

Appendix 1: Database search strategy

SUBJECT HEADING SEARCH TERMS

Medline (from 1946) & Medline In-Process

Nurses[†] OR nursing staff[†] OR nurse's role OR nursing, practical OR nursing[†] OR nursing care[†] OR nurse's practice patterns OR nurse-patient relations OR nursing process[†]

AND

Medication systems OR medication systems, hospital OR medication errors OR drug administration schedule OR drug monitoring

AND

Attention OR communication OR interprofessional relations OR physician-nurse relations OR task performance and analysis OR workload OR workflow OR health facility environment OR systems analysis

AND

Safety[†] OR intervention studies OR evaluation studies OR program evaluation OR evaluation studies OR causality OR randomized controlled trials OR multicenter study OR pilot projects OR comparative study OR nursing evaluation research

Embase (from 1947)

Nurse[†] OR nursing staff[†] OR nursing[†] OR nursing care[†] OR nurse patient relation OR nursing process[†]

AND

Drug therapy OR medication error OR drug administration OR drug monitoring

AND

Attention[†] OR attention disturbance OR interpersonal communication OR doctor nurse relation OR task performance OR workload OR workflow OR system analysis

AND

Safety OR patient safety OR intervention study OR evaluation OR evaluation and follow up OR evaluation research OR nursing evaluation research OR multicenter study OR longitudinal study OR randomized controlled trial OR outcomes research OR pilot study OR comparative study

PsycINFO (from 1806)

Nurses[†] OR nursing

AND

Drug therapy

AND

Attention[†] OR attention span OR distraction OR distractibility OR interpersonal communication OR task complexity OR dual task performance OR task analysis OR work load OR errors OR human channel capacity OR job analysis OR job performance OR work scheduling OR working conditions

AND

Safety OR intervention OR evaluation OR program evaluation[†]

CINAHL

Nurses[†]

AND

Drug therapy[†] OR medication errors OR drug administration OR drug monitoring

AND

Attention OR task performance and analysis OR workload OR health facility environment OR interprofessional relations OR mental processes OR cognition OR distraction

AND

Safety OR patient safety evaluation OR evaluation research OR intervention trials OR randomized controlled trials OR single-blind studies OR program evaluation

FREE TEXT SEARCH TERMS

All above databases

Nurs*

AND

Medication* OR medicine* OR drug*

AND

Interrupt* OR distract* OR disrupt* OR multitask* OR multi task* OR multi-task*

AND

Intervention* OR trial* OR before and after OR before after OR program* OR evaluation* OR project*

*Indicates the term was truncated.

†Subject heading terms that were exploded.

We included both interruptions and distractions as authors sometimes group distractions and interruptions together without distinguishing these terms. Thus in many instances they are used interchangeably.