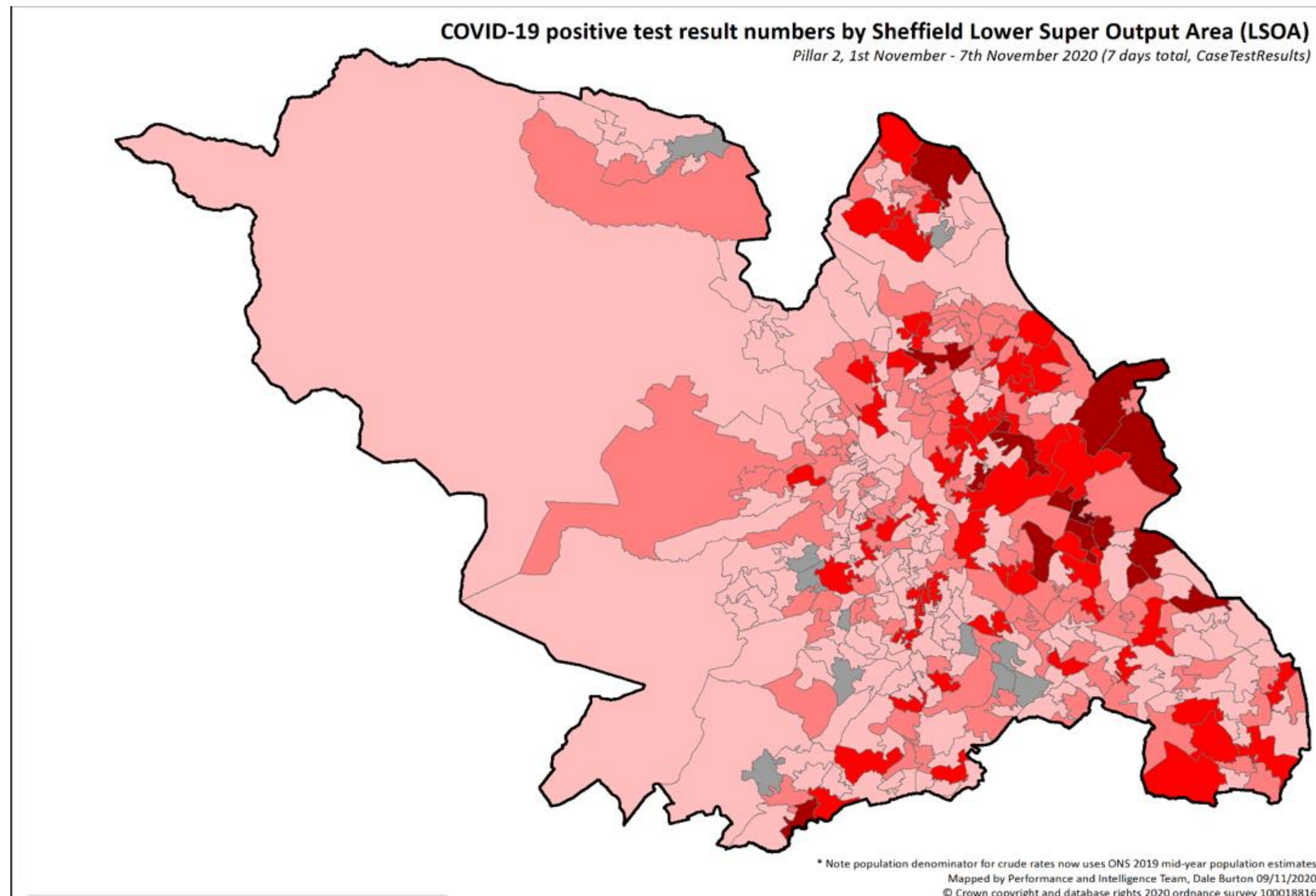








Still principally household transmission Across the city. E of Sheffield becoming a concern (same pattern as we saw before)

