**Log of test changes 2-25-17**

**First runs**

filename =

Capstone excel V2a.xlsx

Starting parallel pool (parpool) using the 'local' profile ... connected to 4 workers.

Strategy 1 Cost: 1819 QALY: 14.373 Unilat blind: 246.0 Bilat blind: 1.8

Strategy 1 Cost: 1827 QALY: 14.428 Unilat blind: 236.6 Bilat blind: 1.4

Strategy 1 Cost: 1819 QALY: 14.376 Unilat blind: 231.6 Bilat blind: 3.8

Strategy 1 Cost: 1826 QALY: 14.425 Unilat blind: 251.4 Bilat blind: 2.0

Strategy 2 Cost: 903 QALY: 14.379 Unilat blind: 558.6 Bilat blind: 23.0

Strategy 2 Cost: 829 QALY: 13.858 Unilat blind: 605.6 Bilat blind: 37.3

Strategy 2 Cost: 1932 QALY: 13.846 Unilat blind: 418.2 Bilat blind: 16.4

Strategy 2 Cost: 1993 QALY: 13.706 Unilat blind: 498.1 Bilat blind: 17.1

ICERs: 42754 1833 -197 -245

ICER Strategy 2 vs Strategy 1: ICER: 11036 ± 21167 Unilat blind: 278.7 ± 79.2 Bilat blind: 21.2 ± 10.4

>> doPortfolioAnalysis2c

filename =

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Capstone excel V2a.xlsx

Strategy 1 Cost: 1828 QALY: 14.434 Unilat blind: 238.7 Bilat blind: 2.0

Strategy 1 Cost: 1824 QALY: 14.418 Unilat blind: 242.9 Bilat blind: 3.2

Strategy 1 Cost: 1821 QALY: 14.388 Unilat blind: 231.9 Bilat blind: 3.8

Strategy 1 Cost: 1826 QALY: 14.419 Unilat blind: 242.5 Bilat blind: 1.7

Strategy 2 Cost: 920 QALY: 14.698 Unilat blind: 682.7 Bilat blind: 40.2

Strategy 2 Cost: 1706 QALY: 14.728 Unilat blind: 505.8 Bilat blind: 28.5

Strategy 2 Cost: 1495 QALY: 14.711 Unilat blind: 764.5 Bilat blind: 49.0

Strategy 2 Cost: 1006 QALY: 13.798 Unilat blind: 609.3 Bilat blind: 31.4

ICERs: -3191 -377 -1112 1328

ICER Strategy 2 vs Strategy 1: ICER: -838 ± 1872 Unilat blind: 401.6 ± 114.6 Bilat blind: 34.6 ± 8.9

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1819 QALY: 14.377 Unilat blind: 250.4 Bilat blind: 3.6

Strategy 1 Cost: 1825 QALY: 14.405 Unilat blind: 257.3 Bilat blind: 1.7

Strategy 1 Cost: 1821 QALY: 14.381 Unilat blind: 232.8 Bilat blind: 4.9

Strategy 1 Cost: 1832 QALY: 14.464 Unilat blind: 228.1 Bilat blind: 3.6

Strategy 2 Cost: 1836 QALY: 14.345 Unilat blind: 334.3 Bilat blind: 6.8

Strategy 2 Cost: 1657 QALY: 14.467 Unilat blind: 171.3 Bilat blind: 3.9

Strategy 2 Cost: 1640 QALY: 13.309 Unilat blind: 1200.3 Bilat blind: 83.6

Strategy 2 Cost: 890 QALY: 14.621 Unilat blind: 330.5 Bilat blind: 3.3

ICERs: -193 -2768 168 -4353

ICER Strategy 2 vs Strategy 1: ICER: -1786 ± 2153 Unilat blind: 266.9 ± 474.7 Bilat blind: 20.9 ± 38.5

***Strategy 2 is variable in cost, but usually cheaper.***

***Both excel sheets are labeled as strategy 1, so what’s the difference between strategy 1 and 2 in the results?***

***Sheet 2 has column L, SD health = 1. = 0 in sheet 1.***

***For purposes of further testing, make all SD = 0 for all values in both sheets. Make strategy 2 = no screen. Three further test runs:***

