# Kubernetes for Medical Deployments

Kubernetes (K8s) orchestrates containerized ML workloads across clusters

## ⚙ Core Components

### 🎯 Pods
Smallest unit containing containers

### 🌐 Services
Expose pods with load balancing

### 🚀 Deployments
Manage replicas & rolling updates

## 🔧 Configuration

### 📋 ConfigMaps
Store configuration data

### 🔒 Secrets
Manage sensitive credentials

### 💾 Volumes
Persistent data storage

## 🛠 Scaling Features

📈 Horizontal Pod Autoscaling (HPA)   ⚡ Resource requests/limits   🎮 Node affinity for GPU scheduling