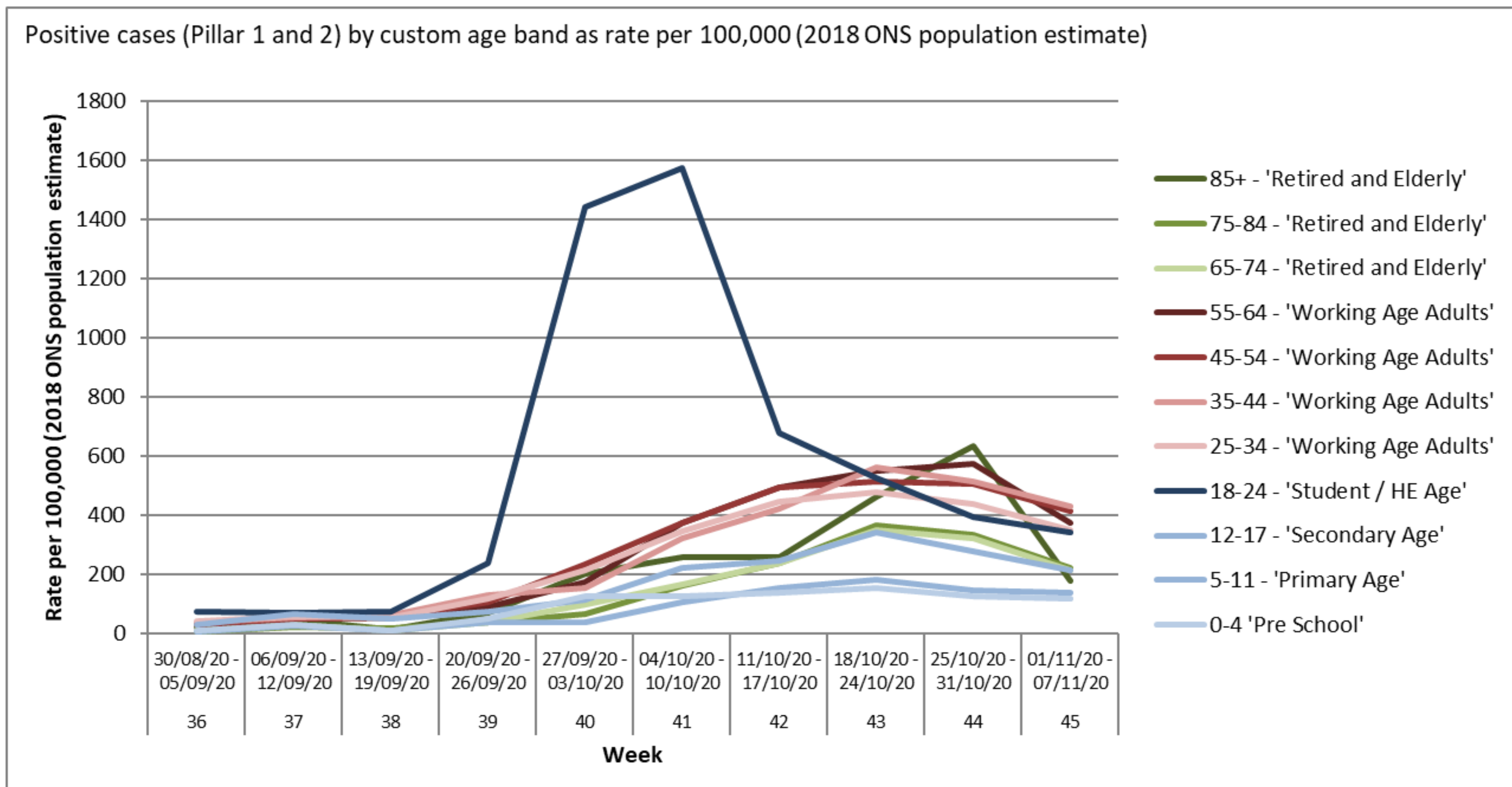


Age specific rates increasing across the board.

