Leeds Institute of Health Sciences



Supporting health research proposals; a day in the life of an NIHR Research Design Service information specialist

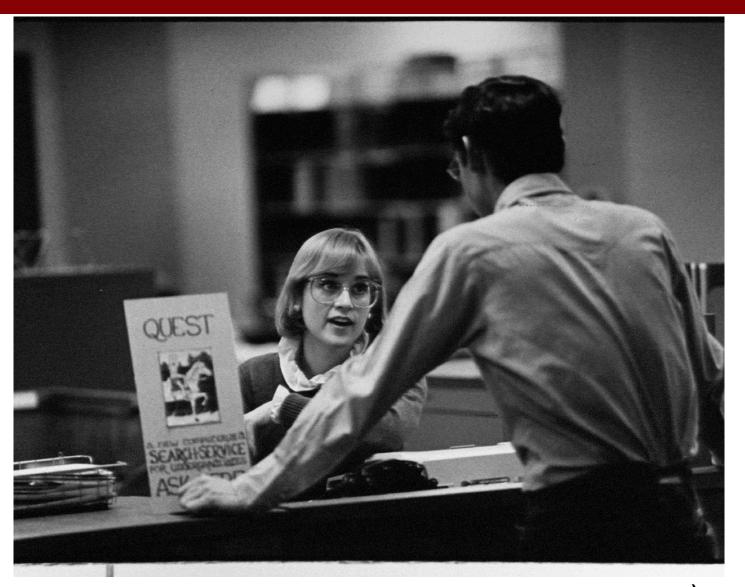
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NIHR Research Design Service Yorkshire and the Humber Leeds Institute of Health Sciences, University of Leeds

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Can I check if it's been done before?





https://www.flickr.com/photos/kstatelibraries/3151830414/in/photostream/ accessed 01-09-16 (CC BY-NC-SA 2.0)



- Research competitions, research waste and literature searches
- NIHR Research Design Service, RDS Information Specialists
- Type of information services provided
- Search methods, sources and strategies
- Costing a librarian into a research project
- How can you support research proposals?

Research competitions



- Winning research grants is increasingly competitive (1)
 - 2014-15 applications to
 Research Councils UK (RCUK)
 grew 12% on previous year
 - RCUK success rate just under28% in 2014-15
 - 22% for MRC



Sandcastle competition at Bembridge © Ian S (CC BY-SA 2.0)

Completing applications is very time consuming



'Research Waste Agenda' – growing awareness and attempts to reduce unfundable, poor quality proposals

Avoiding Research Waste – a brief history



- 85% biomedical research funding unnecessarily wasted (2)
- 'the principle that the initiation of research without a systematic review of already known evidence is unethical, unscientific & wasteful..' (3)
- 2014 Lancet series 'Biomedical research: increasing value, reducing waste'. 5 reviews lead to 17 recommendations e.g. improved publishing, reporting, research design.
- 2015 progress update ⁽³⁾
- Recommendation 3 Librarians can help :

Recommendation 3 – What do we already know?



 "Research funders and regulators should demand that proposals for additional primary research are justified by systematic reviews, showing what is already known, and increase funding for the synthesis of existing evidence" (3)



NIHR and DFG (German funder) require references to existing systematic reviews and review of relevant evidence including ongoing research in research applications.



NIH (US), CIHR (Canada), NHMRC (Australia), MRC (UK) do not (yet...)

National Institute of Health Research Research Design Service NIHR RDS



"To increase the number and proportion of high quality applications for funding ..."

"of clear relevance to NHS services, clinicians and users"



http://www.rds.nihr.ac.uk/

Research Design Service (RDS) Expertise



- "Each RDS must at its core have access to methodological expertise"
 - Research methodology
 - Health economics
 - Statistics
 - Systematic reviews
 - Health psychology and behavioural science
- "Must also be able to draw on other expertise as necessary or provide advice and guidance on all aspects of research design and conduct"

RDS – Improving Research Proposals



- Promoting the services available to support researchers in the NHS
- Increasing engagement with NHS staff, developing 'balanced' research team
- Research funding awareness events, tips for applicants
- Face-to-face advice clinics



