Supplementary material

Table S1: Characteristics of patients who were included in and excluded from the analysis due to missing data

	Total	*Excluded*	*Included*	*P*
Research site				<0.0001
Oxford	17,644	1,117 (6.3)	16,527 (93.7)	
Manchester	22,961	2,353 (10.3)	20,608 (89.8)	
Derby	18,854	990 (5.3)	17,864 (94.7)	
Gender[a]				<0.0001
Male	23,964	2,109 (8.8)	21,855 (91.2)	
Female	35,473	2,329 (6.6)	33,144 (93.4)	
Age group[a]				<0.0001
10-24 years	20,413	1,889 (9.3)	18,524 (90.7)	
25-54 years	34,913	2,391 (6.9)	32,522 (93.1)	
55+ years	4,081	128 (3.1)	3,953 (96.9)	
IMD quintiles				<0.0001
1st-Least deprived	7,926	369 (4.7)	7,557 (95.3)	
2nd-quintile	6,009	300 (5.0)	5,709 (95.0)	
3rd quintile	8,448	571 (6.8)	7,877 (93.2)	
4th quintile	10,382	857 (8.3)	9,525 (91.7)	
5th-Most deprived	22,389	1,876 (8.4)	20,513 (91.6)	
Missing IMD	4,305	487 (11.3)	3,818 (88.7)	
Method of self-harm				<0.0001
Self-poisoning alone	44,020	2,913 (6.6)	41,107 (93.4)	
Self-cut to wrist/arm	8,271	782 (9.5)	7,489 (90.5)	
Self-cut elsewhere involved[b]	2,035	189 (9.3)	1,846 (90.7)	
Self-cut to unknown site	1,623	168 (10.4)	1,455 (89.6)	
Other self-injury alone	3,510	408 (9.4)	3,102 (89.6)	
Psychosocial assessment				<0.0001
Not assessed	26,254	2,570 (9.8)	23,684 (90.2)	

	Total	*Excluded*	*Included*	*P*
Assessed	33,205	1,890 (5.7)	31,315 (94.3)	
Previous self-harm				<0.0001
No	9,619	593 (6.2)	9,026 (93.8)	
Yes	38,309	2,830 (7.4)	35,479 (92.6)	
Not known	11,531	1,037 (9.0)	10,494 (91.0)	
Psychiatric care (present or past)				<0.0001
No	9,893	694 (7.0)	9,199 (93.0)	
Yes	37,108	2,622 (7.1)	34,486(92.9)	
Not known	12,458	1,144 (9.2)	11,314 (90.8)	

[a]Also excludes patients with no information on gender and age i.e. refers to patients excluded for reasons other than gender and age

[b]Combining the two groups which include patients who cut elsewhere on the body, whether they fell into this group exclusively or also cut their wrist or arm in the same episode

Table S2: Characteristics of the study cohort by method of self-harm

		Method of self-harm				
	Total	*Self-poisoning alone*	*Self-cut to wrist/arm alone*[a]	*Self-cut elsewhere*[b]	*Self-cut to unknown site*	*Other self-injury alone*
	54,999	*41,107*	*7,489*	*1,846*	*1,455*	*3,102*
Age group						
10-24 years	18,524	12,960 (31.5)	3,192 (42.6)	705 (38.2)	592 (40.7)	1,075 (34.7)
25-54 years	32,522	24,962 (60.7)	3,977 (53.1)	1,021 (55.3)	783 (53.8)	1,779 (57.4)
55+ years	3,953	3,185 (7.8)	320 (4.3)	120 (6.5)	80 (5.5)	248 (8.0)
Psychosocial assessment						
Yes	31,315	24,910 (60.6)	3,489 (46.6)	896 (48.5)	569 (39.1)	1,451 (46.8)
No	23,684	16,197 (39.1)	4,000 (53.4)	980 (51.5)	569 (60.9)	1,651 (53.2)
Previous self-harm						
Yes	35,479	25,657 (62.4)	5,408 (72.2)	1,373 (74.4)	1,064 (73.1)	1,977 (63.7)
No	9,026	7,827 (19.0)	568 (7.6)	140 (7.6)	108 (7.4)	383 (12.4)
Unknown	10,494	7,623 (18.5)	1,513 (20.2)	333 (18.0)	283 (19.5)	742 (23.9)

