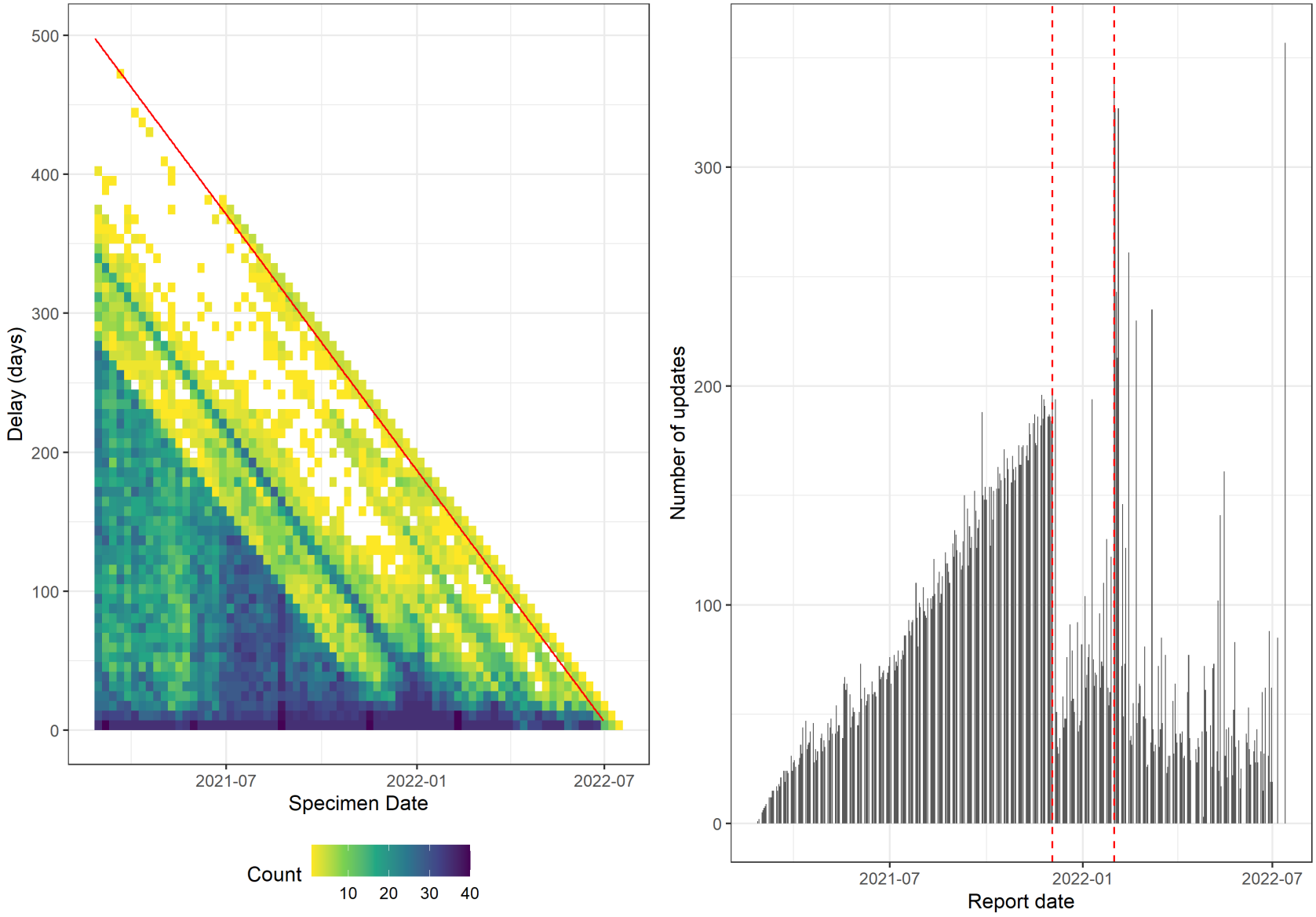
Action items from previous meeting

1. Visualise extra-long delays
2. Analyse test-specific case data

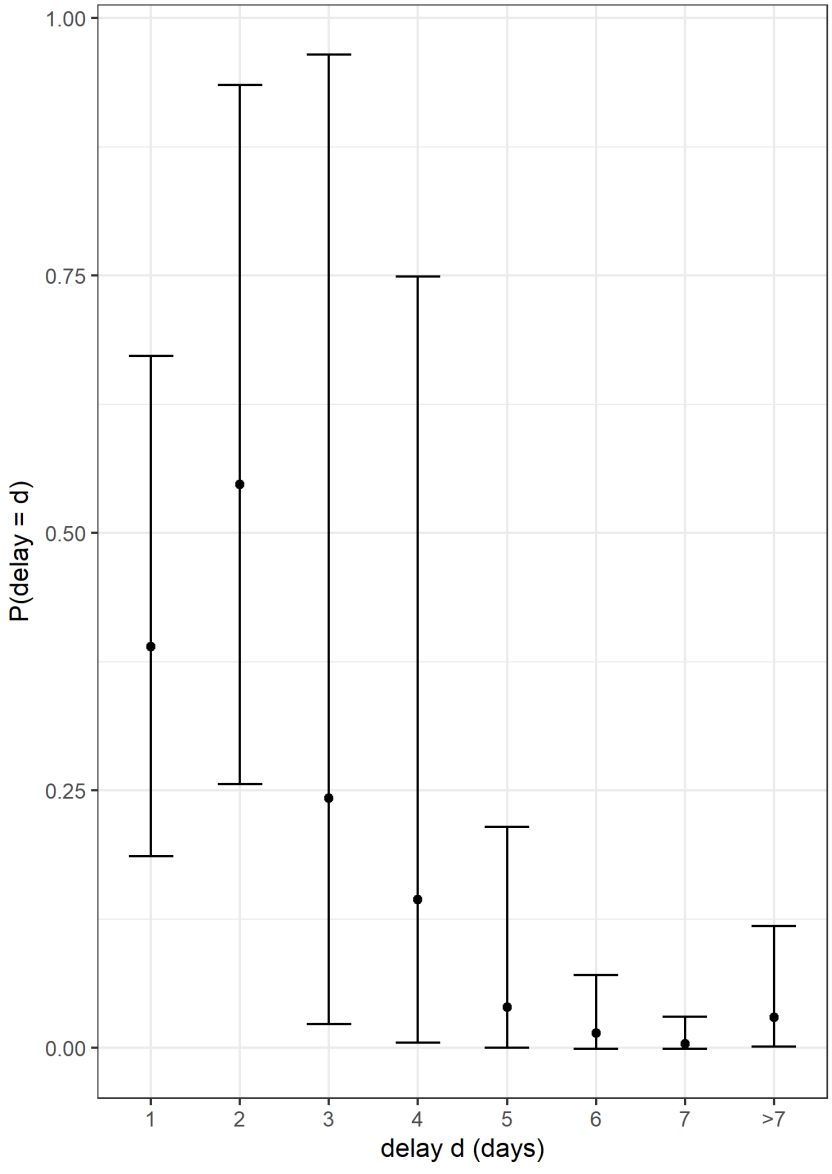
Extra-long delays

