Supplemental content

eTable 1. Study and patient characteristics

Source, year, country	No. of chronic conditions (median)	How conditions were collected	How medications were collected	Medications self-managed (%)	Greater than high school level of education (%)	Living situation (%)	Questionnaire administered by, where	Additional validated tools/questions used
PATD questionnaire								
Anderson *et al*, 2020,[1,2] Australia	5	Medical records	Medical records	90	NR	Home, alone: 32	Researcher administered at patient's home or by phone	-
Aoki *et al*, 2019,[3] Japan	NR	Self-report	Self-report	NR	NR	NR	Self-administered at patient's home, online or by post	Short Form Health Survey, Physical Health Composite Scale score, Mental Health Composite Scale score
Candela *et al*, 2019 (thesis),[4] Spain	2	Medical records	Medical records	NR	NR	NR	Researcher administered at an outpatient clinic	Simplified Medication Adherence Questionnaire
Cross *et al*, 2020,[5] Australia	NR	-	Self-report + medical record	NR	20 [b]	Home, alone: 22 Home with companion/partner/family: 78	Researcher administered at patient's home or by phone	Medication Regimen Complexity Index, PIMcogs, Drug Burden Index score, Tool for Adherence Behaviour Screening, Quality of life EQ-5D, Mini-Mental State Examination
Frankowski *et al*, 2019,[6] Netherlands	NR	-	Medical record	NR	NR	Residential psychiatric facility: 100	Researcher administered	Psychiatric diagnosis, health priorities
Galazzi *et al*, 2016,[7] Italy	4	Medical records	Medical records	NR	NR	Home, alone: 24 Home, with caregiver: 74	Self-administered	-

						Nursing home: 2	with help at hospital	
Gillespie *et al*, 2019,[8] Australia	3	Self-report	Self-report	NR	21	NR	Self-administered at patient's home	All Aspects of Health Literacy Scale 10 items, Canadian Survey of Experiences with Primary Health Care 3 items
Goulding unpublished,[9] USA	NR	-	Medical records	0	NR	NR	Self-administered at patient's home or pharmacy	-
Hao *et al*, 2018,[10] **Malaysia**	NR	-	NR	NR	11	NR	NR	-
Hendrix *et al,* 2019,[11] Australia	2 (Charlson Comorbidity Index)	Medical records	Medical records	NR	NR	NR	Researcher administered at a residential aged care facility	Activities of daily living Katz index, Neuropsychiatric Inventory Nursing Home version, Dementia Severity Rating Scale, FRAIL-NH scale, Charlson Comorbidity Index, Medication Regimen Complexity Index
Kalogianis *et al*, 2016,[12] **Australia**	NR	Medical records	Medical records	NR	NR	NR	Researcher administered at a residential aged care facility	Quality of Life in Alzheimer's Disease Scale (staff informant version)
Ng *et al*, 2017,[13] Singapore	7 [b]	Medical records	Medical records	-	-	Home, alone: 8 Home with domestic helper/nurse: 2 Living with family: 89 Living with others: 2	Researcher administered at an outpatient healthcare centre	Wake Forest Physician Trust Scale
Qi *et al*, 2015,[14] Australia	2	Medical records	Medical records	NR	86 [c]	NR	Researcher administered at hospital	Edmonton Frail Scale, Mini-Mental State Examination
Reeve *et al*, 2014	3	Self-report	Self-report	100		NR	Researcher	-

(thesis)[15,d], Australia							administered at a pharmacy	
Reeve *et al*, 2013 (PATD development + results),[16,17]Australia	6	Self-report + medical record	Self-report + medical record	82	74	NR	Researcher administered at hospital	Beliefs about Medicines Questionnaire Specific, Mini-Mental State Examination score, Geriatric Depression Scale score, Morisky Medication Adherence Score, Drug Burden Index, Wake Forest Physician Trust scale
Saraswathy *et al*, 2018,[18,e] India	NR	NR	NR	NR	NR	NR	-	-
Schiøtz *et al*, 2018,[19] Denmark	6	Medical records	Self-report	NR	37	Home, alone: 69	Self-administered with help available at an outpatient clinic	The Australian Health Literacy Questionnaire 4 items, self-rated health question
Sirois *et al*, 2017,[20] Canada	NR	-	Self-report	89		NR	Self-administered at patient's home, pharmacy or community centre	-
Turner *et al*, 2018,[21] Canada	NR	-	Medical record	NR	45	NR	NR, administered at patient's home or by phone	Beliefs about Medicines Questionnaire Specific, Self-reported fair/poor health, Mini-Mental State Examination, Frailty (VES-13 ≥ 3)
ul Haq *et al*, 2016,[22,e] Pakistan	NR	-	NR	NR	NR	NR	Self-administered	-

							with help available	
Van Marum *et al*, 2016,[23] Netherlands	NR	-	Self-report + medical record	NR	NR	Home ("independent"): 73 Nursing home: 28	Researcher administered	-
Whitty *et al*, 2018,[24] Canada	NR	-	Medical record	NR	NR	NR	NR	Beliefs about Medicines Questionnaire, Edmonton Symptom Assessment System (revised), Clinical Frailty Score
rPATD, rPATDcog questionnaires								
Cardwell *et al*, 2020,[25] Ireland	NR	NR	Medical record	NR	34	NR	Self-administered with help available, NR	Quality of life (EQ-5D-5L), Visual Analogue Scale, Multimorbidity Treatment Burden Questionnaire
Edelman *et al*, 2019,[26,27] Netherlands	NR	Self-report	Self-report	NR	NR	NR	Self-administered at patient's home	International Prostate Symptom Index, Overactive Bladder questionnaire
Gnjidic *et al*, 2019,[28] Australia	2 (Charlson Comorbidity Index)	Self-report	Medical records	NR	38	NR	NR, administered at hospital	Charlson Comorbidity Index, Mini-Mental State Examination, Reported Edmonton Frail Scale, Control Preference Scale, Single Item Literacy Screener
Ikeji *et al*, 2019,[29,30] USA	NR	-	Self-report	87	NR	NR	Self-administered at an outpatient geriatric clinic	-
Kua C-H *et al*,	5	Self-report	Self-report	NR	29	Home with	Self-	-

2020,[31] Singapore						companion/partner/family: 86	administered at hospitals, community pharmacies and primary care clinics	
Kua K *et al,* 2019,[32-34] Malaysia	NR	-	NR	91 (health clinic) 74 (pharmacies)	10	Home, alone: 10 Home with family/friends: 90	Self-administered at community pharmacies and primary care clinics	-
Lundby *et al*, 2019,[35,e] Denmark	NR	NR	NR	NR	NR	NR	NR, at a residential aged care facility	-
Major *et al*, 2019,[36,f] Australia	NR	-	NR	NR	NR	NR	Self-administered with help available at patient's home	-
Martinez *et al*, 2020,[37] USA	NR	Medical records	Medical record		73	NR	Self-administered, NR	-
Ng *et al*, 2019,[38,e] Malaysia	NR	NR	Self-report	NR	NR	NR	NR, at a public health talk	-
Nusair *et al*, 2020,[39] Jordan	4 [b]	NR	NR	NR	25	NR	NR	-
Omar *et al*, 2019,[40] Malaysia	3	Self-report	Self-report		17	NR	NR	-
Paque *et al*, 2019,[41] Belgium	NR	NR	Medical records	NR	15	NR	Researcher administered at a residential aged care facility	Activities of daily living Katz index, Mini Mental State Examination, Minimum Data Set Mortality Risk Index
Reeve *et al*, 2019 (rPATD development + results),[42,43] Australia	NR	Self-report	Self-report	92	74	NR	Self-administered at patient's home	Self-rated health, abbreviated Wake Forest Trust in Physician Scale, Patient Autonomy Index and the Beliefs about Medicines

								Questionnaire
Reeve *et al*, 2018,[44,g] USA	NR	-	Medical records	NR	57	NR	Self-administered at patient's home	-
Reeve *et al*, 2018 (rPATDcog),[45] Australia	3[b]	Medical records and/or interview	Medical records and/or interview	67	29	Home, alone: 24 Home with carer/family/friend: 62 Retirement village: 5 RACF: 10	Researcher administered, NR	Goals of care questions
Scott *et al*, 2019,[34] UK	NR	Self-report	Self-report	NR	NR	NR	Self-administered with help available at hospital	-
Tegegn *et al*, 2018,[46] Ethiopia	2 (CCI)	NR	NR	NR	6	NR	Researcher administered, NR	Charlson Comorbidity Index

[a] Completed high school or higher education
[b] Mean
[c] Secondary or above
[d] This reference contains results from two cohorts; one of these cohorts was published separately (and so are reported separately: Reeve 2013). Data presented here is from the second cohort only (community pharmacy participants)
[e] This is an abstract
[f] This is an editorial comment
[g] Combined PATD and rPATD questions, for clarity we have classified this reference as using the rPATD questionnaire

eTable 2. Process of translation

Source	Language	Forward-back translation (Y/N)	Pilot testing (Y/N)	Other description
PATD questionnaire				
Candela *et al*, 2019 (thesis),[4] Spain	Spanish	N	N	Researcher translated the PATD
Frankowski *et al*, 2019,[6] Netherlands	Dutch	NR	NR	Noted to use Dutch translation from van Marum *et al,* 2016
Galazzi *et al,* 2016,[7] Italy	Italian	Y	Y	Pilot tested with 5 patients
Schiøtz *et al*, 2018,[19] Denmark	Danish	Y	Y	Pilot tested with 5 patients
Sirois *et al*, 2017,[20] Canada	French	N	N	Two people independently translated and reached consensus on the final version
Van Marum *et al,* 2016,[23] Netherlands	Dutch	Y	Y	Pilot tested with 5 patients
rPATD questionnaire				
Edelman *et al*, 2019,[26,27] Netherlands	Dutch	NR	NR	Translated and linguistically validated using the World Health Organisation guideline 'Process of translation and adaptation of instruments'
Kua *et al,* 2019, [32-34] Malaysia	Mandarin & Malay	Y	Y	Pilot tested with 10 older patients
Lundby *et al,* 2019,[35,a] Denmark	Danish	Y	Y	Translated and culturally adapted during five stages of forward and backward translation. The prefinal questionnaire was pilot tested through semi-structured interviews with 11 RACF residents
Nusair *et al,* 2020,[39] Jordan	Arabic	Y	Y	Pilot tested with 28 patients. Internal consistency and test-retest reliability. Validity was assessed through face validity and construct validity. Followed ISPOR's Principles of Good Practice for Translation and Cultural Adaptation
Omar *et al,* 2019,[40] Malaysia	Malay	Y	Y	Translation was confirmed by two pharmacists and one language expert. A pilot study was conducted with 20 older patients
Paque *et al*, 2019,[41] Belgium	Dutch	Y	N	Forward and backward translation
Tegegn *et al*, 2018,[46] Ethiopia	Amharic	Y	Y	Pilot tested with 25 older patients

