

Additional file 5a: Numbers and proportion of physician agreement by stage of coding

Cause of death	Initial		Reconciliation		Adjudication		Total
	Agreement	%	Agreement	%	Agreement	%	
Communicable							
Malaria	1378	65.9%	323	15.4%	390	18.7%	2091
Tuberculosis	4620	80.4%	539	9.4%	588	10.2%	5747
HIV/STI	352	76.5%	51	11.1%	57	12.4%	460
Other infectious diseases	4272	60.8%	1336	19.0%	1424	20.3%	7032
Maternal conditions	634	63.4%	246	24.6%	120	12.0%	1000
Nutritional conditions	172	41.5%	112	27.1%	130	31.4%	414
Non-communicable							
Cancer	3735	66.1%	1023	18.1%	891	15.8%	5649
Heart diseases	5843	75.2%	949	12.2%	973	12.5%	7765
Stroke	3452	65.1%	999	18.8%	855	16.1%	5306
Other CVD	621	42.8%	383	26.4%	448	30.9%	1452
Chronic respiratory disease	4235	71.7%	793	13.4%	882	14.9%	5910
Cirrhosis of the liver	1695	55.2%	759	24.7%	615	20.0%	3069
Other digestive diseases	641	41.2%	426	27.4%	489	31.4%	1556
Renal and other endocrine diseases	1691	61.4%	545	19.8%	518	18.8%	2754
Other chronic diseases	941	45.1%	588	28.2%	557	26.7%	2086
Injury							
Road traffic accidents	1844	68.9%	549	20.5%	282	10.5%	2675
Suicides	2276	68.9%	670	20.3%	355	10.8%	3301
Other injuries	3091	60.5%	1191	23.3%	825	16.2%	5107
Ill-defined conditions	2074	47.5%	780	17.9%	1514	34.7%	4368
All	43567	64.3%	12262	18.1%	11913	17.6%	67742

Additional file 5b: Number of records and CSMF by cause of death and stage of physician coding

	Physician 1 initial code			Physician 2 initial code			Sum of initial codes			Aggregate (all stages**)			Final code	
	No.	CSMF	Error*	No.	CSMF	Error*	No.	CSMF	Error*	No.	CSMF	Error*	No.	CSMF
Communicable														
Malaria	1997	3.3%	-0.1%	1979	3.2%	-0.2%	3976	3.2%	-0.1%	5783	3.2%	-0.1%	2076	3.4%
Tuberculosis	5524	9.0%	-0.2%	5489	8.9%	-0.3%	11013	9.0%	-0.3%	13761	7.7%	-1.5%	5670	9.2%
HIV/STI	435	0.7%	0.0%	423	0.7%	0.0%	858	0.7%	0.0%	1107	0.6%	-0.1%	434	0.7%
Other infectious diseases	6721	11.0%	-0.3%	6547	10.7%	-0.6%	13268	10.8%	-0.5%	19970	11.2%	-0.1%	6918	11.3%
Maternal conditions	846	1.4%	-0.1%	847	1.4%	-0.1%	1693	1.4%	-0.1%	2695	1.5%	0.1%	889	1.4%
Nutritional conditions	409	0.7%	0.1%	403	0.7%	0.0%	812	0.7%	0.0%	1443	0.8%	0.2%	377	0.6%
Non-communicable														
Cancer	5331	8.7%	-0.2%	5320	8.7%	-0.2%	10651	8.7%	-0.2%	14967	8.4%	-0.5%	5449	8.9%
Heart Diseases	7278	11.9%	-0.4%	7370	12.0%	-0.2%	14648	11.9%	-0.3%	19000	10.7%	-1.6%	7513	12.2%
Stroke (cerebrovascular disease)	4366	7.1%	-0.2%	4277	7.0%	-0.4%	8643	7.0%	-0.3%	12457	7.0%	-0.4%	4505	7.3%
Other CVD	726	1.2%	0.1%	744	1.2%	0.1%	1470	1.2%	0.1%	2541	1.4%	0.3%	665	1.1%
Chronic Respiratory diseases	5506	9.0%	0.1%	5563	9.1%	0.2%	11069	9.0%	0.1%	14979	8.4%	-0.5%	5449	8.9%
Cirrhosis of the Liver	2397	3.9%	-0.1%	2474	4.0%	0.0%	4871	4.0%	0.0%	7816	4.4%	0.4%	2448	4.0%
Other digestive diseases	1415	2.3%	0.0%	1406	2.3%	0.0%	2821	2.3%	0.0%	5046	2.8%	0.6%	1398	2.3%
Renal and other endocrine diseases	2413	3.9%	-0.1%	2431	4.0%	-0.1%	4844	3.9%	-0.1%	7273	4.1%	0.0%	2479	4.0%
Other chronic diseases	1722	2.8%	0.1%	1730	2.8%	0.1%	3452	2.8%	0.1%	6128	3.4%	0.7%	1662	2.7%
Injuries														
Road traffic accidents	1986	3.2%	-0.1%	1980	3.2%	-0.1%	3966	3.2%	-0.1%	5525	3.1%	-0.2%	2044	3.3%
Suicides	2564	4.2%	-0.1%	2480	4.0%	-0.2%	5044	4.1%	-0.2%	6986	3.9%	-0.4%	2632	4.3%
Other injuries	4209	6.9%	0.0%	4289	7.0%	0.1%	8498	6.9%	0.0%	12859	7.2%	0.3%	4225	6.9%
Ill-defined conditions	5470	8.9%	1.6%	5591	9.1%	1.7%	11061	9.0%	1.7%	17814	10.0%	2.6%	4520	7.4%
All	61315	100%	3.9%	61343	100%	4.8%	122658	100%	4.2%	178150	100%	10.58%	61353	100%

*CSMF absolute error compared to final assigned codes

** Including initial coding, reconciliation, and adjudication