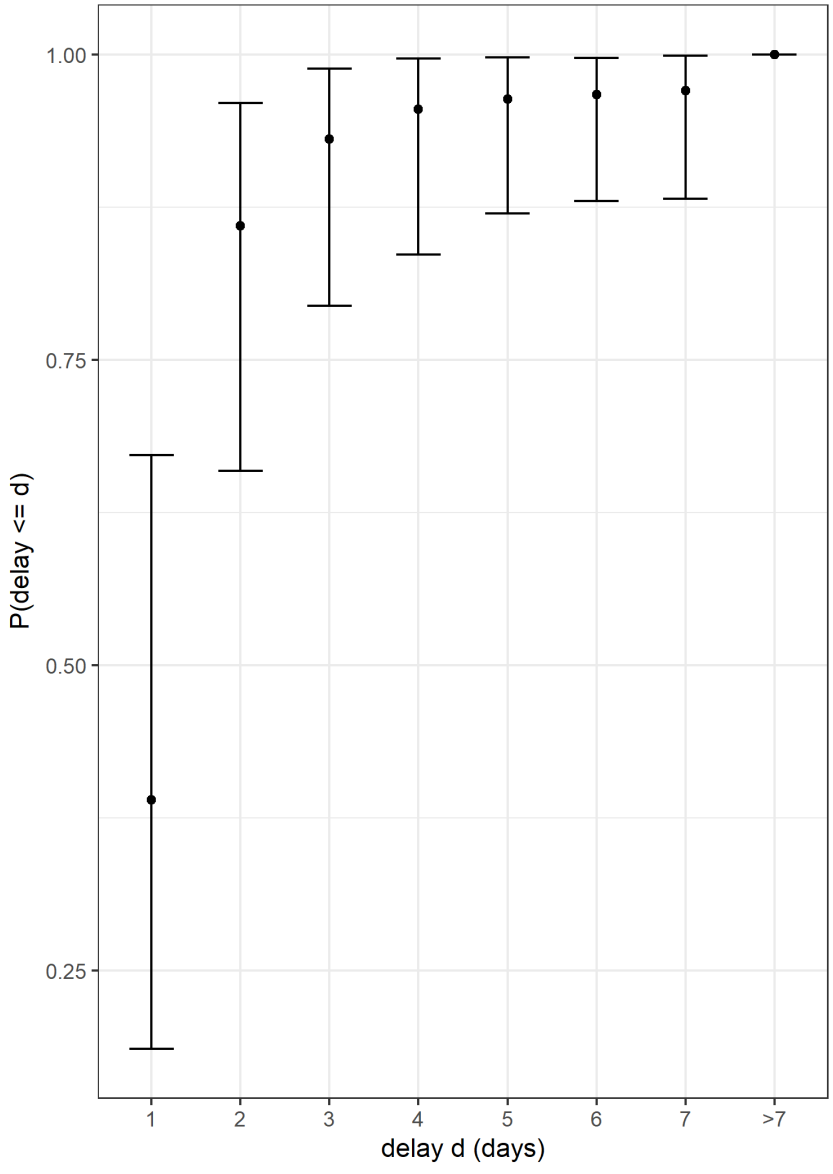


Extra-long delays

- Number of updates per report date increased quite steadily till 03/12/21
  - Unsure about why this happened
- Large number of updates on 31/1/22
  - Updating of case definition to include multiple infection episodes
  - Cases by specimen date revised back to the beginning of the pandemic
- Conclusion: might be reasonable to assume a maximum delay of ~50 days?

