Multimedia Appendix 2. Auxiliary data used by NoteAid for medical concept extraction.

Table A2-1. Words removed from medical terms.

Words removed from terms	Example terms (original form → transformed form)
left, right, bilateral, acute, chronic, severe, low, mild, high, history of, flash	left femur → femur acute gastritis → gastritis high systolic blood pressure → systolic blood pressure

Table A2-2. Semantic types used for prioritizing or deprioritizing medical concepts.

Prioritized UMLS semantic types (example terms)	De-prioritized UMLS semantic types (example terms)
Acquired abnormality (anal stricture, colostomy)	Conceptual entity (treatment, home, history, Dr.)
Antibiotic (gentamicin, Keflex)	Geographic area (community, Hawaii, highlands)
Body part, organ, or organ component (venous, sigmoid colon)	Temporal concept (delayed, hourly, long-term)
Cell or molecular dysfunction (mutation, concentric hypertrophy)	
Clinical attribute (visual acuity, vital signs)	
Clinical drug (Flonase nasal spray, nitroglycerin pill)	
Diagnostic procedure (Doppler, transthoracic echocardiogram)	
Disease or syndrome (hydronephrosis, idiopathic myelofibrosis)	
Experimental model of disease (cancer model, knock-out)	
Finding (diabetic, hypesthesia)	

Health care activity
(critical care, health screening)

Laboratory procedure
(culture, complete blood count)

Laboratory or test result
(motility, urine creatinine)

Neoplastic process
(metastasis, myelofibrosis)

Organ or tissue function
(heart rhythm, diuresis)

Organic chemical
(bupropion, procainamide)

Pathologic function
(fibrosis, hemorrhage)

Pharmacologic Substance
(oxaliplatin, idoxifene)

Physiologic function
(coagulation, ventilation)

Sign or symptom
(hypokinetic, tenderness)

Therapeutic or preventive procedure
(ablation, chemotherapy)