

Supplementary materials for:

Cecil E, Bottle A, Sharland M, Saxena S. Impact of UK primary care policy reforms on short-stay unplanned hospital admissions for children with primary care-sensitive conditions. *Ann Fam Med*. 2015;13(3):214-220.

## Appendix 1

AHRQ Clinical Classifications Software (CCS) clinical codes used to define outcomes of primary care sensitive infectious illness and chronic conditions in children

<b>Broad Category</b>	<b>CCS Category</b>
Chronic disease	Acquired foot deformities
Chronic disease	Acute and unspecified renal failure
Chronic disease	Acute cerebrovascular disease
Chronic disease	Acute posthemorrhagic anemia
Chronic disease	Anal and rectal conditions
Chronic disease	Aortic and peripheral arterial embolism or thrombosis
Chronic disease	Aortic; peripheral; and visceral artery aneurysms
Chronic disease	Aspiration pneumonitis; food/vomit
Chronic disease	Asthma
Chronic disease	Biliary tract disease
Chronic disease	Blindness and vision defects
Chronic disease	Calculus of urinary tract
Chronic disease	Cardiac and circulatory congenital anomalies
Chronic disease	Cardiac arrest and ventricular fibrillation
Chronic disease	Cardiac dysrhythmias
Chronic disease	Cataract
Chronic disease	Chronic obstructive pulmonary disease and bronchiectasis
Chronic disease	Chronic renal failure
Chronic disease	Chronic ulcer of skin
Chronic disease	Coagulation and hemorrhagic disorders
Chronic disease	Coma; stupor; and brain damage
Chronic disease	Conditions associated with dizziness or vertigo
Chronic disease	Conduction disorders
Chronic disease	Congestive heart failure; nonhypertensive
Chronic disease	Coronary atherosclerosis and Other heart disease
Chronic disease	Cystic fibrosis
Chronic disease	Deficiency and Other anemia
Chronic disease	Diabetes mellitus with complications
Chronic disease	Diabetes mellitus without complication
Chronic disease	Digestive congenital anomalies
Chronic disease	Diseases of mouth; excluding dental
Chronic disease	Diseases of white blood cells
Chronic disease	Disorders of lipid metabolism
Chronic disease	Diverticulosis and diverticulitis
Chronic disease	Endometriosis
Chronic disease	Esophageal disorders
Chronic disease	Essential hypertension
Chronic disease	Fluid and electrolyte disorders
Chronic disease	Gastritis and duodenitis
Chronic disease	Gastroduodenal ulcer (except hemorrhage)
Chronic disease	Gastrointestinal hemorrhage
Chronic disease	Genitourinary congenital anomalies

Chronic disease	Genitourinary symptoms and ill-defined conditions
Chronic disease	Glaucoma
Chronic disease	Gout and Other crystal arthropathies
Chronic disease	Headache; including migraine
Chronic disease	Heart valve disorders
Chronic disease	Hemolytic jaundice and perinatal jaundice
Chronic disease	Hemorrhoids
Chronic disease	Hyperplasia of prostate
Chronic disease	Hypertension with complications and secondary hypertension
Chronic disease	Immunity disorders
Chronic disease	Inflammation; Infection of eye (except *)
Chronic disease	Inflammatory conditions of male genital organs
Chronic disease	Inflammatory diseases of female pelvic organs
Chronic disease	Late effects of cerebrovascular disease
Chronic disease	Lung disease due-external agents
Chronic disease	Malaise and fatigue
Chronic disease	Menstrual disorders
Chronic disease	Multiple sclerosis
Chronic disease	Nephritis; nephrosis; renal sclerosis
Chronic disease	Nervous system congenital anomalies
Chronic disease	Non-infectious gastroenteritis
Chronic disease	Nonmalignant breast conditions
Chronic disease	Nonspecific chest pain
Chronic disease	Nutritional deficiencies
Chronic disease	Occlusion or stenosis of precerebral arteries
Chronic disease	Osteoarthritis
Chronic disease	Osteoporosis
Chronic disease	Other acquired deformities
Chronic disease	Other and ill-defined cerebrovascular disease
Chronic disease	Other and ill-defined heart disease
Chronic disease	Other bone disease and musculoskeletal deformities
Chronic disease	Other circulatory disease
Chronic disease	Other congenital anomalies
Chronic disease	Other connective tissue disease
Chronic disease	Other diseases of bladder and urethra
Chronic disease	Other diseases of kidney and ureters
Chronic disease	Other diseases of veins and lymphatics
Chronic disease	Other disorders of stomach and duodenum
Chronic disease	Other ear and sense organ disorders
Chronic disease	Other endocrine disorders
Chronic disease	Other eye disorders
Chronic disease	Other female genital disorders
Chronic disease	Other gastrointestinal disorders
Chronic disease	Other hematologic conditions
Chronic disease	Other hereditary and degenerative nervous system conditions
Chronic disease	Other inflammatory condition of skin
Chronic disease	Other liver diseases
Chronic disease	Other lower respiratory disease
Chronic disease	Other male genital disorders
Chronic disease	Other nervous system disorders
Chronic disease	Other non-traumatic joint disorders

