

Table S1: Diagnoses and Procedures for False Positives and False Negative Cases

Miscategorization	Diagnoses	Procedures
False Positive	<ul style="list-style-type: none"> Moderate persistent asthma with status asthmaticus 	
False Positive	<ul style="list-style-type: none"> Acute bronchiolitis, unspecified 	
False Positive	<ul style="list-style-type: none"> Adult T-cell lymphoma/leukemia (HTLV-1-assoc), in relapse Autistic disorder Epilepsy, unspecified, not intractable, without status epilepticus Blindness, left eye, normal vision right eye Edema, unspecified 	
False Positive	<ul style="list-style-type: none"> Perinatal digestive system disorder, unspecified Constipation, unspecified Abdominal distension (gaseous) Other congenital anemias, not elsewhere classified 	<ul style="list-style-type: none"> Digital x-ray abdomen 1 view
False Positive	<ul style="list-style-type: none"> Constipation, unspecified Unspecified abdominal pain Urticaria, unspecified 	<ul style="list-style-type: none"> Ultrasound images 2nd interpretation In and out catheter Computed Tomography abdomen/pelvis outside images 2nd interpretation
False Positive	<ul style="list-style-type: none"> Vomiting, unspecified Dehydration Colostomy status 	<ul style="list-style-type: none"> Digital x-ray pelvis outside images 2nd interpretation
False Positive	<ul style="list-style-type: none"> Viral infection, unspecified Neutropenia, unspecified Anal fissure, unspecified Melena Rash and other nonspecific skin eruption Fever presenting with conditions classified elsewhere 	<ul style="list-style-type: none"> Digital x-ray abdomen outside images 2nd interpretation
False Positive	<ul style="list-style-type: none"> Unspecified asthma with (acute) exacerbation 	<ul style="list-style-type: none"> Digital x-ray chest outside images 2nd interpretation
False Positive	<ul style="list-style-type: none"> Acute bronchiolitis, unspecified Unspecified asthma, uncomplicated Acute upper respiratory infection, unspecified Viral infection, unspecified Epilepsy, unspecified, not 	<ul style="list-style-type: none"> Digital x-ray chest outside images 2nd interpretation Metered dose inhaler

	intractable, without status epilepticus	
False Positive	<ul style="list-style-type: none"> • Unspecified asthma with status asthmaticus 	<ul style="list-style-type: none"> • Digital x-ray chest 1 view
False Positive	<ul style="list-style-type: none"> • Unspecified asthma with (acute) exacerbation • Acute upper respiratory infection, unspecified 	
False Positive	<ul style="list-style-type: none"> • Nonspecific mesenteric lymphadenitis 	<ul style="list-style-type: none"> • Computed Tomography abdomen/pelvis outside images 2nd interpretation
False Positive	<ul style="list-style-type: none"> • Mild intermittent asthma with status asthmaticus • Acute upper respiratory infection, unspecified • Tachycardia, unspecified 	
False Positive	<ul style="list-style-type: none"> • Acute obstructive laryngitis [croup] • Bradycardia, unspecified 	
False Positive	<ul style="list-style-type: none"> • Unspecified asthma with (acute) exacerbation 	
False Positive	<ul style="list-style-type: none"> • Mild persistent asthma with (acute) exacerbation • Anemia due to glucose-6-phosphate dehydrogenase deficiency • Contact with and exposure to environ tobacco smoke (acute) (chronic) 	
False Positive	<ul style="list-style-type: none"> • Abnormal levels of other serum enzymes • Dehydration • Viral intestinal infection, unspecified • Congenital ichthyosis, unspecified • Presence of cardiac pacemaker 	
False Negative	<ul style="list-style-type: none"> • Cardiomegaly 	<ul style="list-style-type: none"> • Pediatric echocardiogram complete • Electrocardiogram with rhythm strip • Digital x-ray chest 1 view
False Negative	<ul style="list-style-type: none"> • Toxic effect of unspecified corrosive substance, accidental, initial • Otitis media, unspecified, unspecified ear • Unspecified place in single-family (private) house as place 	
False Negative	<ul style="list-style-type: none"> • Unspecified convulsions 	<ul style="list-style-type: none"> • Magnetic Resonance Imaging

	<ul style="list-style-type: none"> • Developmental disorder of speech and language, unspecified 	(MRI) brain with / without contrast <ul style="list-style-type: none"> • Routine Electroencephalogram • Measure of Central Nervous Electr Activity, Extern Approach • Magnetic Resonance Imaging (MRI) of Brain
False Negative	<ul style="list-style-type: none"> • Other iron deficiency anemias 	<ul style="list-style-type: none"> • Type and screen
False Negative	<ul style="list-style-type: none"> • Fever, unspecified • Mucocutaneous lymph node syndrome [Kawasaki] 	
False Negative	<ul style="list-style-type: none"> • Laceration with foreign body of scalp, initial encounter • Assault by unspecified firearm discharge, initial encounter 	<ul style="list-style-type: none"> • Type and screen • Computed Tomography head outside images 2nd interpretation • Digital x-ray skull under 4 views • Digital x-ray chest 1 view • Computed Tomography head without contrast

Patient transfer was a false positive if the potentially avoidable transfer (PAT) metric categorized the case as PAT when the physicians' medical record review (gold standard) categorized the case as not PAT. Patient transfer was a false negative if the PAT metric categorized the case as not PAT when the physicians' medical record review (gold standard) categorized the case as PAT.