

Big Data and Real World Evidence

Healthcare's most powerful currency: RWE as a patient-centric approach to Big-data

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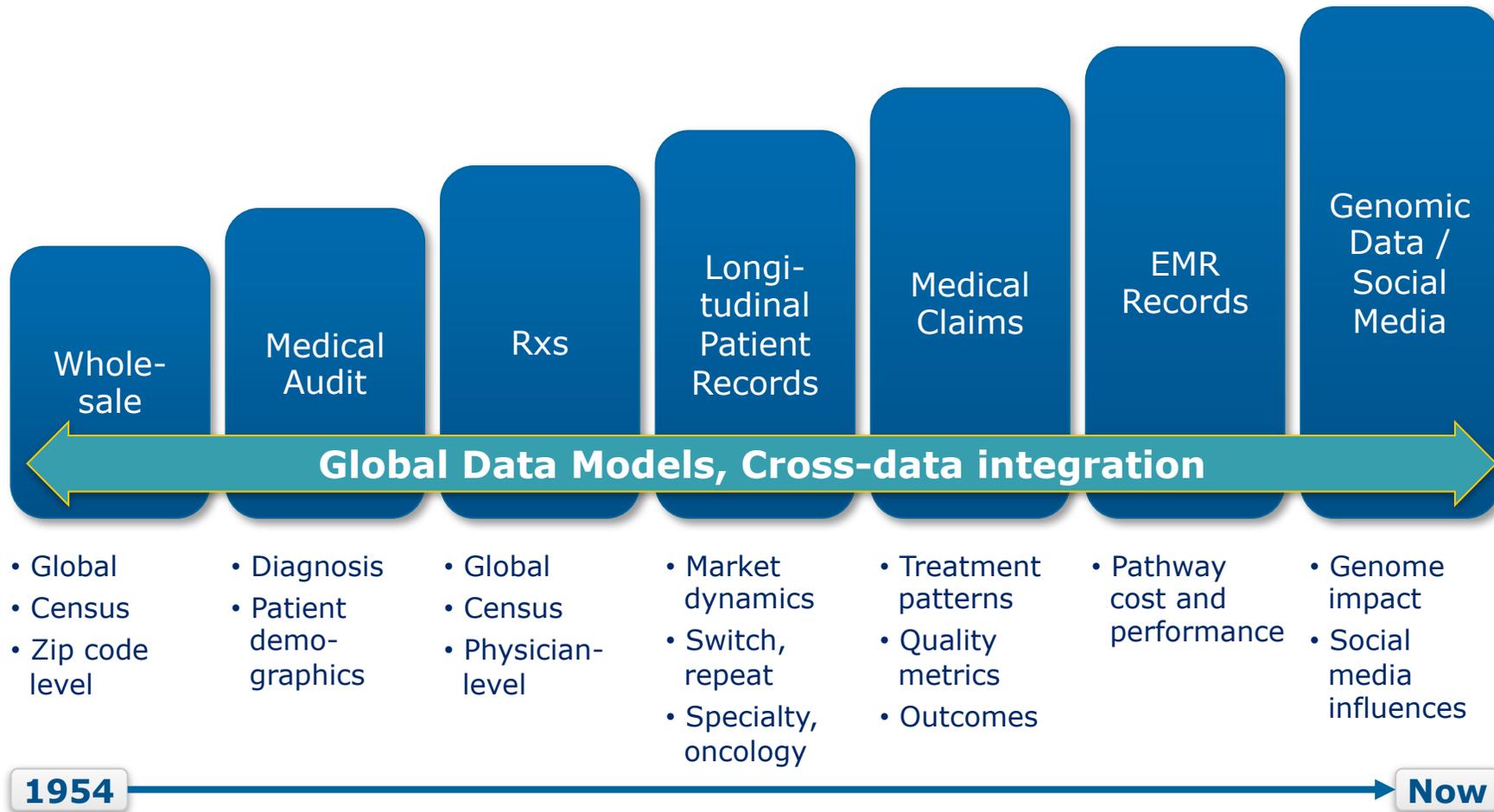
Today's take-aways

RWE a focused approach to unlock “Big Value” from “Big Data”

- ✓ **“Big Data” is necessary but not sufficient** - “Big Data” becomes valuable when organizations ask strategic and focused questions, and use information to derive insights
- ✓ **“Big Data” is different from RWD and RWE** – RWE is a focused and patient-centric approach to “Big Data”
- ✓ **Pharma underutilizes RWE-** RWE’s patient centric view can unlock up to \$1bn of sustained value for pharma, and contribute to health system value
- ✓ **“RWE Platforms” need to address systematic value capture** – capability builds include innovative information sourcing, technology platforms and consolidated analytical CoEs
- ✓ **HEOR has a stake** –RWE can challenge HEOR & Epi norms, but can also deliver more publications at high impact factor!