		Method of self-harm				
	Total	*Self-poisoning alone*	*Self-cut to wrist/arm alone*[a]	*Self-cut elsewhere*[b]	*Self-cut to unknown site*	*Other self-injury alone*
	54,999	*41,107*	*7,489*	*1,846*	*1,455*	*3,102*
Psychiatric care[c]						
Yes	34,486	25,410 (61.8)	4,894 (65.3)	1,300 (70.4)	964 (66.3)	1,918 (61.8)
No	9,199	7,572 (18.4)	890 (11.9)	208 (11.2)	141 (9.7)	388 (12.5)
Unknown	11,314	8,125 (19.8)	1,705 (22.8)	338 (18.3)	350 (24.1)	796 (25.7)

[a]Self-cut or stab involved only arm and/or wrist but no other bodily parts

[b]Presentations involving cutting or stabbing elsewhere on the body (than wrist or arm). Could also be in combination with wrist or arm in the same episode

[c]Past or current psychiatric care

Table S3: Suicide following presentation to hospital for self-harm by site of self-cut according to time of follow-up

		Crude			*Adjusted*[a]		
	N (n of suicides)	***Odds ratio (95% CI)***	***P value***	***ICC (95% CI)***	***Odds ratio (95% CI)***	***P value***	***ICC (95% CI)***
One-year follow-up	54,999 (201)						
Self-poisoning alone	41,107 (132)	1.0		0.70 (0.57-0.80)	1.0		0.67 (0.56-0.77)
Self-cut to wrist/arm alone[b]	7,489 (21)	0.91 (0.54-1.54)	0.73		1.04 (0.60-1.80)	0.88	
Self-cut elsewhere[c]	1,846 (11)	2.24 (1.07-4.75)	0.04		2.28 (1.05-4.92)	0.037	
Self-cut to unknown site	1,455 (9)	2.27 (1.01-5.12)	0.05		2.53 (1.09-5.90)	0.03	
Other self-injury alone	3,102 (28)	3.38 (2.02-5.67)	<0.0001		2.97 (1.75-5.05)	<0.0001	
Specific site of self-cut/stab							
Self-cut to neck[d]	362 (4)	4.40 (1.19-16.31)	0.03	0.70 (0.57-0.80)	3.49 (0.93-13.14)	0.07	0.67 (0.56-0.77)
Four-year follow-up	54,999 (333)						
Self-poisoning alone	41,107 (220)	1.0			1.0		

		Crude			*Adjusted*[a]		
	N (n of suicides)	***Odds ratio (95% CI)***	***P value***	***ICC (95% CI)***	***Odds ratio (95% CI)***	***P value***	***ICC (95% CI)***
Self-cut to wrist/arm alone[b]	7,489 (41)	1.10 (0.76-1.60)	0.63	0.60 (0.50-0.69)	1.23 (0.83-1.82)	0.31	0.62 (0.52-0.71)
Self-cut elsewhere[c]	1,846 (16)	1.84 (1.02-3.33)	0.04		1.82 (0.98-3.38)	0.06	
Self-cut to unknown site	1,455 (16)	2.43 (1.33-4.42)	0.004		2.65 (1.40-5.03)	0.003	
Other self-injury alone	3,102 (40)	2.78 (1.85-4.17)	<0.0001		2.37 (1.55-3.64)	<0.0001	
Specific site of self-cut/stab							
Self-cut to neck[d]	362 (7)	4.18 (1.61-10.80)	0.003	0.59 (0.49-0.69)	3.48 (1.29-9.37)	0.014	0.62 (0.52-0.71)

