#### **Extended Data File 3: Search Strings for Six Databases and Findings.**

Six Databases: Ovid Medline, Embase, CINAHL, Web of Science, Cochrane Library and Lens were searched. The search started with searches of four databases (CINAHL, MEDLINE, Cochrane Library and LENS) using three broad search strings: the older adult, adverse drug events and primary care settings. Given the timeframe for the review and the focus on community dwelling older adults, more specific searches developed by the information specialist( PM) for four databases (OVID MEDLINE, EMBASE CINAHL, WEB OF SCIENCE) using an additional search string; community dwelling were undertaken using the same filters.

Broad Search	Specific Search
CINHAL = 104	CINHAL = 40
MEDLINE = 316	MEDLINE = 35
LENS = 123	WEB OF SCIENCE = 26
Cochrane Library = 0	EMBASE = 38
Total = 543	Total = 139

### Medline (OVID) 15<sup>th</sup> September 2021

String	Terms	Findings
1	(aged 65 or elderly or geriatric or veteran).ab.	370135
2	(Primary Health Care' or 'Family Physicians' or 'General Practitioners' or 'Ambulatory Care' or Government guideline or health policy or policy or guidelines or report or protocol).ab.	2887985
3	"drug-related side effects and adverse reactions".sh. or Adverse drug reaction.ab. or adverse drug event.ab. or drug overdose.ab. or adverse drug outcome.ab. or drug side effect.ab.	43455
4	1 and 3 and 6	316

### **CINAHL 15<sup>th</sup> September 2021**

#	Query	Results
S7	S1 AND S2 AND S5 Limiters - Date of Publication: 2011 01 01- 2021 12 31	104
	(RUN 150921)	
S6	S1 AND S2 AND S5	127
S5	S3 OR S4	339,066
S4	(MH "Government Regulations") OR (MH "Health Policy") OR (MH "Policy and Procedure Manuals/ST/UT") OR "Government guideline or health policy or policy or guidelines or report or protocol" OR (MH "Clinical Governance") OR (MH "Outcomes(Health Care)/ST/UT")OR (MH "Guideline Adherence/UT/ST")	150,352

\$3	(MH "Physicians, Family") OR (MH "Primary Health Care") OR (MH "Adverse Health Care Event") OR "Primary Health Care' or 'Family Physicians' or 'General Practitioners' or 'Ambulatory Care'" OR (MH "Ambulatory Care Facilities/ST/MA/ED")	194,068
S2	(MH "Adverse Drug Event") OR (MH "Medication Errors/AE")	15,678
S1	(MH "Aged, 80 and Over") OR (MH "Aged") OR "aged 65 or elderly or geriatric or veteran"	4,180,347

## Lens.org 16<sup>th</sup> September 2021

Scholarly Works (123) = 'adverse AND ( drug AND ( events' AND ( 'community AND ( dwelling AND ( older AND ( adults' AND ( 'general AND practice' ) ) ) ) ) )

September 16th 2021	Query Type # Items Tools	
Filters: revised Subject, Mesh Headings and Keywords	Subject = (Health(social science), General Medicine, Pharmacology, Geriatrics and Gerontology, Gerontology, Computer Science Applications, Family Practice, Education, Pharmacology (medical), Community and Home Care, Pharmacy, Medicine (miscellaneous), Health Policy, Multidisciplinary) Keyword = (Frail Elderly, Inappropriate Prescribing, Medication Review, Elderly, Drug Utilisation, Pharmaceutical Care, 80 and Over, Health Outcomes, Geriatric Medicine, Medications, Communication, Public Health, Older Patients, Risk Factors, Adherence, Aged, Primary Health Care, Health-Related Quality of Life, Drug-Related Problems, Potentially Inappropriate Prescribing, Community-Dwelling, Adverse Drug Events, Geriatrics, Home Care, Activities of Daily Living, General Practice, Older Adults, Primary Care, Community Dwelling, Older People, Cognitive Impairment, Deprescribing, Quality of Life, Delivery of Health Care, Polypharmacy, Inappropriate Drug Use) MeSH Heading = (Risk Factors, Aged, 80 and over, Aged)	123
Filters: + Keywords	Keyword = (Complexity , Frail Elderly , Inappropriate Prescribing , Medication Review , Elderly , Drug Utilisation , Nursing , Pharmaceutical Care , 80 and Over , Health Outcomes , Geriatric Medicine , Medications , Communication , Public Health , Older Patients , Risk Factors , Ageing , Adherence , Aged , Primary Health Care , Health-Related Quality of Life , Drug-Related Problems , Potentially Inappropriate Prescribing , Community-Dwelling , Adverse Drug Events , Geriatrics , Home Care , Activities of Daily Living , General Practice , Older Adults , Primary Care , Community Dwelling , Older People , Cognitive Impairment , Deprescribing , Quality of Life , Delivery of Health Care , Polypharmacy , Inappropriate Drug Use	138
Filters: + MeSH Headings	MeSH Heading = ( Risk Factors , Aged, 80 and over , Aged )	373
Filters: + Subject	Subject = ( Ageing , Health(social science) , General Medicine , Public Health, Environmental and Occupational Health , Pharmacology , Geriatrics and Gerontology , Gerontology , Computer Science	629