NIHR RDS Information Specialists Preliminary survey results



- Often part of their wider role as Information Specialist in a University research department (e.g. few hours per week funded by NIHR RDS)
- Available in North East, Yorkshire, E Midlands, W Midlands. East of England? South West?
- In other regions, the researchers and other advisors do searches
- Time per enquiry ranges from few hours to several days. ½ day -1 day seems to be usual
- Variation in funding, time spent and type of services offered across the regions
- No formal national communication but informal networks

E.g.s of Information advice work (from ongoing RDS survey)



Literature searches:

- Current research checks
- Scoping literature searches
- Systematic review searches



Other advice

- Checking references, putting references in EndNote
- Document acquisition
- Commenting on proposal as a whole
- Signposting to other RDS advisors and possible collaborators
- Training in systematic review methods
- Who might fund this?
- How much would it cost to include Librarians in the research project?

Example query @ Leeds RDS First steps for Dr Ken





Dr Ken has a research idea to demonstrate that a questionnaire is particularly good for GPs to diagnosing dementia.

Contact RDS

Explains research idea and plans on RDS online form

Discusses

What is known already about dementia Meet RDS diagnosis

How viable plans are

Possible funders and collaborators

Plan searches to Sontact Info Specialist check:

Evidence base

Research recommendations

Ongoing research

Choosing sources for proposal searches



- Research recommendations
 - James Lind Alliance top 10 (DUETs no longer maintained)
 - Systematic Review and journal paper recommendations
- Ongoing and recent research databases
- Overviews of evidence –systematic reviews and summaries
- Prioritise databases, choose most important 1-3 for your question.
 - Eg. PsycInfo for Mental Health may take priority over Medline

Search methods - Strategies



- Quick searches (not exhaustive) using clinical queries and filters...
 - simple, concept searches
 - targeted searches using MeSH, focussed terms, title searches
 - Use ready made filters, clinical queries e.g. Clinical Trial publication type for Therapy studies, or clinical queries searches.
- Look in a few key databases

Research Recommendations



 Top 10s of priorities for research http://www.jla.nihr.ac.uk/top-10-priorities/



- Funder's 'Special Calls' e.g. Obesity
- Systematic reviews may recommend further research





Home	About the JLA	The PSPs	Top 10s	JLA Guidebook	News and Publications
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You are in: Home » The PSPs » Dementia » Top 10 priorities

Dementia Top 10

- 1. What are the most effective components of care that keep a person with dementia as independent as they can be at all stages of the disease in all care settings?
- 2. How can the best ways to care for people with dementia, including results from research findings, be effectively disseminated and implemented into care practice?
- 3. What is the impact of an early diagnosis of dementia and how can primary care support a more effective route to diagnosis?

Particular questions were raised about the impact of early diagnosis on:

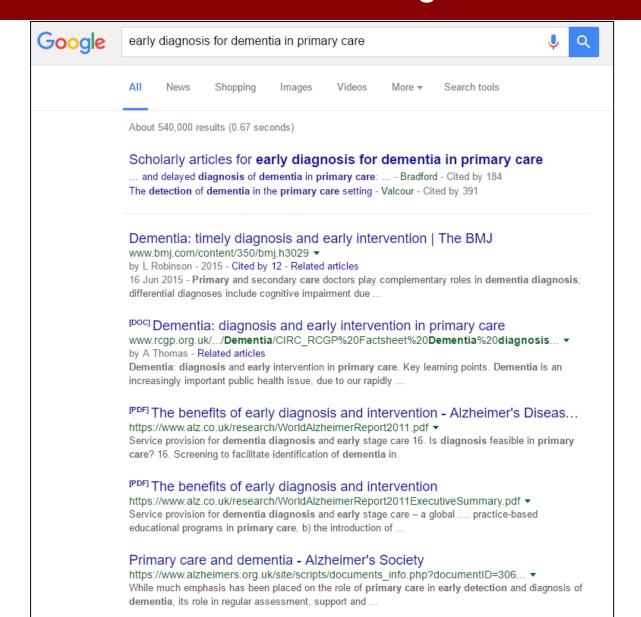
- Health-related outcomes for people with dementia and their carers (including impact on the progression of the disease and life expectancy, mental health, quality of life, attitudes of healthcare professionals to treatment for people with dementia, and on outcomes for carers, including quality of life and mental health).
- Wider outcomes in society for people with dementia and carers/family (including financial planning, insurance issues, employment prospects, independence, access to other healthcare services, driving).
- Health and social care services.