Y = yes
N = no
NR = not reported

[a] This is an abstract

eTable 3. Medication-specific questions in adapted (r)PATD questionnaires

Study Drug class Description	Questions	AGREE % Strongly agree + agree
Qi *et al*, 2015: [14] Statins Questions used in addition to the PATD questionnaire	Q11: I will continue taking the statin for as long as my doctor tells me I need to	98
	Q12: I am concerned about the potential side-effects of taking the statin	94
	Q13: I trust my doctor to tell me if I should stop taking the statin	95
	Q14: If my doctor said it was possible, I would stop taking the statin	95
	Q15: Recently heard negative information regarding statins (yes)	37
Edelman *et al*, 2019: [26,27] Alpha-blockers Questions in the 'appropriateness' and 'concerns about stopping' factors of the rPATD questionnaire were amended by changing the word 'medicines' to 'alpha-blocker'	Appropriateness: [a] I would like to try stopping the alpha-blocker to see how I feel without it I would like my doctor to reduce the dose of the alpha-blocker I feel that I may be taking the alpha-blocker that I no longer need I believe the alpha-blocker may be currently giving me side effects I think the alpha-blocker may not be working	44
	Concerns about stopping: I have had a bad experience when stopping the alpha-blocker before I would be reluctant to stop the alpha-blocker that I had been taking for a long time If the alpha-blocker was stopped I would be worried about missing out on future benefits I get stressed whenever changes are made to my alpha-blocker If my doctor recommended stopping the alpha-blocker I would feel that he/she was giving up on me	7
Gnjidic *et al*, 2019: [28] Benzodiazepines Questions used in addition to the rPATD questionnaire	I will continue taking the benzodiazepine for as long as my doctor tells me I need to	71
	I am concerned about the potential side effects of taking benzodiazepine	19
	I trust my doctor to tell me if I should stop taking the benzodiazepine	95
	If my doctor said it was possible, I would stop taking the benzodiazepine	95
	I believe that the benzodiazepine is effective in treating my symptoms	86
Ikeji *et al*, 2019: [29,30] Proton Pump Inhibitors (PPIs) Questions were amended by changing the word 'medicines' to 'PPIs'. Except the primary outcome (Q7) was asked with both 'PPIs' and 'medicines' rPATD questionnaire	Q2. I'd like to be involved in making decisions about my PPI with my doctor	89
	Q3. I have a good understanding of the reason I was prescribed PPI	89
	Q7. If my doctor said it was possible, I would be willing to stop my PPI	84
	Q13. I would like to try stopping my PPI to see how I feel without it	58
	Q14. I would like my doctor to reduce the dose of my PPI	47
	Q16. I believe my PPI may be giving side effects	0
	Q17. I think my PPI may not be working	32
	Q18. I have had a bad experience when stopping my PPI	32
	Q19. I would be reluctant to stop my PPI	47
	Q21. I get stressed whenever changes are made to my PPI	5
	Q22. If my doctor recommended stopping my PPI I would feel that they were giving up on me	33

[a] Alpha-blocker-specific rPATD factor were categorised into 'disagree' (mean factor score, 1.0–2.4), 'neutral' (2.5–3.5), and 'agree' (3.6–5.0). The results were then expressed as percentages

eTable 4. Quality assessment of studies using the SURGE checklist (n = 38)[a]

	Background (2)	Methods (15)	Results (5)	Discussion (3)	Ethics & Disclosure (3)	TOTAL (26)
PATD questionnaire	**Yes & Partially N (%)[b]**					
Anderson *et al*, 2020 [1,2]	2 (100)	9 (69)	4 (100)	3 (100)	3 (100)	21 (84)
Aoki *et al*, 2019 [3]	2 (100)	8 (62)	4 (80)	3 (100)	3 (100)	20 (83)
Cross *et al*, 2020 [5]	2 (100)	9 (69)	4 (80)	3 (100)	3 (100)	21 (88)
Frankowski *et al*, 2019 [6]	2 (100)	9 (60)	5 (100)	3 (100)	2 (67)	21 (81)
Galazzi *et al*, 2016 [7]	2 (100)	12 (80)	4 (80)	3 (100)	3 (100)	24 (92)
Gillespie *et al*, 2019 [8]	2 (100)	12 (92)	4 (80)	2 (67)	3 (100)	24 (88)
Hao *et al*, 2018 [10]	2 (100)	5 (38)	3 (60)	0 (0)	2 (67)	12 (53)
Hendrix *et al,* 2019 [11]	2 (100)	6 (46)	3 (75)	3 (100)	3 (100)	17 (84)
Kalogianis *et al*, 2016 [12]	2 (100)	8 (62)	5 (100)	3 (100)	3 (100)	21 (92)
Ng *et al*, 2017 [13]	2 (100)	10 (77)	4 (80)	3 (100)	3 (100)	22 (91)
Qi *et al*, 2015 [14]	2 (100)	11 (85)	3 (60)	3 (100)	3 (100)	22 (89)
Reeve *et al*, 2014 (thesis) [15,c]	2 (100)	11 (85)	4 (80)	2 (67)	3 (100)	22 (86)
Reeve *et al*, 2013 (PATD development + results) [16,17]	2 (100)	11 (85)	3 (75)	3 (100)	3 (100)	22 (92)
Saraswathy *et al*, 2018 [18,d]	2 (100)	1 (8)	3 (60)	1 (33)	0 (0)	4 (28)
Schiøtz *et al*, 2018 [19]	2 (100)	10 (67)	3 (75)	3 (100)	3 (100)	21 (88)
Sirois *et al*, 2017 [20]	2 (100)	10 (67)	4 (80)	3 (100)	3 (100)	22 (89)
Turner *et al*, 2018 [21]	2 (100)	8 (62)	3 (60)	2 (67)	3 (100)	18 (78)
ul Haq *et al*, 2016 [22,d]	2 (100)	3 (23)	1 (20)	0 (0)	0 (0)	6 (29)
Van Marum *et al*, 2016 [23]	2 (100)	8 (53)	5 (100)	3 (100)	2 (67)	20 (84)
Whitty *et al*, 2018 [24]	2 (100)	8 (62)	3 (60)	3 (100)	3 (100)	19 (84)
rPATD, rPATDcog questionnaires						
Cardwell *et al*, 2019 [25]	2 (100)	7 (54)	4 (80)	3 (100)	3 (100)	17 (81)
Edelman *et al*, 2019 [26,27]	2 (100)	12 (80)	5 (100)	3 (100)	3 (100)	25 (95)
Gnjidic *et al*, 2019 [28]	2 (100)	9 (69)	4 (100)	2 (67)	3 (100)	20 (87)
Ikeji *et al*, 2019 [29,30]	2 (100)	7 (58)	2 (67)	2 (67)	3 (100)	16 (78)
Kua CH *et al*, 2020 [31]	2 (100)	11 (85)	4 (100)	3 (100)	2 (67)	21 (85)
Kua K *et al,* 2019 [32-34]	2 (100)	9 (60)	4 (80)	3 (100)	3 (100)	21 (88)
Lundby *et al*, 2019 [35,d]	2 (100)	5 (33)	2 (40)	1 (33)	0 (0)	10 (41)
Major *et al*, 2019 [36,e]	2 (100)	3 (23)	2 (50)	1 (33)	1 (33)	9 (48)

Martinez *et al*, 2020 [37]	2 (100)	8 (67)	3 (75)	3 (100)	3 (100)	19 (88)
Ng *et al*, 2019 [38,d]	2 (100)	4 (31)	0 (0)	0 (0)	0 (0)	6 (26)
Nusair *et al*, 2020 [39]	2 (100)	11 (73)	3 (60)	3 (100)	3 (100)	22 (87)
Omar *et al*, 2019 [40]	2 (100)	9 (60)	4 (80)	3 (100)	3 (100)	21 (88)
Paque *et al*, 2019 [41]	2 (100)	11 (73)	3 (60)	3 (100)	3 (100)	22 (87)
Reeve *et al*, 2019 (rPATD results) [42,43]	2 (100)	12 (92)	4 (80)	3 (100)	3 (100)	24 (94)
Reeve *et al*, 2018 [44]	2 (100)	9 (75)	4 (80)	2 (67)	3 (100)	20 (84)
Reeve *et al*, 2018 (rPATDcog) [45]	2 (100)	10 (77)	3 (60)	3 (100)	3 (100)	22 (87)
Scott *et al*, 2019 [34]	2 (100)	10 (77)	5 (100)	3 (100)	3 (100)	23 (95)
Tegegn *et al*, 2018 [46]	2 (100)	10 (67)	4 (80)	3 (100)	3 (100)	22 (89)

[a] Assessment of quality reporting was unable to be performed on two of the studies: Candela *et al*, 2019 (thesis in Spanish),[4] and Goulding (unpublished report) [9]

[b] 'Applicable' responses only, 'not applicable' responses are removed

[c] This reference contains results from two cohorts; one of these cohorts was published separately (and so are reported separately: Reeve 2013). Data presented here is from the second cohort only (community pharmacy participants)

[d] This is an abstract

[e] This is a short report

67-100%
34-66%
0-33%

eTable 5. Quality assessment summary using the SURGE checklist according to checklist items (n = 38)[a]

Checklist items	Yes	Partially	Not reported	Not applicable
Background (2 items)	**N = 38**			
Study design stated in title/abstract	36	2	0	0
Purpose or aim of the research	37	1	0	0
Methods (15 items)				
Questionnaire described	30	8	0	0
Psychometric properties presented	9	19	10	0
References to the original work	34	2	2	0
If translated, the procedures to develop and pre-test it provided	4	4	4	26
If translated, reliability and validity reported	2	5	6	25
Scoring procedures described	17	2	19	0
Description of the desired population	27	7	4	0
Representativeness	16	9	13	0
Sample size calculation or justification for not doing one	18	1	19	0
Reported how the survey was administered[b]	30	-	8	-
Reported the format of the survey	13	-	26	-
Full information about number and type of contact	1	13	22	2
Report whether incentives were provided	1	0	37	0
Description of methods used for data analysis	31	1	6	0
Methods for handling item missing data provided	19	5	13	1
Results (5 items)				
Response rate reported or details for why it was not reported	17	5	14	2
All respondents accounted for or details about missing data/participants provided	29	4	2	3
Details on how non-respondents differ from respondents	3	2	28	5
Results presented clearly	33	3	2	0
Results address objectives	35	2	1	0
Discussion (3 items)				
Strengths of the study stated	32	1	5	0
Limitations of the study stated	32	0	6	0
Generalisability	22	6	10	0
Ethics and disclosure (3 items)				
Sponsorship or funding reported	30	0	8	0
Research ethics approval	33	0	5	0
Consent	33	0	5	0

[a] Assessment of quality reporting was unable to be performed on two of the studies: Candela *et al*, 2019 (thesis in Spanish),[4] and Goulding (unpublished report)[9]

[b] Additional details available in Supplementary Table 6

eTable 6. Caregivers' results from the rPATD questionnaire

Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19
	Global	Involvement				Global	Burden				Appropriateness					Concerns			
	AGREE % (strongly agree + agree)																		
Kua C-H *et al*, 2020[31]	86	80	90	91	82	87	56	55	57	45	40	45	29	34	17	18	35	35	20
Kua K *et al*, 2019[32-34]	83	50	60	73	52	65	48	44	46	39	52	54	31	35	31	23	39	40	14
Paque *et al*, 2019[41]	85	74	75	81	54	79	22	20	19	4	15	14	11	14	6	17	40	13	11
Reeve *et al*, 2019 (rPATD development + results)[42,43]	82	88	95	86	83	84	41	42	31	25	21	15	22	29	16	21	36	29	21
Scott *et al*, 2019[34]	80	66	80	71	75	81	53	57[a]	37	22	44	24	37	36	22	7	54	17	21

