

Dense vs Sparse Retrieval

Aspect	Dense Retrieval	Sparse Retrieval
Similarity Type	Semantic meaning	Keyword matching
Speed	Medium (ANN search)	Fast (inverted index)
Accuracy	High for concepts	High for exact terms
Medical Terms	Understands synonyms	Exact match required

Dense best for:

"Patient with chest pain and shortness of breath"

Sparse best for:

"ICD-10 code I21.0" or "Aspirin 81mg"