Appendix C: Summary of Key Findings from Abstracts

* Refers to an id that was assigned to each paper that was retrieved.

Usage Category: Used to classify or code in a study

Id*	Summary
218	▪ Require multidisciplinary content experts to develop subset
280	▪ Use of SNOMED CT to extract diagnosis and procedures from discharge summary
285	▪ Automated assignment of negation to concepts identified in health records based on review of the text is feasible and practical. SNOMED-CT had overall coverage of 88.7% of the concepts being negated.
456	▪ Using SNOMED CT to annotate free text and feed into electronic quality monitoring has the potential to improve healthcare quality and safety.
462	▪ We conclude that SNOMED CT based computable rules are accurate enough for the automated biosurveillance of pneumonias from radiological reports.
465	▪ Annotating data with SNOMED CT can help to identify influenza
466	▪ No implications
470	▪ SNOMED CT could represent an improvement compared to existing medical terminologies such as MeSH
527	▪ Used to annotate anatomic and diagnostic noun phrases in pathology reports with SNOMED CT.
531	▪ No implicates, early stage of research. Other papers by same authors show results.
533	▪ By annotating free text with NIC thesaurus and SNOMED CT, ontology-based queries can be executed. Enable users to locate biomedical data related to ontology concepts.
562	▪ SNOMED CT used as a standard to facilitate decision support
635	▪ A system to classify lung TNM stages from free-text pathology reports was developed. SNOMED CT can be used for the extraction of key lung cancer characteristics from free-text reports. Future work will investigate the applicability of using the proposed methodology for extracting other cancer characteristics and types.
662	▪ Use of a more granulated, precise and well defined terminology (SNOMED CT vs ICD-10) can help improve quality monitoring and quality development, reduce time and cost in quality management. SNOMED CT can facilitate international benchmarking and research.
717	▪ Use SNOMED CT to automatically classify cancer from free text, can lessen reliance on expert clinical staff, improve efficiency and available of cancer info
744	▪ SNOMED CT used for capturing symptoms at ED, can be used to help classify symptoms into groups
745	▪ No implications
760	▪ No implications
764	▪ Mapped medications to SNOMED CT, potential to improve analysis
858	▪ SNOMED CT can be used to classify cancers in reports using medical free-text processing. Developing decision support systems that are integrated with the free-text processing can reduce costs, enable decision support, enhance efficiency and timeliness

Usage Category: Description of SNOMED CT Implementation

Id*	Summary
215	▪ No implications
244	▪ No implications in abstract
272	▪ Concept-based searching is helpful for searching for physician referrals
288	▪ No abstract
347	▪ Tools are needed to locate appropriate SNOMED CT concepts quickly
355	▪ SNOMED CT concepts can be used to retrieve literature indexed with MeSH via the UMLS
389	▪ Visualisation techniques can aid in exploring terminologies like SNOMED CT
420	▪ SNOMED CT could represent 83% of concepts used in clinical practice guidelines for the management of obesity
433	▪ SNOMED CT provides standardization and facilitates decision support systems
436	▪ Tools to aid coding of clinical research data using SNOMED CT can aid the implementation of data standards to facilitate high quality research data
440	▪ No implications in abstract
444	▪ No implications in abstract
498	▪ SNOMED CT provides standard for enterprise applications
519	▪ SNOMED CT enables consistency of recording patient conditions, allowing retrieval and analysis from narratives, facilitate answering questions on data, potentially. improve quality and efficiency of care
569	▪ No findings, but SNOMED CT has potential benefit to promote patient safety, provide a standard to interface to knowledge base, potential economic advantage, promote interoperability
626	▪ No findings
653	▪ Four implementation challenges: user interface, validating templates that use SNOMED CT, handling SNOMED CT subsets and extensions, creating fast, meaningful, non-redundant search results. Usage of SNOMED CT in tertiary care is promising, requires collaboration.
673	▪ SNOMED CT facilitates standardized approach to data collection and reporting, which can be used in developing diagnostic, prevention, treatment and survivorship strategies against breast cancer.
674	▪ SNOMED CT captured data can facilitate research studies (new approaches to disease prognosis, risk factor assessment, and therapeutic interventions)
685	▪ Usability is an important aspect of implementing a clinical system. Complexities such as the hierarchy should be hidden from the user. Subsets, terms familiar to clinicians and well-designed system are key success factors.
686	▪ Coded structured data forms mapped to SNOMED CT is useful for supporting clinical decision making on pressure ulcer wound management.
720	▪ Rich semantics in SNOMED CT can help support detection of adverse drug events via semantic query and reasoning.
762	▪ Structured forms coded with SNOMED CT enables data entry to be done just once and facilitates advanced data retrieval. Reduced total time for documentation, reporting and follow up. Use of structured documentation with SNOMED CT improves documentation, supports advanced retrieval of data and reduces resource utilization.
788	▪ SNOMED CT used to help standardize data entry and improve results of retrieval.

Usage Category: Retrieve or analyse patient data

Id*	Summary
600	▪ Searched database (free text) using SNOMED CT search terms, no implications
604	▪ Search database (free text) using SNOMED CT terms. Search can be used to help reconcile underreported stats
619	▪ Search SNOMED CT encoded database. SMEs are competent to perform both easy and complex searches.
684	▪ SNOMED CT not include in abstract. Synonyms used to identify patients. Although not semantic searches, can still be used to retrieve relevant patients.
765	▪ SNOMED CT synonyms used as keywords to train NLP. Can help index free text, which in turns facilitates decision support
767	▪ Can be used to help audit completeness of discharge summaries by extracting concepts
781	▪ Concept based searches perform better than keyword searches
785	▪ SNOMED CT is used to annotate free text, which can then classify cancers