

Web Appendix Supplementary Materials

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Appendix A: Table one data collection protocols

Prison Site	Prison			
	Prison A	Prison B	Prison D	Prison C
Frequency of ACCTs per year				
2009			61	
2010			118	
2011	754		168	
2012	756	840	170	779
2013	730	734	154	718
2014	1012	645	208	688
2015	1219	798	249	729
2016 – partial*	1010	675	262	605
Number of ACCTs per year (2012 - 2015)				
Mean (SD)	929.3 (231.31)	754.3 (84.88)	195.3 (42.39)	728.5 (37.86)
Median (Range)	884 (730, 1219)	766 (645, 840)	189 (154, 249)	724 (688, 779)

*2016 frequencies up to September in Prison A, D and C1, and up to November in Prison B.

Appendix B: Table two prison staff focus group participation

	PrisonA (n=10)	PrisonB (n=11)	PrisonC (n=10)
Type of staff			
Operational staff	7 (70.0%)	7 (63.6%)	3 (30.0%)
Managerial staff	0 (0.0%)	1 (9.1%)	5 (50.0%)
Healthcare staff	0 (0.0%)	1 (9.1%)	2 (20.0%)
Visitor to the prison	2 (20.0%)	0 (0.0%)	0 (0.0%)
Admin / Probation	1 (10.0%)	1 (9.1%)	0 (0.0%)
Missing	0 (0.0%)	1 (9.1%)	0 (0.0%)
Gender			
Male	4 (40.0%)	5 (45.5%)	3 (30.0%)
Female	6 (60.0%)	6 (54.5%)	7 (70.0%)
Age			
N	10	10	9
Mean (SD)	33.7 (10.07)	42.7 (11.41)	46.9 (6.15)
Median (Range)	33.0 (19, 49)	44.0 (21, 58)	47.0 (36, 56)
First language			
English	8 (80.0%)	11 (100.0%)	10 (100.0%)
Hungarian	0 (0.0%)	0 (0.0%)	0 (0.0%)
German	0 (0.0%)	0 (0.0%)	0 (0.0%)
Missing	2 (20.0%)	0 (0.0%)	0 (0.0%)
Ethnic group			
British	10 (100.0%)	11 (100.0%)	9 (90.0%)
Irish / Other background	0 (0.0%)	0 (0.0%)	0 (0.0%)
White and Caribbean	0 (0.0%)	0 (0.0%)	0 (0.0%)
Indian / Pakistani	0 (0.0%)	0 (0.0%)	1 (10.0%)
Religious preference			
No religion	2 (20.0%)	6 (54.5%)	1 (10.0%)
Christian	8 (80.0%)	5 (45.5%)	8 (80.0%)
Muslim	0 (0.0%)	0 (0.0%)	1 (10.0%)
Hindu	0 (0.0%)	0 (0.0%)	0 (0.0%)
Consider yourself disabled?			
Yes	0 (0.0%)	0 (0.0%)	0 (0.0%)
No	10 (100.0%)	11 (100.0%)	10 (100.0%)
Highest academic qualification?			
Post Graduate	0 (0.0%)	0 (0.0%)	0 (0.0%)
Graduate	5 (50.0%)	5 (45.5%)	2 (20.0%)
A Level or equivalent	5 (50.0%)	3 (27.3%)	7 (70.0%)
GCSE or equivalent	0 (0.0%)	3 (27.3%)	1 (10.0%)

