



SPA MDR CDR SCE

PAP-ML31

LLMs in clinical trials: Overcoming challenges related to patient confidentiality and intellectual property

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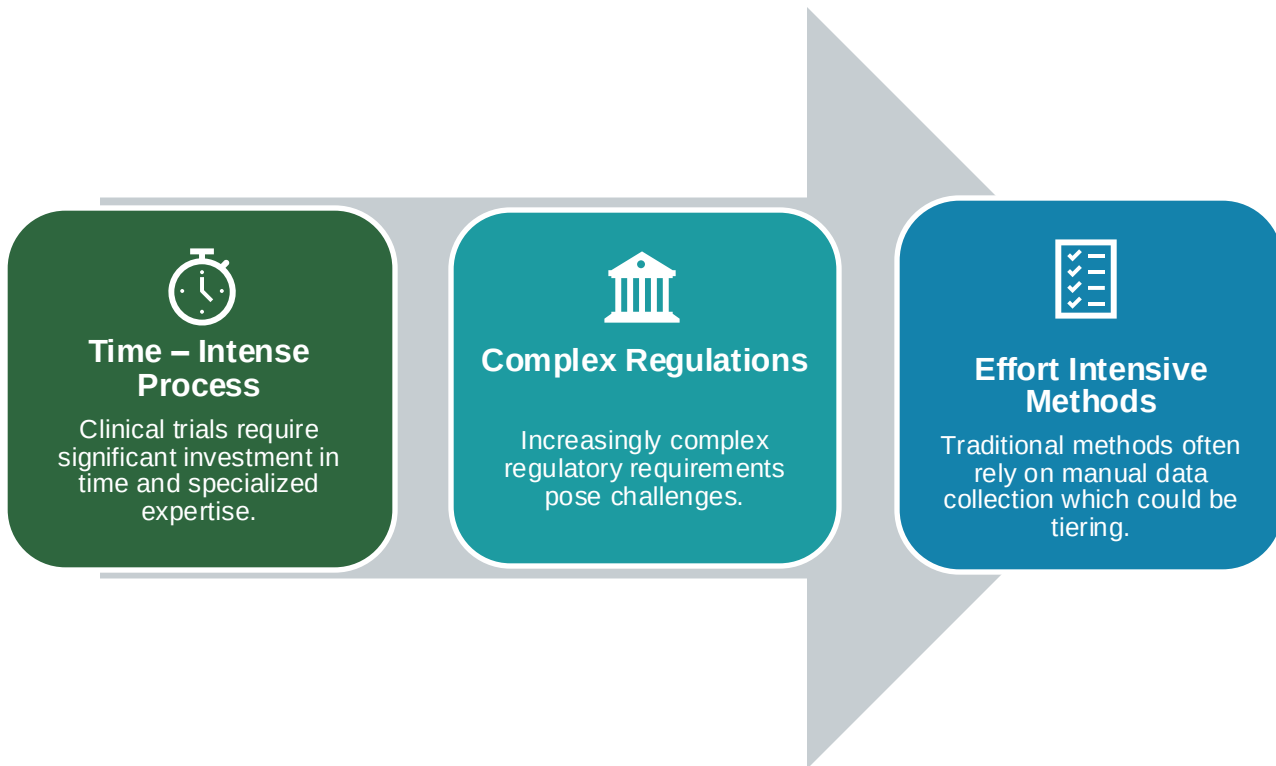


