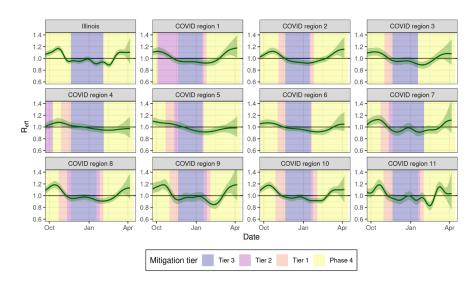




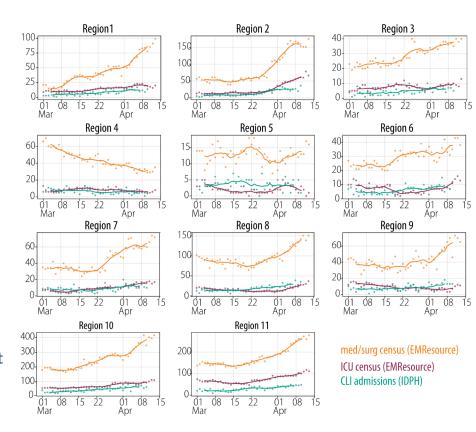
- As of April 6, R_{eff} in regions 1-3 and 6-11 was at or above 1, indicating that the epidemic is growing. This is consistent with more recent hospitalization data.
- Between 1380 and 5320 people will be hospitalized in the next two weeks if the frequency of more transmissible variants continues to increase, vaccination continues at its current pace, and behaviors remain unchanged. Without further interventions, the daily vaccination rate would need to increase by at least 50% to reduce R_{eff} below 1 in two weeks.
- More transmissible variants such as P.1 and B.1.1.7 will continue spreading. Given the current pace of vaccination, the next wave is unlikely to stop soon without more limits on indoor gathering, improvements in ventilation, and other NPIs.
 Prioritizing primary vaccine doses, as shown to be effective in the UK and Canada, would leverage available vaccines to slow the pandemic.



Northwestern University

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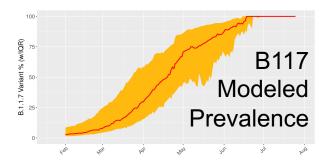
- R_t remains above 1 in all Regions.
- Hospital admissions show concerning steep increase in most regions, except Regions 4 and 5.
- There is no strong signal of a slowdown in growth.
- Hospitalizations in older people are growing more slowly than hospitalizations in young people, but they are still growing.
- Increasing hospital admissions cannot be completely explained by increased severity of B.1.1.7: transmission is also increasing.
- At least 60% of older people and 20% of younger people have received one dose in all regions, and ICU admissions are not increasing at the same rate as hospitalizations.
- Current vaccination rate is not high enough to prevent uncontrolled transmission of the variants and further increase in hospitalizations. Behavioral change is necessary.



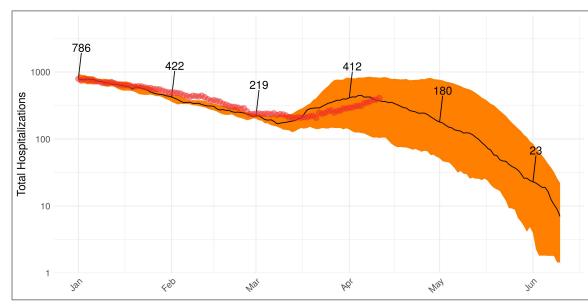
Hospitalization Trends (Chicago, Region 11)



 The March hospitalization trend is hypothesized to be due to a combination of increased out-ofhousehold activities and relaxation of protective behaviors, with a smaller component due to the B117 variant



 Hospitalizations may start to decrease in May due to vaccination effects, with reduced severity and daily cases, but could be exacerbated by lifting restrictions and worsened protective behaviors



 Critically important to continue to increase the rate of vaccination and improve access to underserved populations

April 16, 2021

