

Appendix 3 (as supplied by the authors): Healthcare utilization and costs

Table A1: Healthcare utilization in the last 6-months of life stratified by chronic condition

Decedents	Fiscal Year	Hospital Admission %	ICU Admission %	ED Visits %	Saw ≥ 10 Different Physicians %	Mechanical Ventilation %
Cancer (n=195,560)	All	91.9	13.6	89.7	76.6	8.0
	2004	93.2	13.3	88.0	68.7	7.1
	2005	92.7	13.4	88.1	69.2	7.6
	2006	92.3	13.2	88.8	72.1	7.3
	2007	92.2	13.4	89.2	74.9	7.8
	2008	91.8	13.1	89.4	76.4	7.9
	2009	92.1	13.2	89.5	77.3	8.0
	2010	91.7	13.6	90.1	79.0	8.0
	2011	91.5	13.8	90.2	79.4	8.3
	2012	91.2	14.4	90.8	79.8	8.7
	2013	91.1	14.5	91.4	81.4	8.5
	2014	91.1	13.6	91.2	82.3	8.5
COPD (n=48,755)	All	83.2	29.9	87.9	59.6	24.6
	2004	87.3	29.6	89.7	51.2	21.5
	2005	85.9	28.9	89.3	51.4	21.0
	2006	84.8	29.1	88.9	57.0	23.8
	2007	83.7	29.7	88.3	59.6	24.6
	2008	82.7	28.4	87.2	58.1	24.5
	2009	81.9	29.1	87.3	59.3	23.9
	2010	82.3	30.2	87.6	62.2	24.6
	2011	82.8	30.3	87.9	62.7	25.5
	2012	82.0	29.7	87.6	62.3	24.7
	2013	82.3	31.7	87.1	64.0	26.8
	2014	81.5	31.1	87.1	63.2	27.6
CAD (n=45,400)	All	75.1	38.2	82.1	58.6	27.2
	2004	83.2	42.8	86.5	54.3	25.4
	2005	81.7	40.6	86.0	54.6	26.9
	2006	79.5	39.1	85.2	57.7	26.8
	2007	78.5	38.1	84.6	59.8	27.4
	2008	75.5	36.3	83.1	59.7	25.5
	2009	74.8	38.6	82.3	60.2	27.1
	2010	74.1	36.7	82.1	60.1	27.7
	2011	72.6	36.5	81.4	60.3	26.9
	2012	70.1	35.9	78.5	57.8	26.6
	2013	70.3	39.0	78.6	59.2	29.0
	2014	68.5	38.1	77.1	59.2	29.0

Decedents		Hospital admission %	ICU admission %	ED visits %	Saw ≥ 10 different physicians %	Mechanical ventilation %
	Fiscal Year					
CHF (n=110,337)	All	84.8	32.2	88.8	66.3	20.5
	2004	88.2	34.3	90.5	56.8	18.4
	2005	86.3	34.0	89.9	57.1	18.6
	2006	85.4	32.7	89.3	61.2	19.6
	2007	84.4	32.7	88.4	64.9	19.5
	2008	83.7	30.7	88.4	64.8	19.1
	2009	84.5	31.9	88.2	67.4	20.6
	2010	83.8	30.9	88.0	68.7	21.0
	2011	84.1	31.9	88.5	70.4	21.3
	2012	83.8	32.7	88.4	70.1	21.7
	2013	84.2	31.9	88.8	72.1	22.5
	2014	84.6	30.9	88.8	72.9	22.3
PVD (n=9,701)	All	81.7	39.6	82.5	58.4	31.7
	2004	89.0	43.7	84.8	54.1	30.2
	2005	87.0	42.9	85.8	57.0	30.5
	2006	82.0	37.3	82.0	56.6	30.0
	2007	80.3	40.1	81.7	55.1	31.3
	2008	81.4	40.6	82.5	61.9	33.1
	2009	81.0	38.9	81.8	60.1	33.1
	2010	77.6	36.6	81.2	57.4	31.3
	2011	80.4	36.7	82.8	60.2	31.1
	2012	79.9	40.9	82.1	62.1	35.6
	2013	78.3	38.0	79.1	59.6	32.1
	2014	78.7	38.0	82.7	60.9	31.6
Severe Liver Disease (n=14,643)	All	93.4	41.0	94.6	77.6	30.5
	2004	94.1	34.7	94.2	66.8	25.3
	2005	94.2	38.9	94.0	67.5	27.7
	2006	94.5	40.1	94.7	73.3	28.9
	2007	93.2	36.9	93.3	76.0	27.2
	2008	92.1	37.2	94.1	76.4	27.7
	2009	91.9	38.9	93.8	76.3	29.8
	2010	93.8	39.9	95.2	79.2	30.2
	2011	94.0	42.0	95.8	81.3	33.4
	2012	92.4	43.5	93.8	80.9	31.9
	2013	93.9	47.1	95.0	84.4	34.7
	2014	93.9	47.6	95.6	85.1	35.5