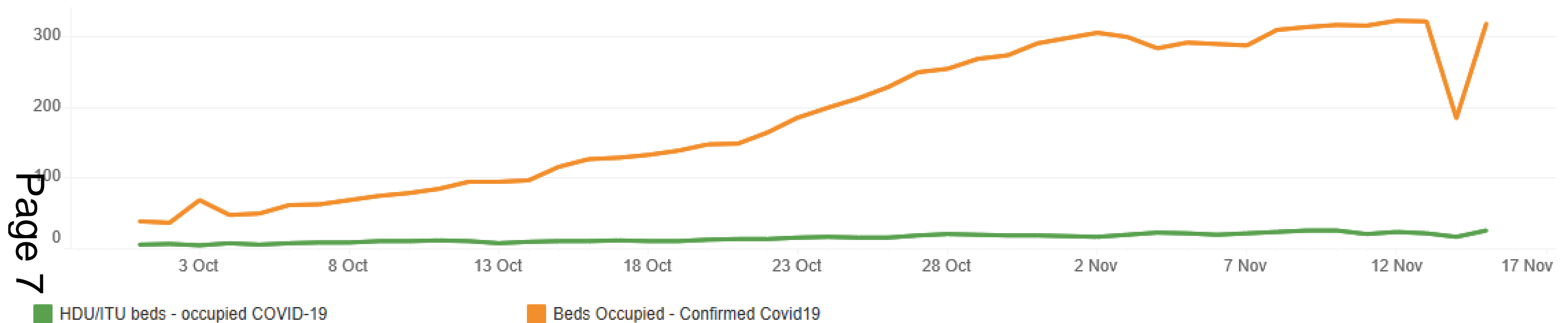
Average age of a case is increasing steadily

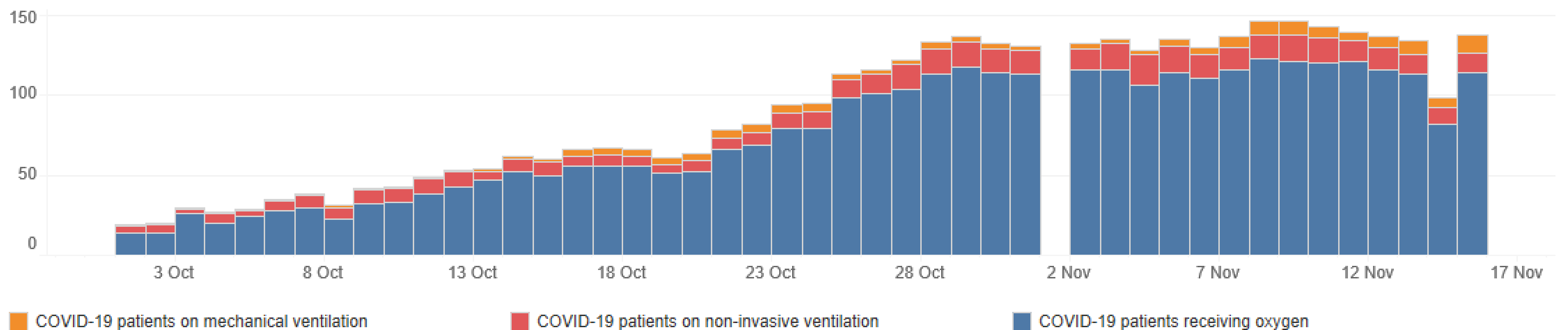
Taking out 18-24 we are like S Yorks

The rate is decreasing in all age bands



Hospital activity flattening? The interpretation of this is nuanced.