Q1. Overall, I am satisfied with my care recipient's current medicines
Q2. I like to be involved in making decisions about my care recipient's medicines with their doctors
Q3. I like to know as much as possible about my care recipient's medicines
Q4. I always ask the doctor, pharmacist or other health care professional if there is something I don't understand about my care recipient's medicines
Q5. I know exactly what medicines the person that I care for is currently taking and/or I have an up to date list of their medicines
Q6. If their doctor said it was possible I would be willing to stop one or more of my care recipient's medicines
Q7. I feel that the person I care for is taking a large number of medicines
Q8. My care recipient's medicines are quite expensive
Q9. Sometimes I think the person I care for takes too many medicines
Q10. I feel that my care recipient's medicines are a burden to them
Q11. I would like the doctor to try stopping one of my care recipient's medicines to see how they feel without it
Q12. I would like the doctor to reduce the dose of one or more of my care recipient's medicines
Q13. I feel that the person that I care for may be taking one or more medicines that they no longer need
Q14. I believe one or more of my care recipient's medicines may be currently giving them side effects
Q15. I think one or more of my care recipient's medicines may not be working
Q16. The person that I care for has had a bad experience when stopping a medicine before
Q17. I would be reluctant to stop one of my care recipient's medicines that they had been taking for a long time
Q18. I get stressed whenever changes are made to my care recipient's medicines
Q19. I feel that if I agreed to stopping one of my care recipient's medicines then this is giving up on them

[a] Question modified for the UK context: 'I feel the National Health Service (NHS) spends a lot of money on my care recipient's medicines'

Not reported
0-10%
11-20%
21-30%
31-40%
41-50%
51-60%
61-70%
71-80%
81-90%
91-100%

eTable 7. Patients: Associations with primary outcome question "If my doctor said it was possible, I would be willing to stop one or more of my regular medicines"

Variable: # of studies reporting a significant association/# of studies that examined the association	Study	Associations found
Age: 5/12	Aoki *et al*, 2019 [3]	[3] Increasing age was found to be significantly associated with patients' willingness to deprescribe (OR per 10-year increase 1.12; 95% CI 1.04–1.20)
	Hao *et al*, 2018 [10]	[10] Age of participant was negatively correlated with willingness to deprescribe (Spearman's rho (ρ) = −0.127, p < 0.05)
	Kua, K *et al* 2019 [32]	[32] Patients aged 75 and over were more willing to have their medications deprescribed (p = 0.003)
	Ng *et al*, 2017 [13]	[13] Patients of younger age (<65 years old) were more willing to have their medications deprescribed (p = 0.02)
	ul Haq *et al*, 2016 [22]	[22] Age (not specific) had a significant influence on the positive attitude (p = 0.001) on willingness to deprescribe
	Kua C-H et al, 2020 [31]	No significant association
	Qi *et al*, 2015 [47]	No significant association
	Tegegn *et al*, 2018 [48]	No significant association
	Reeve *at al*, 2019 [42,43] (r*PATD development + results)*	No significant association
	Reeve *et al,* 2018 [44]	No significant association
	Reeve *et al*, 2014 [49] *(thesis)*[a]	No significant association
	Reeve *et al*, 2013 [16,17] (*PATD development + results)*	No significant association
Number of medications: 3/11	Aoki *et al*, 2019 [3]	[3] Patients: ≥ 5 (polypharmacy) more willing to deprescribe than 1-4 regular prescription meds (aOR 1.43; 95% CI 1.08–1.88)
	Kua C-H *et al,* 2020 [31]	[31] Unclear if finding is + or – "No significant differences in sub-group analysis" (p = 0.031)
	Reeve *et al,* 2018 [44]	[44] Older adults taking 6 or more medications compared with fewer than 6 (adjusted odds ratio [aOR], 2.90; 95%CI, 1.74-4.82) had greater odds of willingness to deprescribe (p = < 0.05)
	Reeve *et al*, 2013 [16,17] (*PATD development + results)*	No significant association
	Gillespie *et al,* 2019 [8]	No significant association
	Kua, K *et al* 2019 [32]	No significant association
	Kalogianis *et al*, 2016	No significant association
	Qi *et al*, 2015 [47]	No significant association
	ul Haq *et al*, 2016 [22]	No significant association
	Reeve *et al*, 2014 [49] *(thesis)*[a]	No significant association
	Reeve *et al*, 2013 [16,17] (*PATD development +*	No significant association

	results)	
Number of chronic health conditions: 2/4	Aoki *et al*, 2019 [3]	[3] Two or more chronic health conditions were positively associated with patients' willingness to deprescribe [adjusted odds ratio (aOR) 1.35; 95% confidence interval (CI) 1.06–1.72]. Adjusted for age and sex
	Reeve *et al,* 2018 [44]	[44] Older adults with 2 to 3 (aOR, 2.87; 95%CI, 1.75-4.69) and more than 3 medical conditions (aOR, 2.87; 95%CI, 1.53-5.37) compared with fewer than 2 had greater odds of willingness to deprescribe (p < .05)
	Reeve *et al*, 2013 [16,17] (*PATD development + results)*	No significant association
	Tegegn *et al*, 2018 [48] (Charlson Comorbidity Index)	No significant association
Gender (female): 0/6	Aoki *et al*, 2019 [3]	No significant association
	Kua C-H *et al, 2020* [31]	No significant association
	Kua, K *et al* 2019 [32]	No significant association
	Tegegn *et al*, 2018 [48]	No significant association
	Reeve *at al*, 2019 [42,43] (r*PATD development + results)*	No significant association
	Reeve *et al,* 2018 [44]	No significant association
Education level: 1/6	Kua, K *et al* 2019 [32]	[32] Patients with lower educational level may be more willing to have their medications deprescribed (− 0.158, p < 0.001) Spearman's correlation test
	Reeve *et al,* 2018 [44]	No significant association
	Aoki *et al*, 2019 [3]	No significant association
	Kua C-H *et al, 2020* [31]	No significant association
	Reeve *at al*, 2019 [42,43] (r*PATD development + results)*	No significant association
	Tegegn *et al*, 2018 [48]	No significant association
Discount medications (concession card or drug coverage) (yes): 2/4	Reeve *at al*, 2019 [42,43] (r*PATD development + results)*	[42,43] Possession of a concession card (OR = 3.194; 95% CI = 1.19-8.59) increased the likelihood of agreeing to have a medication deprescribed (older adults)
	Reeve *et al*, 2013 [16,17] (*PATD development + results)*	[16,17] Possession of a medication discount card was correlated with less willingness to stop a medication (p = 0.048)
	Reeve *et al,* 2018 [44]	No significant association
	ul Haq *et al*, 2016 [22]	No significant association
Trust in physician (High Wake Forest Trust in Physician score): 2/3	Ng *et al*, 2017 [13]	[13] Patients with a higher physician trust score were more willing to deprescribe (p = <0.01)
	Reeve *et al*, 2013 [16,17] (*PATD development + results)*	[16,17] Higher physician trust score was correlated with greater willingness to stop a medication (p = 0.05)
	Reeve *at al*, 2019 [42,43] (r*PATD development + results)*	No significant association
Cognitive impairment or dementia: 0/2	Reeve *et al,* 2018 [44]	No significant association
	Qi *et al*, 2015 [47]	No significant association
Frailty: 1/2	Reeve *et al,* 2018 [44]	[44] Older adults reporting fair/poor health compared

		with excellent/very good health (aOR, 0.46; 95% CI, 0.24-0.86) had lower odds of willingness to deprescribe (p = < 0.05)
	Qi *et al*, 2015 [47]	No significant association
Number of doctors (greater than 3): 1/1	Kua C-H *et al*, 2020 [31]	[31] Having greater than three doctors was correlated with willingness to stop a medication (p = 0.014) Mann–Whitney U test
Use of a dose administration aid: 0/2	Reeve *at al*, 2019 [42,43] (r*PATD development + results)*	No significant association
	Reeve *et al*, 2013 [16,17] (*PATD development + results)*	No significant association
Self-managed medications: 0/2	Kua C-H *et al*, 2020 [31]	No significant association
	Reeve *at al*, 2019 [42,43] (r*PATD development + results)*	No significant association
Private health insurance: 0/2	Kua C-H *et al*, 2020 [31]	No significant association
	Reeve *at al*, 2019 [42,43] (r*PATD development + results)*	No significant association
Overall health literacy (All Aspects of Health Literacy Scale (AAHLS): 1/1	Gillespie *et al,* 2019 [8]	[8] A positive correlation between willingness to stop one or more medications and overall health literacy scores (rs = 0.229, p = < 0.009)
Critical health literacy (AAHLS): 1/1	Gillespie *et al,* 2019 [8]	[8] A positive correlation between willingness to stop one or more medications and critical health literacy scores (rs = 0.198, p = <0.021)
Health status: 1/3	Reeve *et al,* 2018 [44]	[44] Older adults reporting fair/poor health compared with excellent/very good health (aOR, 0.46; 95% CI, 0.24-0.86) had lower odds of willingness to deprescribe (p = < 0.05)
	Aoki *et al*, 2019 [3]	No significant association
	Reeve *et al*, 2019 [42,43] (r*PATD development + results)*	No significant association
Mental health status: 0/2	Aoki *et al*, 2019 [3] (MCS Mental Health Composite Scale score)	No significant association
	Reeve *et al*, 2019 [42,43] (r*PATD development + results)*	No significant association
Setting: 1/1	Kua C-H *et al*, 2020 [31]	[31] Acute hospital patients were more willing to deprescribe than community pharmacy (p = 0.023)
Number of visits to a medical institution: 1/1	Aoki *et al*, 2019 [3]	[3] 2-5 medical visits more willing to deprescribe than ≤ 1 medical visits: 1.34 (1.03–1.75) (p=0.028)
Number of medical centres managing the patient: 0/2	Kua, K *et al,* 2019 [32]	No significant association
	Edelman *et al,* 2019 [26,27]	No significant association
English as a first language: 1/1	Reeve *et al*, 2019 [42,43] (r*PATD development + results)*	[42,43] Having English as a first language (OR = 3.779; 95% CI = 1.07-13.36) increased the likelihood of agreeing to have a medication deprescribed
Race: 1/1	Reeve *et al,* 2018 [44]	[44] Non-Hispanic black respondents (aOR, 0.60; 95% CI, 0.37-0.96) and respondents of other races (aOR, 0.46; 95%CI,0.24-0.89) had lower odds of willingness to deprescribe (p = <

		0.05)
Previous experience with deprescribing: 0/2	Reeve *et al*, 2013 [16,17] (*PATD development + results)*	No significant association
	Paque *et al*, 2019 [41]	No significant association

Variables not included in this table were only studied in a single study and no association found: number of medication doses per day [3], income [3], functional and communicative health literacy (AAHLS) [8], living situation [31], recent fall [44], high patient autonomy index score [42,43], reason for hospital admission [48], recent medication review [42,43], goals of care: 'extend duration of life, goals of care: 'be comfortable' [42,43].

