evidation

New ways to measure health in everyday life, incorporating the science of patient input

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With everyday behavior data, the nature of patient input is changing
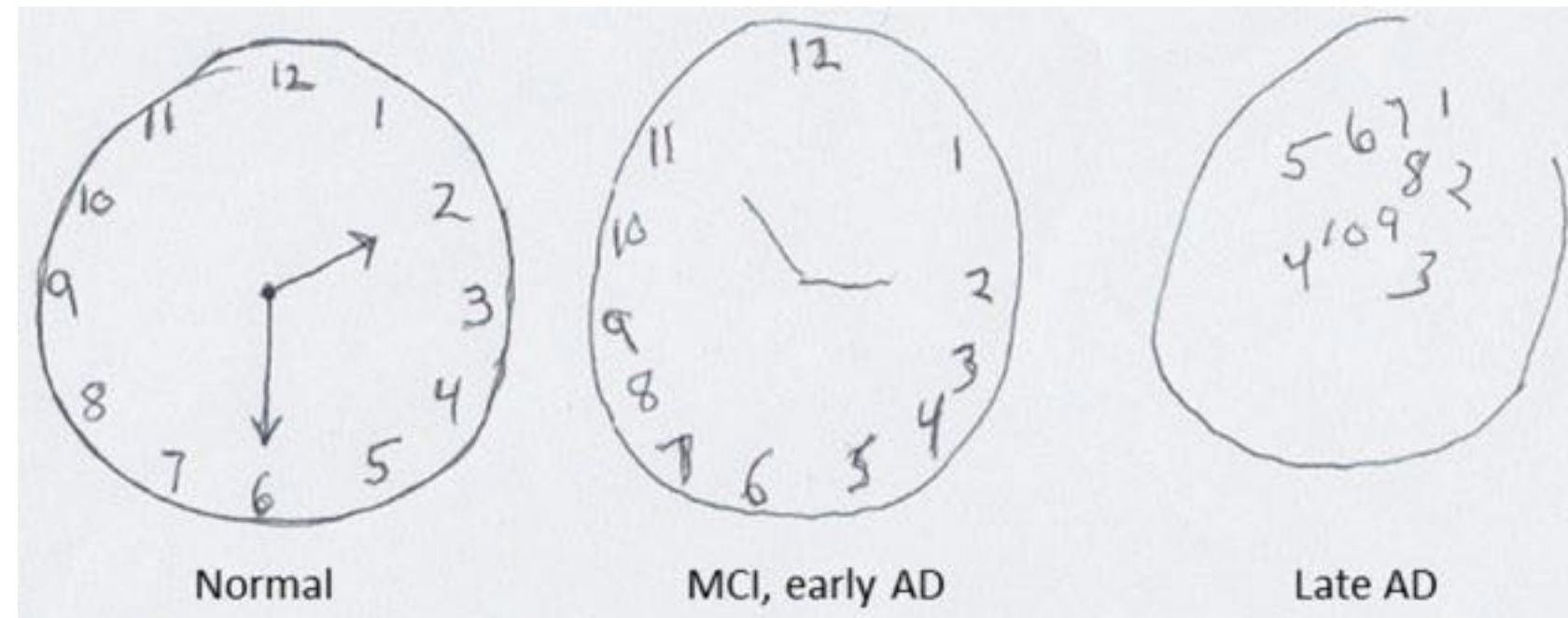
Diet

Social

Location

Video

Sleep

Stress

Speech and voice

Movement

Exercise

App interactions

We are working with one of our partners to examine how novel forms of patient input can help us understand cognitive decline.

