Table 1 E	Baseline	patient	characteristics
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Characteristic	Mean (Standard deviation) or Count (%)							
Characteristic	Control group		Intervention group					
	Combined	Combined	No phone	One phone	Two phone	Three		
	group	group	calls	call	calls	phone calls	P value *	
	n=211	n=211	n=52	n=12	n=16	n=131		
Mean age	68.8	68.8	72.1	71.1	69.0	67.3	0 106	
(SD)	(12.4)	(12.4)	(12.9)	(11.4)	(10.8)	(12.1)	0.100	
<40 year	3	3	1	0	1	1		
40-65 year	68	68	11	3	3	51		
>65 year	140	140	40	9	12	79		
Mean Number of Medicines (SD)	12.5 (3.8).	12.6 (3.4)	12.9 (3.9)	12.5 (4.4)	11.9 (3.2)	12.4 (3.1)	0.883	
Gender							0.53	
Male	109	109	27	5	9	68		
Female	102	102	25	7	7	63		
*One-way Analys	sis of variance (/	ANOVA) interver	ntion subgroup	o differences				

Table 2 Readmission rates, intention to treat (ITT) group

	Matched Control n=211	Intention to treat group n=211	P value ^a	Odds ^b Ratio	95% Confidence Interval	
30-day Readmitted patients (rate)	59 (28.0%)	38 (18.0%)	<0.001*	0.57	0.36 - 0.90	
90-day Readmitted patients (rate)	103 (48.8%)	71 (33.6%)	0.021*	0.53	0.36 -0.79	
a: McNemar's test for matched pairs, b: Readmission Odds Ratio (Intervention/Control) *Statistically significant at level 0.05						

Table 3 Subgroup analysis of readmission rate at 30-day time interval, based on number of telephone calls received by patients

Number of calls for intervention group	Number (percentage) of intervention readmitted patients	Number (percentage) of matched control readmitted patients ^a	P value ^b	Odds Ratio ⁰	95% Confidence interval
No calls	n= 17/52 (32.7%)	n=12/52 (23.1%)	0.16	1.619	0.68 - 3.85
1 call	n= 3/12 (25.0%)	n= 4/12 (33.3%)	0.28	0.68	0.11 - 3.93
2 calls n=16	n= 7/16 (43.8%)	n= 5/16 (31.3%)	0.424	1.71	0.40 - 7.27
3 calls (per protocol)	n= 11/131 (8.4%)	n= 38/131 (29.0%)	<0.001*	0.22	0.11 - 0.46
^a Control patients ma	atched (propensity sco	ore) to intervention p	patients (rece	eived no	calls)

^bMcNemar's test for matched pairs ^c Readmission Odds Ratio (Intervention/Control) *statistically significant at level of 0.05

Table 4 Subgroup analysis of readmission rate at 90-day time interval, based on number of telephone calls received by patients

Number of calls for intervention group	Number (percentage) of intervention readmitted patients	Number (percentage) of matched control readmitted patients ^a	P value ^b	Odds Ratio ^c	95% Confidence interval	
No call	n= 22/52 (42.3%)	n= 18/52 (34.6%)	0.12	1.38	0.63 - 3.06	
1 call	n= 5/12 41.7%)	n= 8/12 (66.7%)	1.00	0.36	0.068 - 1.88	
2 calls	n= 11/16 (68.8%)	n= 12/16 (75.0%)	0.14	0.73	0.16 - 3.45	
3 calls (per protocol)	n= 33/131 (25.2%)	n= 65/131 (49.6%)	0.012*	0.34	0.20 - 0.57	
^a Control patients matched (propensity score) to intervention patients (received no calls) ^b McNemar's test for matched pairs ^c Readmission Odds Ratio (Intervention/Control) *statistically eignificant at lovel of 0.05						

*statistically significant at level of 0.05

BMO Scale	Mean score Baseline	Mean score post intervention	Mean	Р	95% Cor inte	nfidence rval		
Divid Scale	(Standard deviation)	(Standard deviation)	difference	value ^a	Lower	upper		
Necessity	22.5 (2.6)	23.1 (2.0)	0.6	0.12	-0.14	1.18		
Concern	14.2 (4.4)	11.0 (3.1)	-3.2	<0.001	-4.22	-2.27		
Necessity– Concerns Differential	8.3 (5.3)	12.1 (3.6)	3.8	<0.001	2.60	4.93		
^a Repeated meas	^a Repeated measures t-test							

Table 5 Mean differences in response to the BMQ (n=83)

Table S1 Reasons that prevented clinical pharmacists from delivering the three intervention sessions to the recruited patients.