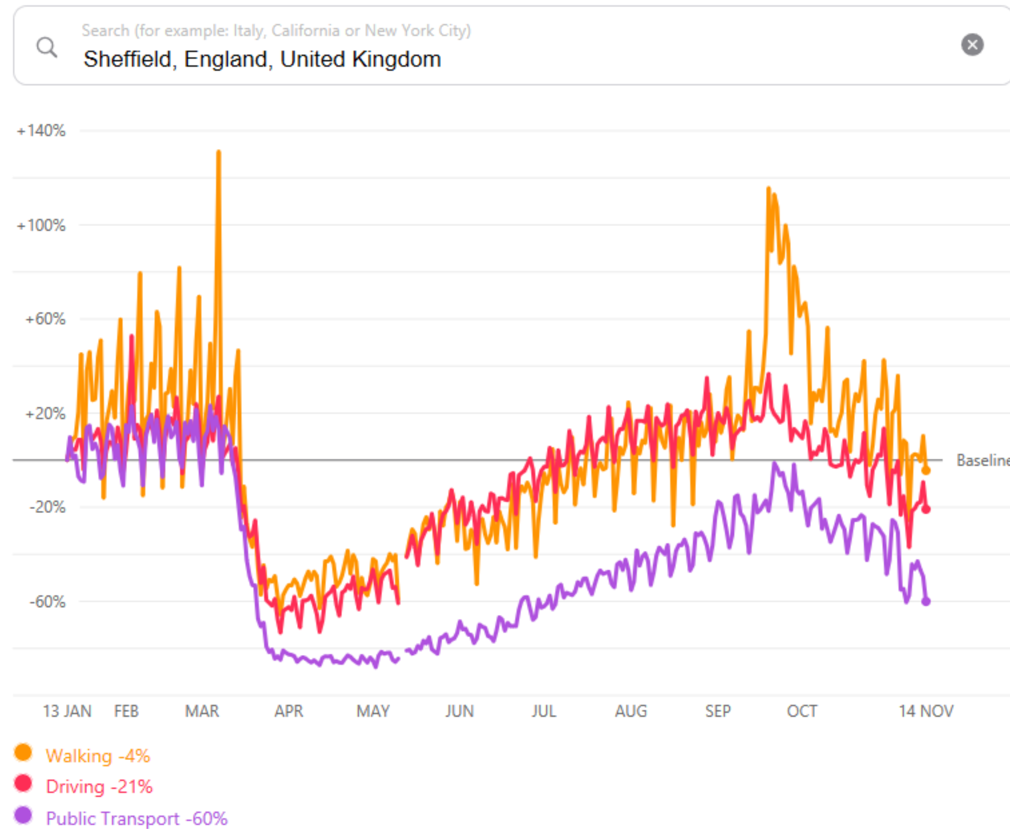
Epi Summary

- 300 cases / 100k population in 7d – 2000 per week (Number being tested is coming down?)
- Poss we will get to 200 by 2 Dec
- 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

