

## **Supporting Information**

## **Supplementary methods and results**

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

Appendix to: Liu B, Scaria A, Stepien S, Macartney K. Effectiveness of COVID-19 vaccine boosters for reducing COVID-19 mortality among people aged 65 years or older, Australia, August 2023 – February 2024: a retrospective observational cohort study. *Med J Aust* 2025; doi: 10.5694/mja2.70015.

## **Supplementary results**

Table 1. Characteristics of cohort of Australian adults aged 65 years or older on 1 August 2023, overall and by time since most recent coronavirus disease 2019 (COVID-19) vaccine booster dose\*

	Time since most recent COVID-19 vaccine booster (days)				
Characteristic	8-90	91-180	181-365	More than 365	Population <sup>¶</sup>
All people	767,775	1,161,397	248,915	1,460,470	4,118,648
Age group (years)					
65-74	388,301 (50.6%)	550,324 (47.4%)	148,503 (59.7%)	842,340 (57.7%)	2,232,677 (54.2%)
75 or older	379,474 (49.4%)	611,073 (52.6%)	100,412 (40.3%)	618,130 (42.3%)	1,885,971 (45.8%)
Gender					
Women	413,890 (53.9%)	618,884 (53.3%)	133,343 (53.6%)	780,779 (53.5%)	2,210,340 (53.7%)
Men	353,878 (46.1%)	542,512 (46.7%)	115,573 (46.4%)	679,692 (46.5%)	1,908,303 (46.3%)
Jurisdiction					
New South Wales	238,531 (31.1%)	374,538 (32.2%)	82,289 (33.1%)	473,878 (32.4%)	1,330,511 (32.3%)
Victoria	196,872 (25.6%)	289,219 (24.9%)	60,628 (24.4%)	357,836 (24.5%)	1,023,595 (24.9%)
Queensland	146,389 (19.1%)	219,458 (18.9%)	48,264 (19.4%)	304,717 (20.9%)	830,774 (20.2%)
South Australia	58,399 (7.6%)	105,988 (9.1%)	21,337 (8.6%)	117,344 (8.0%)	339,154 (8.2%)
Western Australia	86,423 (11.3%)	104,019 (9.0%)	25,576 (10.3%)	154,494 (10.6%)	405,650 (9.8%)
Tasmania	26,099 (3.4%)	39,067 (3.4%)	5,929 (2.4%)	29,608 (2.0%)	110,842 (2.7%)
Northern Territory	3,045 (0.4%)	3,328 (0.3%)	1,681 (0.7%)	8,143 (0.6%)	18,517 (0.4%)
Australian Capital Territory	12,003 (1.6%)	25,779 (2.2%)	3,204 (1.3%)	14,450 (1.0%)	59,585 (1.4%)
Weekly household equiv	alised income				
\$0-499	185,916 (24.2%)	282,328 (24.3%)	61,936 (24.9%)	389,736 (26.7%)	1,063,722 (25.8%)
\$500-999	264,680 (34.5%)	416,148 (35.8%)	79,767 (32.0%)	481,240 (33.0%)	1,401,350 (34.0%)
\$1000-1499	104,975 (13.7%)	162,104 (14.0%)	36,239 (14.6%)	204,544 (14.0%)	570,628 (13.9%)
\$1500-1999	51,996 (6.8%)	78,787 (6.8%)	18,675 (7.5%)	100,119 (6.9%)	276,001 (6.7%)
\$2000 or more	58,512 (7.6%)	91,704 (7.9%)	20,128 (8.1%)	97,891 (6.7%)	289,967 (7.0%)
Other	101,697 (13.2%)	130,322 (11.2%)	32,166 (12.9%)	186,940 (12.8%)	516,967 (12.6%)
Medical conditions (preceding six months) <sup>†</sup>					
0 or 1	118,292 (15.4%)	164,078 (14.1%)	48,477 (19.5%)	302,645 (20.7%)	800,152 (19.4%)
2 or 3	227,059 (29.6%)	341,747 (29.4%)	73,139 (29.4%)	438,679 (30.0%)	1,216,876 (29.5%)
4 or 5	213,489 (27.8%)	332,577 (28.6%)	63,826 (25.6%)	373,136 (25.5%)	1,079,913 (26.2%)
6 or more	208,930 (27.2%)	322,996 (27.8%)	63,473 (25.5%)	346,014 (23.7%)	1,021,7092 (4.8%)
General practitioner visits (preceding twelve months) <sup>‡</sup>					
0	17,644 (2.3%)	26,890 (2.3%)	8,073 (3.2%)	60,899 (4.2%)	164,574 (4.0%)
1 or 2	38,539 (5.0%)	50,872 (4.4%)	17,013 (6.8%)	109,016 (7.5%)	270,836 (6.6%)
3-6	192,257 (25.0%)	274,596 (23.6%)	64,374 (25.9%)	383,286 (26.2%)	1,044,918 (25.4%)
7-12	267,338 (34.8%)	415,535 (35.8%)	81,088 (32.6%)	468,911 (32.1%)	1,361,415 (33.1%)
13 or more	251,987 (32.8%)	393,498 (33.9%)	78,367 (31.5%)	438,367 (30.0%)	1,276,900 (31.0%)
Received influenza vaccine during 2022§	700,697 (91.3%)	1,086,399 (93.5%)	192,846 (77.5%)	1,080,137 (74.0%)	3,188,707 (77.4%)

