

Renal evidence map

Search protocol and strategy

September 2024

Method

Searches were conducted on the following databases: MEDLINE, EMBASE, Cochrane Library and HMIC and selected grey literature sources. Searches were initially conducted in January 2024. Search alerts were set up to identify new and emerging evidence; the map was maintained until the end of September 2024.

Evidence map protocol

Theme	Focus	Search parameters		Study type						Sources				
		Geographical	Date range	Systematic review/ meta-analysis	Economic evaluation	Service evaluation	Experimental studies (e.g. trial)	Observational studies (e.g. cohort study)	Qualitative	MEDLINE	EMBASE	Cochrane	HMIC	Other
Aetiology	Risk factors in general inc other clinical conditions	International	2022 onwards*	✓	✗	✗	✗	✓	✗	✓	✓	✗	✗	
	Risk factors: demography & socioeconomic factors	UK	2022 onwards*	✓	✗	✗	✗	✓	✗	✓	✓	✗	✗	
	Lifestyle factors	International	2014 onwards	✓	✗	✗	✗	✓	✗	✓	✓	✗	✗	
	Impacts of COVID-19/Long COVID	International	2022 onwards*	✓	✗	✗	✗	✓	✗	✓	✓	✗	✗	
Diagnosis	Earlier diagnosis including the use of health checks	UK	2019 onwards	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	UK Kidney Association Kidney Research UK
	Consequences of late diagnosis	International	2022 onwards*	✓	✓	✗	✗	✓	✗	✓	✓	✗	✗	
Treatment	Drug treatments	International	2022 onwards*	✓	✓	✗	✗	✗	✗	✓	✓	✓	✗	
	Home dialysis - cost effectiveness and uptake	UK	2019 onwards	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	Inter-CEPt study
	Patient/clinician behaviours inc interventions for compliance and adherence	UK	2019 onwards	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	UK Kidney Association Kidney Research UK
	Opportunities for improving self-management	UK	2019 onwards	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	

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	End of life care - specifically decisions re starting or stopping dialysis v palliative, medical futility	UK	2019 onwards	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	
Prognosis	Impact of health inequalities	UK	2014 onwards	✓	✓	✗	✗	✓	✗	✓	✓	✗	✗	
Prevention	Effectiveness of strategies (for prevention of incidence as well as progression)	UK	2019 onwards	✓	✓	✗	✓	✗	✗	✓	✓	✓	✗	
Environmental impacts	Environmental costs of kidney care	International	2014 onwards	✓	✓	✓	✗	✗	✗	✓	✓	✗	✓	Centre for Sustainable Healthcare; UK Kidney Association (Sustainability group); National Kidney Federation (Green Nephrology)
Modelling	Published renal dialysis or transplant demand and/or capacity/resources models and methodologies	International	2014 onwards	Models						✓	✓	✗	✗	OR journals (if not indexed by Medline and Embase)

* date ranges differed by theme, to avoid duplication with the recently published KRUK "Economics of kidney disease" report

Sample search strategy

MEDLINE strategy

Line	Search string	
1	exp Acute Kidney Injury/	Aetiology
2	exp Renal Insufficiency, Chronic/	
3	1 or 2	
4	et.fs.	
5	risk.mp.	
6	mortality.mp.	
7	cohort.ti,ab.	
8	or/4-7	
9	exp Diabetes Mellitus/	
10	exp Hypertension/	
11	9 or 10	
12	3 and 8 and 11	
13	limit 12 to (meta analysis or observational study or "systematic review")	
14	exp population characteristics/	
15	3 and 8 and 14	
16	limit 15 to (meta analysis or observational study or "systematic review")	
17	exp Life Style/	
18	risk factors/	
19	exp Overnutrition/	
20	exp Obesity/	
21	exp Smoking/	
22	exp Drinking Behavior/	
23	exp Health Behavior/	
24	Sedentary Behavior/	
25	or/17-24	
26	3 and 8 and 25	
27	limit 26 to (meta analysis or observational study or "systematic review")	
28	exp COVID-19/	
29	exp Severe acute respiratory syndrome-related coronavirus/	
30	("long covid" or "post covid").ti,ab.	
31	(covid or coronavirus).ti.	
32	or/28-31	
33	3 and 8 and 32	
34	limit 33 to (meta analysis or observational study or "systematic review")	
35	exp early diagnosis/	Diagnosis