Particular questions about more effective routes to diagnosis in primary care included:

- Routes to faster referral to specialists, where appropriate.
- The best way to communicate a diagnosis of dementia, including who is the best person to communicate the diagnosis and where it should be delivered; how best to involve relatives and carers taking confidentiality into account.
- The psychological impact of a diagnosis of dementia on the person and carers.
- 4. What non-pharmacological and/or pharmacological (drug) interventions are most effective for managing challenging behaviour in people with dementia?

Researcher should at least Google!





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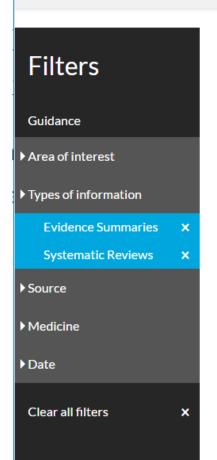
Systematic Review search - DEMO

- Cochrane Library
- NHS Evidence
- other databases with SR filter e.g. PsycInfo for Mental Health.



Search	Sear Cit Manager	Medical ferrils (Me3H)		TOWSE
search an exact word(s) use quotation	n marks, e.g. "hospital" finds hospital; hospital (no quotation r	narks) finds hospital and hospitals; pay finds paid, pays,	paying, payed)	
Add to top				View all lines
— Edit → #1	(dementia or alzheimer*):ti,ab,kw		141	9956
— Edit → #2	"early <u>diagnos</u> *"):ti,ab,kw		141	1482
— Edit + #3	primary or "general practi*" or "family practi*	"):ti,ab,kw	TH	121188
— Edit + #4	#1 and #2 and #3		141	12
#5	#1 and #2		111	66
— Edit → #6			(m) [H	N/A
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All Results (66) Cochrane Reviews (8) All	Cochrane Database of Systematic Review Issue <u>updated daily</u> throughout month There are 8 results from 9515 records for edited	s : Issue 8 of 12, August 2016 your search on #5 - #1 and #2 in Cochrane R	Reviews in the stra	itegy currently being
Review Protocol Other Reviews (4)	Select all Export all Export selected		Sort by Relevance	e: high to low 🔻
 Trials (48) Methods Studies (0) Technology Assessments (3) Economic Evaluations (3) 	11C-PIB-PET for the early diagnos impairment (MCI)	is of Alzheimer 's disease dementia and other d hris Hyde , Anna H Noel-Storr , Yemisi Takwoing		





Results 1 - 10 of 663 sorted by relevance / date

Share Download

Rapid appraisal of barriers to the **diagnosis** and management of patients with **dementia** in **primary** care: a systematic review

01 July 2010 - Publisher: Springer

Abstract BackgroundThe diagnosis of dementia in primary care is perceived as a problem across countries and systems, resulting in delayed recognition and adverse outcomes for patients and their carers. Improving its early detection is an area identified for

Read Summary - Remove: Systematic Reviews filter

World Alzheimer report 2011: the benefits of early diagnosis and intervention [PDF]

12 September 2011 - Publisher: Alzheimer's Disease International

This report shows that there are interventions that are effective in the early stages of dementia, some of which may be more effective when started earlier, and that there is a strong economic argument in favour of earlier diagnosis and timely intervention.

Read Summary - Remove: Evidence Summaries filter

Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE) for the diagnosis of dementia within a general practice (primary care) setting

Source: Cochrane Database of Systematic Reviews - 03 July 2014

...particular utility in **primary** care / general...against a clinical **diagnosis** of **dementia** (the reference...ALOIS (Cochrane **Dementia** and Cognitive Improvement...cognitive screening and **dementia**. We used standardized...increasing globally. **Early diagnosis** of **dementia**...