**Sheet 1:**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Compliance | Health | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 1 | 1 | 0.05 | 1 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 1 | 1 | 0.06 | 1 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 1 | 1 | 0.2 | 1 | 1 | 0 | 0 | 0 | 0 |

**Sheet2:**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Compliance | Health | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 1 | 1 | 0.05 | 4 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 1 | 1 | 0.06 | 4 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 1 | 1 | 0.2 | 4 | 1 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1822 QALY: 14.393 Unilat blind: 237.0 Bilat blind: 3.3

Strategy 1 Cost: 1821 QALY: 14.381 Unilat blind: 241.5 Bilat blind: 2.0

Strategy 1 Cost: 1824 QALY: 14.402 Unilat blind: 252.5 Bilat blind: 3.6

Strategy 1 Cost: 1826 QALY: 14.425 Unilat blind: 239.7 Bilat blind: 1.8

Strategy 2 Cost: 0 QALY: 13.709 Unilat blind: 1643.1 Bilat blind: 189.4

Strategy 2 Cost: 0 QALY: 13.732 Unilat blind: 1634.2 Bilat blind: 188.5

Strategy 2 Cost: 0 QALY: 13.724 Unilat blind: 1606.8 Bilat blind: 179.3

Strategy 2 Cost: 0 QALY: 13.700 Unilat blind: 1640.9 Bilat blind: 168.9

ICERs: 2638 2729 2694 2604

ICER Strategy 2 vs Strategy 1: ICER: 2666 ± 56 Unilat blind: 1388.6 ± 23.5 Bilat blind: 178.9 ± 9.3

>> doPortfolioAnalysis2c

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1821 QALY: 14.384 Unilat blind: 228.9 Bilat blind: 1.6

Strategy 1 Cost: 1819 QALY: 14.370 Unilat blind: 236.8 Bilat blind: 1.8

Strategy 1 Cost: 1820 QALY: 14.392 Unilat blind: 218.9 Bilat blind: 5.2

Strategy 1 Cost: 1824 QALY: 14.412 Unilat blind: 227.0 Bilat blind: 1.5

Strategy 2 Cost: 0 QALY: 13.737 Unilat blind: 1626.9 Bilat blind: 180.5

Strategy 2 Cost: 0 QALY: 13.751 Unilat blind: 1604.0 Bilat blind: 170.3

Strategy 2 Cost: 0 QALY: 13.716 Unilat blind: 1629.2 Bilat blind: 177.3

Strategy 2 Cost: 0 QALY: 13.690 Unilat blind: 1635.0 Bilat blind: 185.0

ICERs: 2793 2853 2705 2606

ICER Strategy 2 vs Strategy 1: ICER: 2739 ± 108 Unilat blind: 1395.9 ± 19.8 Bilat blind: 175.8 ± 6.7

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1826 QALY: 14.431 Unilat blind: 232.5 Bilat blind: 5.0

Strategy 1 Cost: 1821 QALY: 14.391 Unilat blind: 252.1 Bilat blind: 1.7

Strategy 1 Cost: 1827 QALY: 14.423 Unilat blind: 240.5 Bilat blind: 3.8

Strategy 1 Cost: 1819 QALY: 14.367 Unilat blind: 225.2 Bilat blind: 1.9

Strategy 2 Cost: 0 QALY: 13.725 Unilat blind: 1643.0 Bilat blind: 176.7

Strategy 2 Cost: 0 QALY: 13.703 Unilat blind: 1616.0 Bilat blind: 182.2

Strategy 2 Cost: 0 QALY: 13.625 Unilat blind: 1634.1 Bilat blind: 159.5

Strategy 2 Cost: 0 QALY: 13.719 Unilat blind: 1692.3 Bilat blind: 169.2

ICERs: 2688 2607 2344 2667

ICER Strategy 2 vs Strategy 1: ICER: 2576 ± 159 Unilat blind: 1408.7 ± 43.4 Bilat blind: 168.8 ± 10.3