Appendix C: Table three prisoner focus group participation

	PrisonA (n=13)	PrisonB (n=43)	PrisonC (n=11)	Total (n=67)
Are you on Remand?				
Yes	2 (15.4%)	2 (4.7%)	1 (9.1%)	5 (7.5%)
No	11 (84.6%)	38 (88.4%)	10 (90.9%)	59 (88.1%)
Missing	0 (0.0%)	3 (7.0%)	0 (0.0%)	3 (4.5%)
First time offender?				
Yes	4 (30.8%)	19 (44.2%)	7 (63.6%)	30 (44.8%)
No	9 (69.2%)	23 (53.5%)	4 (36.4%)	36 (53.7%)
Missing	0 (0.0%)	1 (2.3%)	0 (0.0%)	1 (1.5%)
Age first entered prison (years)				
N	13	42	11	66
Mean (SD)	21.3 (7.61)	30.0 (13.13)	40.5 (12.71)	30.0 (13.35)
Median (Range)	18.0 (15.0, 40.0)	27.0 (13.0, 61.0)	39.0 (18.0, 60.0)	26.0 (13.0, 61.0)
Number of times in prison?				
N	13	40	11	64
Mean (SD)	7.2 (8.67)	2.8 (3.12)	1.2 (0.40)	3.4 (4.94)
Median (Range)	4.0 (0.0, 30.0)	1.5 (1.0, 15.0)	1.0 (1.0, 2.0)	1.0 (0.0, 30.0)
Time spent in this prison? (months)				
N	13	42	11	66
Mean (SD)	9.2 (10.66)	29.0 (25.27)	34.8 (26.98)	26.0 (24.71)
Median (Range)	6.0 (1.0, 42.0)	24.0 (2.0, 102.0)	24.0 (11.0, 84.0)	16.0 (1.0, 102.0)
Length of sentence (months)				
N	11	38	11	60
Mean (SD)	167.5 (344.02)	208.5 (231.48)	181.9 (108.94)	196.1 (236.56)
Median (Range)	30.0 (18, 1188)	120.0 (8, 666)	168.0 (42, 333)	126.0 (8, 1188)
Months left until sentence expiry				
N	9	30	8	47
Mean (SD)	36.1 (44.62)	64.0 (59.95)	76.5 (56.46)	60.8 (57.15)
Median (Range)	16.3 (3.7, 120.2)	41.0 (0.8, 257.9)	56.4 (6.2, 154.6)	40.2 (0.8, 257.9)

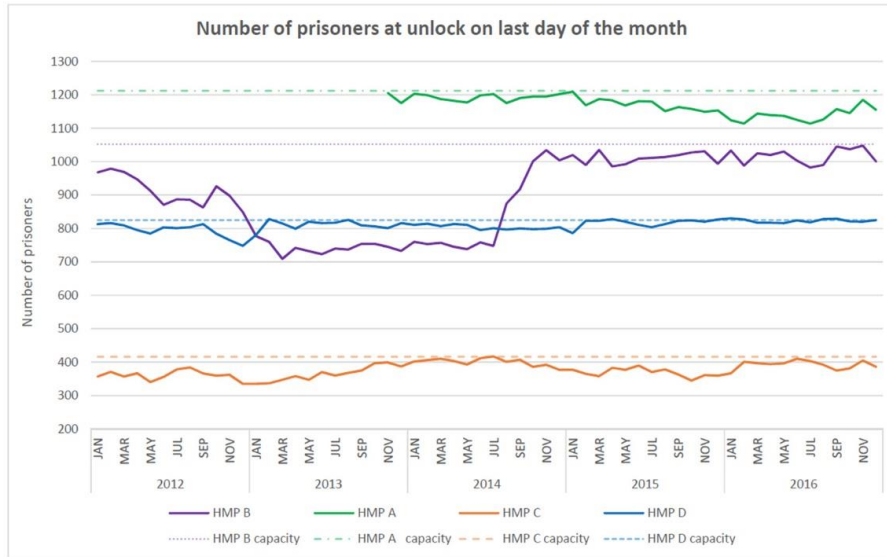
Appendix D: Table four prisoner self-harm details