Remove: Systematic Reviews filter

The accuracy of family physicians' **dementia diagnoses** at different stages of **dementia**: a systematic review

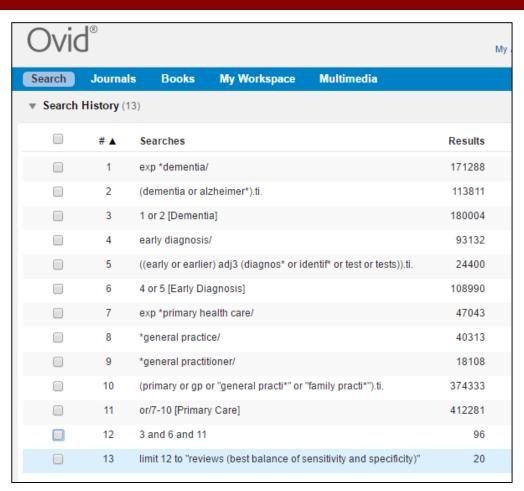
Source: SCIE Social Care Online - 01 January 2012

...physicians' **dementia diagnoses** at different stages of **dementia**: a systematic...recognition and **diagnosis** of **dementia** are critical if...importance of **early diagnosis**, the...different stages of **dementia** in a **primary** care setting...

Read Summary - Remove: Systematic Reviews filter

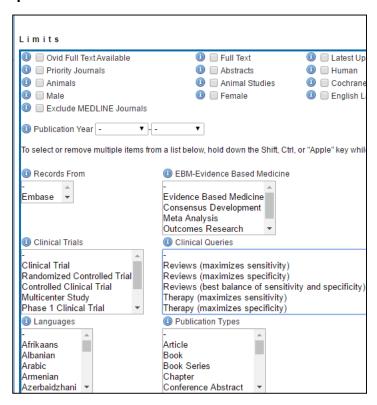
Ovid Embase Proposal Reviews Search





Focused headings (sometimes), title searches, simple searches

Additional limits & clinical queries – useful shortcuts



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Ongoing / recent research - DEMO

- Ongoing trials registers
 - ClinicalTrials.gov
 - ICTRP International Clinical Trials Registry Platform (WHO)

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- Medline-in-Process, Daily update... (Ovid)
- PubMed
- PROSPERO International Prospective Register of Systematic Reviews
- Funding body web pages e.g <u>NIHR Evaluation Trials and</u> Studies Portfolio Search

ClinicalTrials.gov

Find Studies

A service of the U.S. National Institutes of Health

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Fill in any or all of the fields belo	ow. Click on the label to the left of each search	field fo	r more in	formation (or read the Help	
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Study Results:	Open Studies Not yet recruiting					
	Recruiting					
Eligibility Criteria:	Expanded Access: Available Closed Studies					
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Age:	Completed Terminated					
	Suspended					
Gender:	Withdrawn Enrolling by invitation					
Accepts Healthy Volunteers:	Expanded Access: Temporarily not available	dy				
	Expanded Access: No longer available Expanded Access: Approved for marketing					
Targeted Search:						
Conditions:	dementia OR alzheimers					
Interventions:						
Title Acronym/Titles:	"early diagnosis"					
Outcome Measures:						
Sponsor/Collaborators:				Exact m	natch	
Sponsor (Lead):				Exact m	natch	
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State 2:	Optional ▼					
Country 2:	Optional]				
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ClinicalTrials.gov

Recruiting

A service of the U.S. National Institutes of Health

Example: "Heart attack" AND "Los Angeles"

Search for studies:

Search

Advanced Search | Help | Studies by Topic | Glossary

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Find Studies
About Clinical Studies
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Resources
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Home > Find Studies > Search Results Text Size ▼ 11 studies found for: dementia OR alzheimers | "early diagnosis" Modify this search | How to Use Search Results List By Topic On Map Search Details + Show Display Options □ Download Subscribe to RSS ☐ Include only open studies ☐ Exclude studies with Unknown status Rank Status Study Terminated Early Diagnosis of Alzheimer-like Dementia: Benefit of MRI and PET Imaging Conditions: Alzheimer Disease; Mild Cognitive Impairment; Vascular Dementia Interventions: Other: Magnetic resonance imaging; Other: Positron emission tomography 2 Recruiting Early Diagnosis of Alzheimer's Disease - a Multidisciplinary Approach Conditions: Mild Cognitive Impairment; Alzheimer's Disease; Dementia With Lewy Bodies; Vascular Dementia Intervention: 3 Recruiting Korean Brain Aging Study for Early Diagnosis and Prediction of Alzheimer's Disease Conditions: Alzheimer's Disease; Mild Cognitive Impairment Intervention: Active, not Vagus Somatosensory Evoked Potentials and Near-infrared Spectroscopy in the Early Diagnosis of Dementia recruiting Condition: Alzheimer's Disease Intervention: 5 Completed Early Diagnosis of Alzheimer's Disease: Clinical, Neuropsychological and Neuroimaging Follow-up of a Cohort of Patients With an Isolated Memory Impairment Condition: Alzheimer's Disease Interventions: Other: Neurological and neuropsychological consultation, MRI; Other: Neurological and neuropsychological consultation, MRI, Studies in imaging of drip, DNA