36	Mass Screening/	
37	(early adj2 diag*).ti,ab.	
38	"health check*".ti,ab.	
39	or/35-38	
40	3 and 39	
41	Delayed Diagnosis/	
42	(late adj2 diagnos*).ti,ab.	
43	(delay* adj2 diagnos*).ti,ab.	
44	or/41-43	
45	3 and 44	
46	Sodium-Glucose Transporter 2 Inhibitors/	Treatment
47	Glucagon-Like Peptide-1 Receptor/	
48	Mineralocorticoid Receptor Antagonists/	
49	(sglt2 or glp1 or mra).ti.	
50	or/46-49	
51	3 and 50	
52	exp Renal Dialysis/	
53	exp Renal Replacement Therapy/	
54	Hemodialysis, Home/	
55	(home adj2 (hemodialy* or haemodialy*)).ti,ab.	
56	or/52-55	
57	3 and 56	
58	Guideline Adherence/	
59	exp "Treatment Adherence and Compliance"/	
60	exp "Attitude of Health Personnel"/	
61	Practice Patterns, Physicians'/	
62	(complian* or adheren* or concordan*).ti,ab.	
63	or/58-62	
64	3 and 63	
65	self care/ or self-management/	
66	((self or remote) adj2 monitor*).ti,ab.	
67	(patient* adj2 activat*).ti,ab.	
68	(self adj (management or care)).ti.	
69	or/65-68	
70	3 and 69	
71	"end stage renal".ti,ab.	
72	exp Renal Replacement Therapy/	
73	3 or 71 or 72	
74	exp Terminal Care/	
75	Palliative Care/	
76	"end of life".ti,ab.	
77	or/74-76	
78	73 and 77	

79	Patient Preference/	
80	exp Decision Making/	
82	(modality adj2 (choice or decision)).ti,ab.	
83	Medical Futility/	
84	Conservative Treatment/	
85	supportive adj2 care.ti,ab.	
86	or/79-84	
87	78 and 87	
88	Prognosis/	Prognosis
89	diagnosed.ti,ab.	
90	cohort*.mp.	
91	exp Cohort Studies/	
92	predictor*.ti,ab.	
93	death.ti,ab.	
94	exp models, statistical/	
95	or/88-94	
96	exp health inequities/	
97	"Social Determinants of Health"/	
98	exp Health Services Accessibility/	
99	exp Socioeconomic Factors/	
100	Working Poor/	
101	social deprivation/	
102	Ethnicity/	
103	"Ethnic and Racial Minorities"/	
104	exp Racial Groups/	
105	Race Factors/	
106	Cultural Characteristics/	
107	Culture/	
108	(health* adj2 inequal*).ti,ab.	
109	(health* adj2 inequit*).ti,ab.	
110	(health* adj2 disparit*).ti,ab.	
111	(health* adj2 equit*).ti,ab.	
112	(health* adj2 equalit*).ti,ab.	
113	depriv*.ti,ab.	
114	poverty.ti,ab.	
115	(socio-economic or socioeconomic).ti,ab.	
116	disadvantaged.ti,ab.	
117	impoverished.ti,ab.	
118	exp Demography/	
119	(ethnic* or race or racial).ti,ab.	
120	or/96-119	
121	3 and 95 and 120	
122	exp Preventive Health Services/	Prevention

123	exp Healthy Lifestyle/	
124	(diet or nutrition or exercise).ti,ab.	
125	exp Health Education/	
126	Health Literacy/	
127	Health Knowledge, Attitudes, Practice/	
128	or/122-127	
129	3 and 128	
130	exp Diabetes Mellitus/	
131	exp Hypertension/	
132	9 or 10	
133	pc.fs.	
134	132 and 133	
135	128 or 134	
136	3 and 135	
137	limit 136 to (observational study or "review")	
138	limit 136 to "economics (best balance of sensitivity and specificity)"	
139	137 or 138	
140	exp Environment/	Environment
141	Environmental Indicators/	
142	((greenhouse adj gas) or (greenhouse adj gases) or (waste adj produc*) or (energy adj consum*) or (energy adj us*)).ti,ab.	
143	(life cycle assessment or life cycle assessments or life cycle analysis or life cycle analyses).ti,ab.	
144	((green or environmental or sustainability) and co2).ti,ab.	
145	Greenhouse Gases/	
146	exp Energy-Generating Resources/	
147	Water Supply/	
148	Environmental Policy/	
149	exp Waste Products/	
150	exp Environmental Pollutants/	
151	exp Environmental Pollution/	
152	environmental footprint*.ti,ab.	
153	or/140-152	
154	Hemodialysis Units, Hospital/	
155	Nephrology/	
156	3 or 154 or 155	
157	153 and 156	
158	(microsimulation* or "micro simulation*").ti,ab.	Modelling
159	markov.ti,ab.	
160	(monte carlo and probability).ti,ab.	
161	"agent-based model*".ti,ab.	

162	optimi*sation method*.ti,ab.	
163	Queu* theory.ti,ab.	
164	"system dynamic*".ti,ab.	
165	"discrete event simulation".ti,ab.	
166	"simulation model*".ti,ab.	
167	exp Forecasting/	
168	models, theoretical/ or models, biopsychosocial/ or exp models, biological/ or models, organizational/ or exp models, statistical/	
169	"Health Services Needs and Demand"/td [Trends]	
170	model*.ti,ab.	
171	Computer Simulation/	
172	169 and (170 or 171)	
173	or/158-168	
174	172 or 173	
175	156 and 174	
176	13 or 16 or 27 or 34 or 40 or 45 or 51 or 57 or 64 or 70 or 87 or 121 or 139 or 157 or 175	