	Applications , General Nursing , Family Practice , Education ,	
	Pharmacology (medical) , Community and Home Care , Pharmacy ,	
	Medicine (miscellaneous) , Health Policy , Multidisciplinary	
Filters: Date published	Query: 'adverse AND ( drug AND ( events' AND ( 'community AND ( dwelling AND ( older AND ( adults' AND ( 'general AND practice' ) ) ) ) ) )	1,172
from = 2011-		
01-01 to =		
2021-09-01		

# ADVERSE DRUG EFFECTS / PRIMARY CARE searches – Paul Murphy - 01 Oct 2021

	OVID MEDLINE ALL	01102021
1	exp "Drug-Related Side Effects and Adverse Reactions"/ OR (adverse drug	140937
	reaction? or adverse drug event? or adverse drug outcome?).mp.	
2	exp Primary Health Care/ OR Physicians, Family/ OR Physicians, Primary Care/ OR (primary adj2 care) OR (family adj2 practice) OR (general adj2 practicien) OR (general adj2 practitioner?).ti,ab. OR Community Pharmacy Services/ OR (community pharmacy or community pharmacist?).mp. OR (Ambulatory adj1 Care).mp.	447725
3	aged.mp. or exp "Aged, 80 and over"/ or exp Aged/ or (elderly or geriatric or veteran).mp.	5751527
4	(Community adj2 dwelling) OR (community adj2 living) OR exp Independent Living/	32854
5	1 AND 2 AND 3 AND 4	46
6	Limit to English and Humans, from 2011 to 2021	35

	EMBASE Elsevier	01102021
1	'adverse drug reaction'/exp OR (adverse NEAR/2 drug NEAR/2 reaction?):ti,ab,de OR (adverse NEAR/2 drug NEAR/2 event?):ti,ab,de OR (adverse NEAR/2 drug NEAR/2 outcome?):ti,ab,de OR (drug NEAR/2 side NEAR/2 effect?):ti,ab,de	597,991
2	'primary health care'/exp OR 'general practitioner'/exp OR (general practitioner\$) OR (primary NEAR/2 care):ti,ab,de OR (family NEAR/2 practice):ti,ab,de OR (family NEAR/2 physician?):ti,ab,de OR (general NEAR/2 practice):ti,ab,de,kw OR (community NEAR/1 pharamacist\$):ti,ab,de,kw or 'ambulatory care'/exp OR 'community health nursing'/exp	526,719
3	'aged'/exp OR (aged OR elderly OR veteran):ti,ab,de,kw	5,142,482
4	'community dwelling persons'/exp OR (community NEAR/2 dwelling) OR (community NEAR/1 living) OR 'independent living'/exp	43,695
	1 AND 2 AND 3 AND 4	47
	LIMIT English only, 2011 - 2021	38

	CINAHL with Full text - Ebscohost	01102021
1	(MH "Adverse Drug Event+") OR SU drug N2 side N2 effect* OR TI drug N2 side N2 effect* OR AB drug N2 side N2 reaction* OR SU drug N2 adverse N2 reaction* OR TI drug N2 adverse N2 reaction* OR SU adverse N2 drug OR TI adverse N2 drug OR AB adverse N2 drug	(48,807)
2	(MH "Physicians, Family") OR (MH "Primary Health Care") OR (primary N1 care OR primary N1 health N1 care) OR (family N1 practice) OR (general N1 practice) OR (general N1 practice) OR (general N1 practitioner\$) OR (family N1 physician\$) OR (community N2 pharmac?) OR (community N1 nurs?)	(164,676)
3	(MH "Aged, 80 and Over") OR (MH "Aged") OR TI (aged OR elderly OR veteran) OR AB (aged OR elderly OR veteran)	(1,058,088)
4	(community N2 dwelling) OR (community N2 living) OR (independent N2 living)	(32,877)
5	1 AND 2 AND 3 AND 4	45
6	LIMIT 5 2011-2021	40

	WEB OF SCIENCE: Science & Social Science Citation Indexes	01102021
1	TS=(adverse NEAR/2 drug NEAR/2 reaction?) OR TS=(adverse NEAR/2 drug	34,898
	NEAR/2 event?) OR TS=(adverse NEAR/2 drug NEAR/2 effect?) OR TS=(drug	
	NEAR/2 side NEAR/2 effect?) OR TS=(drug NEAR/2 side NEAR/2 event?)	
2	TS=(primary NEAR/2 health NEAR/2 care) OR TS=(primary NEAR/1 health) OR	236,189
	TS=(primary NEAR/2 care) OR TS=(general NEAR/2 practitioner?) OR TS=(family	
	NEAR/2 physician?) OR TS=(general NEAR/2 practice) OR TS=(family NEAR/2	
	practice) OR TS=( community NEAR/2 pharmacist\$)	
3	TS=(aged OR elderly OR veteran OR geriatric) OR TS=(older NEAR1/ adult?)	3,360,521
4	TS=((community NEAR/2 dwelling) OR (community NEAR/2 living) OR	43,399
	(independent NEAR/1 living))	
5	1 AND 2 AND 3 AND 4	37
6	Limit to 2011-2021	26

139 into Endnote, 42 Duplicates removed (29 by Endnote, 13 by hand)