



*National Institute for
Health Research*

PROSPERO: an international prospective register of systematic reviews

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The need for registration

- Health and social care decisions based upon systematic review evidence
- SRs should be robust and free from bias
- Concern about and evidence of
 - publication bias
 - selective outcome reporting bias
- **Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2009**

How registration can help

- Allows comparison of published review results with what was planned
- Able to judge whether any discrepancies are likely to have introduced bias
- Register provides a public listing of systematic reviews, irrespective of publication status
 - Register can link to informal grey literature publications
 - Registration may also serve to encourage publication
- Funders/reviewers can check whether there are any reviews already in progress that address their topic of interest to avoid unplanned duplication

Taking the initiative

- Following publication of the PRISMA statement CRD began to receive unsolicited requests to register systematic reviews
- Until PROSPERO no open access facility to formally register systematic review protocols
 - Cochrane and Campbell Collaboration protocol registration limited to their own organisations
- International support for registration
- CRD has an established IT platform and infrastructure for the DARE, NHS EED and HTA databases
- Set up an International Advisory Group

Establishing the minimum dataset

- International consultation
 - Identify the key items for inclusion in the register
 - Opinions on ‘operational’ issues
 - Raise awareness
- A two-round electronic modified Delphi of over 300 relevant experts
 - commissioners, clinical and academic researchers, methodologists, statisticians, information specialists, publishers and users of systematic review evidence

Registration minimum dataset 22 required fields:

Administrative

- Review title
- Named contact(s)
- Contact e-mail
- Organisational affiliation
- Funding source/sponsors
- Conflict of interests
- Anticipated or actual start date
- Stage of review[†]
- Anticipated completion date
- Review status[†]

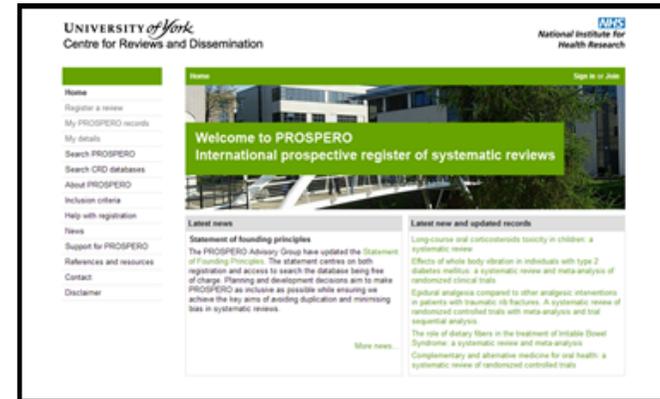
[†] *these fields are updated as the review progresses*

Review design

- Review question/objective
- Condition/domain studied
- Search details
- Participants/population
- Intervention/exposure
- Comparator/control
- Study types
- Primary outcomes
- Secondary outcomes
- Risk of bias (quality) assessment
- Strategy for data synthesis
- Planned subgroup analyses

PROSPERO: International prospective register of systematic reviews

- Web based
- Free to register
- Free to search
- Users create and update their own records
- Minimum data set required
- Record content is responsibility of review lead
- Administrators check for “sense” **not** peer review
- A public audit trail of amendments is maintained



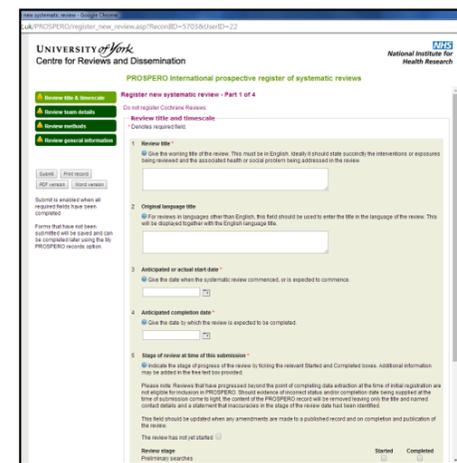
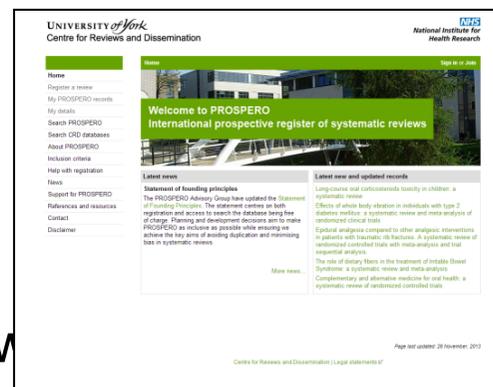
Eligibility for inclusion in PROSPERO