	PrisonA (n=26)	PrisonB (n=18)	Prison D (n=4)	Total (n=48)
Ever harmed yourself?				
Yes	26 (100.0%)	18 (100.0%)	4 (100.0%)	48 (100.0%)
Time since most recent self-harm (months)				
N	26	16	4	46
Mean (SD)	1.0 (0.72)	0.7 (0.45)	1.5 (1.86)	1.0 (0.79)
Median (Range)	1.0 (0.0, 3.0)	0.7 (0.0, 1.5)	0.8 (0.1, 4.2)	0.7 (0.0, 4.2)
Self-Harm frequency				
Every day	1 (3.8%)	0 (0.0%)	0 (0.0%)	1 (2.1%)
Twice a week	3 (11.5%)	2 (11.1%)	0 (0.0%)	5 (10.4%)
Once a week	4 (15.4%)	1 (5.6%)	1 (25.0%)	6 (12.5%)
Every two weeks	0 (0.0%)	4 (22.2%)	1 (25.0%)	5 (10.4%)
Once a month	3 (11.5%)	2 (11.1%)	0 (0.0%)	5 (10.4%)
3 monthly	3 (11.5%)	1 (5.6%)	1 (25.0%)	5 (10.4%)
Less often than three monthly	12 (46.2%)	7 (38.9%)	1 (25.0%)	20 (41.7%)
Missing	0 (0.0%)	1 (5.6%)	0 (0.0%)	1 (2.1%)
Type of most recent self-harm				
Ligature	2 (7.7%)	3 (16.7%)	0 (0.0%)	5 (10.4%)
Cutting	14 (53.8%)	11 (61.1%)	4 (100.0%)	29 (60.4%)
OD Medication/ Recreational drug overdose	6 (23.1%)	4 (22.2%)	0 (0.0%)	10 (20.8%)
Electrocution	1 (3.8%)	0 (0.0%)	0 (0.0%)	1 (2.1%)
Hunger strike	3 (11.5%)	0 (0.0%)	0 (0.0%)	3 (6.3%)
How easy was it for you to get help?				
Very Easy	6 (23.1%)	4 (22.2%)	0 (0.0%)	10 (20.8%)
Took some time	10 (38.5%)	6 (33.3%)	2 (50.0%)	18 (37.5%)
There was no help available	7 (26.9%)	4 (22.2%)	0 (0.0%)	11 (22.9%)
I didn't bother to ask	3 (11.5%)	3 (16.7%)	2 (50.0%)	8 (16.7%)
can't remember	0 (0.0%)	1 (5.6%)	0 (0.0%)	1 (2.1%)

Appendix E: Table five coding variability across prison sites

Prison B	Prison A	Prison C	Prison D
<p>Prior to Nov 2013: Not available</p> <p>Nov 2013 – Aug 2014: coded as self-harm or concerns</p> <p>Aug 2014 – Oct 2015: free text reasons</p> <p>Oct 2015 – present:</p> <ol style="list-style-type: none"> 1. Suicide attempt or statement of intent to take own life 2. Self-injury or statement to self-harm 3. Unusual behaviour/talk 4. Very low mood 5. Drug Alcohol Withdrawal 6. Other concerns 7. Self-harm warning received from court <p><i>Not possible to distinguish acts of self-harm and suicide from intent, statements, or concerns.</i></p>	<p>Recorded as free text.</p> <p><i>Not always possible to distinguish acts of self-harm and suicide from intent, statements, or concerns.</i></p>	<p>Not available</p>	<p>Prior to mid-2016:</p> <ol style="list-style-type: none"> 1. Suicide Attempt 2. Statement/thoughts of intent to kill self 3. Self-Harm 4. Statement of intent/thoughts to self-harm 5. Unusual Behaviour 6. Low mood 7. Problems related to Drug / Alcohol withdraw 8. External Concerns 9. Deportation 10. Bullying 11. Other <p>Mid-2016 to present:</p> <ol style="list-style-type: none"> 1. Suicide attempt or Statement of intent to take own life 2. Self-Injury or Statement to Self-Harm 3. Unusual behaviour/Talk 4. Low Mood 5. Drug Alcohol Withdrawal 6. Other Concerns <p><i>Method coding also provided and varies</i></p>
<p>Following coding:</p> <ul style="list-style-type: none"> • 39% Related to SH or suicide • 20% Other • 41% Missing 	<p>Following coding:</p> <ul style="list-style-type: none"> • 36% due to SH incident or suicide attempt • 39% related to SH or suicide • 25% Other • <1% Missing 		<p>Following coding:</p> <ul style="list-style-type: none"> • 39% due to a SH incident or suicide attempt • 24% related to SH or suicide • 33% Other • 4% Missing