CLOCK TEST

Like many PROs and patient-led assessments, the test has limited ability to detect subtle changes without long observation periods and may lack visit-to-visit reliability
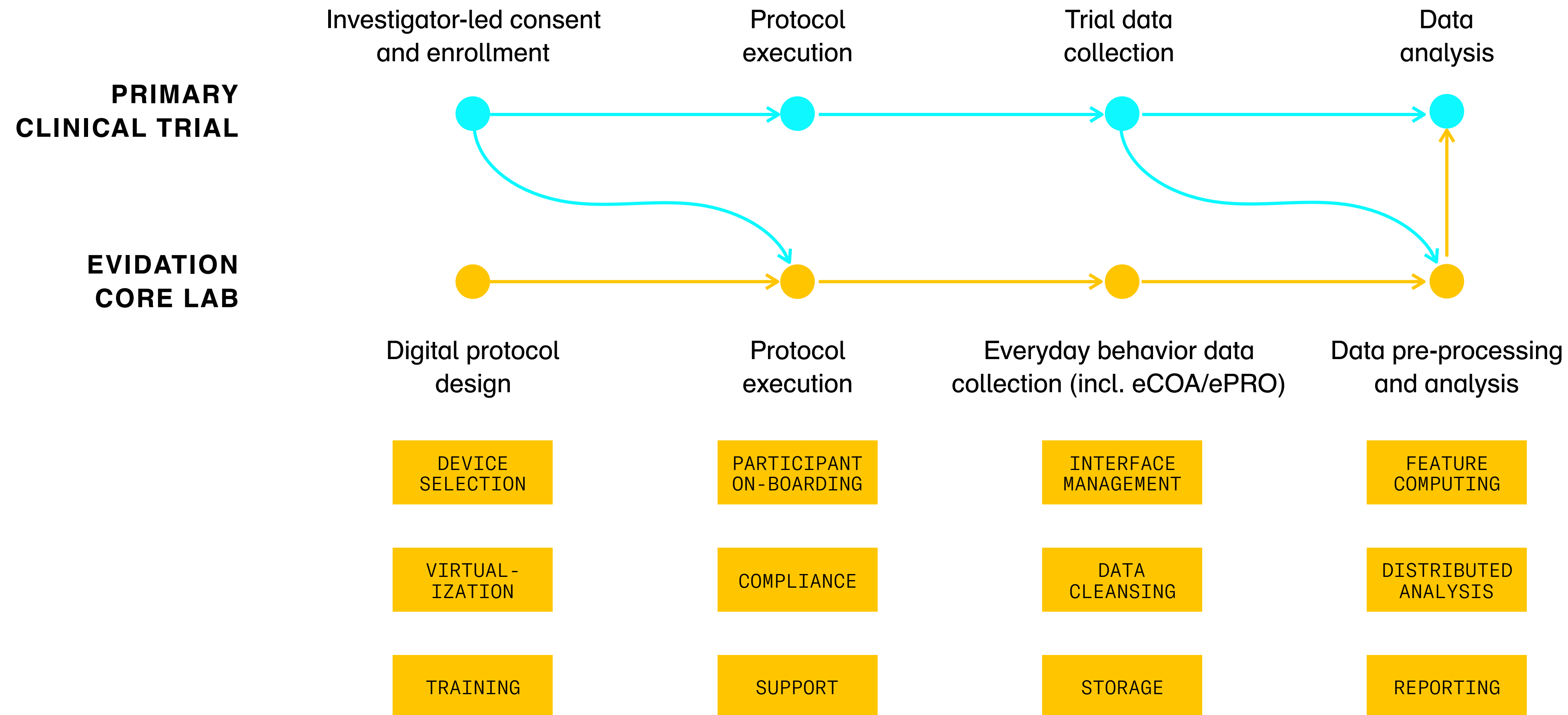

SMARTPHONE

Capture multiple types of data passively (and actively as part of a study), objectively measuring patient function through the course of their everyday lives

What if a patient could simply tell us they have mild cognitive impairment or Alzheimer's?

Before gathering novel patient inputs to support our study, we had to gather a lot of … patient input.

PRIMARY CLINICAL TRIAL

Investigator-led consent and enrollment → Protocol execution → Trial data collection → Data analysis

EVIDATION CORE LAB

Digital protocol design → Protocol execution → Everyday behavior data collection (incl. eCOA/ePRO) → Data pre-processing and analysis

Digital protocol design	Protocol execution	Everyday behavior data collection	Data pre-processing and analysis
DEVICE SELECTION	PARTICIPANT ON-BOARDING	INTERFACE MANAGEMENT	FEATURE COMPUTING
VIRTUAL-IZATION	COMPLIANCE	DATA CLEANSING	DISTRIBUTED ANALYSIS
TRAINING	SUPPORT	STORAGE	REPORTING

We built the infrastructure necessary to analyze and translate patient input, and then apply the results to future studies.

Invisible	▶	Visible

e.g., mobility and speech

Subjective	+	Objective

e.g., executive function and memory

Clinical	▶	Meaningful

e.g., 6MWT, 9-HPT

	Connect	Process	Analyze
ACTIVITY ⟶	Real-time interface, bulk data transfer	Queue (error checking, logging)	Data cleansing, normalization	Distributed analysis
MEDICAL ⟶				
CONTEXTUAL ⟶		Indexed, streaming data	Big data storage	Reporting

⟶

Specialized analysis

Activity

Voice/speech

Video

Location