Agenda

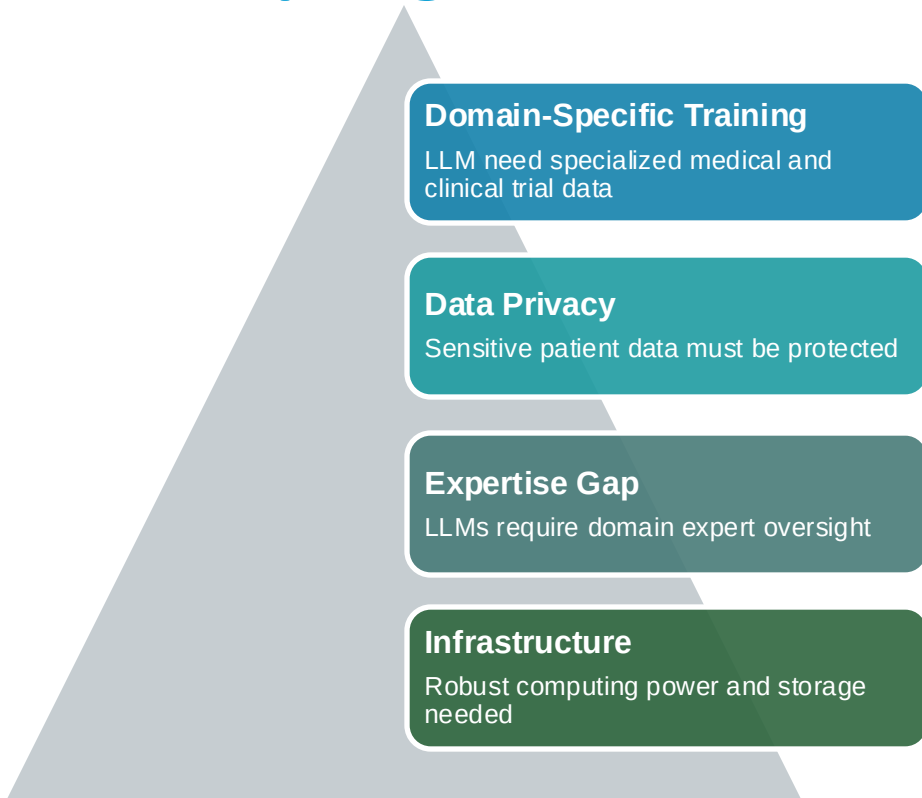
- 1 Present Landscape of Clinical Trials
- 2 Challenges
- 3 Overcoming Challenges
- 4 Visionary Use Cases



Current Landscape of Clinical Trials



Challenges in Adopting LLMs



Overcoming Challenges: Local LLMs



On-Premises Processing

Local LLMs run on private servers, ensuring data never leaves the organization's network.



Enhanced Privacy

Sensitive information remains within the organization, aiding compliance with HIPAA and GDPR.



Greater Control

Organizations maintain tighter control over AI operations and reduce external vendor dependency.



Building the Right Infrastructure



High-Performance Computing

Powerful GPUs or TPUs to handle complex algorithms and vast datasets.



Scalable Storage

Robust, secure storage solutions to manage large volumes of clinical trial data.

