

AIDAN: AI-Data Analysis Network

PhUSE SDE Basel 2025

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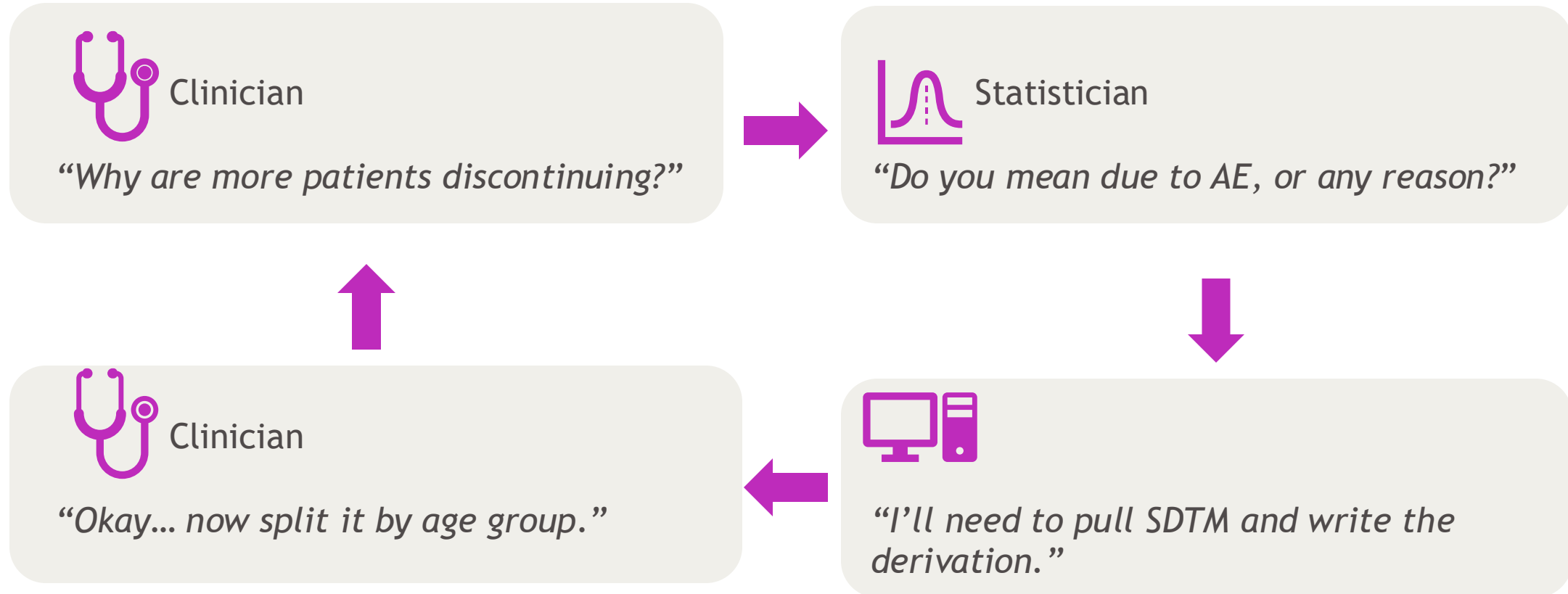
The Old Way

