



Supplementary Figure 1. Flow diagram showing the establishment of the spinal cord injury (SCI) cohort. ICD-9 (International Classification of Disease, ninth edition) External Cause of Injury Code: E-code.

Supplementary Table 1. Estimated mean survival for 16-year period from rolling-over extrapolation method and Kaplan-Meier (KM) method in the SCI cohort and subcohorts stratified by sex, age, cause, and level of injury.

	16-year survival based on KM estimate (2000-2015)	Extrapolated survival rate from the first 10 years of follow up (2000-2009) of the same subcohort	Relative bias
All	50.5	52.2	3.5%
Sex			
Male	50.4	50.9	1.0%
Female	51	55.8	9.4%
Age (year)			
16-39	76.4	74.1	-3.1%
40-59	52.5	55.3	5.9%
60-99	14.7	15.1	3.1%
Traumatic causes	53.2	54.1	1.6%
MV injuries	55.2	56.3	2.1%
Falls	49	48.9	-0.2%
16-99			
MV-related quadriplegia	49.5	49.1	0.8%
MV-related paraplegia	69.6	75.3	8.1%
Fall-related quadriplegia	44.5	43.3	-1.8%
Fall-related paraplegia	55.7	55.1	0.7%
16-59			
MV-related quadriplegia	64	61.2	-4.4%
MV-related paraplegia	73.5	79.6	8.3%
Fall-related quadriplegia	58.2	61.4	5.4%
Fall-related paraplegia	68.7	66.2	-3.5%

SCI: spinal cord injury; MV: motor vehicle; Relative bias = (extrapolated estimate – KM estimate)/(KM estimate).

Supplementary Table 2. Comparison of life expectancy (LE), loss-of-LE, lifetime medical costs (LMC, US\$ with 3% discount) and cost per year (CPY) for those living with quadriplegia and paraplegia stratified by age and coding with external causes (E-code). Values are numbers of cases (95% confidence interval).

Age (year)	Category	LE (year)	Loss-of-LE (year)	LMC (US\$)	CPY* (US\$)
16-39	Quadriplegia	28.3 (22.8 to 38.8)	19.6 (9.2 to 25.3)	100784 (87082 to 115480)†	4268 (3739 to 4690)†
	Paraplegia	27.2 (21.9 to 39.3)	21.6 (9.5 to 27.1)	71259 (59588 to 82363)†	3066 (2633 to 3509)†
	Quadriplegia with E-code	21.6 (19.8 to 36.3)	23.8 (12.2 to 28.3)	96117 (83952 to 114851)‡	4405 (3600 to 5052)
	Paraplegia with E-code	24.6 (19.6 to 36.2)	24.7 (12.8 to 29.9)	78658 (69312 to 96826)‡	3594 (3176 to 4040)
40-59	Quadriplegia	18.4 (15.3 to 19.4)	12.5 (10.0 to 13.9)	81538 (74890 to 87446)†	5165 (4765 to 5446)†
	Paraplegia	16.5 (14.9 to 19.4)	14.6 (11.6 to 16.1)	68334 (61323 to 77005)†	4319 (3818 to 4834)†
	Quadriplegia with E-code	15.9 (14.4 to 18.1)	13.3 (11.2 to 15.0)	76041 (68961 to 84842)	5015 (4504 to 5492)
	Paraplegia with E-code	17.3 (14.7 to 24.0)	13.6 (7.1 to 16.0)	80873 (69621 to 96656)	4902 (4320 to 5587)
60-99	Quadriplegia	7.7 (7.2 to 8.2)	86.2 (79.6 to 93.2)	63179 (58751 to 66911)†	8268 (7662 to 8875)†
	Paraplegia	8.8 (7.6 to 10.3)	74.7 (57.7 to 89.4)	51743 (43623 to 59551)†	6006 (5221 to 6857)†
	Quadriplegia with E-code	8.6 (7.9 to 9.5)	6.4 (5.7 to 7.2)	62488 (58172 to 67088)	7408 (6715 to 7892)
	Paraplegia with E-code	8.8 (7.4 to 11.2)	6.3 (4.0 to 7.9)	60229 (50473 to 72754)	6960 (5803 to 8008)

*: with 3% discount for the numerator and denominator.

†: $p < .05$, comparison between quadriplegia and paraplegia.

‡: $p < .05$, comparison between quadriplegia with E-code and paraplegia with E-code.

Supplementary Table 3. Comparison of the standardized mortality ratio (SMR), life expectancy (LE), loss-of-LE, lifetime medical costs (LMC, US\$ with 3% discount) and SCI-related LMC for quadriplegia and paraplegia patients (16-99 years old) stratified by motor vehicle (MV) injuries and falls. Values are numbers (95% confidence interval).

	No. death	SMR	LE (year)	Loss-of-LE (year)	LMC (US\$)	SCI-related LMC (US\$)
MV injuries						
Quadriplegia	384	31 (28 to 34)	16.2 (14.6 to 19.4)	15.7 (12.6 to 17.5)*	80930 (71951 to 88176)	54073 (48578 to 58402)
Paraplegia	78	36 (28 to 44)	18.0 (16.3 to 22.1)	23.8 (19.5 to 25.9)*	71759 (65378 to 79552)	45888 (38874 to 54720)
Falls						
Quadriplegia	275	29 (25 to 32)	15.3 (12.8 to 19.3)*	11.6 (7.5 to 14.2)*	77204 (69575 to 86258)	54709 (46130 to 63629)
Paraplegia	127	32 (26 to 37)	26.8 (19.7 to 31.0)*	7.3 (2.8 to 14.8)*	83525 (69628 to 97375)	55741 (45160 to 69191)

*: $p < .05$, comparison between quadriplegia and paraplegia.