[a] This reference contains results from two cohorts; one of these cohorts was published separately (and so are reported separately: Reeve 2013). Data presented here is from the second cohort only (community pharmacy participants)

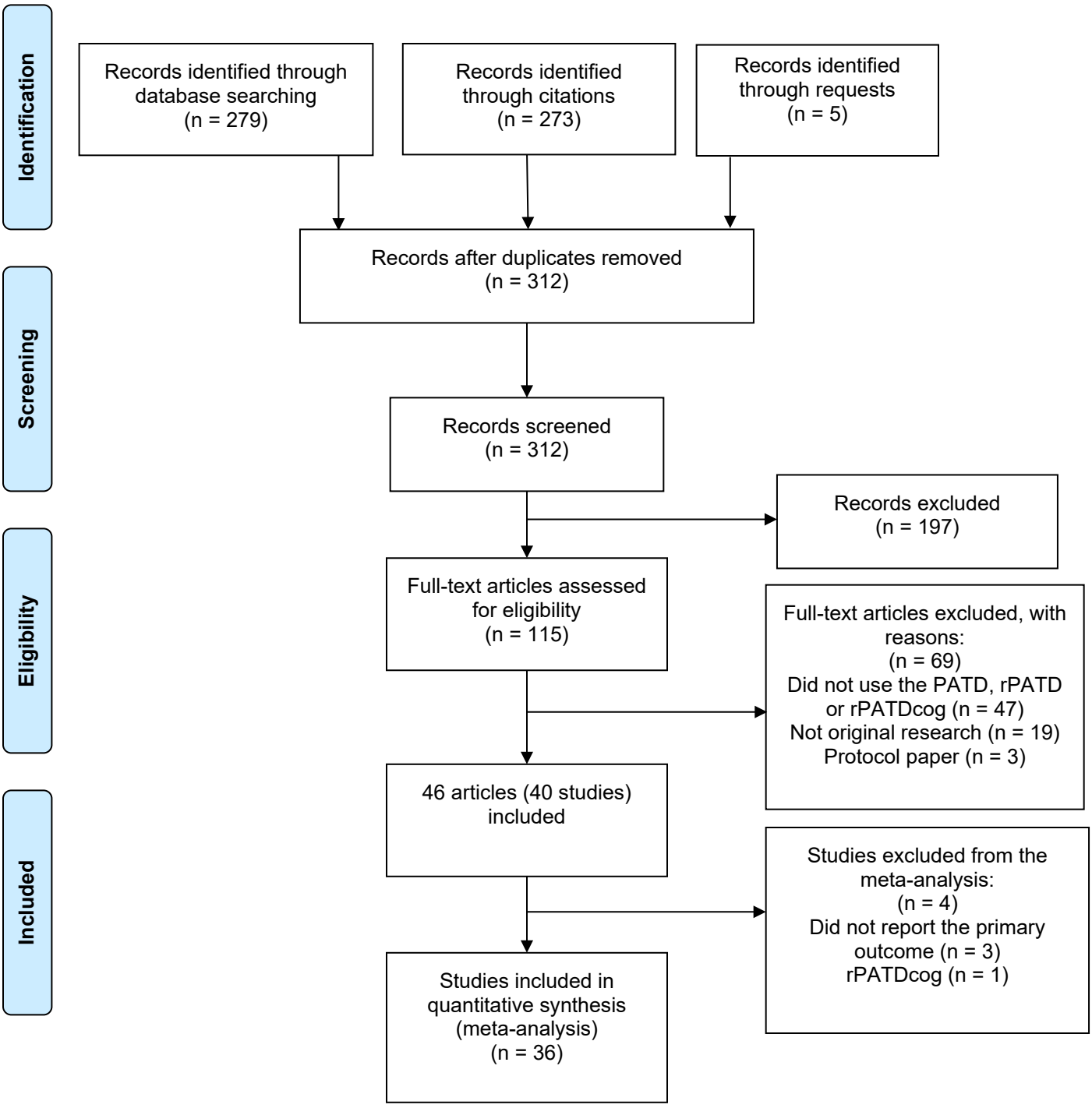
eTable 8. Caregivers: Associations with the primary outcome question "If their doctor said it was possible, I would be willing to stop one or more of my care recipient's medicines"

Source, year	Variables, statistical significance and direction of association						
	Age (increasing)	**Gender (female)**	**Education level**	**Self-managed medications ±**	**Self-rated physical health (excellent/good) ±**	**Number of doctors±**	**Previous experience with deprescribing±**
rPATD							
Kua C-H *et al*, 2020 [31]	NS	NS	S+ [a]	NS [b]	/	S+ [c]	/
Reeve *et al*, 2019 (rPATD results) [42,43]	NS	NS	NS	S+	S+	/	/
Paque *et al*, 2019 [41]	/	/	/	/	/	/	NS
TOTAL EXAMINED	**1**	**1**	**2**	**2**	**1**	**1**	**1**
TOTAL SIGNIFICANT	**0**	**0**	**1**	**1**	**1**	**1**	**0**

NE = Not examined
NS = Not significant
S = Significant
+ = Increasing/higher variable (or Female gender or previous experience with deprescribing) associated with increasing willingness to deprescribe
– = Decreasing/lower variable (or Male gender, or no previous experience with deprescribing) associated with increasing willingness to deprescribe

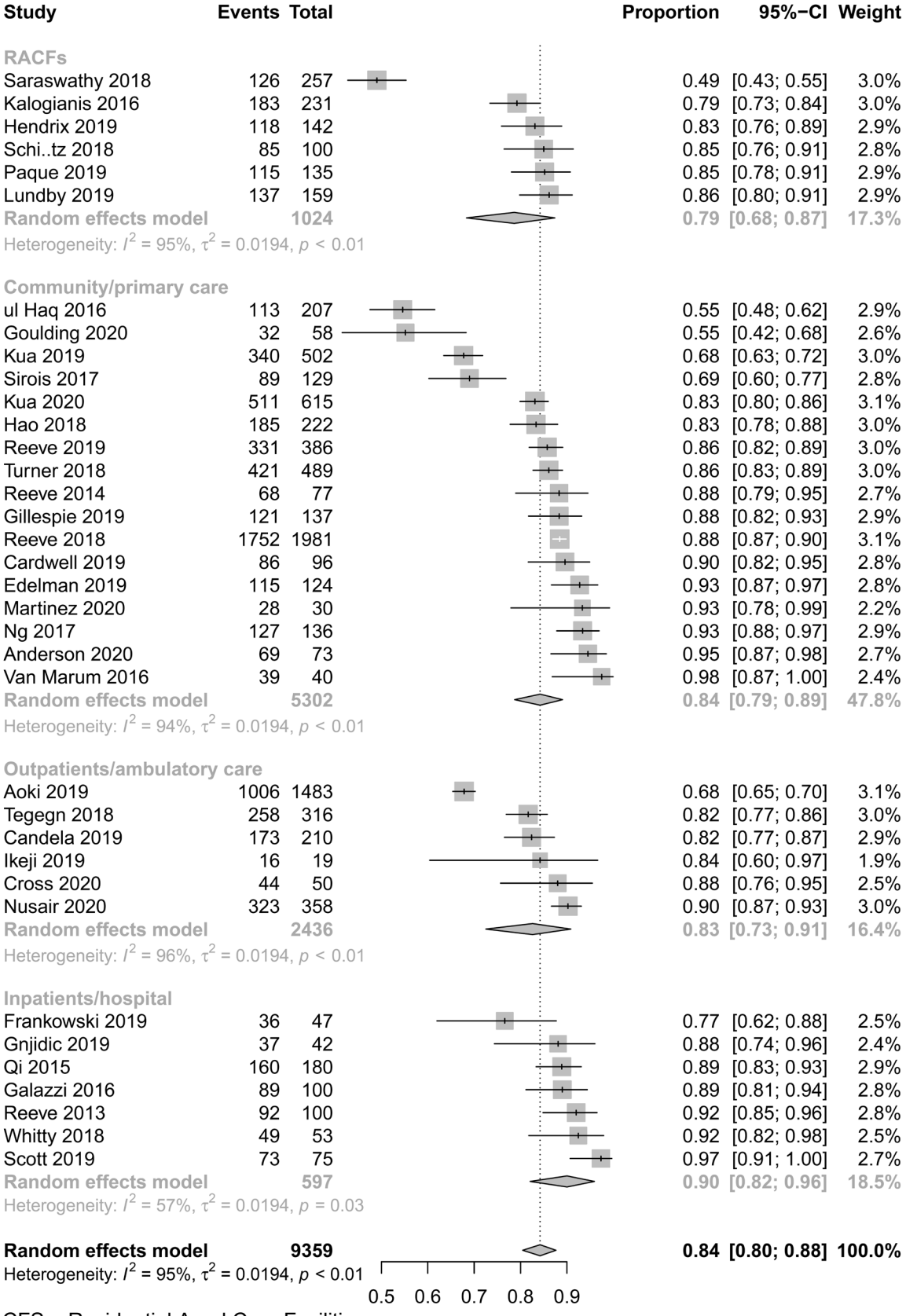
[a] University>secondary
[b] Self-managed/self-managed with help/family or friend
[c] More than 3 doctors or less than 3 doctors
± Of care recipient

