

# Economic Burden Associated with Adverse Effects due to COVID-19 Vaccination

## Data from the Queensland COVID-19 Vaccination Program Statewide Study

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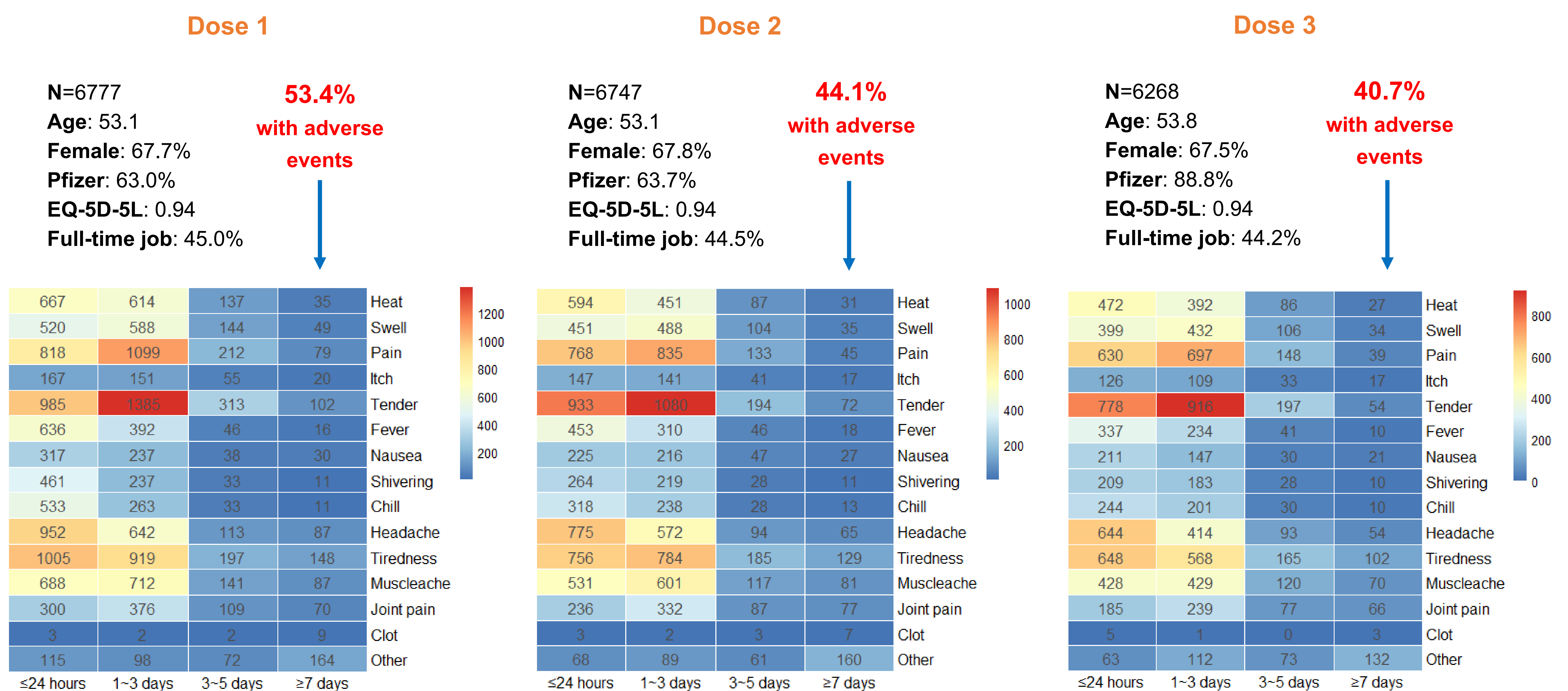
### BACKGROUND & AIMS

- Although COVID-19 vaccines have shown remarkable safety and efficacy in preventing infection and severe disease, mild adverse effects have been reported.
- Vaccine-related adverse effects have wide-ranging implications, causing increased healthcare visits and decreased productivity, impacting both individuals and society.
- Limited research exists on the economic impact of vaccine-related adverse effects.
- This study aims to fill the gap by examining healthcare use and productivity losses, utilizing data from the Queensland COVID-19 Vaccination Program (QoVAX) Statewide Study.

