

Appendix 2 Peer-reviewed publications from administrative databases in China

We searched PubMed to identify studies conducted in mainland China. The eligibility criteria of studies were: 1) explicitly labelled as administrative database studies; 2) published as a full-text article either in English or Chinese; 3) database was available prior to the conduct of study; 4) all the data used for the study were primarily from database; and 5) exclusively included Chinese population.

The following search strategy was used in the PubMed database:

Search (((((((new rural cooperative medical system[Title/Abstract]) OR new rural cooperative medical scheme[Title/Abstract])) OR health insurance[Title/Abstract]) OR medical insurance[Title/Abstract]) OR (((((((clinical information system*[Title/Abstract]) OR patient care information[Title/Abstract]) OR hospital information system*[Title/Abstract]) OR HIS[Title/Abstract]) OR laboratory information management system*[Title/Abstract]) OR LIS[Title/Abstract]) OR (picture archiving[Title/Abstract] AND communication system*[Title/Abstract])) OR PACS[Title/Abstract])) OR (((((((medical record*[Title/Abstract]) OR medical chart*[Title/Abstract]) OR medical claim*[Title/Abstract]) OR prescription claim*[Title/Abstract]) OR administrative claim*[Title/Abstract]) OR electronic medical record*[Title/Abstract]) OR EMR[Title/Abstract]))) AND ((China[Title/Abstract]) OR Chinese[Title/Abstract]) Filters: Humans

Our search yielded 3,572 reports, of which 523 were eligible after title and abstract screening.

Table 1: Published papers on retrospective databases by data sources

Data source	Number of publications	Examples of studies
Medical chart review	456	Lung cancer in Dachang Tin Mine ¹ Death and injuries in earthquake ^{2 3} 111 patients with laboratory-confirmed avian-origin influenza A (H7N9) infection ⁴
Electronic medical record (EMR)	39	The phenotype and clinical patterns of Crohn's disease ⁵ adverse drug reactions (ADRs) in 20 hospitals ⁶ acute myocardial infarction (AMI) in 14 Chinese hospitals ⁷
Medical claims/insurance	25	New Cooperative Medical Scheme (NCMS) ⁸ Urban Employee Basic Medical Insurance (UEBMI) ⁹
Others	3	Beijing Emergency Medical Service System (EMSS) ¹⁰ Infectious Disease Reporting System of the Center of Diseases Control ¹¹

Table 2: Published papers on retrospective databases by disease areas

Areas of research	Number of publications	Examples of studies
Cancer	102	Breast cancer ¹² ; Renal tumors ¹³
Cardiovascular and cerebrovascular diseases	57	Atrial fibrillation ¹⁴ ; Heart failure ¹⁵
Infectious diseases	38	Chronic hepatitis B ¹⁶ ; HIV infection ¹⁷
Ophthalmology	37	Blindness ¹⁸ ; Late traumatic flap ¹⁹
Digestive disease	37	Pancreatic duct stone ²⁰ ; Liver cirrhosis ²¹
Respiratory disease	33	H1N1 virus infection ²² ; Community-acquired pneumonia ²³
Obstetric and gynecological disorders	30	Cesarean section ²⁴ ; Gestational diabetes mellitus ²⁵
Mental and neurological diseases	22	Parkinson's syndrome ²⁶ ; Use of psychotropic drugs ²⁷
Orthopedics	22	Hip fracture ²⁸ ; Acute spinal fractures ²⁹
Injuries	18	Maxillofacial fractures ³⁰ ; Crush syndrome ³¹
Adverse drugs events	12	Severe cutaneous adverse drug reactions ³² ; Administered Dengzhan Xixin ³³
Renal and urogenital disorder	12	End-stage renal disease ³⁴ ; Acute renal failure ³⁵
Health policies and evaluation	11	New Rural Cooperative Medical Scheme ³⁶ Urban Resident Basic Medical Insurance ³⁷
Dermatosis	10	Systemic lupus erythematosus ³⁸ Port wine stains ³⁹
Endocrine disease	10	Diabetes ⁴⁰ ; Nonmedullary thyroid carcinoma ⁴¹
Medical interventions	10	Dialysis ⁴² ; Perioperative prophylactic use of antimicrobial agents ⁴³
Others	62	Orphan diseases ^{44 45} ; Parasitic disease ^{46 47} ; Death ^{48 49}

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