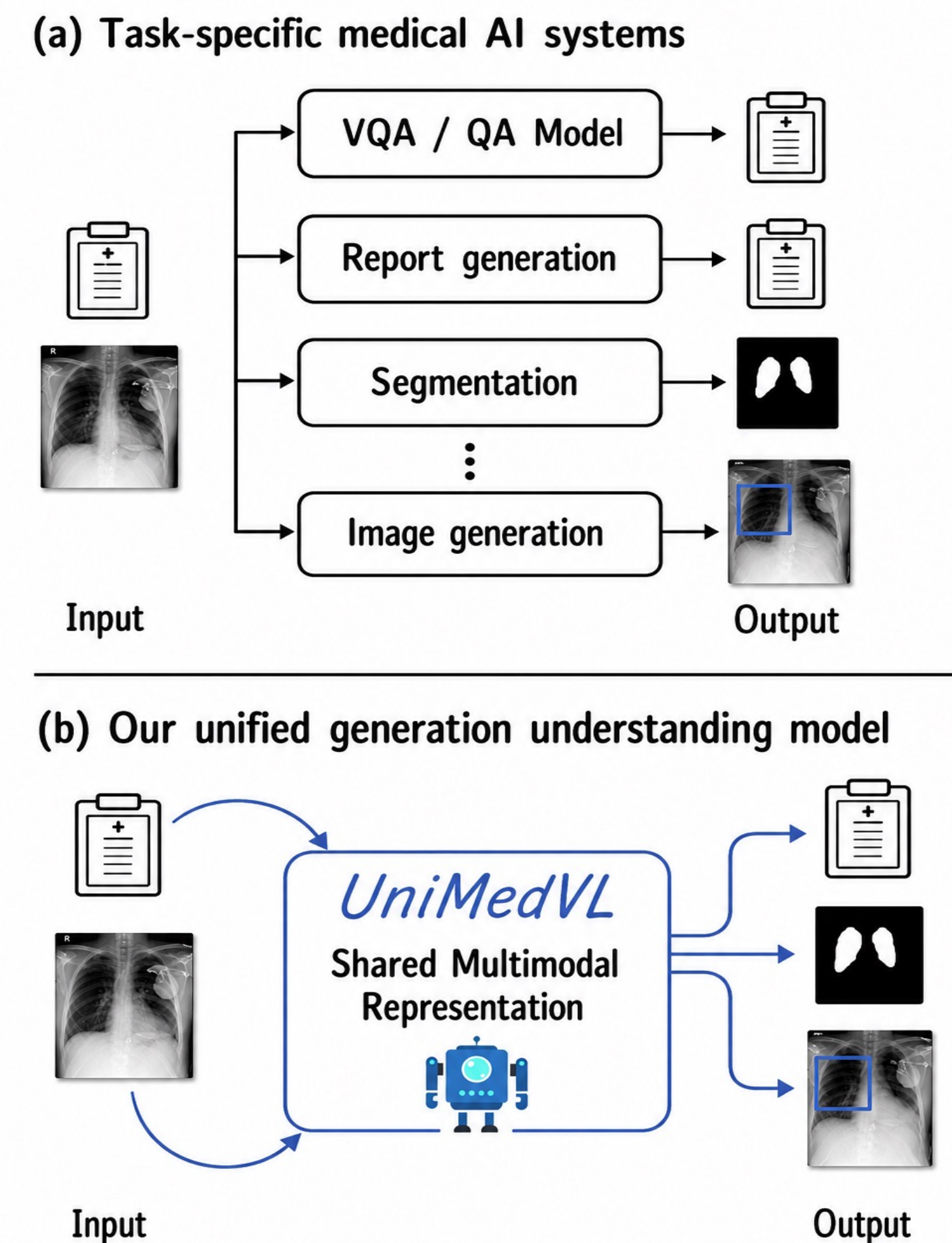


1. Motivation

Task Fragmentation in Medical AI



Why a Unified Model?