Appendix F: Figure 1 numbers of prisoners at unlock on last day of the month



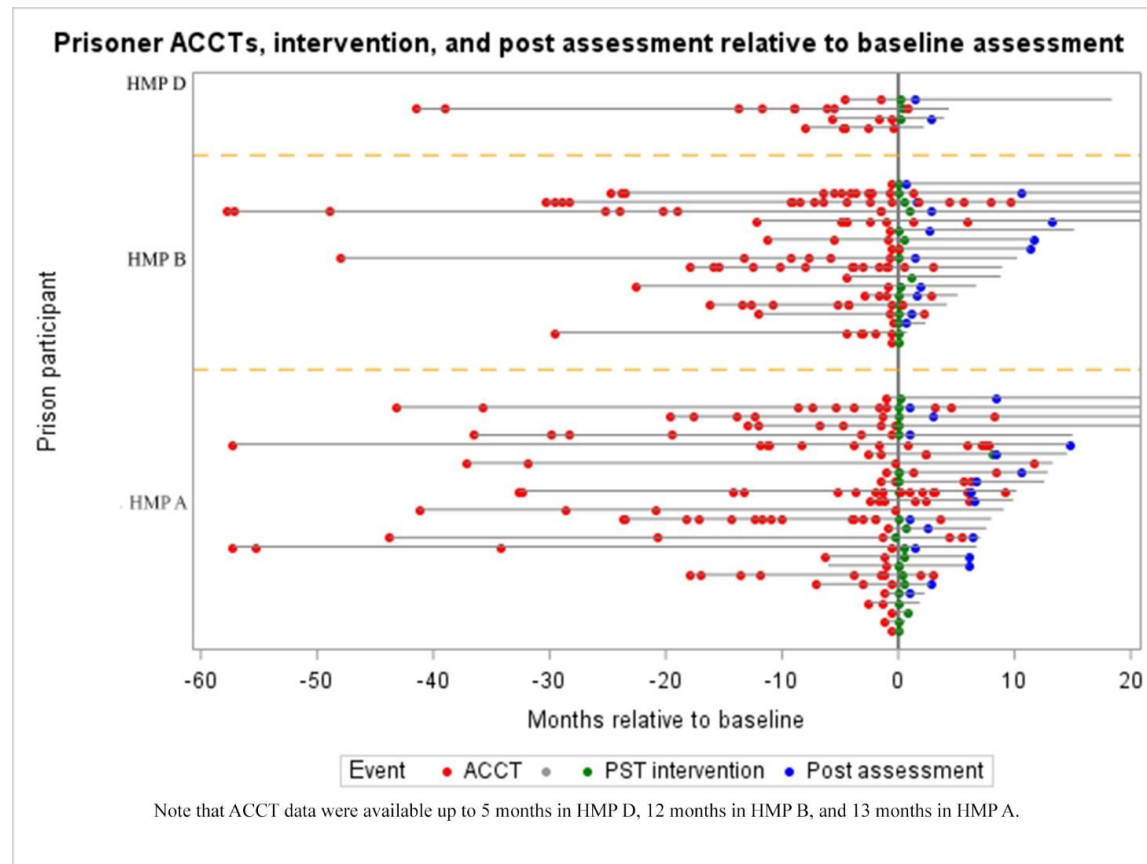
Appendix G: Table six standardised ACCT process costs

ACCT task per person	Initial ACCT opening and assignment of case manager by safer custody administration staff (minutes) £	Initial assessment by Case Manager (minutes) £	Case review attendance by two operational staff, one healthcare/other agency e.g., chaplaincy (minutes) £	Observation and case note entry into the ACCT documentation by Case manager (minutes) £	Post closure review (7 days after an ACCT has been shut). Interview between patient and Case Manager (minutes) £	Audit checks and data entry on the ACCT documentation once the ACCT shut by safer custody administrator (minutes) £
Time allocated	(30)	(30)	(60)	(5)	(30)	(30)
Standardised cost	4.60	6.50	39	1.05	6.50	4.60

Appendix H: Table seven training and implementation costs

Prison	Training Period	Number of staff trained	Number of training sessions	Cost for staff attending the training sessions (£)	Average cost per training sessions (£)]	Number of prisoners receiving the intervention	Overall intervention time (minutes)	Average intervention time spent per person (minutes)	Cost of intervention per head (£)	Cost of training and intervention delivery (£)	Overall cost per prisoner (£)]
HMP A	15.2.15-7.7.15	175	24	2625	172.87	26	1055	40.5	£35.17	6478	249.17
HMP B	15.2.15-7.7.15	175	24	2625	172.87	26	1055	40.5	£35.17	6478	249.17
HMP C	11.12.15-26.2.16	18	2	270	207.6	-	-	-	-	415.20	0
HMP D	23.6.16-9.8.16	8	2	120	132.6	4	90	22.5	£28.87	500.7	125.17

Appendix I: Figure 2 prisoner ACCTs, intervention and post assessment relative to baseline assessment



Appendix J: Figure 3 Phq-9 score at baseline and follow-up