**Capstone Excel v2a**

**Don’t change anything in sheet 2, changes only applied to sheet1**

1. **Pop type**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Compliance | Health | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 4 | 1 | 1 | 0.05 | 1 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 4 | 1 | 1 | 0.06 | 1 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 4 | 1 | 1 | 0.2 | 1 | 1 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 32570 QALY: 14.416 Unilat blind: 228.9 Bilat blind: 1.6

Strategy 1 Cost: 32519 QALY: 14.391 Unilat blind: 238.7 Bilat blind: 3.3

Strategy 1 Cost: 32529 QALY: 14.402 Unilat blind: 233.0 Bilat blind: 3.2

Strategy 1 Cost: 32489 QALY: 14.383 Unilat blind: 244.5 Bilat blind: 1.2

Strategy 2 Cost: 0 QALY: 13.701 Unilat blind: 1623.9 Bilat blind: 171.9

Strategy 2 Cost: 0 QALY: 13.727 Unilat blind: 1610.9 Bilat blind: 206.3

Strategy 2 Cost: 0 QALY: 13.714 Unilat blind: 1659.6 Bilat blind: 196.0

Strategy 2 Cost: 0 QALY: 13.714 Unilat blind: 1626.6 Bilat blind: 205.4

ICERs: 46668 48437 47556 47578

ICER Strategy 2 vs Strategy 1: ICER: 47560 ± 722 Unilat blind: 1394.0 ± 23.7 Bilat blind: 192.6 ± 15.7

***Costs go up, ICER up***

1. **Compliance**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Compliance | Health | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 3 | 1 | 0.05 | 1 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 3 | 1 | 0.06 | 1 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 3 | 1 | 0.2 | 1 | 1 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1660 QALY: 15.014 Unilat blind: 36.9 Bilat blind: 0.0

Strategy 1 Cost: 1660 QALY: 15.002 Unilat blind: 36.3 Bilat blind: 0.0

Strategy 1 Cost: 1659 QALY: 14.989 Unilat blind: 35.5 Bilat blind: 0.0

Strategy 1 Cost: 1657 QALY: 15.002 Unilat blind: 36.0 Bilat blind: 0.1

Strategy 2 Cost: 0 QALY: 13.758 Unilat blind: 1601.2 Bilat blind: 178.2

Strategy 2 Cost: 0 QALY: 13.711 Unilat blind: 1648.5 Bilat blind: 182.5

Strategy 2 Cost: 0 QALY: 13.678 Unilat blind: 1617.2 Bilat blind: 183.5

Strategy 2 Cost: 0 QALY: 13.728 Unilat blind: 1668.7 Bilat blind: 174.7

ICERs: 1334 1285 1253 1303

ICER Strategy 2 vs Strategy 1: ICER: 1294 ± 34 Unilat blind: 1597.7 ± 30.6 Bilat blind: 179.7 ± 4.1

***Costs down, QALYs up* ADDRESSED 3D**

**2b. Try changing screen type of strategy 1 to teleoph, the most effective now**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Compliance | Health | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 3 | 1 | 0.05 | 3 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 3 | 1 | 0.06 | 3 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 3 | 1 | 0.2 | 3 | 1 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1209 QALY: 14.956 Unilat blind: 27.3 Bilat blind: 0.0

Strategy 1 Cost: 1211 QALY: 15.006 Unilat blind: 29.4 Bilat blind: 0.0

Strategy 1 Cost: 1213 QALY: 15.036 Unilat blind: 20.9 Bilat blind: 0.0

Strategy 1 Cost: 1209 QALY: 14.998 Unilat blind: 18.5 Bilat blind: 0.0

Strategy 2 Cost: 0 QALY: 13.687 Unilat blind: 1624.5 Bilat blind: 180.7

Strategy 2 Cost: 0 QALY: 13.722 Unilat blind: 1620.3 Bilat blind: 174.9

Strategy 2 Cost: 0 QALY: 13.730 Unilat blind: 1612.6 Bilat blind: 163.6

Strategy 2 Cost: 0 QALY: 13.689 Unilat blind: 1674.6 Bilat blind: 171.7

ICERs: 923 948 954 924

ICER Strategy 2 vs Strategy 1: ICER: 937 ± 16 Unilat blind: 1608.9 ± 31.6 Bilat blind: 172.7 ± 7.1