- Systematic reviews of the effects of interventions and strategies to prevent, diagnose, treat, and monitor health conditions
- Reviews of methodological issues need to contain at least one direct patient or clinical outcome *(included from November 2012)*
- Systematic reviews of reviews with a health related outcome *(included from November 2012)*
- New Cochrane review protocols uploaded automatically *(included from Oct 2013)*
- Exclusions: Scoping reviews, Reviews of animal studies
- Completed reviews are not accepted
- Registration should take place once the systematic review protocol is finalised, but ideally before screening studies for inclusion begins

Registering a review

www.crd.york.ac.uk/PROSPERO

- Registration should take place once the review protocol is finalised, but ideally before screening studies for inclusion begins
- Set up a user account and sign in to access the registration form submission system
- Submissions are checked against scope and for completeness and ‘sense’ not peer reviewed
- Published registrations are MeSH indexed by CRD information specialists and appear in the public database as soon as they are accepted



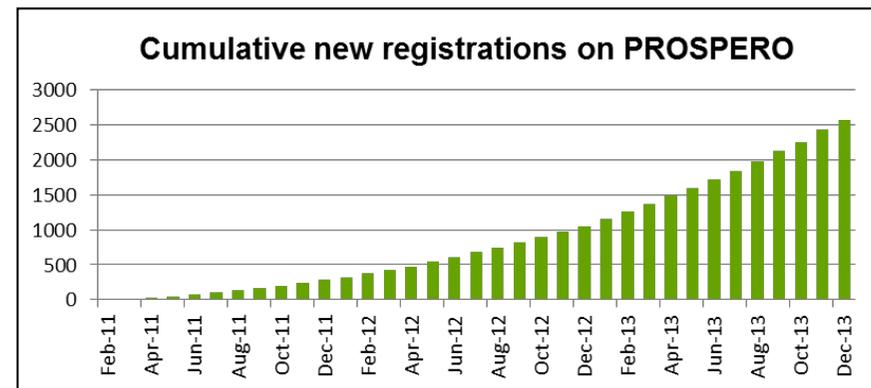
The story so far...

PROSPERO opened for registration 22 February 2011

By end June 2013 there were 3713 registrations published

- 3209 Ongoing
- 6 Completed published and being updated
- 275 Completed but not published
- 208 Completed and published
- 15 Abandoned

- 593 rejected
(most too far advanced)

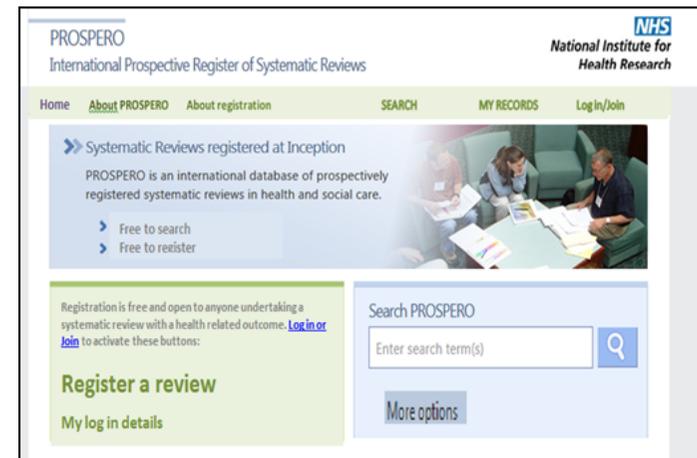


Future developments to enhance search interface

- Boolean – AND/OR/NOT operators
- Cochrane Reviews vs non-Cochrane Reviews
- Filter by type of review
 - Diagnostic, prognostic, prevention, epidemiology, etc.
- Filter by review method
 - Meta-analysis, IPD, cost-effectiveness, network meta-analysis, etc.
- Filter by health topic
 - Cancer, oral health, palliative care, etc.

Future developments to enhance usability

- Save search strategies (i.e. import and export strategies)
- Export search results include generic formats (e.g. txt and .ris)
- Create filters for reference management software (e.g. EndNote, Reference Manager)
- Alerts feature



www.crd.york.ac.uk/PROSPERO
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References

- Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)
<http://www.prisma-statement.org/>
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