Clinician Questions → Slow Answers



Too many handoffs

Each Handoff = Days Lost



Exploration Without Barriers

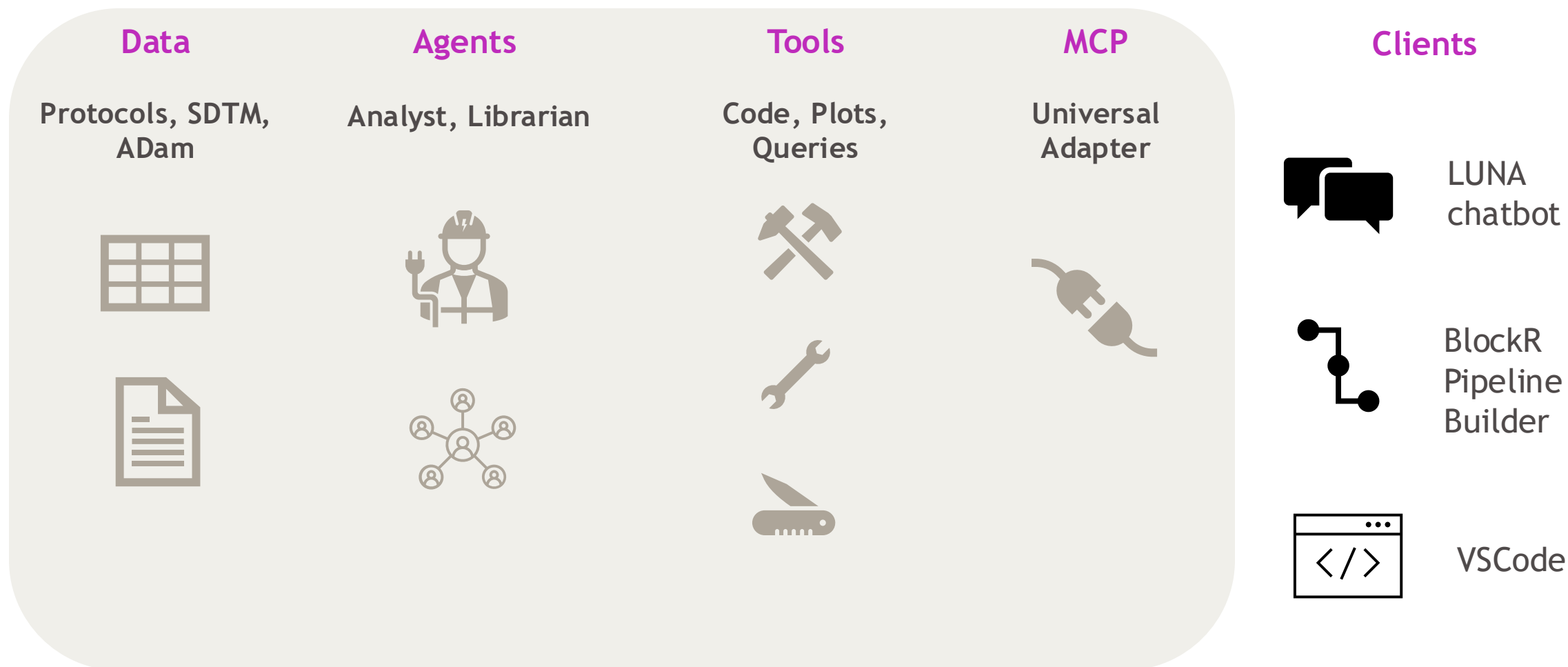
Ask → See → Follow Up → Insight



Sometimes I wish I could
code...

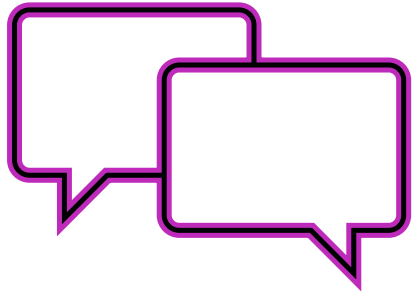
Meet AIDAN

AIDAN connects data → smart agents → useful tools → any client front end.



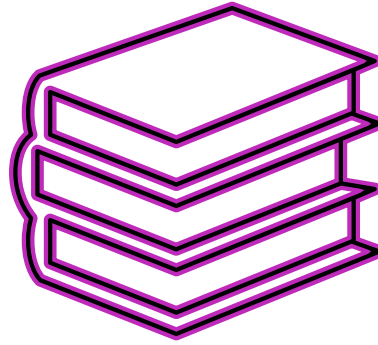
Two Digital Colleagues: Data Analyst and Librarian

Data Analyst



- Understands questions
- Runs analysis
- returns plots and code

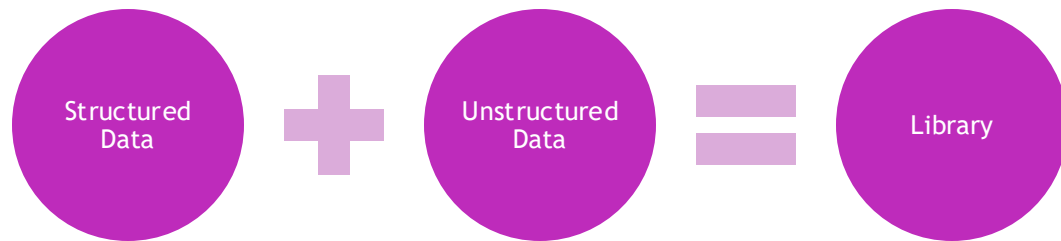
Librarian



- Builds knowledge graphs on-the-fly
- Enables structured queries

Together: fast questions + trustworthy answers

Spotlight: Knowledge Graph Agent



- Links patients, events, treatments, endpoints
- Enables structured queries + hybrid RAG

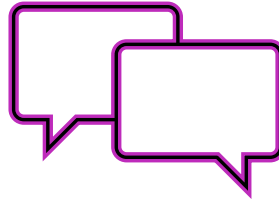
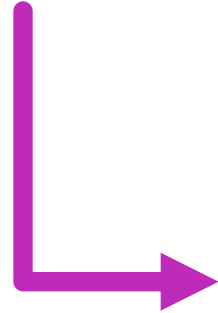
```
MATCH (p:Patient)-[:DISCONTINUED]->(ae:AE
{term:"Nausea"})
RETURN p.patient_id, p.treatment
```



