Impact of providing ART to Medicare ineligibles

**Supplementary Results**

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This document provides additional costing results for the analysis of the impact of providing anti-retroviral therapy (ART) to people living with HIV (PLHIV) in Australia who are Medicare ineligible. It provides the costs associated with ART provision when the average time between infection and initiating ART, , is 2 to 4 years rather than 4-5 years for the main analysis. All the calculations are done in the exact same manner and with the same parameters as for the main results except for this change in .

**Results**

**Table 1** - Summary results for status-quo scenario and the expanded access scenario. The results show the median and inter-quartile range (IQR) of all simulations for each scenario. NA = not applicable. Costs are rounded to the nearest $10,000

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| --- | --- | --- |
| Indicator | Status-quo scenario (median, IQR) | Expanded access scenario (median, IQR) |
| Annual infections after 5 years | 22 (18 - 26) | 5 (3 - 7) |
| Cumulative infections | 131 (116 - 145) | 50 (43 - 57) |
| Infections averted | NA | 81 (69 - 93) |
| Cost providing ART (undiscounted) | NA | $39,580,000  ($32,970,000 - $46,200,000) |
| Lifetime care and ART costs (undiscounted) | $131,360,000  ($111,100,000 - $151,620,000) | $49,910,000  ($40,900,000 - $58,910,000) |
| Reduction in lifetime ART costs (undiscounted) | NA | $80,610,000  ($66,080,000 - $95,150,000) |
| Cost providing ART (discounted 5%) | NA | $35,180,000  ($29,300,000 - $41,070,000) |
| Lifetime care and ART costs (discounted 5%) | $39,050,000  ($33,530,000 - $44,570,000) | $15,580,000  ($12,930,000 - $18,230,000) |
| Reduction in lifetime ART costs (discounted 5%) | NA | $23,300,000  ($19,300,000 - $27,310,000) |

Providing ART to Medicare ineligibles over 5 years is estimated to have a median undiscounted cost of $39,580,000 (IQR: $32,970,000 - $46,200,000) and a median discounted cost of $35,180,000 (IQR: $29,300,000 - $41,070,000). This corresponds to a cost per infection averted of $440,000 (IQR: $350,000 - $530,000) (with 5% discounting).

Figure 3 shows the cumulative costs for providing ART to Medicare ineligible people for the next 5 years and the savings due to the reduction in infections during this period. The median undiscounted cumulative cost when ART is expanded to all Medicare ineligible PLHIV is $39,580,000 (IQR: $32,970,000 - $46,200,000) (taking the median of the sum for each simulation). The resulting reduction in infections gives a median saving of $80,610,000 (IQR: $66,080,000 - $95,150,000; Figure 3) in the lifetime treatment costs for newly infected people. When discounting is taken into account, the costs of providing ART reduce to a median $35,180,000 (IQR: $29,300,000 - $41,070,000) and the resulting saving in treatment costs reduces to a median of $23,300,000 (IQR: $19,300,000 - $27,310,000).

**Figure 3** - Median total costs for providing all Medicare ineligibles with ART and the reduction in lifetime treatment costs for partners of Medicare Ineligibles who acquire infection over 5 years. The bars show the interquartile range in total costs across all simulations.