Chronic disease	Other nutritional; endocrine; and metabolic disorders
Chronic disease	Other skin disorders
Chronic disease	Ovarian cyst
Chronic disease	Pancreatic disorders (not diabetes)
Chronic disease	Paralysis
Chronic disease	Peri-; endo-; and myocarditis; cardiomyopathy (except *)
Chronic disease	Peripheral and visceral atherosclerosis
Chronic disease	Peritonitis and intestinal abscess
Chronic disease	Phlebitis; thrombophlebitis and thromboembolism
Chronic disease	Pleurisy; pneumothorax; pulmonary collapse
Chronic disease	Prolapse of female genital organs
Chronic disease	Pulmonary heart disease
Chronic disease	Regional enteritis and ulcerative colitis
Chronic disease	Respiratory distress syndrome
Chronic disease	Respiratory failure; insufficiency; arrest (adult)
Chronic disease	Retinal detachments; defects; vascular occlusion; and retinopathy
Chronic disease	Rheumatoid arthritis and related disease
Chronic disease	Sickle cell anemia
Chronic disease	Spondylosis; intervertebral disc disorders; Other back problems
Chronic disease	Systemic lupus erythematosus and connective tissue disorders
Chronic disease	Thyroid disorders
Chronic disease	Transient cerebral ischemia
Chronic disease	Varicose veins of lower extremity
Chronic & Infection**	Epilepsy; convulsions
Chronic & Infection**	Other upper respiratory disease
Infection	Abdominal pain
Infection	Acute and chronic tonsillitis
Infection	Acute bronchitis
Infection	Bacterial Infection; unspecified site
Infection	Encephalitis (except *)
Infection	Fever of unknown origin
Infection	Gangrene
Infection	Hepatitis
Infection	HIV Infection
Infection	Immunizations and screening for infectious disease
Infection	Infective arthritis and osteomyelitis (except*)
Infection	Influenza
Infection	Intestinal Infection
Infection	Lymphadenitis
Infection	Meningitis (except*)
Infection	Mycoses
Infection	Nausea and vomiting
Infection	Other CNS Infection and poliomyelitis
Infection	Other Infections; including parasitic
Infection	Other upper respiratory Infections
Infection	Otitis media and related conditions
Infection	Pneumonia
Infection	Septicemia (except in labor)
Infection	Sexually transmitted Infections (not HIV or hepatitis)
Infection	Skin and subcutaneous tissue Infections
Infection	Tuberculosis

Infection	Urinary tract Infections
Infection	Viral Infection

*\* (except that caused by tuberculosis or sexually transmitted disease)*

*\*\*Chronic & Infection are where the ICD10 codes within the CCS group have been separately categorised.*

International classification of disease version 10 (ICD10) codes used to define outcomes of primary care sensitive infectious illness and chronic conditions in children where direct AHRQ Clinical Classifications Software group categorisation was not possible

Broad Category	CCS Category	ICD10* code	ICD10 Description	Conditions
Chronic disease	Epilepsy; convulsions	G40	Epilepsy	
Chronic disease	Epilepsy; convulsions	G41	Status epilepticus	
Infection	Epilepsy; convulsions	R560	Febrile convulsions	
Chronic disease	Epilepsy; convulsions	R568	Other and unspecified convulsions	
Chronic disease	Other upper respiratory disease	J30	Vasomotor and allergic rhinitis	
Chronic disease	Other upper respiratory disease	J31	Chronic rhinitis, nasopharyngitis and pharyngitis	
Chronic disease	Other upper respiratory disease	J33	Nasal polyp	
Chronic disease	Other upper respiratory disease	J34	Other disorders of nose and nasal sinuses	
Chronic disease	Other upper respiratory disease	J37	Chronic laryngitis and laryngotracheitis	
Chronic disease	Other upper respiratory disease	J38	Disease of vocal cords and larynx, not elsewhere classified	
Chronic disease	Other upper respiratory disease	J39	Other disease of upper respiratory tract	
Chronic disease	Other upper respiratory disease	J98	Other respiratory disorders	
Chronic disease	Other upper respiratory disease	R04	Hemorrhage from respiratory passages	
Chronic disease	Other upper respiratory disease	R060	Dyspnoea	
Infection	Other upper respiratory disease	R062	Wheezing	if aged <1 yrs
Chronic	Other upper respiratory disease	R062	Wheezing	if aged 1+ yrs
Chronic disease	Other upper respiratory disease	R063	Periodic breathing	
Chronic disease	Other upper respiratory disease	R064	Hyperventilation	
Chronic disease	Other upper respiratory disease	R065	Mouth breathing	
Chronic disease	Other upper respiratory disease	R067	Sneezing	
Chronic disease	Other upper respiratory disease	R068	Other and unspecified abnormalities of breathing	
Chronic disease	Other upper respiratory disease	R07	Pain in throat	
Chronic disease	Other upper respiratory disease	R49	Voice disturbances	