Reasons to receive less than three telephone calls	No phone calls n=52	One phone call n=12	Two phone calls n=16
Transfer/ discharge to destination other than home after recruitment			
(Nursing home, rehab, step down bed, other hospital, residential home)	21	0	2
No longer interested in participating in the telephone intervention	17	2	2
Unable to be contacted (multiple telephone calls with no answer)	6	5	4
Situation changed regarding exclusion criteria (terminal illness, number of medicines, palliative care, other person takes care of patient)	5	4	3
Others (incorrect patient information, discharge against medical advice, deceased during follow up)	3	1	3
Other reasons (readmitted and had a long length of hospital stay during the readmission, i.e. exceeded 90-day endpoint)	0	0	2

Table S2 Resource use and cost-benefit analysis using the mean data, (per protocol approach)

Resource use	30 day	s post-discharge		90) days post-discharge		
	Control group	Per protocol group		Control group	Per protocol group		
	n=131	n=131		n=131	n=131		
	(Readmission rate	(Readmission rate	Benefit	(Readmission rate	(Readmission rate	Benefit	
	29.0%* Mean LOS 7.8	8.4%, Mean LOS 5.3		49.6%* Mean LOS 7.8	25.2%, Mean LOS 5.3		
	days)	days)		days)	days)		
Cost of roodmission ^a	£1,223.74	£240.85	£982.89	£2093.02	£722.56	C1270.4C	
Cost of reduffission	(29.0*7.8*541)/100	(8.4*5.3*541)/100		(49.6*7.8*541)/100	(25.20*5.3*541)/100	E1370.40	
Cost of intervention per patient (pharmacist		£10.20			£25.00		
salary plus 23% employer's costs) ^{b ,c}		£19.20			L99.99		
Benefit-Cost Ratio yielded from reducing		51.19			38.08		
unplanned readmission ^d							
^a cost per night of the hospital stay £541 (as d	ocumented by Antrim A	rea Hospital costing d	ata)				
^b the average time for 1 st , 2 nd and 3 rd telephor	e calls was as follows: 2	0 min, 10 min and 5 m	in, with resp	pective pre- and post-pre	paration times of 20, 10 a	nd 10 min, i.e.	
total allocated time for 3 telephone calls was 75 min, i.e. 1.25 hr. Pharmacist average hourly cost (Band 7) is £23.41. Therefore, cost of three telephone calls = £29.26. Time							
allocated for 1 st telephone call = 40 minutes (i	allocated for 1 st telephone call = 40 minutes (i.e. intervention cost in the first 30 day = £15.61)						
^c Charges for calls were not considered as cost	t is negligible (less than 4	4p per minute)					
^d Benefit-Cost Ratio = Benefit divided by cost.							

Table S3 Resource use and cost-benefit analysis using the mean data, intention to treat approach

Resource use	30 day	s post-discharge		90 days post-discharge		
	Control group n=211 (Readmission rate 28% * Mean LOS 8.3 day)	Intention to group n=211 (Readmission rate 18.0%, Mean LOS 6.7 day)	Benefit	Control group n=211 (Readmission rate 48.80% * Mean LOS 8.3 day)	Intention to treat n=211 (Readmission rate 33.6%, Mean LOS 6.7 day)	Benefit
Cost of readmission ^a	£1,257.28 (28*8.3*541)/100	£652.45 (18*6.7*541)/100	£604.83	£2,191.27 (48.8*8.3*541)/100	£1,217.90 (33.6*6.7*541)/100	£973.37
Gross cost (employment/facility/work space) = 23% more than Cost of intervention		£20.42			£41.28	
Benefit-Cost Ratio yielded from reducing unplanned readmission ^d	29.62 23.58					
 ^a cost per night of the hospital stay £541 ^b Intention to treat cost of calls was higher per protocol, 90-day cost was estimated 14,53% (r patient than the per pr	otocol cost. 30-day co	ost was estin	nated to be 6.32% (see be	elow sum of 1 and 2) highe	er than per
1. Rate of patients who received no intervent 2. Rate of patients who received one telepho	1. Rate of patients who received no intervention calls = $52/211$, time allocated = 5 minutes, so the impact = $(52/211) * (5/60) = 2.05\%$					
3. Rate of patients who received two telephone calls = $16/211$, time allocated = 65 minutes, so impact = $(16/211) * (65/60) = 8.21\%7$						
i.e. there is 5 minutes more allocated for ITT patients (but not PP patients) which estimated as the actual time needed to confirm that patient will be no longer be involved in the protocol.						
^c Charges for calls were not considered as cos	t is negligible (less than 4	4p per minute)				

^d Benefit-Cost Ratio = Benefit divided by cost.

Satisfaction measure	Agree, strongly agree (n,%)*	NA (n,%)*	Disagree strongly, disagree (n,%)*
1. The care provided helped ease any problems I was having with my medicines	74	2	4
	92.5%	2.5%	5.0%
2 The follow up helped minimice any uppleasant effects from my medication	64	12	4
. The follow up helped minimise any unpreasant enects from my medication		15.0%	5.0%
3. The follow up improved my ability to take my medication as prescribed		21	10
		26.3%	12.5%
4. The follow up helped me in managing problems with the packaging or containers with my current medication		40	22
		50.0%	27.5%
5. The follow up helped me in managing problems with reading /understanding the	7	55	18
print on medication containers		68.8%	22.5%
6. The follow up helped me in managing problems with managing my inhaler	20	52	8
(volumatic/nebuhaler, nebuliser)	25.0%	65.0%	10.0%
7 The follow up increased my superspace shout modifiers storage	46	24	10
7. The follow up increased my awareness about medicines storage	57.5%	30.0%	12.5%
8. This follow up increased my awareness about other medicines I used apart from my	38	30	12
prescription		37.5%	15.0%
0. Overall the follow up allowed me to have better control of my medicines	67	8	5
s. Overall the follow up allowed me to have better control of my medicines	83.8%	10.0%	6.3%
*n= actual number of patients, % is the percentage of patients who responded			

Table S4 Satisfaction questionnaire results (n=80)