**Table A1 Extubation Advisor Costing Analysis**

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| --- | --- | --- | --- | --- |
| Cost Item | Description | Annual Cost\*(C$) | Annual Cost Per Patient\*\*(C$) | Proportion of Total Annual Cost (%) |
| TOTAL | Sum of personnel and infrastructure costs | **164,221** | **65.69** | **100%** |
| PERSONNEL |   | **70,734** | **28.29** | **43.1%** |
| Training(Opportunity Cost) | Opportunity costs of attending training for RTs and MDs (45-minute training session) | 4,672 | 1.87 | 2.9% |
| Coordination Support | Coordination support for EA usage(0.25 FTE for an EA coordinator) | 12,188 | 4.88 | 7.4% |
| Technical Support | Technical support by IT personnel and biomedical technologist(0.05 FTE for IT, 0.05 FTE for a biomedical technologist) | 7,751 | 3.10 | 4.7% |
| Entering data (Opportunity Cost) | Opportunity cost of time spent by RTs to enter patient data into EA;Assuming 10 minutes per SBT, 3 SBTs per patient(Number of ventilated patients per year abstracted from TOH data warehouse (2000 patients per year)) | 46,123 | 18.45 | 28.1% |
| INFRASTRUCTURE |   | **93,488** | **37.40** | **56.9%** |
| Licencing Costs For EA | C$2500 per bed | 90,000 | 36.00 | 54.8% |
| Virtual Server | 2 CPUs and 8 GB RAM | 1,500 | 0.60 | 0.9% |
| Server Storage | Average annual cost estimated across 3 models of server storage - Fastest disks, Performance disks, Capacity disks | 1,988 | 0.80 | 1.2% |

EA, Extubation Advisor; RT, Respiratory Therapist; IT, Information Technology; SBT, Spontaneous Breathing Trial

1Calculated using average salary estimates, 37.5 hours in a week, 52 weeks in a year.

2Cost per patient estimated by dividing the total institution cost by number of ventilated patients in a year; Number of ventilated patients per year obtained from TOH data warehouse (2500 patients a year).

3Licensing costs have been calculated for 2 ICUs with 18 beds each.