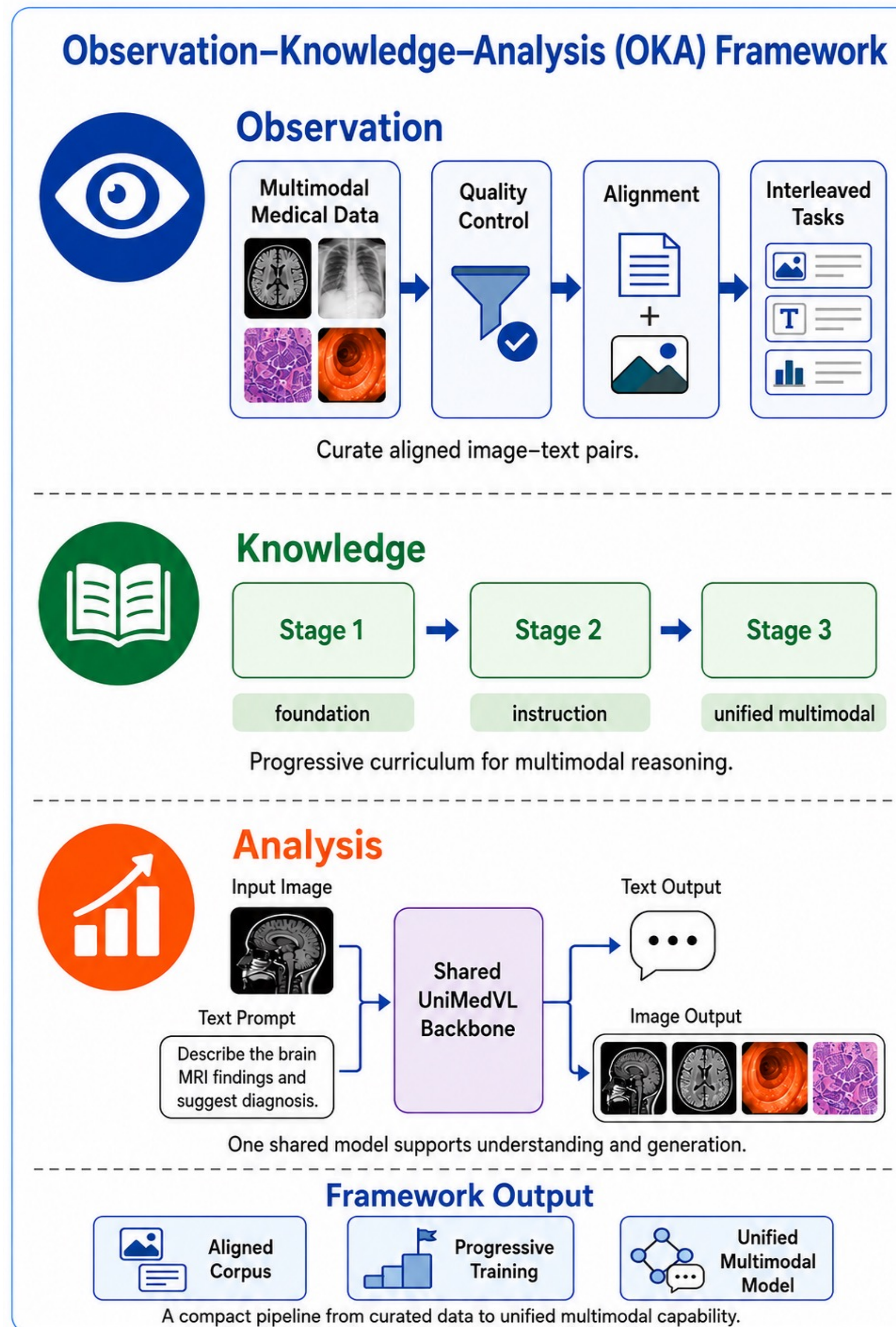
- Fragmented models across **tasks** and **modalities**.
- Poor generalization and data inefficiency
- Manual handoff between understanding and generation.
- A single model enables seamless reasoning and richer capabilities.

UniMedVL-5M (Pretraining Dataset)

			
5.6M	8	5	8
Multimodal Samples	Imaging Modalities	Understanding Benchmarks	Medical Imaging Modalities