<sup>\*</sup> Data source: 2021 census data, except: † Pharmaceutical Benefits Scheme database; ‡ Medicare Benefits Schedule database; § Australian Immunisation Register.

<sup>¶</sup> Columns and rows may not necessarily add to totals because of perturbation of individual data points (see methods). Total population also includes people with none, one, or two COVID-19 vaccine doses (numbers not shown).

Figure 1. Number of coronavirus disease 2019 (COVID-19) vaccine doses received by people in Australia aged 65 years or older by 1 August 2023 and 29 February 2024: proportions

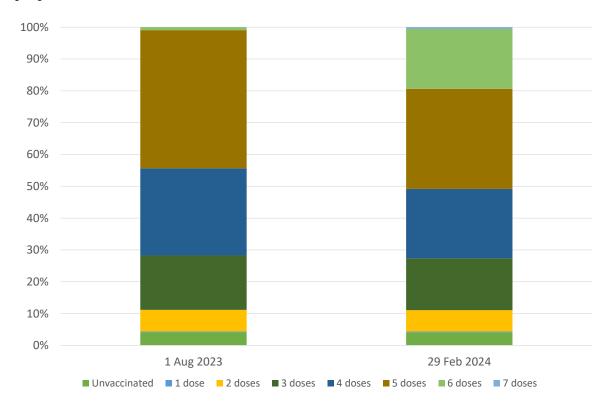


Figure 2. Booster coronavirus disease 2019 (COVID-19) vaccine type received by people in Australia aged 65 years or older by 29 February 2024: proportions by vaccine dose

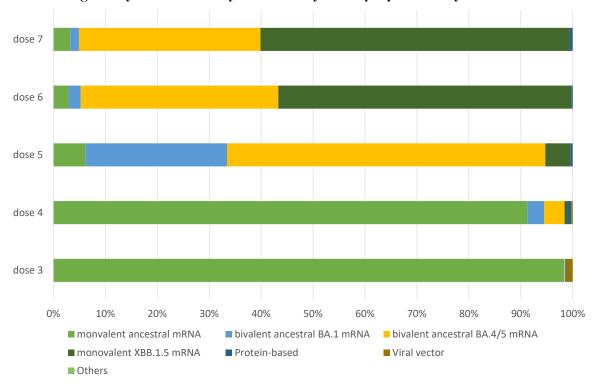


Figure 3. Median time since most recent booster coronavirus disease 2019 (COVID-19) vaccine for people in Australia aged 65 years or older, 1 August 2023 – 29 February 2024, by category of most recent dose and vaccine type