eFigure 1: PRISMA Flow diagram of included articles



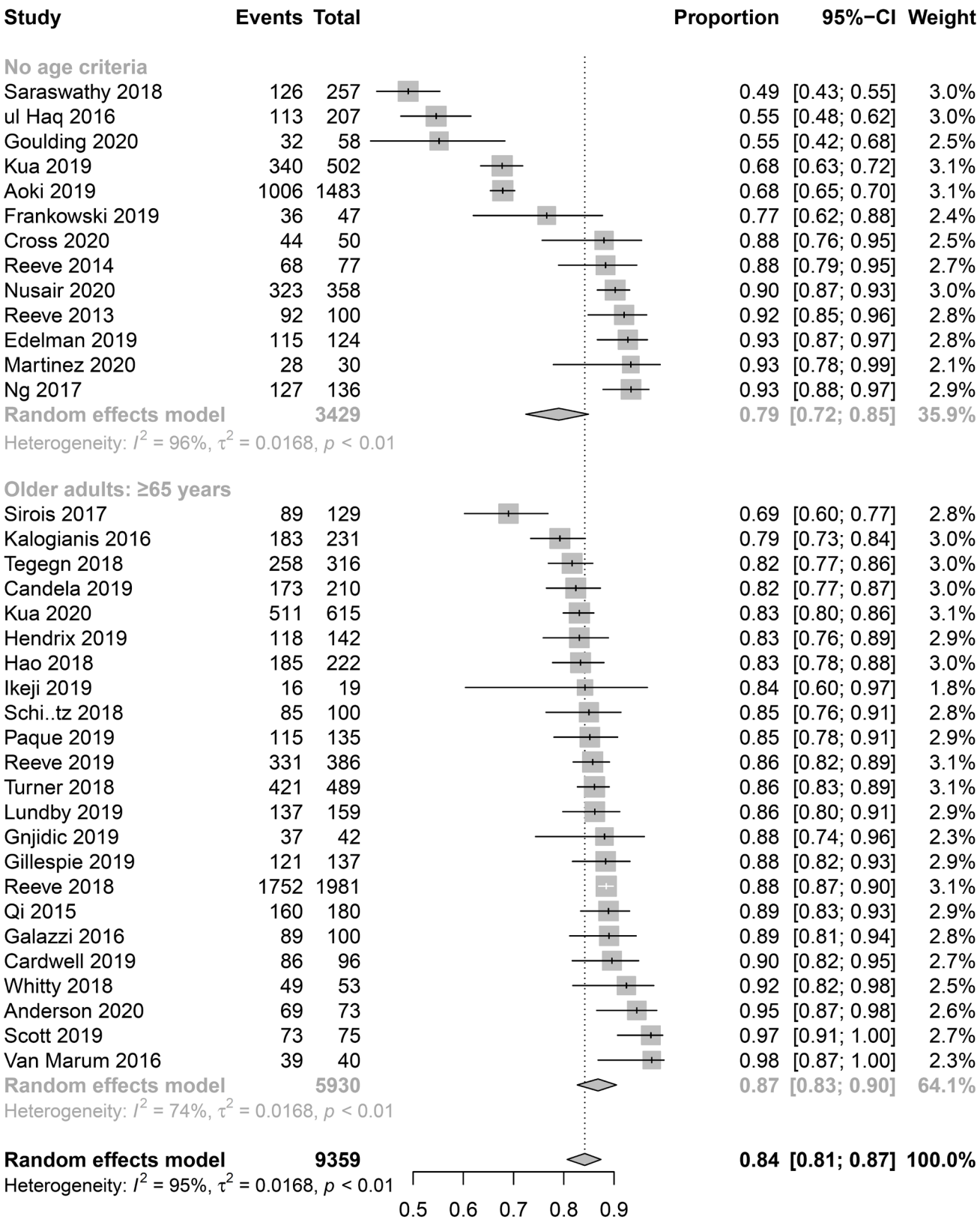
eFigure 2. Subgroup analyses of proportion of patients who agreed or strongly agreed with the question "If my doctor said it was possible, I would be willing to stop one or more of my medicines"

2a. Study setting (residential aged care facilities, community/primary care, outpatients/ambulatory care, inpatients/hospital)

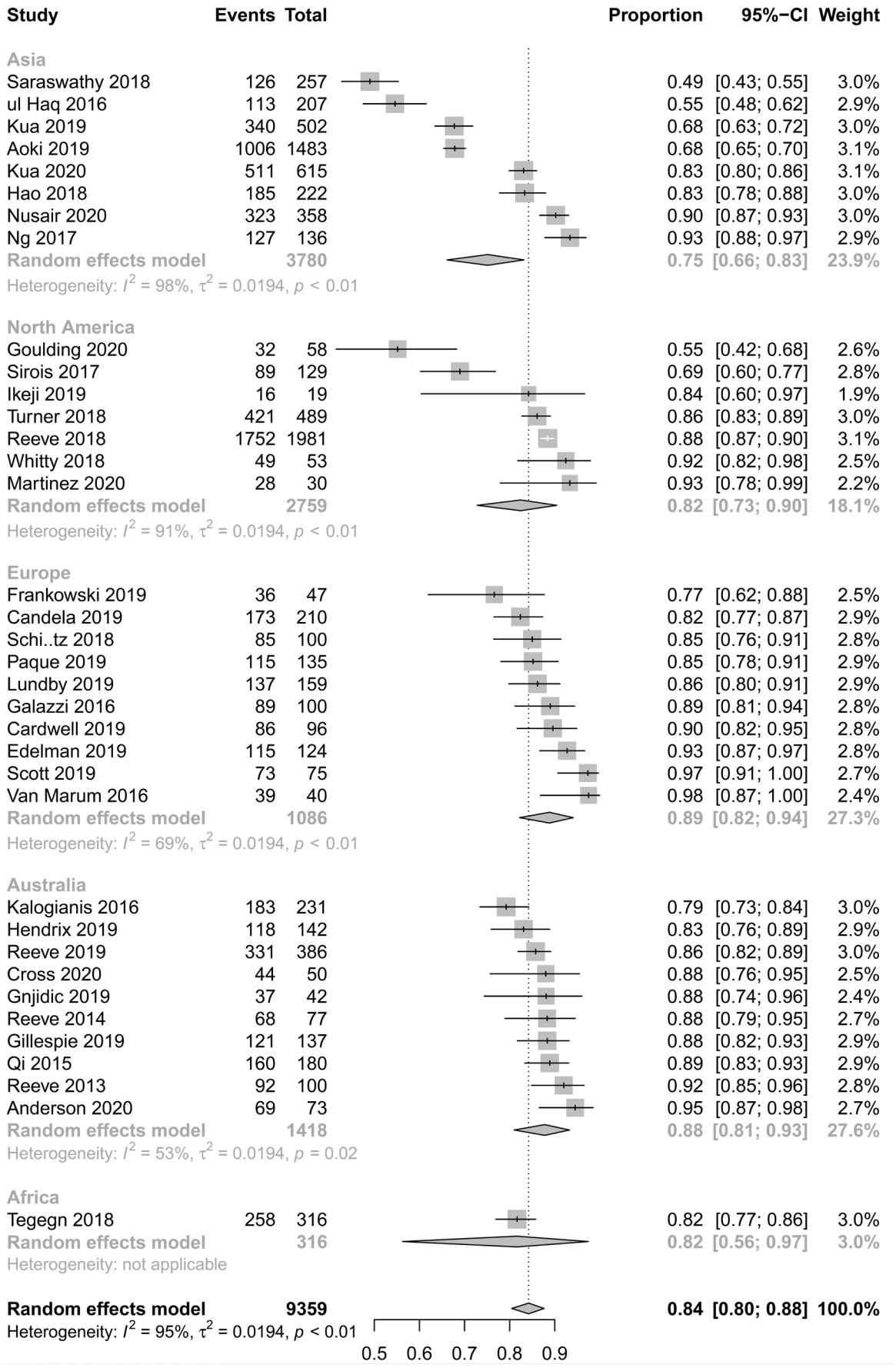


RACFS = Residential Aged Care Facilities

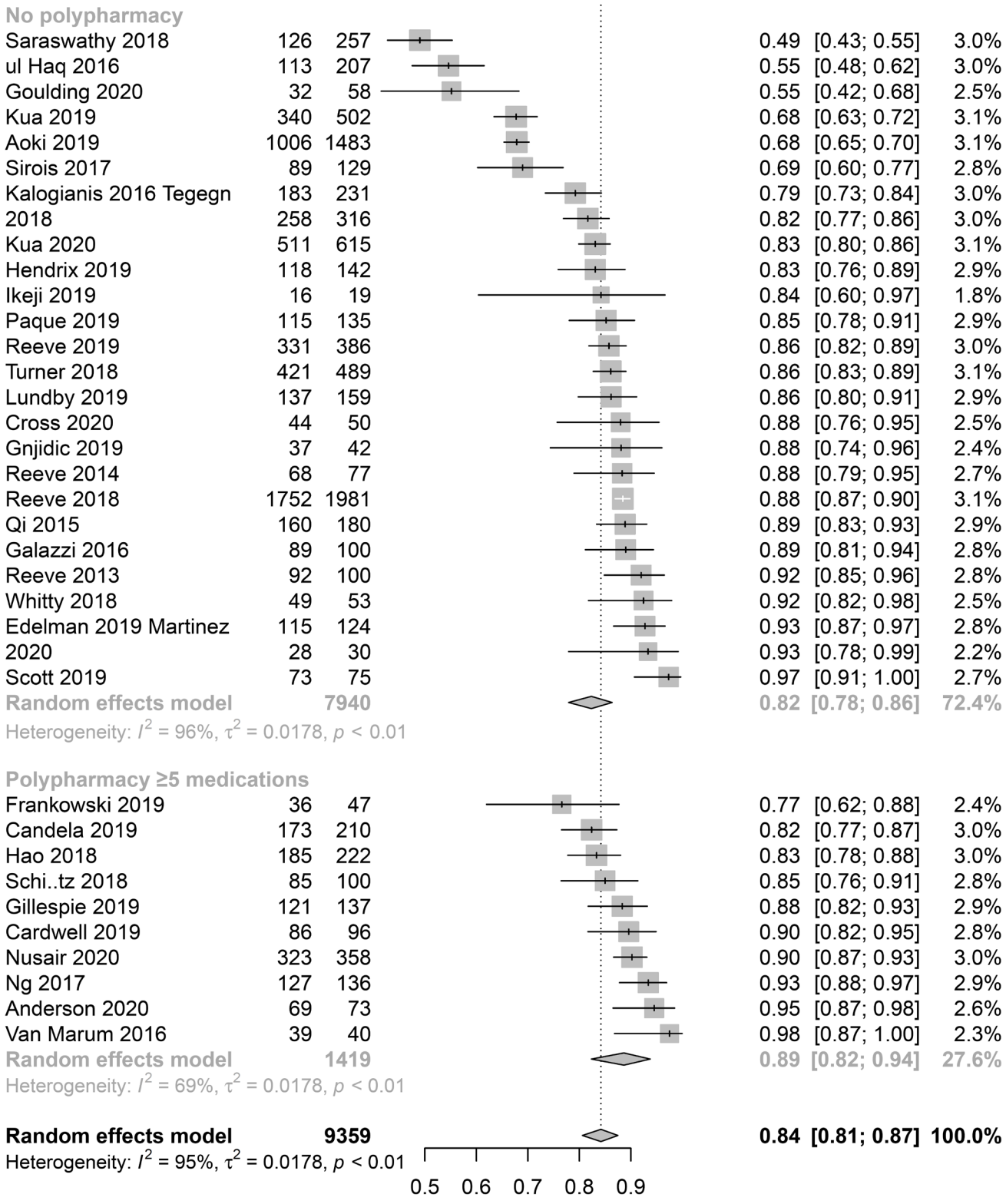
2b. Age (no age criteria vs older adults: ≥65 years)