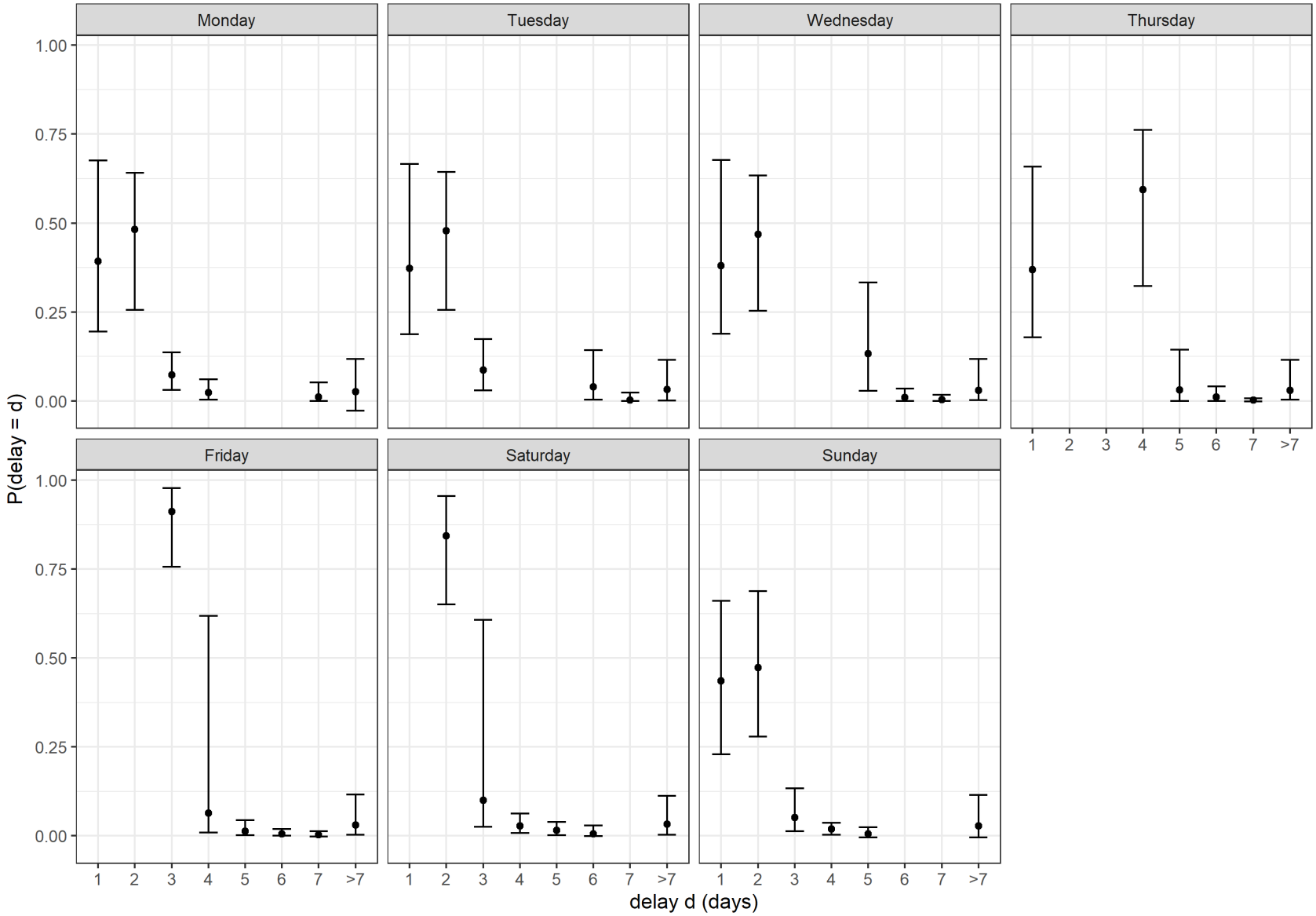
Distribution of cases by delay





Day of week

Sanity check

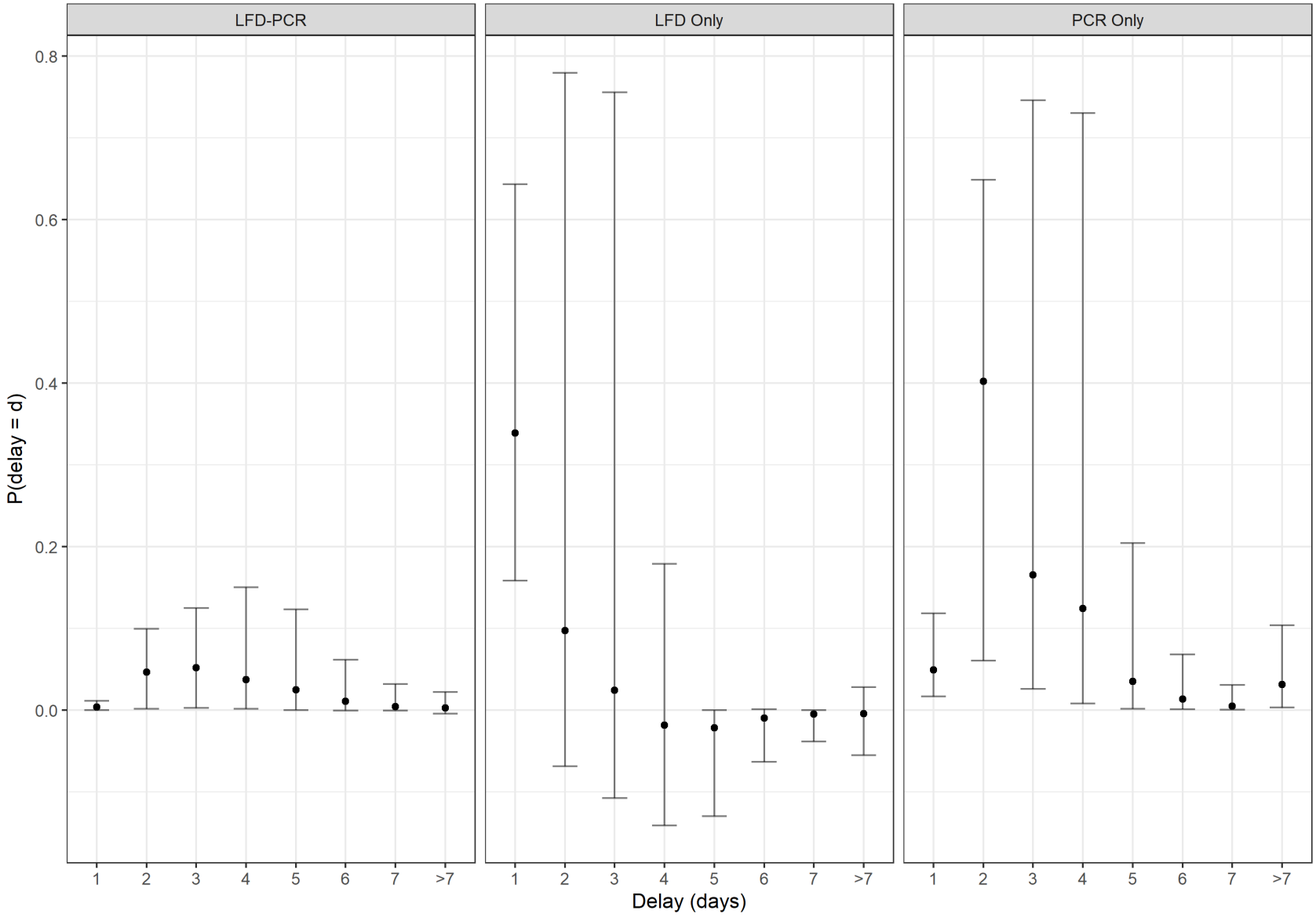


Test-specific case data

`New cases by specimen date` is the sum of three separate data sources:

1. LFD confirmed by PCR
   - Identified by LFD and confirmed by PCR within 3 days
   - Date reflects LFD test date
2. LFD only
   - Identified by LFD and not confirmed by PCR within 3 days
   - If subsequent PCR is negative, cases will be removed
3. PCR only
   - Identified by PCR excluding those identified by LFD within 3 days

Test type


LFD-PCR
LFD Only
PCR Only
P(delay = d)
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
>7
Delay (days)

Test type

- Might be able to nowcast LFD-PCR and PCR only streams separately
  - updates for these streams are not all positive, occasionally some case definition revisions lead to large negative updates
  - e.g. Revision to episode-based case definition on 1/2/22 led to large drops in PCR only cases for a few dates (7-10/1/22) in the thousands
- Need a different model for LFD only stream

Next steps

- Try out `epinowcast`
- Explore further stratification by location and age
- Create counterfactual datasets with alternative reporting schedule (weekdaily vs weekly)