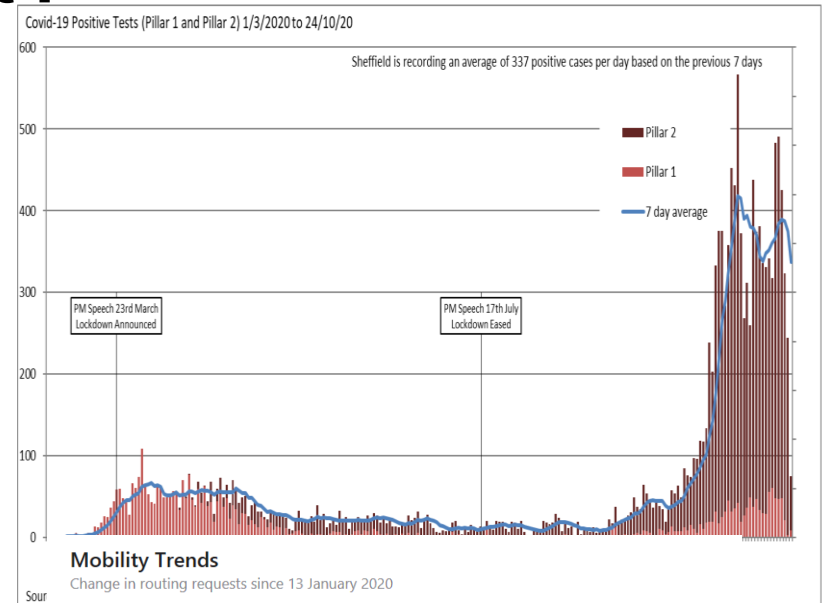


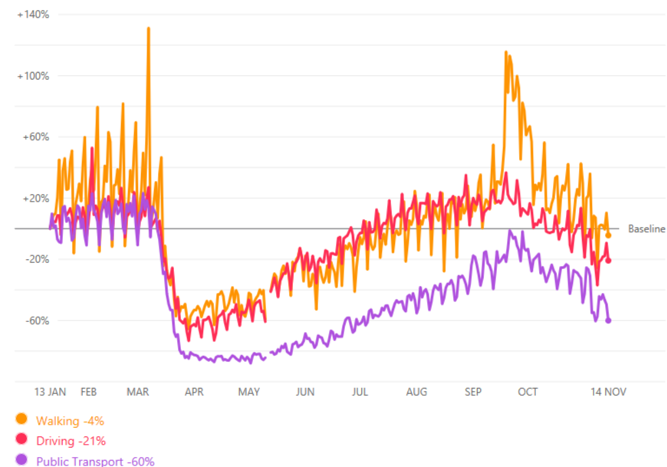
Purpose

- Get R0<1
- Get level of infection back to mid May levels
- R0 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?

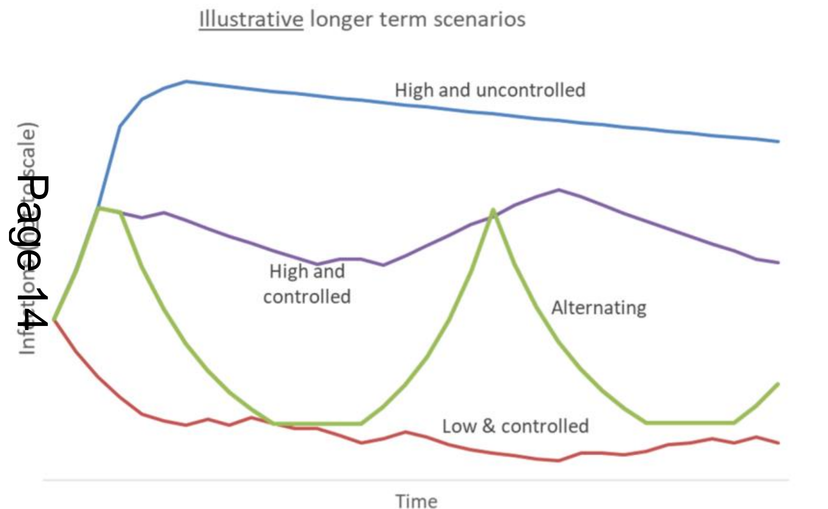
- The measures currently in place have slowed spread (4d in March, 17d now)
- 4 weeks will not, in and of itself, eradicate the virus.
- Not long enough?? - See the curve shift from lockdown in March.
- This lockdown is less restrictive (education and many forms of employment)





- As restrictions are taken off on 2 Dec, recent positive changes might be lost
- We will be lucky to get R0 to 0.9 (March lockdown got us to 0.6)
- R0 = 0.9 where case numbers are low vs high. Room for manoeuvre is extremely limited.