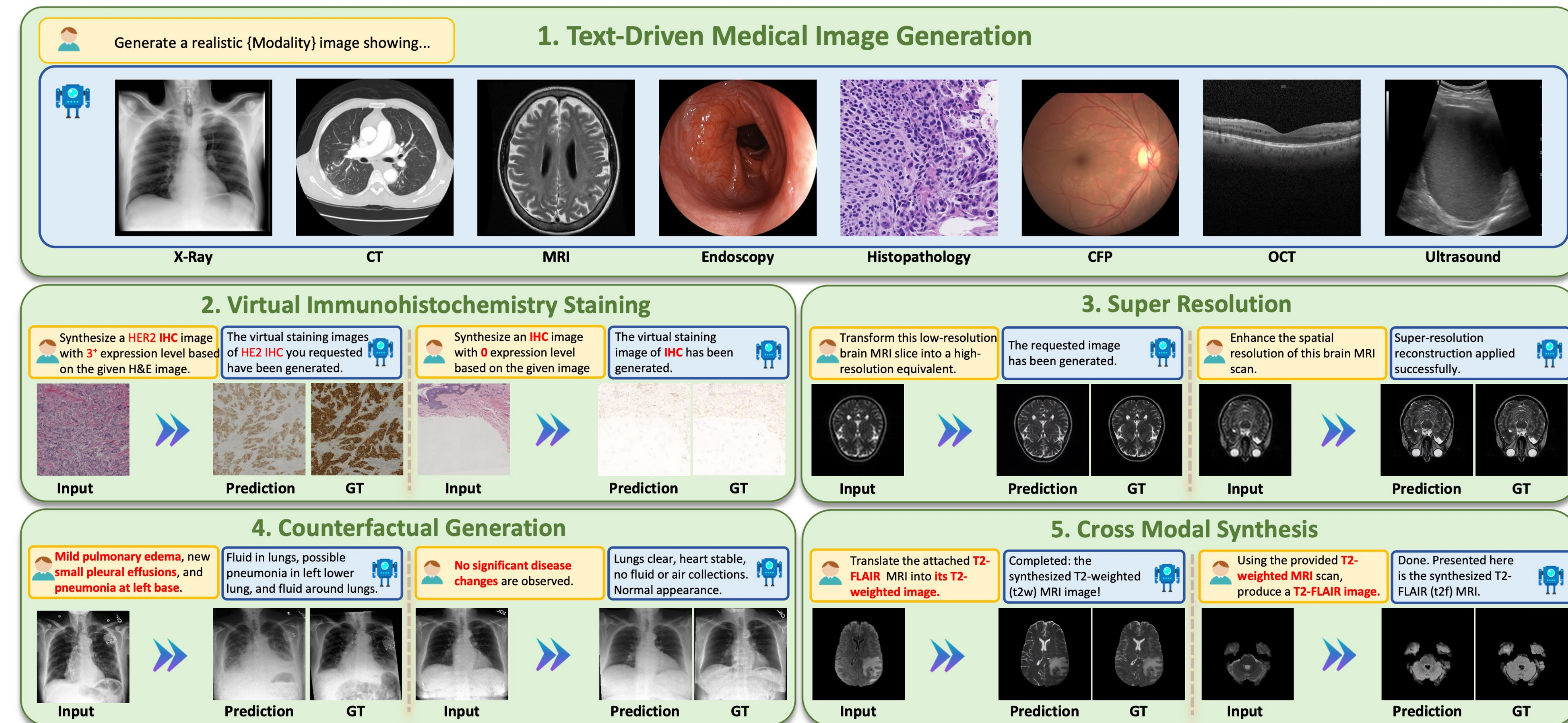
2. Method

Overview of Data and Model training

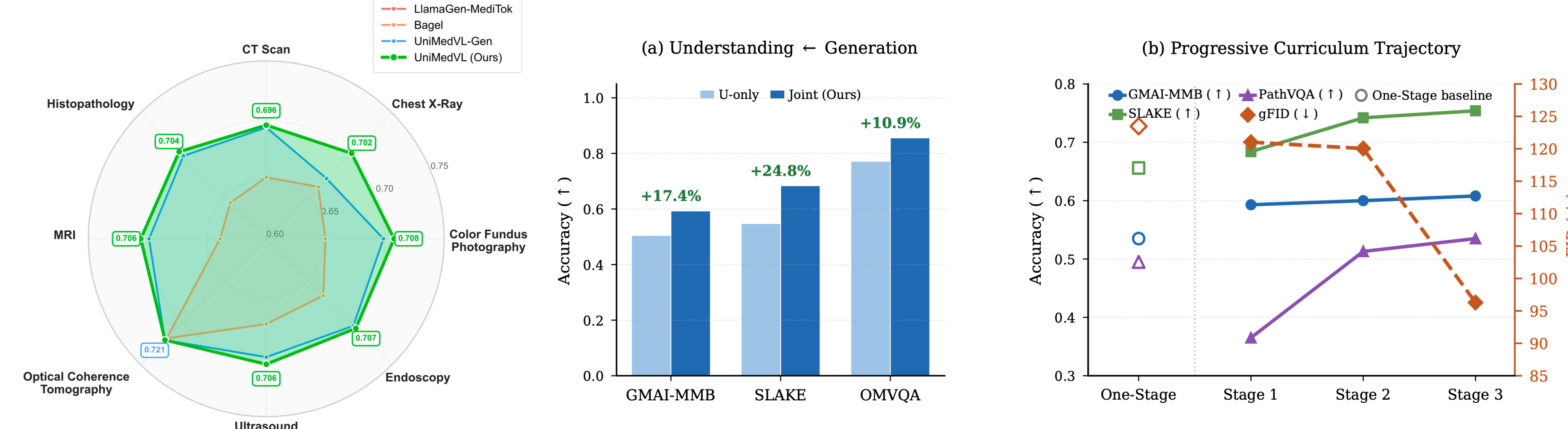


3. Results

Multimodal Capabilities



Quantitative Performance Summary



Highlights



Medical Unified Model
Understanding Avg: 67.47
Strong among medical unified models
HealthGPT-L14 56.94



Data Foundation
5.6M training samples
8 imaging modalities
5 understanding benchmarks



Understanding Results
SLAKE 75.4
OmniMedVQA 85.8
GMAI-MMB 60.75
PathVQA 53.5



Generation Results
Avg.(FID): 96.29
CS: 0.706
vs UniMedVL Gen only: 108.40 / 0.699



Specialized Tasks
H&E→IHC: 0.237 / 0.456
MRI→XMR: 0.227 / 0.600
Near specialist performance in unified model