**Supplementary Table 1.:**

**Drug-Related Per Capita Health Costs**

**– Calculation of Key Mean Ratios**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **State** | **P.C. Total Costs** | **P.C. Health Care** | **Lost Productivity** | **Productivity / Health Care Ratio** |
| Newfoundland and Labrador | 1373 | 0.34 | 0.43 | 1.26471 |
| Prince Edward Island | 1222 | 0.37 | 0.35 | 0.94595 |
| Nova Scotia | 1277 | 0.35 | 0.40 | 1.14286 |
| New Brunswick | 1232 | 0.35 | 0.39 | 1.11429 |
| Quebec | 1058 | 0.33 | 0.41 | 1.24242 |
| Ontario | 1074 | 0.28 | 0.39 | 1.39286 |
| Manitoba | 1094 | 0.33 | 0.40 | 1.21212 |
| Saskatchewan | 1224 | 0.33 | 0.41 | 1.24242 |
| Alberta | 1332 | 0.30 | 0.46 | 1.53333 |
| British Columbia | 1050 | 0.33 | 0.38 | 1.15152 |
| Yukon | 1929 | 0.37 | 0.45 | 1.21622 |
| Northwest Territories | 2329 | 0.31 | 0.53 | 1.70968 |
| Nunavut | 2652 | 0.39 | 0.48 | 1.23077 |
|   |   |   |   |   |
| **Key Ratios** |   | **0.32625** | **0.40750** | **1.25676** |

**Supplementary Table 2.:**

**Calculation of Per Capita Drug Related Health Costs in Quebec**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **QC Lost Productivity** | **QC Health Care** | **QC Total Costs from Health Care** | **QC Total Costs from Productivity** | **QC** |
| Alcohol\_Total\_Cost |   |   | 2324 | 2339 | 2339 |
| Tobacco\_Total\_Cost |   |   | 3105 | 3124 | 3124 |
| Cannabis\_Total\_Cost |   |   | 176 | 177 | 177 |
| Opioid\_Total\_Cost |   |   | 790 | 795 | 795 |
| Cocaine\_Total\_Cost |   |   | 210 | 211 | 211 |
| Stimulants\_Total\_Cost |   |   | 290 | 292 | 292 |
| All\_Total\_Cost |   |   | 7214 | 7259 | 7259 |
| Alcohol\_Health\_Care\_Cost | 953 | 758 |   |   | 758 |
| Tobacco\_Health\_Care\_Cost | 1273 | 1013 |   |   | 1013 |
| CanHealth\_Care\_Cost | 72 | 57 |   |   | 57 |
| Opioid\_Health\_Care\_Cost | 324 | 258 |   |   | 258 |
| Cocaine\_Health\_Care\_Cost | 86 | 68 |   |   | 68 |
| Stimulants\_Health\_Care\_Cost | 119 | 95 |   |   | 95 |
| All\_Health\_Care\_Cost | 2958 | 2354 |   |   | 2354 |

**Supplementary Table 3.:**

**Correlation Matrix of Various Drug Total Costs with Total Congenital Defect Rate**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Correlation Matrix** | Total Defect Rate | PC Drug Costs | PC Alcohol Total Cost | PC Tobacco Total Cost | PC Cannabis Total Cost | PC Opioid Total Cost | PC Cocaine Total Cost | PC Stimulant Total Cost |
| Total Defect Rate | 1.0000 | 0.4445 | 0.2236 | 0.6282 | 0.2216 | -0.1677 | 0.1964 | 0.3762 |
| PC Drug Costs | 0.4445 | 1.0000 | 0.9443 | 0.8756 | 0.6412 | -0.2443 | 0.4604 | 0.7404 |
| PC Alcohol Total Cost | 0.2236 | 0.9443 | 1.0000 | 0.6901 | 0.6466 | -0.1712 | 0.5587 | 0.5623 |
| PC Tobacco Total Cost | 0.6282 | 0.8756 | 0.6901 | 1.0000 | 0.4945 | -0.3490 | 0.2405 | 0.8063 |
| PC Cannabis Total Cost | 0.2216 | 0.6412 | 0.6466 | 0.4945 | 1.0000 | -0.2307 | 0.7576 | 0.4506 |
| PC Opioid Total Cost | -0.1677 | -0.2443 | -0.1712 | -0.3490 | -0.2307 | 1.0000 | 0.0461 | -0.0064 |
| PC Cocaine Total Cost | 0.1964 | 0.4604 | 0.5587 | 0.2405 | 0.7576 | 0.0461 | 1.0000 | 0.1149 |
| PC Stimulant Total Cost | 0.3762 | 0.7404 | 0.5623 | 0.8063 | 0.4506 | -0.0064 | 0.1149 | 1.0000 |

**Supplementary Table 4.:**

**Significance Matrix of Various Drug Total Costs with Total Congenital Defect Rate**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Significance Matrix** | Total Defect Rate | PC Drug Costs | PC Alcohol Total Cost | PC Tobacco Total Cost | PC Cannabis Total Cost | PC Opioid Total Cost | PC Cocaine Total Cost | PC Stimulant Total Cost |
| Total Defect Rate | 0.0000 | 0.1280 | 0.4628 | 0.0215 | 0.4669 | 0.5840 | 0.5203 | 0.2052 |
| PC Drug Costs | 0.1280 | 0.0000 | 0.0000 | 0.0001 | 0.0182 | 0.4212 | 0.1134 | 0.0038 |
| PC Alcohol Total Cost | 0.4628 | 0.0000 | 0.0000 | 0.0090 | 0.0169 | 0.5760 | 0.0472 | 0.0455 |
| PC Tobacco Total Cost | 0.0215 | 0.0001 | 0.0090 | 0.0000 | 0.0858 | 0.2425 | 0.4287 | 0.0009 |
| PC Cannabis Total Cost | 0.4669 | 0.0182 | 0.0169 | 0.0858 | 0.0000 | 0.4482 | 0.0027 | 0.1223 |
| PC Opioid Total Cost | 0.5840 | 0.4212 | 0.5760 | 0.2425 | 0.4482 | 0.0000 | 0.8812 | 0.9834 |
| PC Cocaine Total Cost | 0.5203 | 0.1134 | 0.0472 | 0.4287 | 0.0027 | 0.8812 | 0.0000 | 0.7086 |
| PC Stimulant Total Cost | 0.2052 | 0.0038 | 0.0455 | 0.0009 | 0.1223 | 0.9834 | 0.7086 | 0.0000 |