\*International classification of disease version 10

## Appendix 2

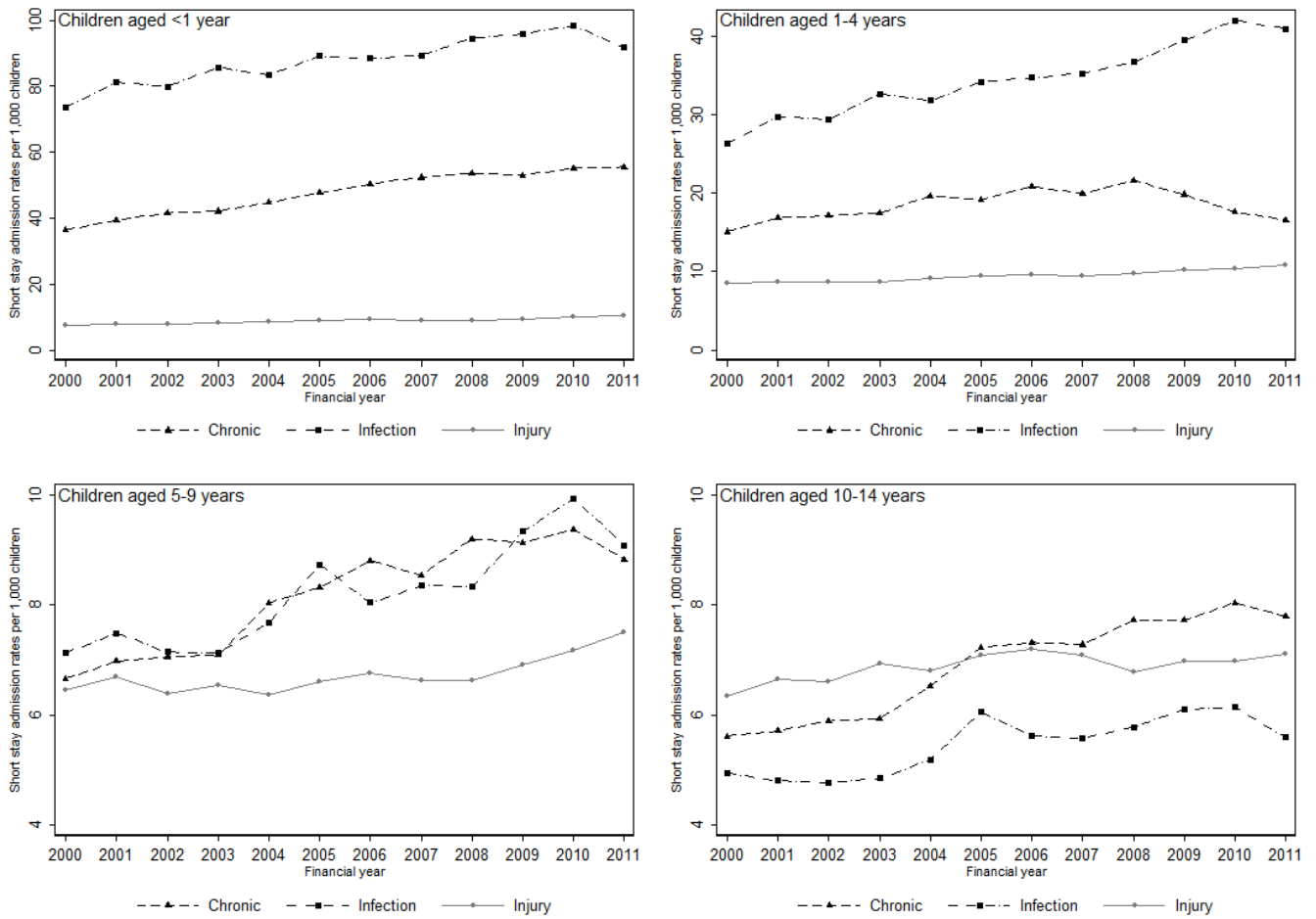
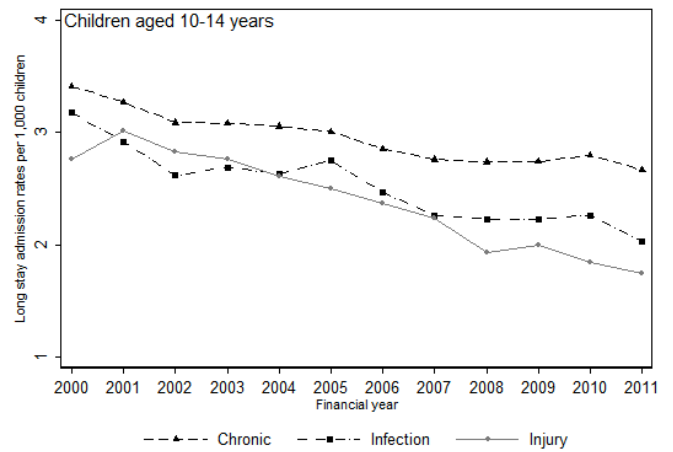
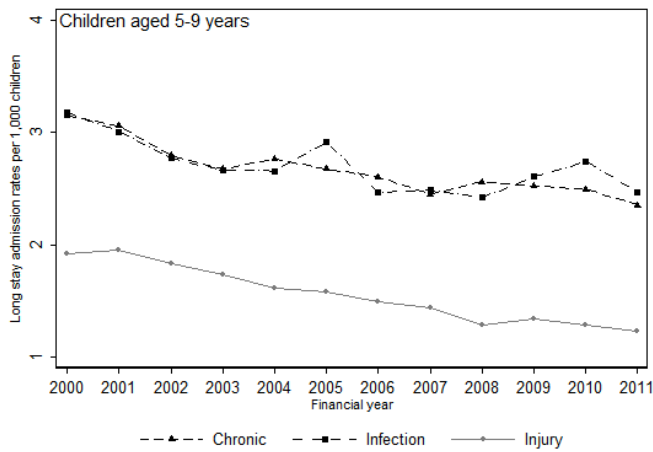
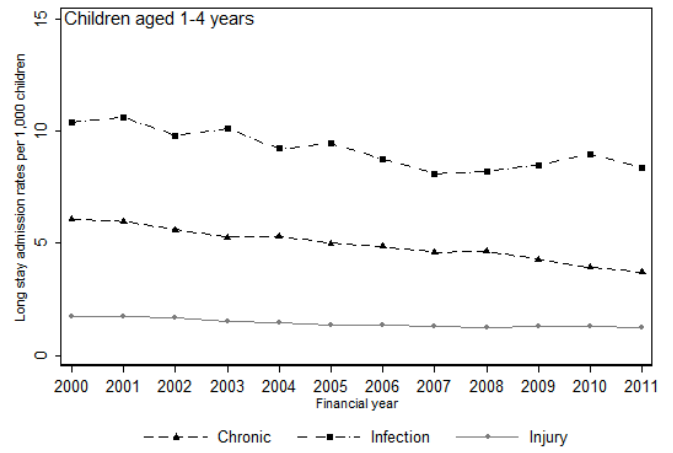
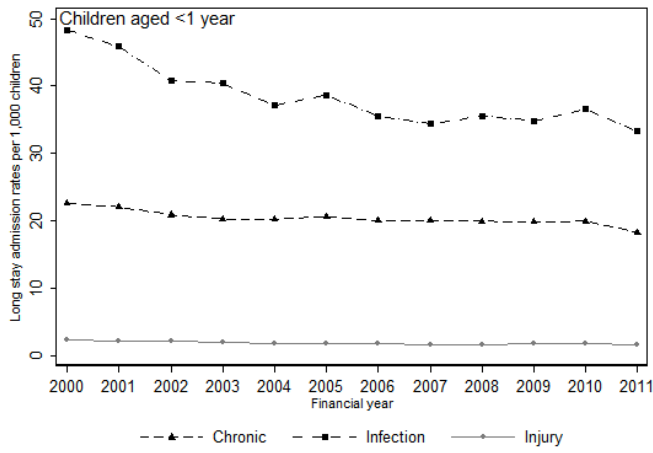


Figure 1: Age specific annual short stay admission rates per 1,000 children aged 0-14 years for infectious illness, chronic conditions and injury, from 2000-2011, in England.



**Figure 2: Age specific annual long stay admission rates per 1,000 children aged 0-14 years for infectious illness, chronic conditions and injury, from 2000-2011, in England.**