Developing a New EEG Method for the Early Diagnosis of Dementia

Condition: Dementia



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▼ Search History (13)

	# 🛦	Searches	Results	Туре	
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	3	1 or 2 [Dementia]	125049	Advanced	Dis
	4	early diagnosis/	20117	Advanced	Dis
	5	((early or earlier) adj3 (diagnos* or identif* or test or tests)).ti.	18534	Advanced	Dis
	6	4 or 5 [Early Diagnosis]	33821	Advanced	Dis
	7	exp *primary health care/	71414	Advanced	Dis
	8	*general practice/	8025	Advanced	Dis
	9	*general practitioner/	4021	Advanced	Dis
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1 Resource selected | Hide | Change

(1) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

PROSPERO

International prospective register of systematic reviews



Home About I	PROSPERO Help with registration	Search Log in Join				
Click to show your search history and hide search results . Remember you can use the quick search page instead.						
Q (dementia	Show filters					
button then edi	o search the whole of PROSPERO without restriction. Change how PROSPERO is searched by c ting the sections to add one or more search filters. All filters you select will be applied to the next see until you change them.					
6 records found	d for (dementia or alzheimers) and "early diagnosis"	[Export]				
Registered 4	; Title 🔷	Review status 🌲				
23/08/2016	18F-PET ligands for the early diagnosis of Alzheimer's disease dementia and other dementias i people with mild cognitive impairment (MCI) [Cochrane Protocol]	n Ongoing				
18/08/2015	Automated tests for cognitive impairment	Ongoing				
06/01/2015	Individual and group psychotherapy with people affected by dementia	Ongoing				
22/05/2015	Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE) for the early diagnosis of dementia across a variety of healthcare settings [Cochrane Protocol]	f Ongoing				
30/10/2015	Multi-disciplinary team approaches to screening and early diagnosis of dementia in primary care costs and consequences	e - Ongoing				
04/06/2013	Observational assessments of task performance in complex everyday activities to estimate	Ongoing				

functional cognition in older adults: a systematic review and evaluation of measurement properties



Evaluation, Trials and Studies



Research programmes	Search our portfolio of projects	Search			
Funding opportunities		C			
Project portfolio	Search terms Dementia early diagnosis Search	Browse Visit project portfo			
Browse projects	Scalen terms Panana any angrisor	We'd like your views			
Resources for researchers	Advanced Search [+] Browse projects	Help us improve your experience of our website I participating in a short survey.			
Become a reviewer	Results for: Dementia early diagnosis	Website survey			
dentifying research questions	Filter by project status:	Drainet Status			
Public and patient involvement	All statuses Waiting to start Research in progress Waiting to publish	Project Status Research In Progress (7)			
About us and our approach		HRCS Health			
he impact of our health research	ALL EME HS&DR HTA PHR SR	Category			
News and literature	Recent portfolio projects Start date (desc) 10 results per page 1	Neurological (4) Mental Health (1)			
	Number of projects: 7	Cancer (1)			
	HS&DR Project: 14/70/96	HRCS Research Activity Code			
	Project title: Dementia undetected or undiagnosed in primary care: the prevalence, causes and consequences Chief investigator: Dr George Savva	6 Evaluation Of Treatments And Therapeutic Interventions (4)			
	Organisation: South Norfolk CCG Status: Research in progress	7 Management Of Disease And Conditions (3)			
	Notify me When this item is published View project page	5 Development Of Treatments And Therapeut Interventions (1)			
	HTA Project: 14/140/80	8 Health And Social Care Services Research (1)			
	Project title: Journeying through dementia ; randomised controlled trial of clinical and cost effectiveness	4 Detection, Screening And Diagnosis (1)			
	Chief investigator: Professor Gail Mountain Organisation: Sheffield Health & Social Care NHS Foundation Trust				
	Status: Research in progress	2015 (2)			

Example Query @ Leeds RDS Dr Ken refines the question



Searches show

Range of current tools and techniques are in use and being researched around the world

'Early' diagnosis is a research priority

Outcomes of early diagnosis is underresearched

GPs and patients play a role in success of tools and techniques for diagnosis

meetii dn-wollo_ Dr Ken discusses lit search results with RDS team.

