Seq	Model	Developed By	Local/API	Approx. Size	Pros	Cons	Additional Specs	Training Data	Fine-Tuning Ability	Privacy and Security	Resource Requirements	Inference Speed	Ethical Considerations
1	ClinicalBERT	Based on BERT	Local	Similar to BERT	Tailored for clinical notes	May need further tuning	Optimized for EHRs	Medical-specific	High	High compliance potential	Moderate-High	Moderate	High; addresses bias in clinical data
2	BioBERT	Based on BERT	Local	Similar to BERT	Pre-trained on biomedical literature	Not general clinical	Biomedical focus	Biomedical-specific	Moderate	High compliance potential	Moderate-High	Moderate	Moderate; less bias in narrow fields
3	RoBERTa	Facebook AI	Local	~355M parameters	General high performance	Requires medical fine-tuning	Robust training	General	High	Moderate	High	High	Moderate; requires careful bias management
4	spaCy (Med7)	Explosion AI	Local	Varies with model	Efficient, specialized Med7 for medical	Less comprehensive	Extensible, efficient	General, with medical extensions	Moderate	High if processed locally	Low-Moderate	High	High; focus on ethical NLP practices
5	ELMo	Allen Institute for AI	Local	Smaller than BERT-based models	Good depth, feature extraction	Outperformed by newer models	LSTM-based	General	Low	High if processed locally	Moderate	Low	Moderate; older model, less focus on bias
6	ULMFiT	FastAI	Local	Smaller than BERT-based models	Good for transfer learning	Needs specific tuning	Transfer learning pioneer	General	High	Moderate	Low	Moderate	Moderate; potential for bias if not managed
7	BERT	Google AI	Local	~416M parameters	Highly versatile	Generalist, needs tuning	Foundational model	General	High	Moderate	High	Moderate	Moderate; initial model less focused on bias