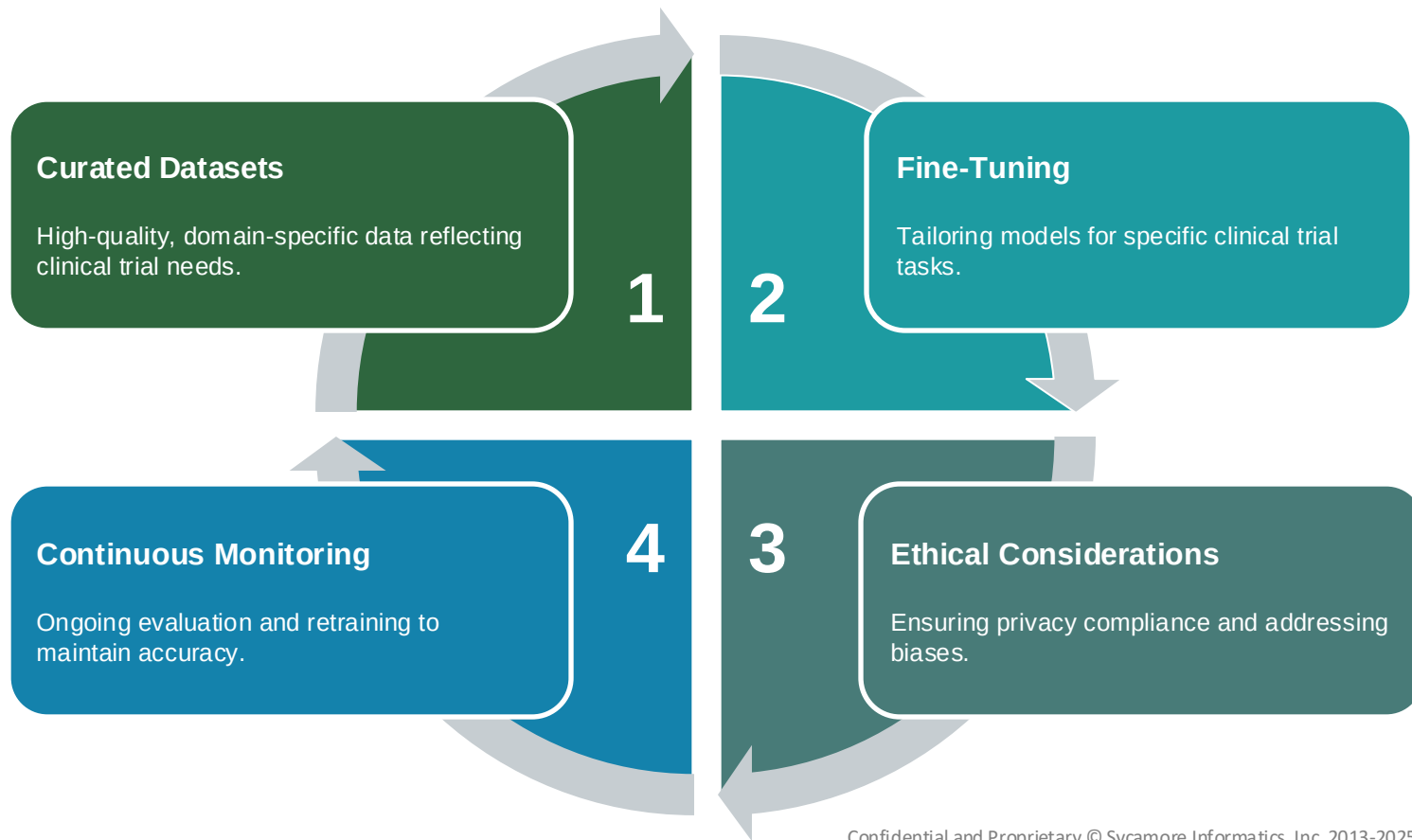


Security and Compliance

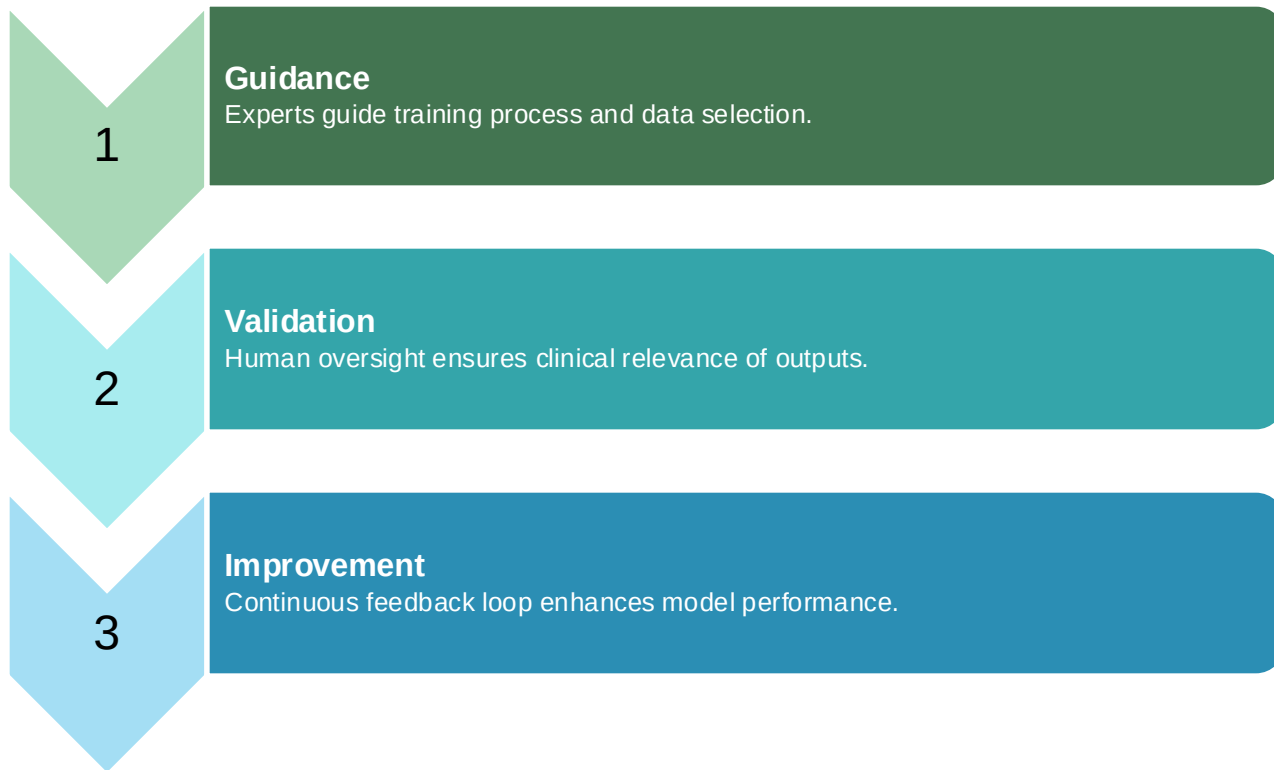
Strict access controls, encryption, and monitoring to protect patient data.