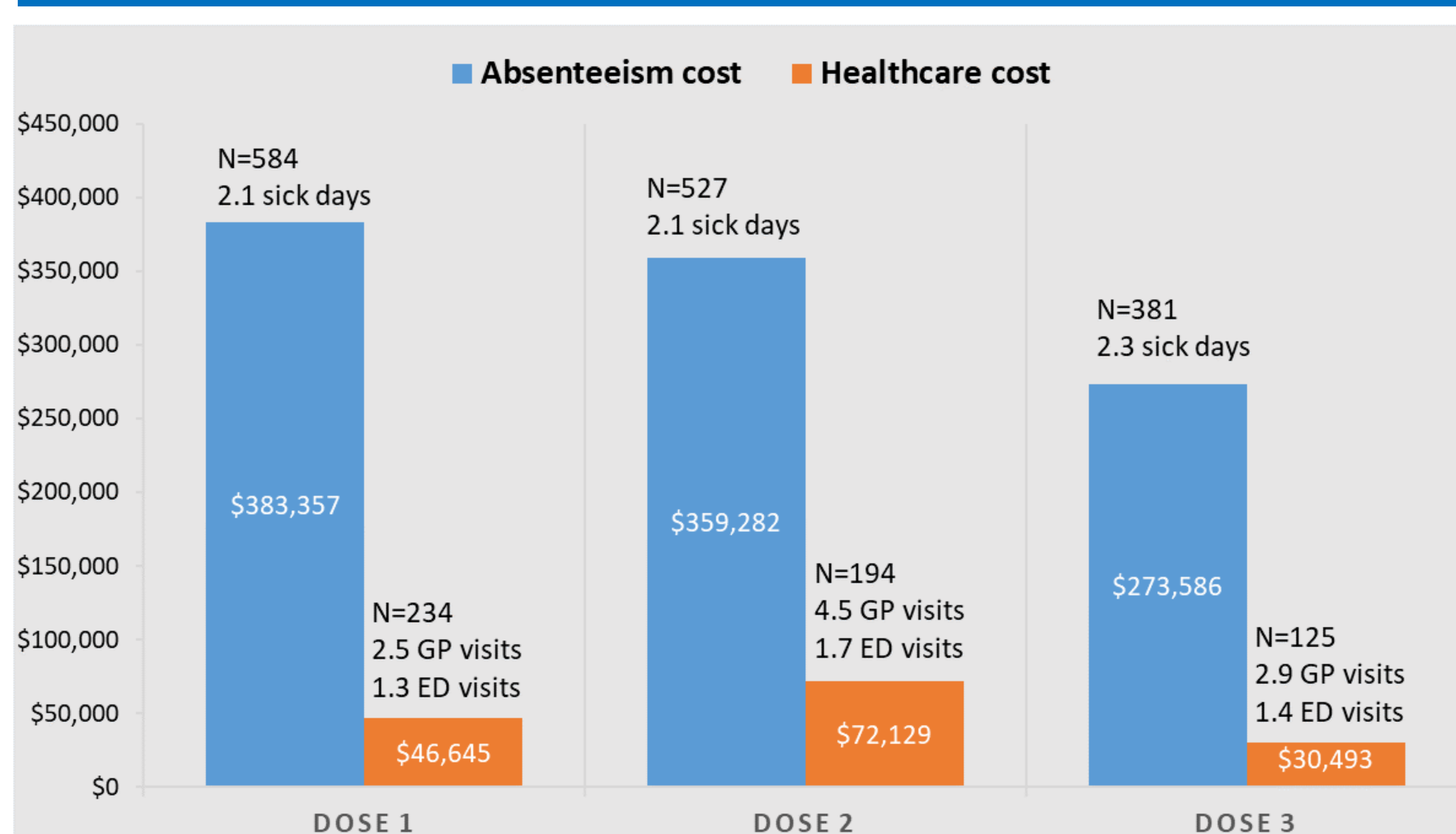
### METHODS

- **Participants:** Queenslanders aged  $\geq 18$  years who received a COVID-19 vaccine within 12 months prior to enrolment.
- **Recruitment method:** digitally-delivered survey from 1 Jul to 30 Sep 2022.
- **Questionnaire:** cross-sectional survey collecting self-reported vaccination history including adverse events, health service use, and off work days.
- **Statistical analyses:** 1) Descriptive statistics outlined participants' characteristics, vaccine doses, and adverse effects. 2) Direct healthcare costs covering general practitioner and emergency department visits were estimated using national reimbursement rates. 3) Societal (absenteeism) cost was calculated by multiplying the number of hours absent during the study period with Age- and Sex-specific Australian Average Earnings.

### RESULTS



### Economic Burden on Health System & Society:



### CONCLUSION

We observed a relatively high rate of self-reported adverse effects following COVID-19 vaccination, although only a small proportion of individuals sought medical advice/services. The productivity cost due to COVID-19 vaccine-related adverse events was substantially higher than the healthcare costs.

These insights are pivotal as they underscore the overall safety of COVID-19 vaccines, wherein adverse effects are chiefly self-limiting and do not demand comprehensive medical care. It augments evidence endorsing the benefits of extensive vaccination, offering key insights for stakeholders in public health planning.