Research question may be modified in light of evidence

Dr Ken' proposal:
Has relevant up to

Has relevant up to date references

Demonstrates good knowledge of the research area

Provides robust rationale for the research



Costing a librarian into a research project



Ask to see proposal even if its 'very draft'

 Scoping & draft searches help to get idea of size of searches, complexity (do search concepts have MeSH that fit well?)

 Manage expectations, offer alternatives, negotiate

Adding it all up



- Cost the time requirements based on
 - Expertise and salary of the searcher
 - Number of databases
 - Complexity of searches
 - Likely duplication / reference management
 - If document acquisition is required
 - Writing search methods
 - Update searches
 - Time in meetings



Cat and Calculator by Felix Idan*

- Remember any travel, consumables, Inter-library loan costs
- Add 10%? Always takes longer than you think

^{*} https://www.flickr.com/photos/felixidan/2162733310 (CC BY-NC-ND 2.0)

How can you support research proposals?



Refer your researchers to the RDS service*

http://www.rds.nihr.ac.uk/

Request support from the RDS

- If capacity, undertake some proposal searches
- Advise researchers on starting their own searches
- Check that research idea really is novel http://youtu.be/WLmhNNdYntQ (Claire Beecroft, ScHARR)

^{*}NHS & academics are eligible if applying for national funded schemes

Benefits of proposal work



- Interesting
- Widen your network of contacts, greater engagement
- May lead to funded project work for Info team
- Develop your own skills in grant applications
- Reduces waste and improves value of research

Conclusions & Issues

- Growing potential/obligation to help tackle research waste
- Low profile of librarians in supporting research proposals?
- How to measure impact of proposal work?
 - # successful proposals?
 - amount of proposal work prevented by identifying when a researcher is attempting duplicate or unviable research?
- Greater sharing of search methods and evaluation of methods will improve our best practice.
- Next...co-authoring paper for Supporting Researchers special issue of the New Review of Academic Librarianship (Mary Edmunds Otter RDS E Mids)

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Acknowledgements

- Natalie King (RDSYH) and Mary Edmunds Otter (RDS E Mids) – RDS Information Specialist survey
- Claire Beecroft (ScHARR) RDS Scoping Search training materials
- RDS Information Specialists and Advisors providing supporting information and survey results
- Emoji provided free by http://emojione.com
- Vector images by https://Pixabay.com

- 1. Matthews D. Success rates: surge in application to 'struggling research councils'. Times Higher Education Supplement. 29th October 2015
- 2. Chalmers I, Glasziou P. Avoidable waste in the production and reporting of research evidence. Obstetrics & Gynecology. 2009 Dec 1;114(6):1341-5.
- 3. Moher D, Glasziou P, Chalmers I, Nasser M, Bossuyt PM, Korevaar DA, Graham ID, Ravaud P, Boutron I. Increasing value and reducing waste in biomedical research: who's listening? The Lancet. 2016 Apr 15;387(10027):1573-86.

Links



- NIHR Research Design Service http://www.rds.nihr.ac.uk/
- Top 10s of priorities for research http://www.jla.nihr.ac.uk/top-10-priorities/
- The Cochrane Library http://www.cochranelibrary.com/
- NICE Evidence http://www.evidence.nhs.uk/
- ClinicalTrials.gov https://clinicaltrials.gov/
- International Clinical Trials Registry Platform (WHO) <u>http://www.who.int/ictrp/en/</u>
- PROSPERO http://www.crd.york.ac.uk/PROSPERO/searchadvanced.php
- NIHR Evaluation Trials and Studies http://www.nets.nihr.ac.uk/
- Check that research idea really is novel http://youtu.be/WLmhNNdYntQ
 (Claire Beecroft, ScHARR)