Scenarios for next 6m



High and controlled
High uncontrolled
Alternating
Low and controlled

https://www.youtube.com/watch?v=pD2i7WEeBHs

To get low and controlled

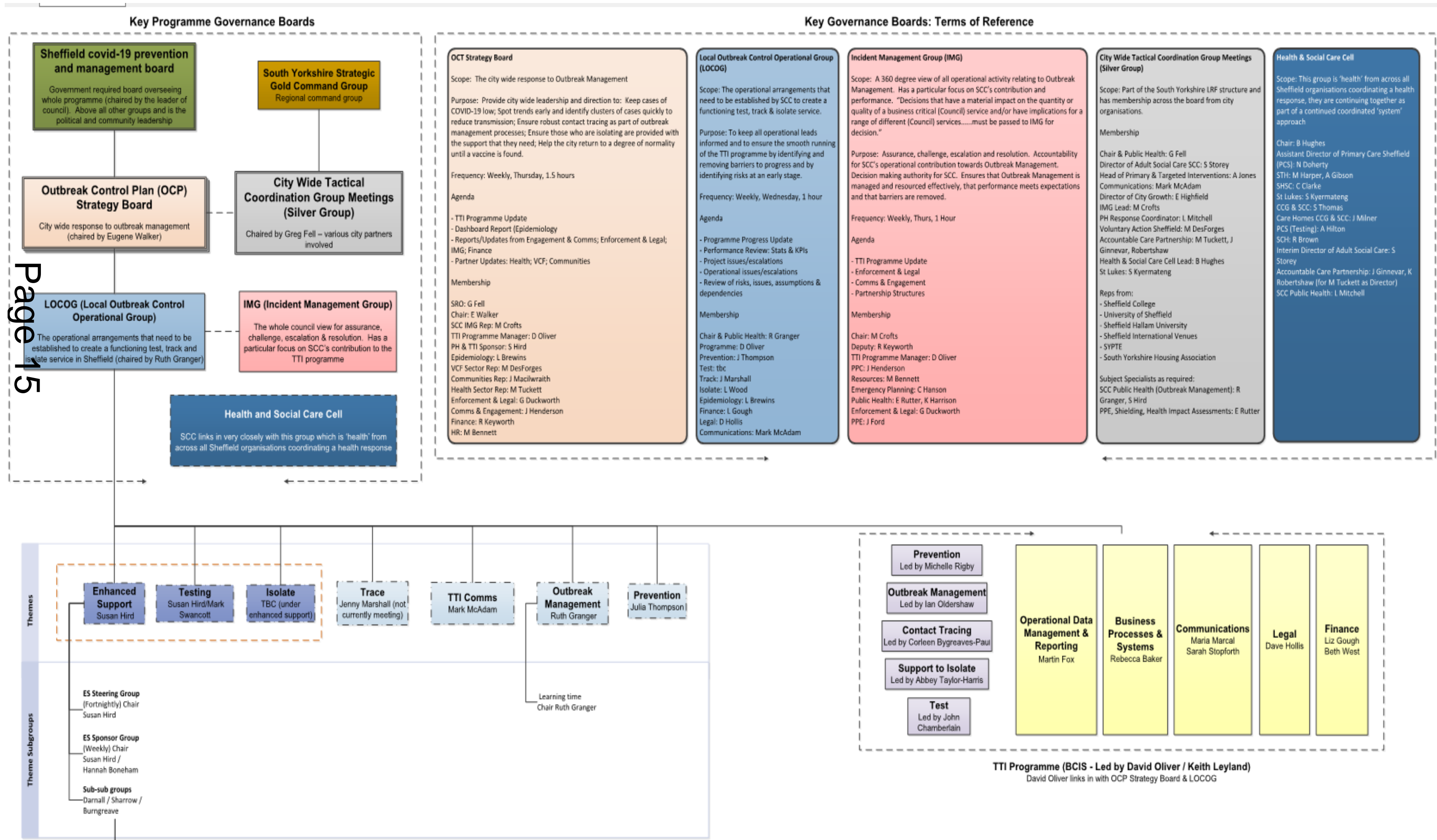
- Rapid and decisive interventions to push R well below 1 and maintain that for some time.
- Measures to hold R below 1 would need to be in place for longer in those areas that currently have higher prevalence
- Once prevalence is low, measures could eased somewhat.
- Substantial measures would need 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



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"
   - R0 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**