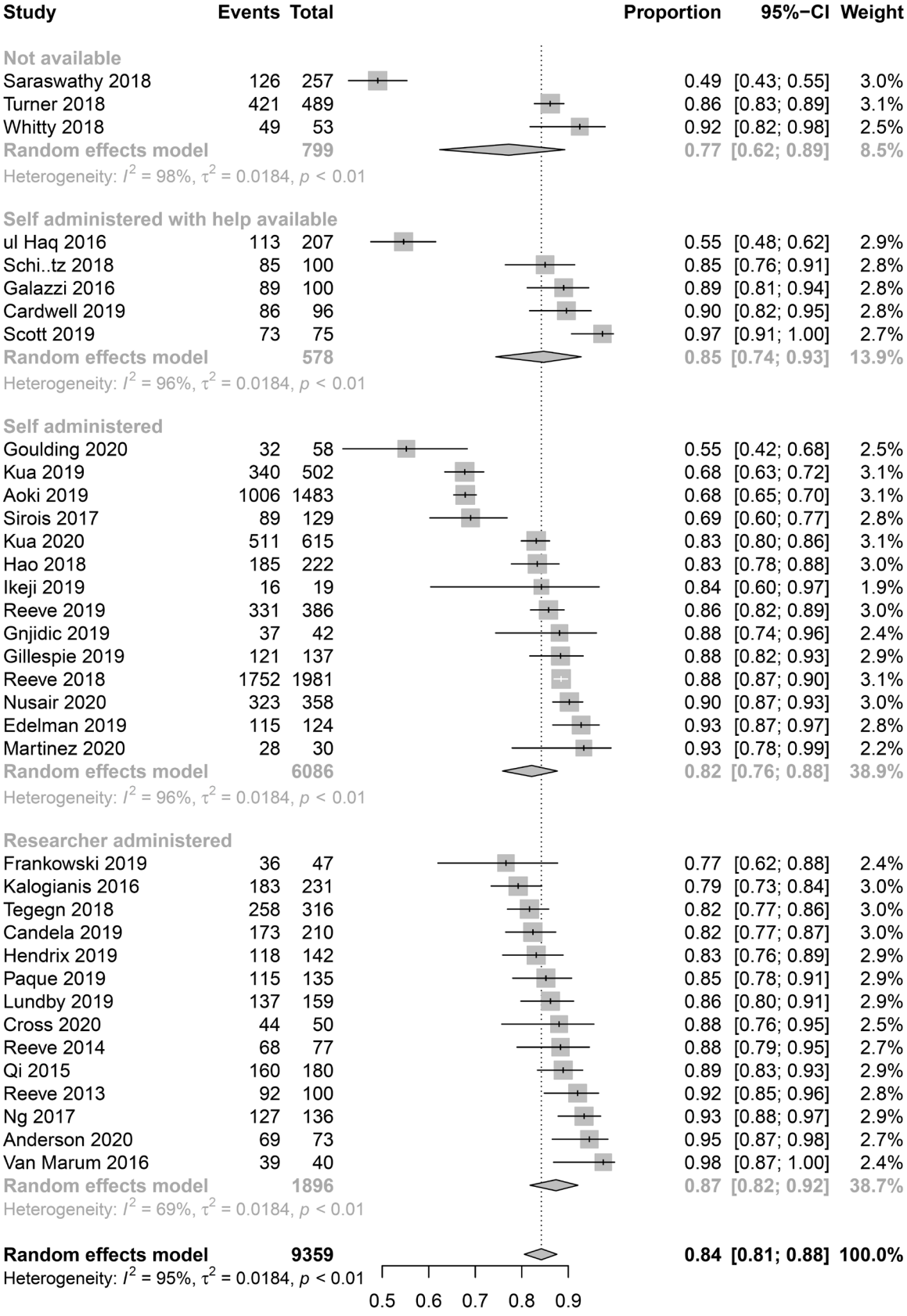
2c. Continent



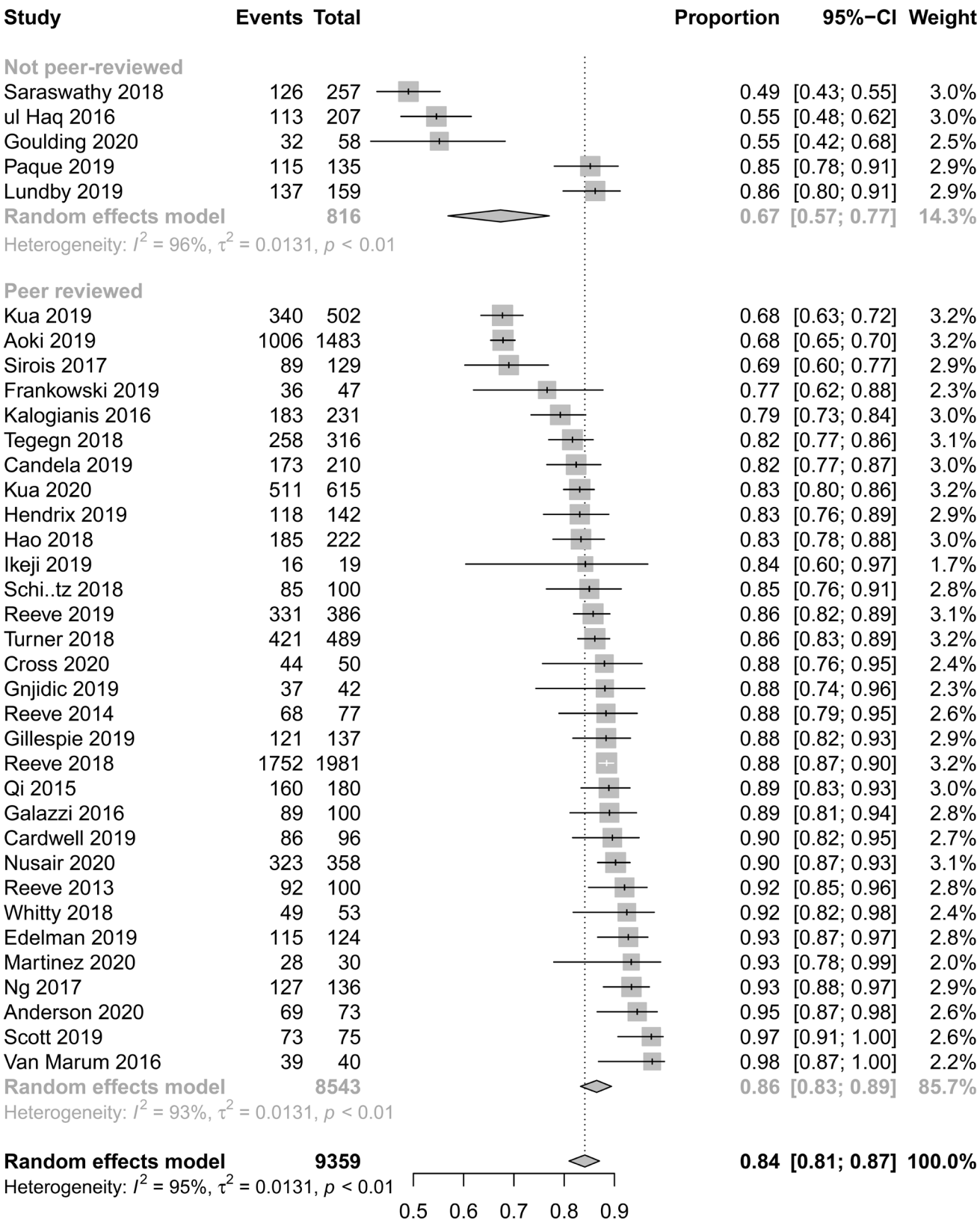
2d. Polypharmacy: taking 5 or more regular medications vs no polypharmacy criteria



2e. Survey administration (self-administered, researcher administered, self-administered with help available)

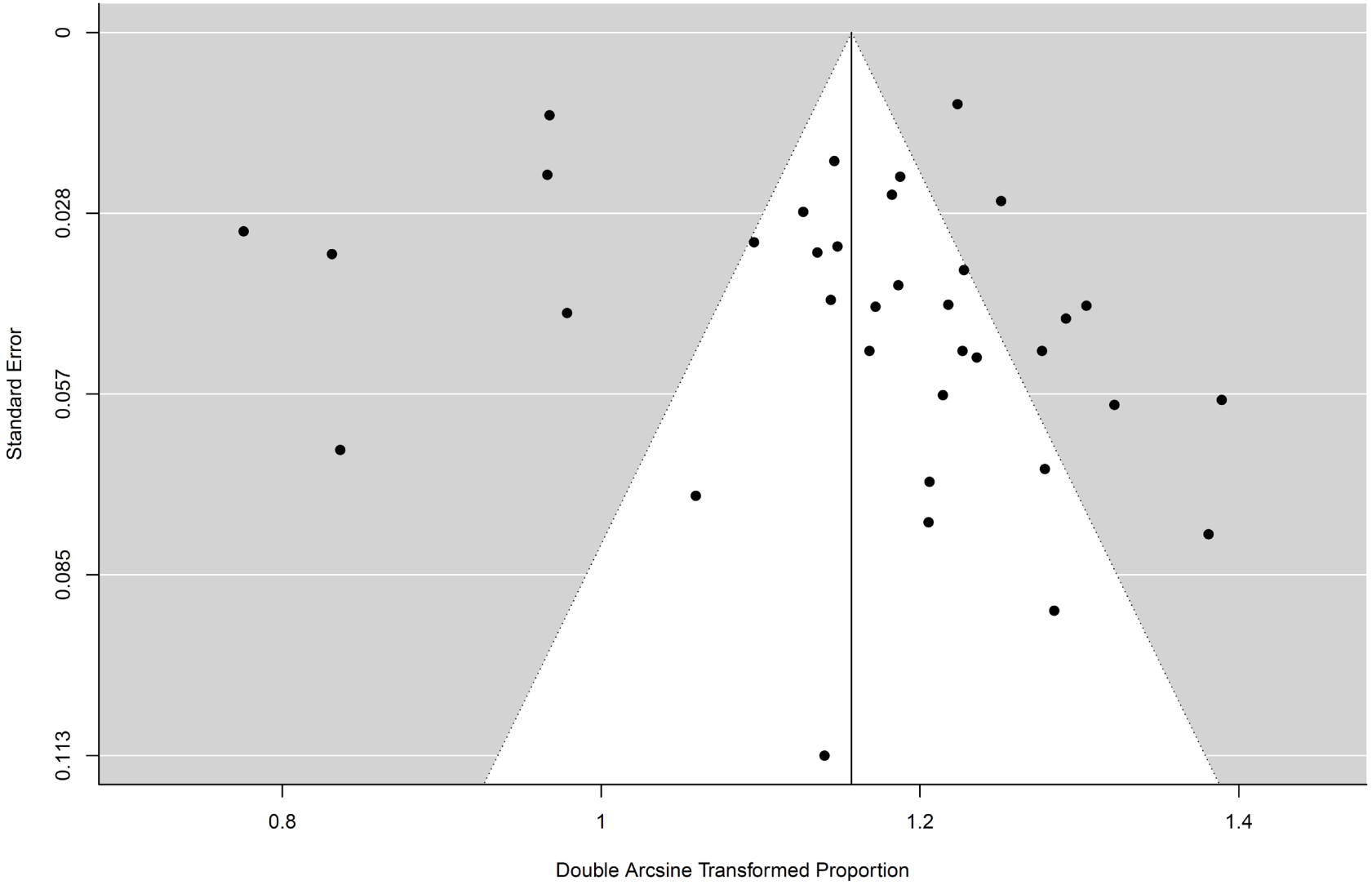


2f. Peer-reviewed status (included journal articles and published theses)

