# Optimisation of E-learning Interventions for Undergraduate Clinical Medical Education: A Systematic Review

L Halpenny, C Dunne, S Hyde, J O'Doherty, A O'Regan

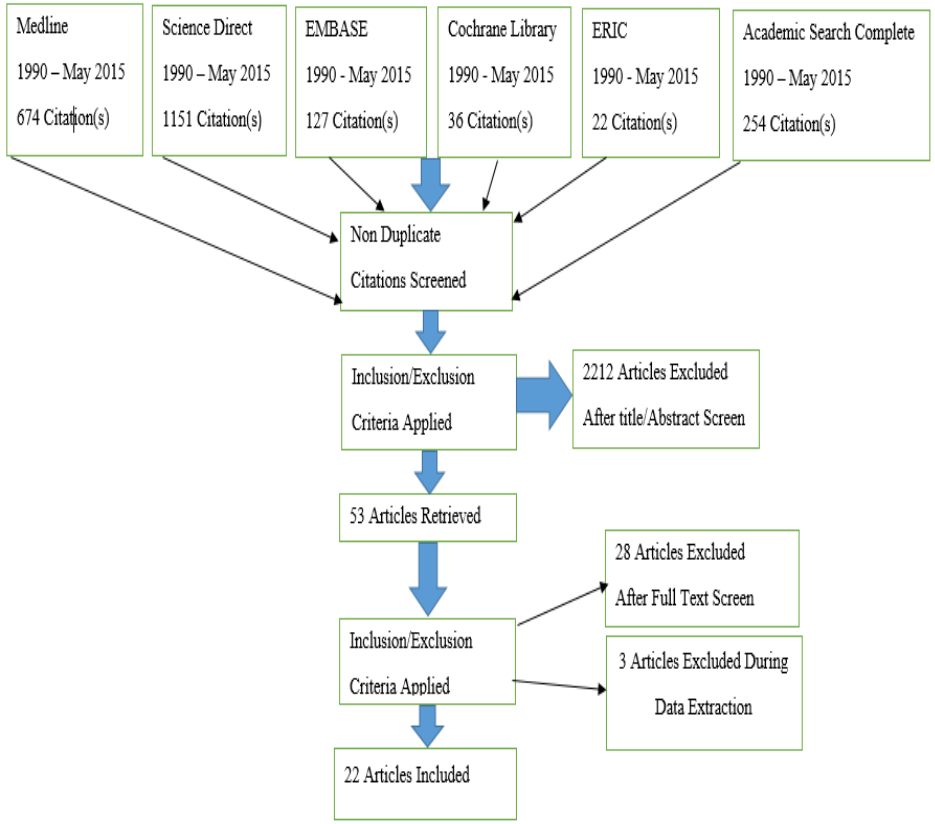
- E-learning: use of the internet to enhance knowledge and performance*
- Now mainstream in medical education
- Systematic review: how/when to use them**

| Search terms | |
|---|---|
| 'e-learning' or 'digital resources' or 'internet learning resources' AND 'medical education' AND 'techniques' or 'programmes' or 'interventions | |
| **Database** | |
| MEDLINE/PubMed, ScienceDirect, EMBASE, Cochrane Library, ERIC and Academic Search Complete, hand searches | |
| **Inclusion criteria** | **Exclusion criteria** |
| E-learning intervention<br>Clinical subjects<br>Reported in English | Preclinical sciences<br>No focus on an intervention<br>Reported in a language other than English |

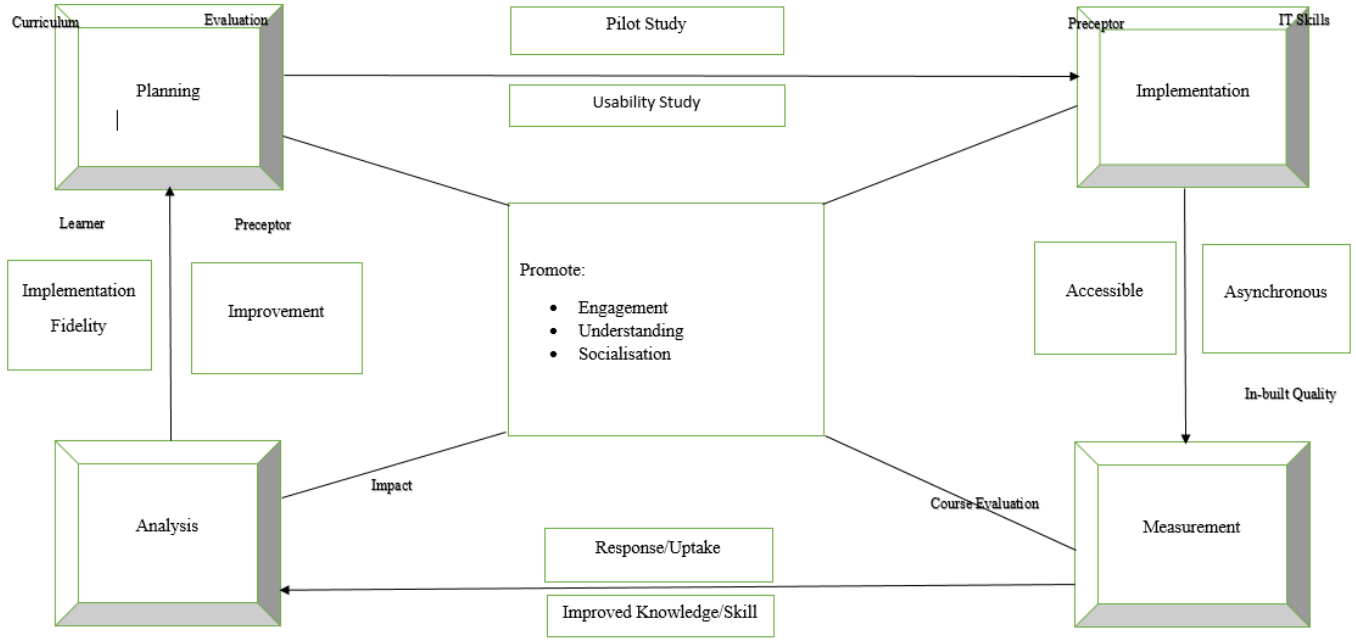
*Ruiz et al. Academic medicine, 2006.
**Cook et al. Medical Education, 2010.

# Optimisation of E-learning Interventions for Undergraduate Clinical Medical Education: A Systematic Review

- Prisma Flow Diagram




- Framework for an Intervention



# Optimisation of E-learning Interventions for Undergraduate Clinical Medical Education: A Systematic Review

## What this study adds

- A framework for optimising e-learning interventions

## Limitations

- English language reports only, unpublished work (bias)

## Future research

- Implementation fidelity