Training AI Models for Clinical Trials



Collaboration with Domain Experts



Visionary Use Cases

Automated TLF Generation

LLMs generate SAS code for Tables, Listings, and Figures from Statistical Analysis Plans.

Real-time Data Analysis

Instant reports and summaries as clinical trial data becomes available.

Predictive Analytics

Identify trends and potential issues from historical trial data.

Generating SAP

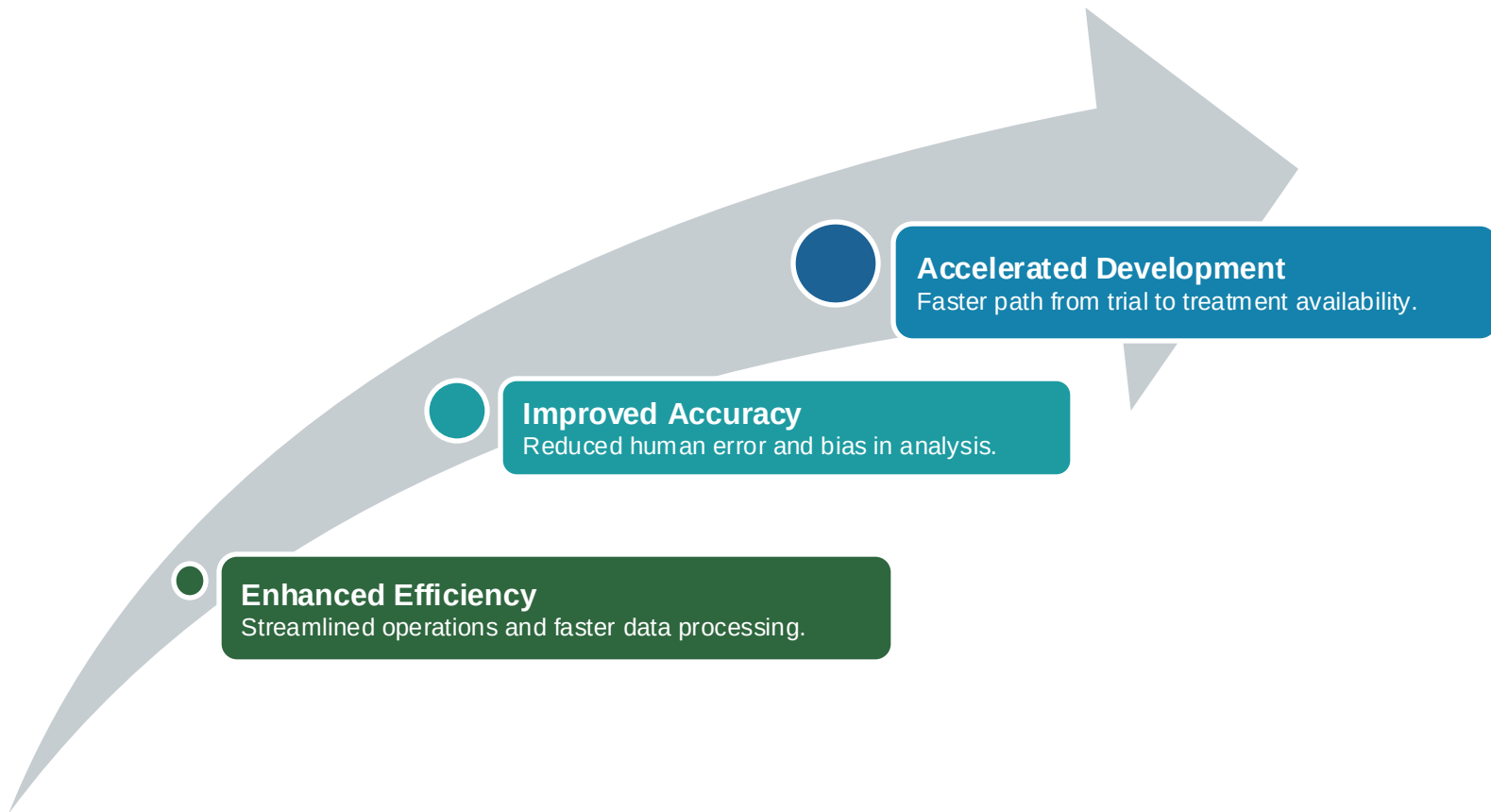
Automate creation of Statistical Analysis Plans, ensuring consistency and compliance.

Collaboration

Collaborate within the Sat Programming team for knowledge repository and real-time assistance



Future of Clinical Trials



Thank you!