Decedents	Fiscal Year	Hospital admission %	ICU admission %	ED visits %	Saw ≥ 10 different physicians %	Mechanical ventilation %
Diabetes (with end-organ failure (n=745)	All	72.3	27.7	81.1	66.4	22.1
	2004	92.9	32.1	85.7	67.9	25.0
	2005	76.7	30.0	93.3	53.3	*
	2006	76.9	36.9	80.0	63.1	24.6
	2007	74.0	20.6	82.2	63.0	13.7
	2008	71.2	17.8	82.2	76.7	16.4
	2009	73.5	33.8	80.9	67.7	27.9
	2010	64.5	25.8	74.2	59.7	25.8
	2011	71.1	24.1	75.9	63.9	20.5
	2012	71.6	31.1	85.1	66.2	32.4
	2013	69.6	28.3	79.4	67.4	23.9
	2014	70.4	28.9	82.5	72.2	22.7
Renal Failure (n=29,199)	All	85.3	30.3	87.8	72.3	20.3
	2004	91.6	35.6	90.0	72.3	22.4
	2005	90.0	33.4	89.4	72.1	21.3
	2006	88.2	31.4	89.8	73.5	20.5
	2007	87.4	33.2	89.1	74.9	22.3
	2008	86.2	30.4	88.0	75.1	21.6
	2009	80.0	27.7	85.0	70.1	18.9
	2010	80.9	26.7	86.3	69.1	18.8
	2011	81.3	27.3	86.2	72.0	18.2
	2012	80.5	27.3	85.2	69.1	18.5
	2013	82.2	28.2	86.8	72.8	20.3
	2014	81.9	26.9	86.7	71.6	18.1
Dementia (n=86,778)	All	63.4	6.5	70.9	39.4	4.2
	2004	71.9	6.9	77.2	36.0	4.0
	2005	67.4	6.2	74.7	33.5	4.0
	2006	64.0	6.4	72.0	35.4	4.0
	2007	63.9	6.2	71.7	37.9	3.6
	2008	62.3	5.7	69.7	37.7	3.3
	2009	62.3	6.4	69.2	39.3	4.4
	2010	63.8	6.8	71.4	42.3	4.2
	2011	62.5	7.1	70.4	40.6	4.4
	2012	61.7	6.3	69.2	40.3	4.4
	2013	61.9	6.9	69.4	42.3	4.6
	2014	61.2	6.6	69.4	42.4	4.3

* Data suppressed due to low number of cases (< 6)

COPD- Chronic obstructive pulmonary disease; CAD – Coronary artery disease; CHF- Congestive heart failure; PVD – Peripheral vascular disease; ICU – Intensive Care Unit; ED – Emergency Department

Table A2: Health care costs (adjusted to 2014 Canadian dollars) in the last 6-months of life stratified by site of death

	All patients N=962,462	Died in hospital N=433,074	Died out of hospital N=529,388
Cost Categories	Cost (\$)		
In-patient			
Mean (SD)	17,521 (32,456)	28,387 (41,727)	8,631 (17,753)
Median (IQR)	7,824 (0-21,426)	16,284 (7,290-33,216)	0 (0-11,060)
Hospital outpatient clinic			
Mean (SD)	1,294 (2,571)	1,841 (3,161)	847 (1,844)
Median (IQR)	359 (0-1,558)	779 (0-2,279)	0 (0-966)
Same day surgery*			
Mean (SD)	163 (691)	213 (806)	121 (576)
Emergency department			
Mean (SD)	936 (930)	1,291 (922)	646 (831)
Median (IQR)	754 (205-1,351)	1,061 (697-1,660)	412 (0-976)
Drug cost			
Mean (SD)	1,542 (2,810)	1,492 (2,837)	1,582 (2,786)
Median (IQR)	980 (311-1,939)	896 (298-1,794)	1,058 (325-2,054)
Rehabilitation services*			
Mean (SD)	563 (4,807)	662 (5,122)	482 (4,532)
Complex continuing care*			
Mean (SD)	2,420 (11,575)	843 (6,923)	3,710 (14,166)
Long-term care *			
Mean (SD)	4,215 (8,072)	1,879 (5,577)	6,125 (9,215)
Home care services			
Mean (SD)	2,220 (4,828)	2,083 (4,103)	2,332 (5,346)
Median (IQR)	414 (0-2,334)	616 (0-2,382)	0 (0-2,275)
Physician (fee for service			
Mean (SD)	3,296 (4,950)	4,556 (5,593)	2,265 (4,075)
Median (IQR)	2,108 (832-4,313)	3,172 (1,707-5,664)	1,233 (485-3,077)
Total cost			
Mean (SD)	36,335 (40,369)	45,621 (49,090)	28,739 (29,379)
Median (IQR)	26,329 (13,873-45,279)	32,291 (18,245-55,308)	22,895 (7,636-36,931)

* Median (IQR) costs are 0 for these health sectors