[a]Adjusted for age (in years), gender, previous self-harm, psychiatric treatment and hospital

[b]Self-cut or stab involved only arm and/or wrist but no other bodily parts

[c]Presentations involving cutting or stabbing elsewhere on the body (than wrist or arm). Could also be in combination with wrist or arm in the same episode

[d]Relative to presentations to hospital after self-poisoning alone

ICC=Interclass correlation coefficients

Table S4: The likelihood of suicide following presentation to hospital for self-harm by site of self-cut, mixed effect logistic regression - sensitivity analyses

		Crude			*Adjusted*[a]		
	N (n of suicides)	***Odds ratio (95% CI)***	***P value***	***ICC (95% CI)***	***Odds ratio (95% CI)***	***P value***	***ICC (95% CI)***
Presentations to hospital during 2005-2011							
Total	43,286 (384)						
Self-poisoning alone	32,444 (260)	1.0		0.60 (0.52-0.68)	1.0		0.60 (0.51-0.69)
Self-cut to wrist/arm	5,695 (46)	1.10 (0.76-1.58)	0.61		1.16 (0.80-1.69)	0.43	
Self-cut elsewhere[b]	1,362 (20)	2.26 (1.29-3.97)	0.005		2.16 (1.21-3.86)	0.009	
Self-cut to unknown site	1,342 (17)	1.82 (1.01-3.28)	0.045		1.90 (1.04-3.48)	0.037	
Other self-injury alone	2,443 (41)	2.47 (1.64-3.72)	<0.0001		2.06 (1.35-3.15)	0.001	
Specific site of self-cut/stab							
Self-cut to neck[c]	267 (10)	7.22 (2.96-17.58)	<0.0001	0.60 (0.52-0.68)	6.00 (2.44-14.76)	<0.0001	0.60 (0.51-0.69)
Psychiatric care status unknown excluded							
Total	43,685 (395)						
Self-poisoning alone	32,982 (273)	1.0		0.60 (0.52-0.69)	1.0		0.60 (0.52-0.68)
Self-cut to wrist/arm	5,784 (45)	1.02 (0.71-1.47)	0.91		1.08 (0.74-1.57)	0.70	
Self-cut elsewhere[b]	1,508 (18)	1.68 (0.95-2.99)	0.08		1.59 (0.88-2.88)	0.13	

		Crude			*Adjusted*[a]		
	N (n of suicides)	***Odds ratio (95% CI)***	***P value***	***ICC (95% CI)***	***Odds ratio (95% CI)***	***P value***	***ICC (95% CI)***
Self-cut to unknown site	1,105 (21)	2.88 (1.64-5.05)	<0.0001		2.87 (1.60-5.14)	<0.0001	
Other self-injury alone	2,306 (38)	2.34 (1.54-3.56)	<0.0001		1.90 (1.23-2.92)	0.004	
Specific site of self-cut/stab							
Self-cut to neck[c]	305 (9)	4.49 (1.85-10.88)	0.001	0.59 (0.52-0.67)	3.64 (1.47-9.04)	0.005	0.60 (0.52-0.68)
Previous self-harm status unknown excluded							
Total	44,505 (381)						
Self-poisoning alone	33,484 (262)	1.0		0.60 (0.52-0.67)	1.0		0.62 (0.54-0.69)
Self-cut to wrist/arm	5,976 (47)	1.10 (0.77-1.58)	0.61		1.17 (0.80-1.71)	0.42	
Self-cut elsewhere[b]	1,513 (17)	2.68 (0.93-3.03)	0.08		1.65 (0.89-3.04)	0.11	
Self-cut to unknown site	1,172 (20)	2.68 (1.52-4.73)	0.001		2.67 (1.48-4.83)	0.001	
Other self-injury alone	2,360 (35)	2.18 (1.42-3.36)	<0.0001		1.85 (1.18-2.89)	0.007	
Specific site of self-cut/stab							
Self-cut to neck[c]	301 (10)	5.66 (2.40-13.37)	<0.0001	0.60 (0.52-0.67)	4.92 (2.03-11.91)	<0.0001	0.61 (0.53-0.69)
Episodes of self-poisoning combined with self-cutting excluded							
Total	52,399 (449)						