**Costs further down. QALYs still up? ADDRESSED 3D**

1. **Population health**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Compliance | Health | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 1 | 3 | 0.05 | 1 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 1 | 3 | 0.06 | 1 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 1 | 3 | 0.2 | 1 | 1 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 873 QALY: 14.268 Unilat blind: 618.8 Bilat blind: 16.6

Strategy 1 Cost: 872 QALY: 14.238 Unilat blind: 587.5 Bilat blind: 14.2

Strategy 1 Cost: 875 QALY: 14.249 Unilat blind: 595.3 Bilat blind: 10.1

Strategy 1 Cost: 874 QALY: 14.275 Unilat blind: 582.6 Bilat blind: 12.1

Strategy 2 Cost: 0 QALY: 13.686 Unilat blind: 1626.3 Bilat blind: 174.3

Strategy 2 Cost: 0 QALY: 13.750 Unilat blind: 1687.6 Bilat blind: 190.8

Strategy 2 Cost: 0 QALY: 13.697 Unilat blind: 1628.0 Bilat blind: 165.6

Strategy 2 Cost: 0 QALY: 13.680 Unilat blind: 1626.9 Bilat blind: 173.4

ICERs: 1528 1722 1559 1513

ICER Strategy 2 vs Strategy 1: ICER: 1581 ± 96 Unilat blind: 1046.1 ± 39.1 Bilat blind: 162.8 ± 9.5

**Costs down, QALYs slightly down ADDRESSED 3D**

***Maybe progress through matrix so fast that they all die?***

**3b. Pophealth = 2**

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1517 QALY: 14.380 Unilat blind: 313.9 Bilat blind: 3.0

Strategy 1 Cost: 1514 QALY: 14.346 Unilat blind: 318.4 Bilat blind: 4.8

Strategy 1 Cost: 1519 QALY: 14.389 Unilat blind: 307.6 Bilat blind: 4.6

Strategy 1 Cost: 1515 QALY: 14.358 Unilat blind: 310.6 Bilat blind: 6.0

Strategy 2 Cost: 0 QALY: 13.705 Unilat blind: 1625.7 Bilat blind: 156.7

Strategy 2 Cost: 0 QALY: 13.694 Unilat blind: 1599.6 Bilat blind: 166.2

Strategy 2 Cost: 0 QALY: 13.726 Unilat blind: 1640.4 Bilat blind: 163.6

Strategy 2 Cost: 0 QALY: 13.704 Unilat blind: 1621.2 Bilat blind: 178.6

ICERs: 2286 2250 2362 2282

ICER Strategy 2 vs Strategy 1: ICER: 2295 ± 47 Unilat blind: 1309.1 ± 21.2 Bilat blind: 161.7 ± 7.9

**Costs lower, QALYs slightly lower vs test1 ADDRESSED 3D**

**3c. Are compliance and health columns mismatched? Health has 4 options, compliance only 3. Make health = 4.**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Compliance | Health | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 1 | 4 | 0.05 | 1 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 1 | 4 | 0.06 | 1 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 1 | 4 | 0.2 | 1 | 1 | 0 | 0 | 0 | 0 |

Error using screenSystemV2c (line 205)

Index exceeds matrix dimensions.

**3d. Make compliance = 4**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Compliance | Health | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 4 | 1 | 0.05 | 1 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 4 | 1 | 0.06 | 1 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 4 | 1 | 0.2 | 1 | 1 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 2066 QALY: 12.571 Unilat blind: 2143.3 Bilat blind: 174.5

Strategy 1 Cost: 2067 QALY: 12.579 Unilat blind: 2172.0 Bilat blind: 172.2

Strategy 1 Cost: 2063 QALY: 12.551 Unilat blind: 2069.3 Bilat blind: 171.0

Strategy 1 Cost: 2066 QALY: 12.568 Unilat blind: 2112.6 Bilat blind: 163.4

Strategy 2 Cost: 0 QALY: 13.716 Unilat blind: 1623.2 Bilat blind: 182.0

Strategy 2 Cost: 0 QALY: 13.710 Unilat blind: 1649.3 Bilat blind: 174.0

Strategy 2 Cost: 0 QALY: 13.722 Unilat blind: 1596.9 Bilat blind: 182.4

Strategy 2 Cost: 0 QALY: 13.716 Unilat blind: 1634.8 Bilat blind: 172.9

ICERs: -1799 -1808 -1789 -1799

ICER Strategy 2 vs Strategy 1: ICER: -1799 ± 8 Unilat blind: -498.3 ± 26.9 Bilat blind: 7.6 ± 4.2

