Foot infection code list creation process

Found a useful paper ( <https://pmc.ncbi.nlm.nih.gov/articles/PMC2914721/> ) that classified diabetic foot infections using ICD-9-CM codes which was helpful in deciding what sort of symptoms should be included. This paper mentioned using the terms gangrene, osteomyelitis, ulcer, foot cellulitis/abscess, toe cellulitis/abscess, and paronychia.

Searched for existing published code lists using OpenCodelists and found a useful list called “foot ulcer or infection or ischaemia codes” (see <https://www.opencodelists.org/codelist/nhsd-primary-care-domain-refsets/footulcerinfectisch_cod/20250627/> ). This covered a lot of key terms.

In addition, I found one called “skin and soft tissue infections” also using OpenCodelists ( <https://www.opencodelists.org/codelist/ukhsa/skin-and-soft-tissue-infections/2dfc111b/#full-list> ). This covered cellulitis and ulcers which were mentioned in the PubMed article but it wasn’t specific to feet. I therefore filtered by foot terms (foot, heel, toe) and took out any codes that actually excluded feet and any that were not specific enough in terms of infection location (e.g. “foot or leg”).

The only key term from the PubMed article that was not included in the two OpenCodelists was paronychia, so I added these codes to the final code list from the Aurum Medcode dictionary.

Had some internal debate about whether the ankle counted as part of the foot but I decided not to include ankle terms because when I searched for ankle in the PubMed paper codelist it only included terms that specifically said “ankle and foot”.

Some remaining questions about the codelist that can hopefully be cleared up by the clinicians is whether or not infections caused by insect bites are a relevant code to include. I’ve included them because it is possible that they are more likely to get infected due to diabetes.