



Non-IID Medical Data




 **Different patient demographics**
Age, gender, ethnicity vary by location




 **Varying disease prevalence**
Regional differences in disease patterns



 **Hospital-specific protocols**
Different treatment guidelines and standards



 **Equipment differences**
Imaging devices, sensors vary in quality



 **Regional health patterns**
Climate, lifestyle, socioeconomic factors



Impact: Model bias • Slower convergence • Reduced accuracy