***3e. Costs up, QALYs down. What we would expect for health = 4. Switch health and compliance columns, run again with health = 4***

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Health | Compliance | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 4 | 1 | 0.05 | 1 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 4 | 1 | 0.06 | 1 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 4 | 1 | 0.2 | 1 | 1 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 2071 QALY: 12.591 Unilat blind: 2137.5 Bilat blind: 171.8

Strategy 1 Cost: 2070 QALY: 12.594 Unilat blind: 2099.5 Bilat blind: 162.2

Strategy 1 Cost: 2068 QALY: 12.573 Unilat blind: 2062.2 Bilat blind: 154.1

Strategy 1 Cost: 2067 QALY: 12.568 Unilat blind: 2191.2 Bilat blind: 159.2

Strategy 2 Cost: 0 QALY: 13.678 Unilat blind: 1639.5 Bilat blind: 187.5

Strategy 2 Cost: 0 QALY: 13.732 Unilat blind: 1592.4 Bilat blind: 191.6

Strategy 2 Cost: 0 QALY: 13.732 Unilat blind: 1629.2 Bilat blind: 192.2

Strategy 2 Cost: 0 QALY: 13.674 Unilat blind: 1651.9 Bilat blind: 179.0

ICERs: -1887 -1798 -1797 -1893

ICER Strategy 2 vs Strategy 1: ICER: -1844 ± 54 Unilat blind: -494.4 ± 44.5 Bilat blind: 25.8 ± 10.0

***Costs up, QALYs down.***

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Health | Compliance | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 1 | 3 | 0.05 | 1 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 1 | 3 | 0.06 | 1 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 1 | 3 | 0.2 | 1 | 1 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 871 QALY: 14.236 Unilat blind: 627.5 Bilat blind: 13.8

Strategy 1 Cost: 872 QALY: 14.254 Unilat blind: 622.1 Bilat blind: 11.6

Strategy 1 Cost: 872 QALY: 14.239 Unilat blind: 604.9 Bilat blind: 17.2

Strategy 1 Cost: 871 QALY: 14.254 Unilat blind: 584.6 Bilat blind: 11.6

Strategy 2 Cost: 0 QALY: 13.723 Unilat blind: 1618.0 Bilat blind: 181.3

Strategy 2 Cost: 0 QALY: 13.721 Unilat blind: 1604.7 Bilat blind: 170.8

Strategy 2 Cost: 0 QALY: 13.743 Unilat blind: 1617.9 Bilat blind: 191.9

Strategy 2 Cost: 0 QALY: 13.730 Unilat blind: 1608.8 Bilat blind: 174.0

ICERs: 1666 1662 1733 1690

ICER Strategy 2 vs Strategy 1: ICER: 1688 ± 32 Unilat blind: 1002.5 ± 19.3 Bilat blind: 165.9 ± 6.8

***Costs way down, QALYs down slightly. Revert to test2.***

1. **Prevalence (change in both strat 1 and 2)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Health | Compliance | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 1 | 1 | 0.5 | 1 | 1 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 1 | 1 | 0.5 | 1 | 1 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 1 | 1 | 0.5 | 1 | 1 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1822 QALY: 14.390 Unilat blind: 229.5 Bilat blind: 1.4