	N (n of suicides)	*Crude* *Odds ratio (95% CI)*	*P value*	*ICC (95% CI)*	*Adjusted*[a] *Odds ratio (95% CI)*	*P value*	*ICC (95% CI)*
Self-poisoning alone	41,107 (327)	1.0		0.59 (0.50-0.66)	1.0		0.61 (0.52-0.68)
Self-cut to wrist/arm	5,935 (42)	0.94 (0.65-1.36)	0.74		0.97 (0.66-1.43)	0.89	
Self-cut elsewhere[b]	1,517 (19)	1.82 (1.05-3.17)	0.03		1.65 (0.92-2.94)	0.09	
Self-cut to unknown site	1,165 (19)	2.52 (1.43-4.45)	0.001		2.55 (1.41-4.62)	0.002	
Other self-injury alone	2,675 (42)	2.25 (1.53-3.34)	<0.0001		1.89 (1.21-2.84)	0.002	
Specific site of self-cut/stab							
Self-cut to neck[c]	304 (10)	5.57 (2.39-13.0)	<0.0001	0.58 (0.50-0.66)	4.60 (1.92-11.0)	0.001	0.60 (0.52-0.68)
Presentations during 2005-2011 - psychiatric care status unknown excluded							
Total	33,482 (304)						
Self-poisoning alone	25,398 (211)	1.0		0.61 (0.53-0.69)	1.0		0.61 (0.51-0.70)
Self-cut to wrist/arm	4,270 (35)	1.11 (0.73-1.68)	0.64		1.16 (0.75-1.78)	0.51	
Self-cut elsewhere[b]	1,073 (15)	2.09 (1.09-4.03)	0.03		1.98 (1.02-3.84)	0.05	
Self-cut to unknown site	1,022 (16)	2.28 (1.21-4.30)	0.01		2.39 (1.25-4.56)	0.008	
Other self-injury alone	1,719 (27)	2.24 (1.36-3.69)	0.002		1.79 (1.08-2.97)	0.03	
Specific site of self-cut/stab							

	N (n of suicides)	*Crude Odds ratio (95% CI)*	*P value*	*ICC (95% CI)*	*Adjusted[a] Odds ratio (95% CI)*	*P value*	*ICC (95% CI)*
Self-cut to neck[c]	219 (8)	6.88 (2.51-18.9)	<0.0001	0.61 (0.53-0.69)	5.57 (2.03—15.31)	0.001	0.61 (0.51-0.70)
Presentations during 2005-2011 - previous self-harm status unknown excluded							
Total	34,718 (297)						
Self-poisoning alone	26,185 (204)	1.0		0.61 (0.53-0.69)	1.0		0.62 (0.52-0.70)
Self-cut to wrist/arm	4,508 (37)	1.19 (0.79-1.80)	0.41		1.28 (0.83-1.95)	0.26	
Self-cut elsewhere[b]	1,113 (16)	2.35 (1.24-4.46)	0.009		2.33 (1.21-4.48)	0.01	
Self-cut to unknown site	1,091 (15)	2.09 (1.09-3.98)	0.025		2.16 (1.12-4.17)	0.02	
Other self-injury alone	1,821 (25)	2.03 (1.22-3.37)	0.006		1.73 (1.03-2.90)	0.04	
Specific site of self-cut/stab							
Self-cut to neck[c]	221 (10)	10.18 (3.98-26.03)	<0.0001	0.61 (0.53-0.69)	8.71 (3.38-22.43)	<0.0001	0.62 (0.52-0.70)
Presentations during 2005-2011 - episodes of self-poisoning combined with self-cutting excluded							
Total	41,333 (357)						
Self-poisoning alone	32,444 (260)	1.0		0.60 (0.52-0.68)	1.0		0.62 (0.52-0.70)
Self-cut to wrist/arm	4,573 (34)	1.00 (0.66-1.50)	0.98		1.03 (0.68-1.58)	0.88	
Self-cut elsewhere[b]	1,144 (17)	2.25 (1.22-4.13)	0.009		2.08 (1.11-3.88)	0.02	