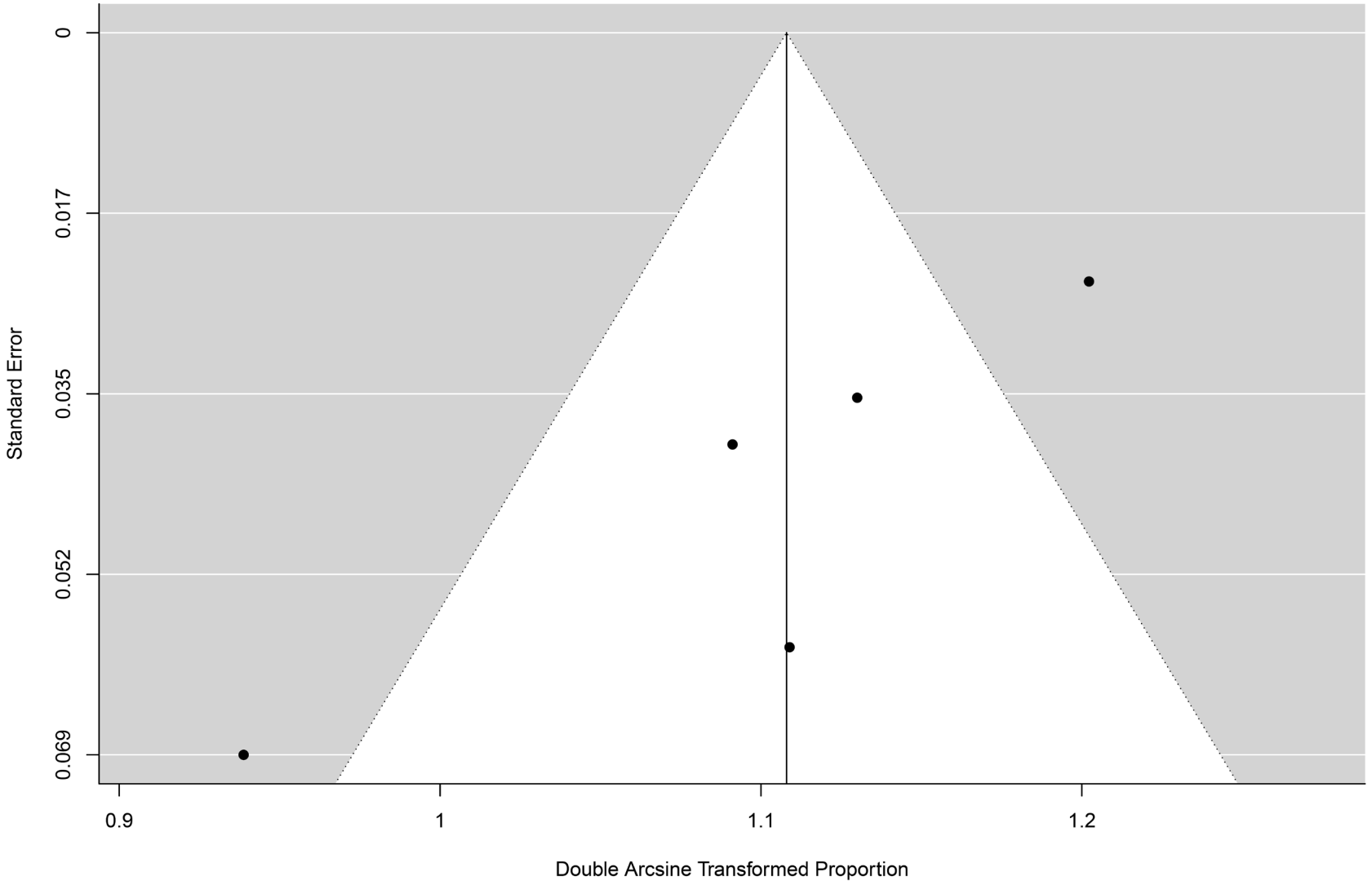


eFigure 3. Funnel plots of patients, caregivers, and sample size

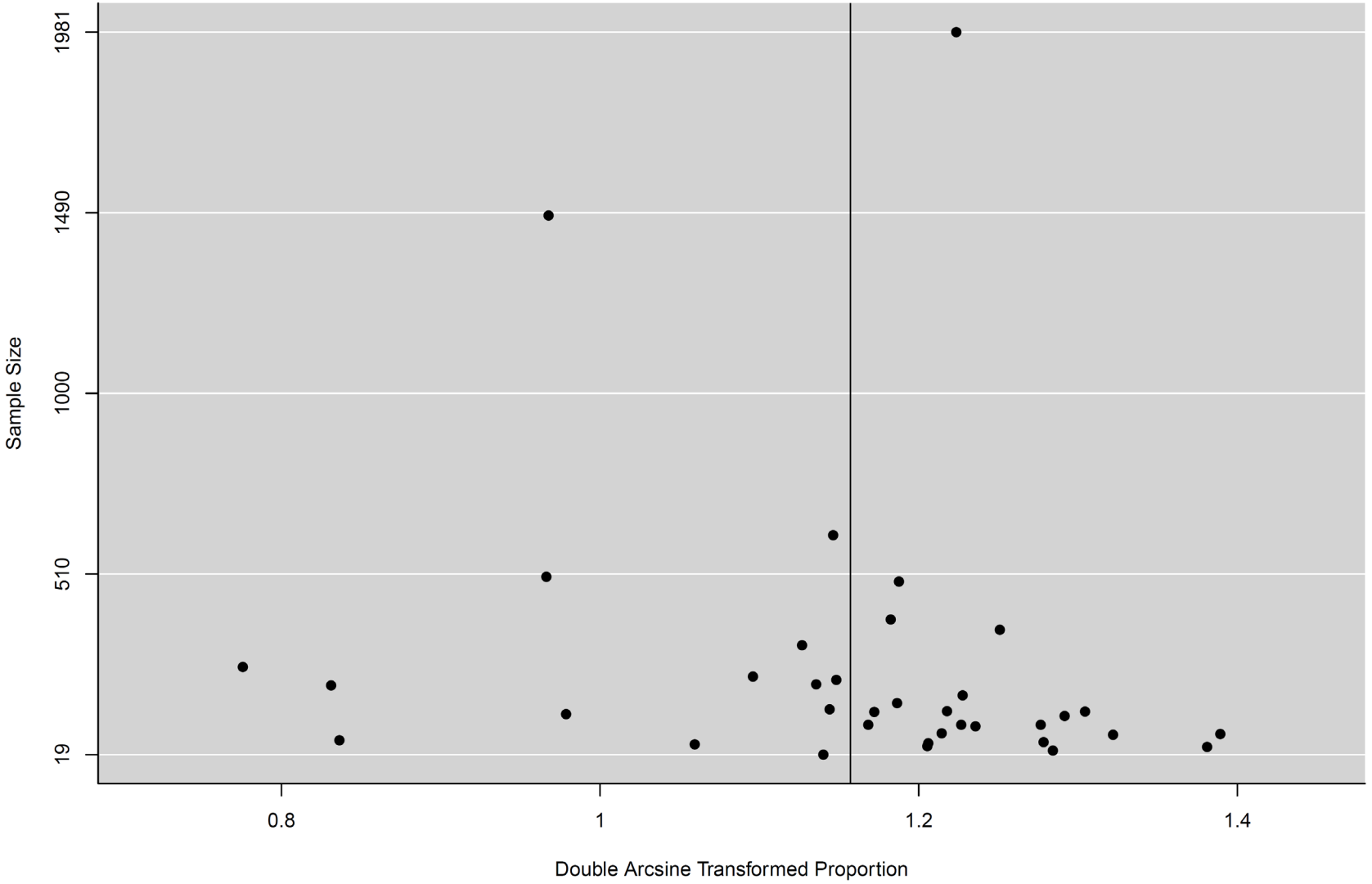
3a. Funnel plot patients



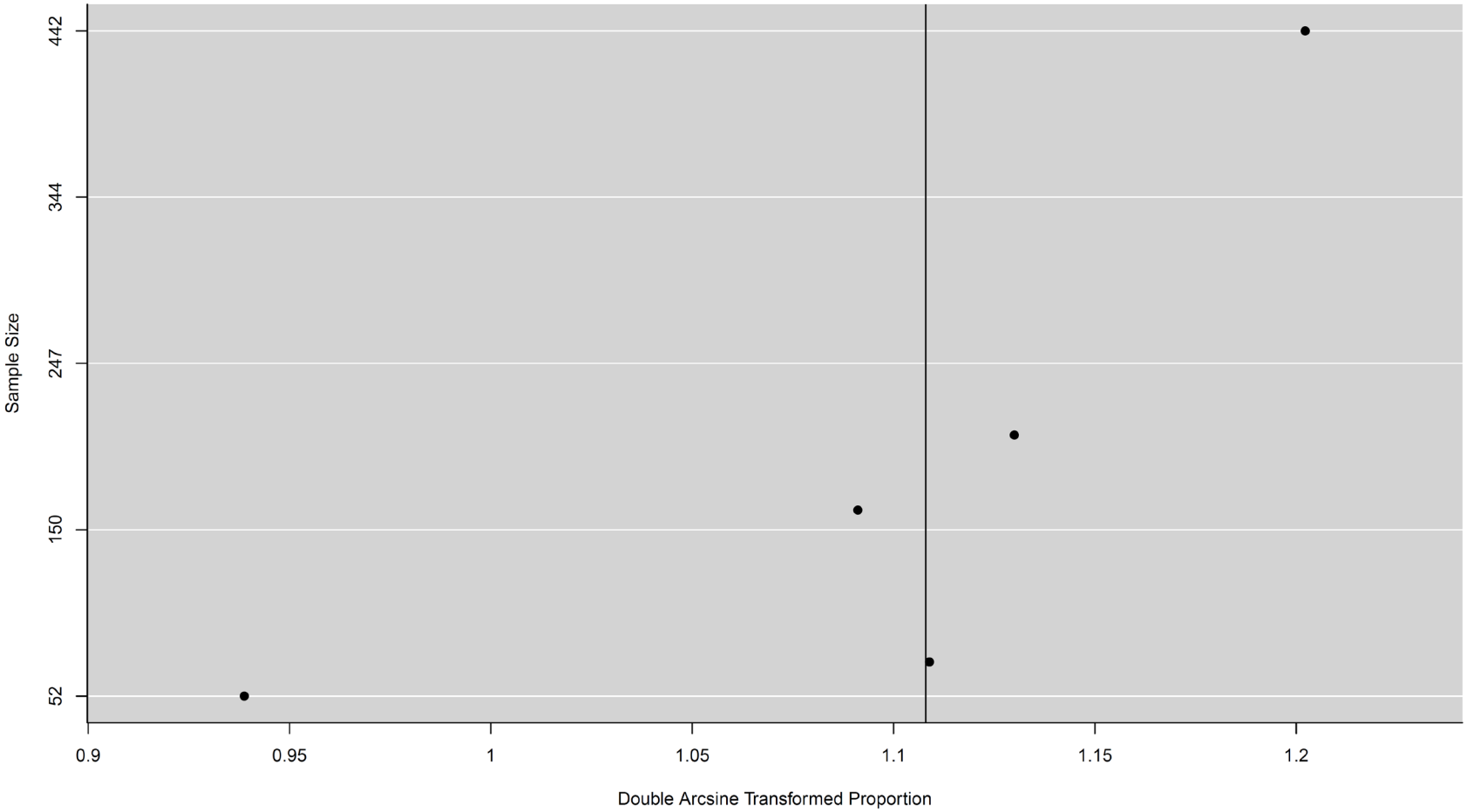
3b. Funnel plot caregivers



3c. Funnel plot sample size patients



3d. Funnel plot sample size caregivers



References:

1. Anderson K. Minimising potentially inappropriate polypharmacy in community living older people: a multi-phase, mixed methods study to develop and pilot a general practitioner-led deprescribing intervention in primary care. 2018.
2. Anderson K, Freeman C, Foster M, Scott I. GP-Led Deprescribing in Community-Living Older Australians: An Exploratory Controlled Trial. *Journal of the American Geriatrics Society.* 2020;68(2):403-410.
3. Aoki T, Yamamoto Y, Ikenoue T, Fukuhara S. Factors associated with patient preferences towards deprescribing: a survey of adult patients on prescribed medications. *International Journal of Clinical Pharmacy.* 2019;41(2):531-537.
4. Candela M. Ánalisis de la complejidad farmacoterapéutica y la necesidad potencial de desprescripción en pacientes con infección por el VIH. *Proyecto de investigación:.* 2019.
5. Cross AJ, George J, Woodward MC, Le VJ, Elliott RA. Deprescribing potentially inappropriate medications in memory clinic patients (DePIMM): A feasibility study. *Research in Social and Administrative Pharmacy.* 2020.
6. Frankowski N, Grootens K, Van Der Stelt R, Noort A, Van Marum R. 'You tell me, you are the doctor'; Patients on long-term psychiatric residences about their medication. [Dutch]. *Tijdschrift voor Psychiatrie.* 2019;61(8):527-535.
7. Galazzi A, Lusignani M, Chiarelli MT, et al. Attitudes towards polypharmacy and medication withdrawal among older inpatients in Italy. *International Journal of Clinical Pharmacy.* 2016;38(2):454-461.
8. Gillespie R, Mullan J, Harrison L. Attitudes towards deprescribing and the influence of health literacy among older Australians. *Primary Health Care Research & Development.* 2019;20.
9. Goulding H. Quality Improvement project on optimising medications - serious mental illness. In: University of Pittsburg; 2018.
10. Hao LJ, Omar MS, Tohit N. Polypharmacy and willingness to deprescribe among elderly with chronic diseases. *International Journal of Gerontology.* 2018;12(4):340-343.
11. Hendrix I, Page AT, Korhonen MJ, et al. Patterns of High-Dose and Long-Term Proton Pump Inhibitor Use: A Cross-Sectional Study in Six South Australian Residential Aged Care Services. *Drugs - Real World Outcomes.* 2019;6(3):105-113.
12. Kalogianis MJ, Wimmer BC, Turner JP, et al. Are residents of aged care facilities willing to have their medications deprescribed? *Research in Social and Administrative Pharmacy.* 2016;12(5):784-788.
13. Ng WL, Tan MZW, Koh EYL, Tan NC. Deprescribing: What are the views and factors influencing this concept among patients with chronic diseases in a developed Asian community? *Proc Singapore Healthcare.* 2017;26(3):172-179.
14. Qi K, Reeve E, Hilmer SN, Pearson SA, Matthews S, Gnjidic D. Older peoples' attitudes regarding polypharmacy, statin use and willingness to have statins deprescribed in Australia. *International Journal of Clinical Pharmacy.* 2015;37(5):949-957.
15. Reeve E. *Development and feasibility of a patient-centred deprescribing process / by Emily Reeve*, Thesis (PhD)--University of South Australia, 2014.; 2014.
16. Reeve E, Shakib S, Hendrix I, Roberts MS, Wiese MD. Development and validation of the patients' attitudes towards deprescribing (PATD) questionnaire. *International Journal of Clinical Pharmacy.* 2013;35(1):51-56.
17. Reeve E, Wiese MD, Hendrix I, Roberts MS, Shakib S. People's attitudes, beliefs, and experiences regarding polypharmacy and willingness to deprescribe. *Journal of the American Geriatrics Society.* 2013;61(9):1508-1514.
18. Saraswathy GR, Pratheeksha M, Maheswari E. Analysing the Attitude of Old Age Home Residents on Polypharmacy and Deprescribing of Medications in Mangalore, Karnataka. *Value in Health.* 2018;21 (Supplement 3):S220.
19. Schiøtz ML, Frølich A, Jensen AK, et al. Polypharmacy and medication deprescribing: A survey among multimorbid older adults in Denmark. *Pharmacol Res Perspect.* 2018;6(6).
20. Sirois C, Ouellet N, Reeve E. Community-dwelling older people's attitudes towards deprescribing in Canada. *Research In Social & Administrative Pharmacy.* 2017;13(4):864-870.
21. Turner JP, Martin P, Zhang YZ, Tannenbaum C. Patients beliefs and attitudes towards deprescribing: Can deprescribing success be predicted? *Research in Social and Administrative Pharmacy.* 2020;16(4):599-604.
22. Ul Haq N, Mohaib M, Nasim A, Razaque G, Riaz S. Chronic patients attitudes, beliefs, and experiences regarding polypharmacy and willingness to deprescribe in Quetta. *Value in Health.* 2016;19 (7):A823.
23. Van Marum RJ, Van Marum S, Van Driesten S, Verdoorn S, Boxman A, Grossklaus A. Deprescribing for the elderly: Comparing opinions of patients, pharmacists and doctors. *Pharm Weekbl.* 2016;151(43):28-33.
24. Whitty R, Porter S, Battu K, et al. A pilot study of a Medication Rationalization (MERA) intervention. *CMAJ Open.* 2018;6(1):E87-E94.
25. Cardwell K, Smith SM, Clyne B, et al. Evaluation of the General Practice Pharmacist (GPP) intervention to optimise prescribing in Irish primary care: a non-randomised pilot study. *BMJ open.* 2020;10(6):e035087.
26. Edelman M, Blanker M, Jellema P, Hak E, Denig P. Patient attitudes towards deprescribing of alpha-blockers and willingness to participate in a discontinuation trial. *Neurourology and Urodynamics.* 2017;36 (Supplement 3):S242-S244.
27. Edelman M, Jellema P, Hak E, Denig P, Blanker MH. Patients' Attitudes Towards Deprescribing Alpha-Blockers and Their Willingness to Participate in a Discontinuation Trial. *Drugs & aging.* 2019;36(12):1133-1139.

28. Gnjidic D, Ong HMM, Leung C, Jansen J, Reeve E. The impact of in hospital patient-education intervention on older people's attitudes and intention to have their benzodiazepines deprescribed: a feasibility study. *Therapeutic Advances in Drug Safety.* 2019;10.
29. Ikeji C, Williams A, Hennawi G, Brandt NJ. Patient and Provider Perspectives on Deprescribing Proton Pump Inhibitors. *J Gerontol Nurs.* 2019;45(10):9-17.
30. Ikeji CA, Brandt N, Hennawi G, Williams A. Patient and prescriber perspectives on proton pump inhibitor (PPI) use and deprescribingin older adults. *Journal of the American Geriatrics Society.* 2019;67 (Supplement 1):S287.
31. Kua CH, Reeve E, Ratnasingam V, Mak VSL, Lee SWH, Pharmaceutical Society of Singapore Deprescribing W. Patients' and Caregivers' Attitudes Towards Deprescribing in Singapore. *J Gerontol A Biol Sci Med Sci.* 2020;22:22.
32. Kua KP, Saw PS, Lee SWH. Attitudes towards deprescribing among multi-ethnic community-dwelling older patients and caregivers in Malaysia: a cross-sectional questionnaire study. A Comment. *International Journal of Clinical Pharmacy.* 2019;41(5):1131-1132.
33. Kua KP, Saw PS, Lee SWH. Attitudes towards deprescribing among multi-ethnic community-dwelling older patients and caregivers in Malaysia: a cross-sectional questionnaire study. *Int J Clin Pharm.* 2019;41(3):793-803.
34. Scott S, Clark A, Farrow C, et al. Attitudinal predictors of older peoples' and caregivers' desire to deprescribe in hospital. *BMC Geriatrics.* 2019;19(1).
35. Lundby C, Simonsen T, Ryg J, Sondergaard J, Pottegard A, Lauridsen HH. Translation, cultural adaptation, and psychometric properties of the Danish version of the revised Patients' attitudes towards Deprescribing questionnaire. *Pharmacoepidemiology and Drug Safety.* 2019;28 (Supplement 2):291-292.
36. Major GL, Mills A, Lowthian JA. Deprescribing Attitudes of Older Adults Receiving Medication Management Support From Home-Based Nurses. *Journal of the American Geriatrics Society.* 2019;67(8):1756-1757.
37. Martinez AI, Spencer J, Moloney M, Badour C, Reeve E, Moga DC. Attitudes toward deprescribing in a middle-aged health disparities population. *Research in Social and Administrative Pharmacy.* 2020.
38. Ng KY, Lee SWH. Attitude of older patients with Parkinson's disease towards deprescribing: A pilot study. *Journal of Parkinson's Disease.* 2019;9 (1):101.
39. Nusair MB, Arabyat R, Al-Azzam S, El-Hajji FD, Nusir AT, Al-Batineh M. Translation and psychometric properties of the Arabic version of the revised Patients' Attitudes Towards Deprescribing questionnaire. *J Pharm Health Serv Res.* 2020.
40. Omar MS, Ariandi AH, Tohit NM. Practical problems of medication use in the elderly Malaysians and their beliefs and attitudes toward deprescribing of medications. *Journal of research in pharmacy practice.* 2019;8(3):105.
41. Paque K. Balancing medication use in nursing home residents with life-limiting disease. *European journal of clinical pharmacology.* 2019.
42. Reeve E, Low LF, Hilmer SN. Attitudes of Older Adults and Caregivers in Australia toward Deprescribing. *Journal of the American Geriatrics Society.* 2019;67(6):1204-1210.
43. Reeve E, Low LF, Shakib S, Hilmer SN. Development and Validation of the Revised Patients' Attitudes Towards Deprescribing (rPATD) Questionnaire: Versions for Older Adults and Caregivers. *Drugs and Aging.* 2016;33(12):913-928.
44. Reeve E, Wolff JL, Skehan M, Bayliss EA, Hilmer SN, Boyd CM. Assessment of Attitudes Toward Deprescribing in Older Medicare Beneficiaries in the United States. *JAMA Internal Medicine.* 2018;178(12):1673-1680.
45. Reeve E, Anthony AC, Kouladjian O'Donnell L, et al. Development and pilot testing of the revised Patients' Attitudes Towards Deprescribing questionnaire for people with cognitive impairment. *Australasian journal on ageing.* 2018;37(4):E150-E154.
46. Tegegn HG, Tefera YG, Erku DA, et al. Older patients' perception of deprescribing in resource-limited settings: A cross-sectional study in an Ethiopia university hospital. *BMJ open.* 2018;8(4).
47. Qi K, Reeve E, Hilmer SN, Pearson SA, Matthews S, Gnjidic D. Older peoples' attitudes regarding polypharmacy, statin use and willingness to have statins deprescribed in Australia. *Int J Clin Pharm.* 2015;37(5):949-957.
48. Tegegn HG, Tefera YG, Erku DA, et al. Older patients' perception of deprescribing in resource-limited settings: a cross-sectional study in an Ethiopia university hospital. *BMJ open.* 2018;8(4):e020590.
49. Reeve E. *Development and feasibility of a patient-centred deprescribing process*. South Australia, Australia: School of Pharmacy and Medical Sciences, University of South Australia; 2014.