Strategy 1 Cost: 1826 QALY: 14.411 Unilat blind: 223.3 Bilat blind: 1.5

Strategy 1 Cost: 1824 QALY: 14.407 Unilat blind: 239.7 Bilat blind: 1.9

Strategy 1 Cost: 1825 QALY: 14.404 Unilat blind: 229.7 Bilat blind: 2.9

Strategy 2 Cost: 0 QALY: 13.712 Unilat blind: 1583.9 Bilat blind: 185.1

Strategy 2 Cost: 0 QALY: 13.720 Unilat blind: 1614.1 Bilat blind: 179.3

Strategy 2 Cost: 0 QALY: 13.748 Unilat blind: 1657.0 Bilat blind: 169.7

Strategy 2 Cost: 0 QALY: 13.674 Unilat blind: 1600.2 Bilat blind: 178.8

ICERs: 2641 2669 2786 2504

ICER Strategy 2 vs Strategy 1: ICER: 2650 ± 116 Unilat blind: 1383.2 ± 27.2 Bilat blind: 176.3 ± 6.5

***Shouldn’t Unilat and Bilat blind be affected?* WILL BE ONCE WE INCORPORATE THAT INTO CODE. RIGHT NOW ONLY LOOKS AT DM IN FUNCTION ITSELF.**

1. **Utility = 3 for both sheets**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Health | Compliance | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 1 | 1 | 0.05 | 1 | 3 | 0 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 1 | 1 | 0.06 | 1 | 3 | 0 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 1 | 1 | 0.2 | 1 | 3 | 0 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1825 QALY: 14.447 Unilat blind: 237.1 Bilat blind: 1.8

Strategy 1 Cost: 1824 QALY: 14.437 Unilat blind: 253.3 Bilat blind: 3.2

Strategy 1 Cost: 1826 QALY: 14.455 Unilat blind: 240.7 Bilat blind: 3.3

Strategy 1 Cost: 1816 QALY: 14.386 Unilat blind: 226.0 Bilat blind: 1.2

Strategy 2 Cost: 0 QALY: 14.001 Unilat blind: 1631.3 Bilat blind: 162.6

Strategy 2 Cost: 0 QALY: 14.023 Unilat blind: 1631.2 Bilat blind: 190.6

Strategy 2 Cost: 0 QALY: 14.024 Unilat blind: 1619.7 Bilat blind: 197.7

Strategy 2 Cost: 0 QALY: 14.011 Unilat blind: 1640.3 Bilat blind: 183.5

ICERs: 4237 4469 4478 4338

ICER Strategy 2 vs Strategy 1: ICER: 4381 ± 115 Unilat blind: 1391.3 ± 17.0 Bilat blind: 181.2 ± 14.5

***Blindness has high utility, QALYs go up especially in no screen condition***

1. SD Utility = 1 for both sheets

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Health | Compliance | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 1 | 1 | 0.05 | 1 | 1 | 1 | 0 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 1 | 1 | 0.06 | 1 | 1 | 1 | 0 | 0 | 0 |
| Cree | 10000 | 3 | 1 | 1 | 0.2 | 1 | 1 | 1 | 0 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1824 QALY: 14.416 Unilat blind: 268.5 Bilat blind: 3.8

Strategy 1 Cost: 1826 QALY: 14.431 Unilat blind: 248.1 Bilat blind: 1.5

Strategy 1 Cost: 1822 QALY: 14.400 Unilat blind: 233.4 Bilat blind: 1.6

Strategy 1 Cost: 1828 QALY: 14.440 Unilat blind: 241.0 Bilat blind: 3.3

Strategy 2 Cost: 0 QALY: 13.788 Unilat blind: 1659.1 Bilat blind: 165.4

Strategy 2 Cost: 0 QALY: 13.812 Unilat blind: 1636.6 Bilat blind: 182.0

Strategy 2 Cost: 0 QALY: 13.755 Unilat blind: 1613.4 Bilat blind: 178.6

Strategy 2 Cost: 0 QALY: 13.783 Unilat blind: 1622.7 Bilat blind: 170.0

ICERs: 2882 2992 2736 2857

ICER Strategy 2 vs Strategy 1: ICER: 2867 ± 105 Unilat blind: 1385.2 ± 5.2 Bilat blind: 171.4 ± 8.8

***No effect on QALYs or ICER SD- WILL BE ADDRESSED IN LATER VERSIONS***

1. **SD demographics = 1 for both sheets**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Region | Census | Pop type | Health | Compliance | Prevalence DM as proportion | Screen type | Utility | SD Utility | SD Demographics | SD Screen | SD Health |
| Montreal1 | 1000000 | 1 | 1 | 1 | 0.05 | 1 | 1 | 0 | 1 | 0 | 0 |
| Montreal2 | 2000000 | 1 | 1 | 1 | 0.06 | 1 | 1 | 0 | 1 | 0 | 0 |
| Cree | 10000 | 3 | 1 | 1 | 0.2 | 1 | 1 | 0 | 1 | 0 | 0 |