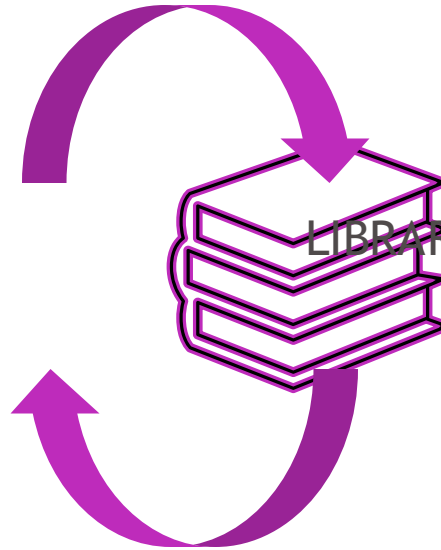
From Question → Loop → Code + Output



“Show me the primary endpoint”



LUNA



LIBRARIAN



LUNA in Action

The New Way (Fewer Handoffs)

Shared Tools = Fewer Handoffs



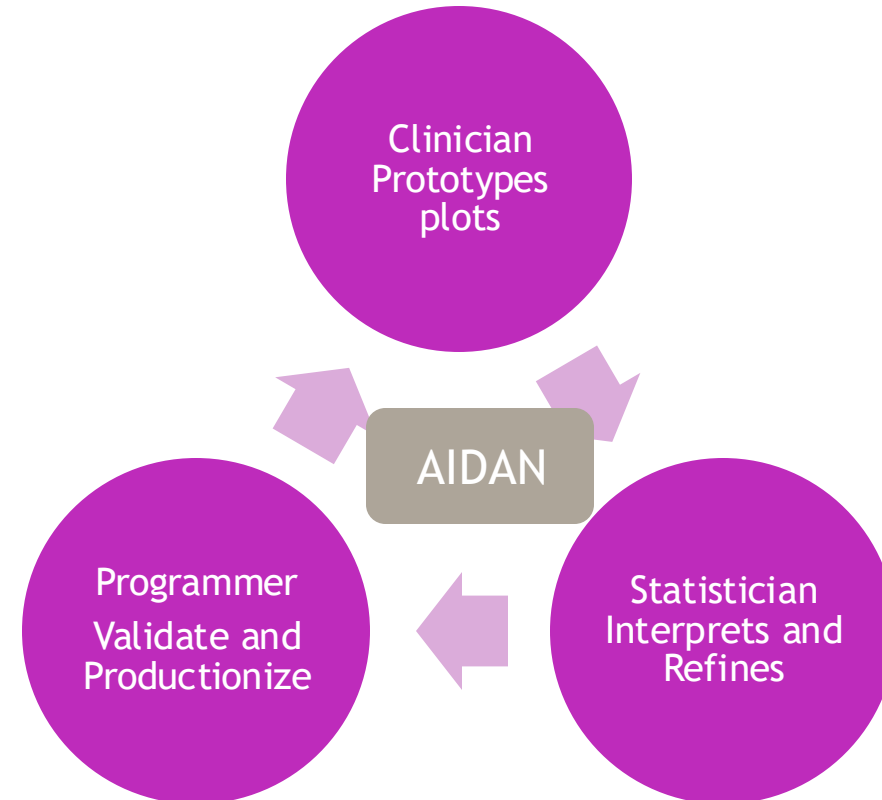
Clinicians prototype



Programmers validate



Statisticians interpret

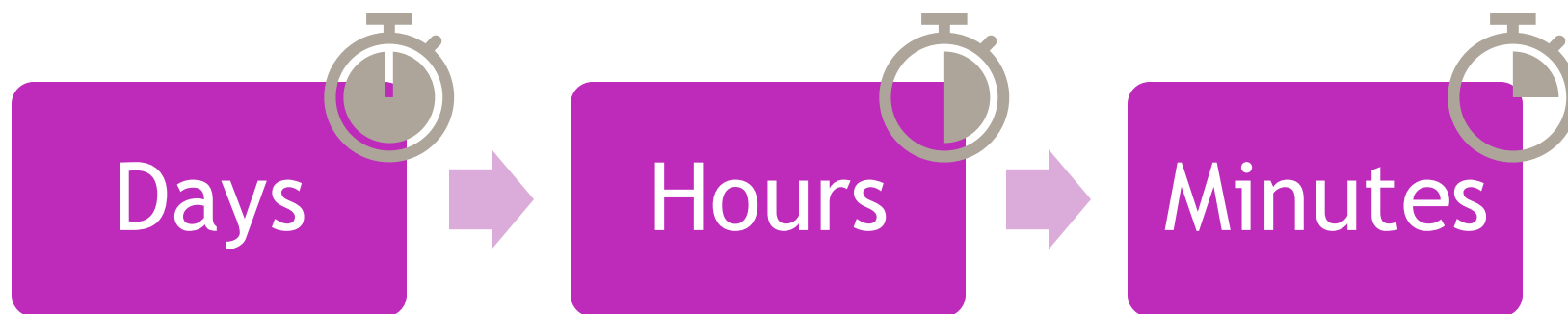


Shared backbone means everyone works faster – with fewer handoffs.

From Days... to Minutes

Time to insight shrinks dramatically

- Insight in minutes, not days
- Insight in minutes, not days
- Faster paths to better medicines



Road Ahead



Thank You!



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