	N (n of suicides)	*Crude* *Odds ratio (95% CI)*	*P value*	*ICC (95% CI)*	*Adjusted*[a] *Odds ratio (95% CI)*	*P value*	*ICC (95% CI)*
Self-cut to unknown site	1,074 (14)	1.95 (1.02-3.73)	0.04		2.01 (1.04-3.91)	0.04	
Other self-injury alone	2,098 (32)	2.19 (1.39-3.44)	0.001		1.82 (1.14-2.90)	0.01	
Specific site of self-cut/stab							
Self-cut to neck[c]	228 (9)	8.11 (3.12-21.14)	<0.0001	0.61 (0.52-0.69)	6.77 (2.59-17.72)	<0.0001	0.60 (0.51-0.69)

[a]Adjusted for age (in years), gender, previous self-harm, psychiatric treatment and hospital, all are assumed to be associated with specific method and with risk of suicide based previous research.

[b]Combining the two groups which include patients who cut elsewhere on the body, whether they fell into this group exclusively or also cut their wrist or arm in the same episode

[c]Compared to presentations to hospital following self-poisoning alone

ICC=Interclass correlation coefficients

Table S5. Characteristics of patients who presented to hospital for self-cut/stab according to whether or not site of cut was known. Numbers and percentages are displayed by episodes, n=10,790

	n (%)			
	Site of cut known	**Unknown site of cut**	**Total**	**P value**
	9,335 (86.3)	1,455 (13.5)	10,790	
Gender				
Male	2,892 (86.3)	587 (13.7)	4,289	0.62
Female	4,597 (86.6)	868 (13.4)	6,501	
Age group				
10-24 years	3,897 (86.8)	592 (13.2)	4,489	0.37
25-54 years	4,998 (86.5)	783 (13.5)	5,781	
55 years and over	440 (84.6)	80 (15.4)	520	
Research site				
Site 1	3,373 (99.8)	5 (0.2)	3,378	<0.0001
Site 2	3,261 (77.4)	955 (22.6)	4,216	
Site 3	2,701 (84.5)	495 (15.5)	3,196	
Time of presentation to hospital				
Working hours (9am-17pm)	2,197 (86.3)	350 (13.7)	2,547	<0.0001
Out of working hours	6,839 (87.4)	987 (12.6)	7,826	
Now known	299 (71.7)	118 (28.3)	417	
Self-harm Method				
Self-injury alone	7,452 (86.5)	1,165 (13.5)	8,617	0.83
Self-injury and self-poisoning	1,883 (86.7)	290 (13.3)	2,173	

		n (%)		
	Site of cut known	**Unknown site of cut**	**Total**	**P value**
Admitted to a hospital bed				
No	5,454 (86.8)	827 (13.2)	6,281	<0.0001
Yes	2,960 (92.2)	251 (7.8)	3,211	
Not Known	845 (71.0)	346 (29.0)	1,191	
Psychosocial assessment				
Not assessed	4,950 (84.8)	886 (15.2)	5,836	<0.0001
Assessed	4,385 (88.5)	569 (11.5)	4,954	
History of self-harm				
Yes	708 (86.8)	108 (13.2)	816	0.93
No	6,781 (86.4)	1,064 (13.6)	7,845	
Unknown	1,846 (86.7)	283 (13.3)	2,129	
Psychiatric care (past or current)				
Yes	1,098 (88.6)	141 (11.4)	1,239	0.03
No	6,194 (86.5)	964 (13.5)	7,158	
Unknown	2,043 (85.4)	350 (14.6)	2,393	