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1895 QALY: 14.952 Unilat blind: 239.1 Bilat blind: 3.9

Strategy 1 Cost: 2173 QALY: 17.157 Unilat blind: 373.7 Bilat blind: 9.8

Strategy 1 Cost: 2092 QALY: 16.515 Unilat blind: 338.0 Bilat blind: 4.2

Strategy 1 Cost: 1813 QALY: 14.317 Unilat blind: 274.7 Bilat blind: 2.0

Strategy 2 Cost: 0 QALY: 15.098 Unilat blind: 2401.8 Bilat blind: 405.5

Strategy 2 Cost: 0 QALY: 12.565 Unilat blind: 1213.2 Bilat blind: 103.2

Strategy 2 Cost: 0 QALY: 16.103 Unilat blind: 1540.7 Bilat blind: 193.6

Strategy 2 Cost: 0 QALY: 15.103 Unilat blind: 2021.3 Bilat blind: 330.7

ICERs: 3129 629 -5413 3150

ICER Strategy 2 vs Strategy 1: ICER: 374 ± 4035 Unilat blind: 1487.9 ± 584.2 Bilat blind: 253.3 ± 138.2

***SD increases for COST, QALYs and ICER. Adjusts SD of ages.***

1. **SD Screen = 1**

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1813 QALY: 14.393 Unilat blind: 261.2 Bilat blind: 4.2

Strategy 1 Cost: 1830 QALY: 14.438 Unilat blind: 321.7 Bilat blind: 5.1

Strategy 1 Cost: 1765 QALY: 14.309 Unilat blind: 398.5 Bilat blind: 6.0

Strategy 1 Cost: 1811 QALY: 14.380 Unilat blind: 310.8 Bilat blind: 5.9

Strategy 2 Cost: 0 QALY: 13.741 Unilat blind: 1617.4 Bilat blind: 184.7

Strategy 2 Cost: 0 QALY: 13.685 Unilat blind: 1630.2 Bilat blind: 172.6

Strategy 2 Cost: 0 QALY: 13.726 Unilat blind: 1593.6 Bilat blind: 173.8

Strategy 2 Cost: 0 QALY: 13.662 Unilat blind: 1561.8 Bilat blind: 178.0

ICERs: 2826 2597 2762 2515

ICER Strategy 2 vs Strategy 1: ICER: 2675 ± 144 Unilat blind: 1277.7 ± 69.9 Bilat blind: 172.0 ± 6.0

***SD of screened cost and QALY up. No change to unscreened.***

1. **SD health = 1**

filename =

Capstone excel V2a.xlsx

Strategy 1 Cost: 1827 QALY: 13.853 Unilat blind: 927.3 Bilat blind: 37.1

Strategy 1 Cost: 1305 QALY: 14.838 Unilat blind: 217.8 Bilat blind: 2.3

Strategy 1 Cost: 1675 QALY: 14.813 Unilat blind: 91.6 Bilat blind: 0.0

Strategy 1 Cost: 1277 QALY: 14.203 Unilat blind: 392.1 Bilat blind: 7.7

Strategy 2 Cost: 0 QALY: 13.104 Unilat blind: 2620.0 Bilat blind: 549.7

Strategy 2 Cost: 0 QALY: 13.317 Unilat blind: 1783.3 Bilat blind: 310.5

Strategy 2 Cost: 0 QALY: 12.793 Unilat blind: 1993.7 Bilat blind: 336.4

Strategy 2 Cost: 0 QALY: 13.696 Unilat blind: 1621.7 Bilat blind: 224.2

ICERs: 1150 1371 931 2081

ICER Strategy 2 vs Strategy 1: ICER: 1383 ± 499 Unilat blind: 1597.5 ± 281.8 Bilat blind: 343.4 ± 123.9

***SD cost and QALYs up for both.***