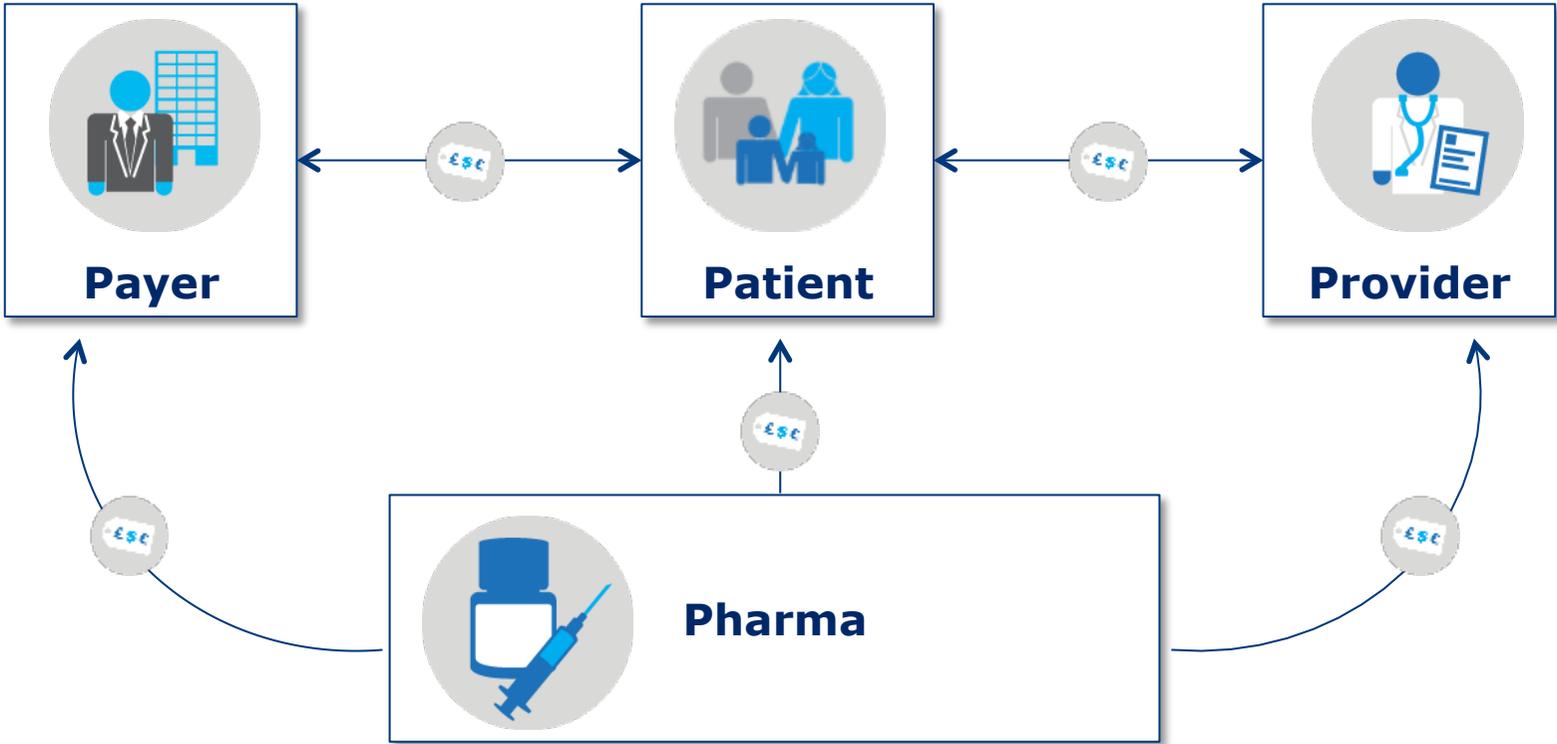
Big Data is about enabling connectivity between ever-increasing healthcare data sources

Driven by the evolution of healthcare technology

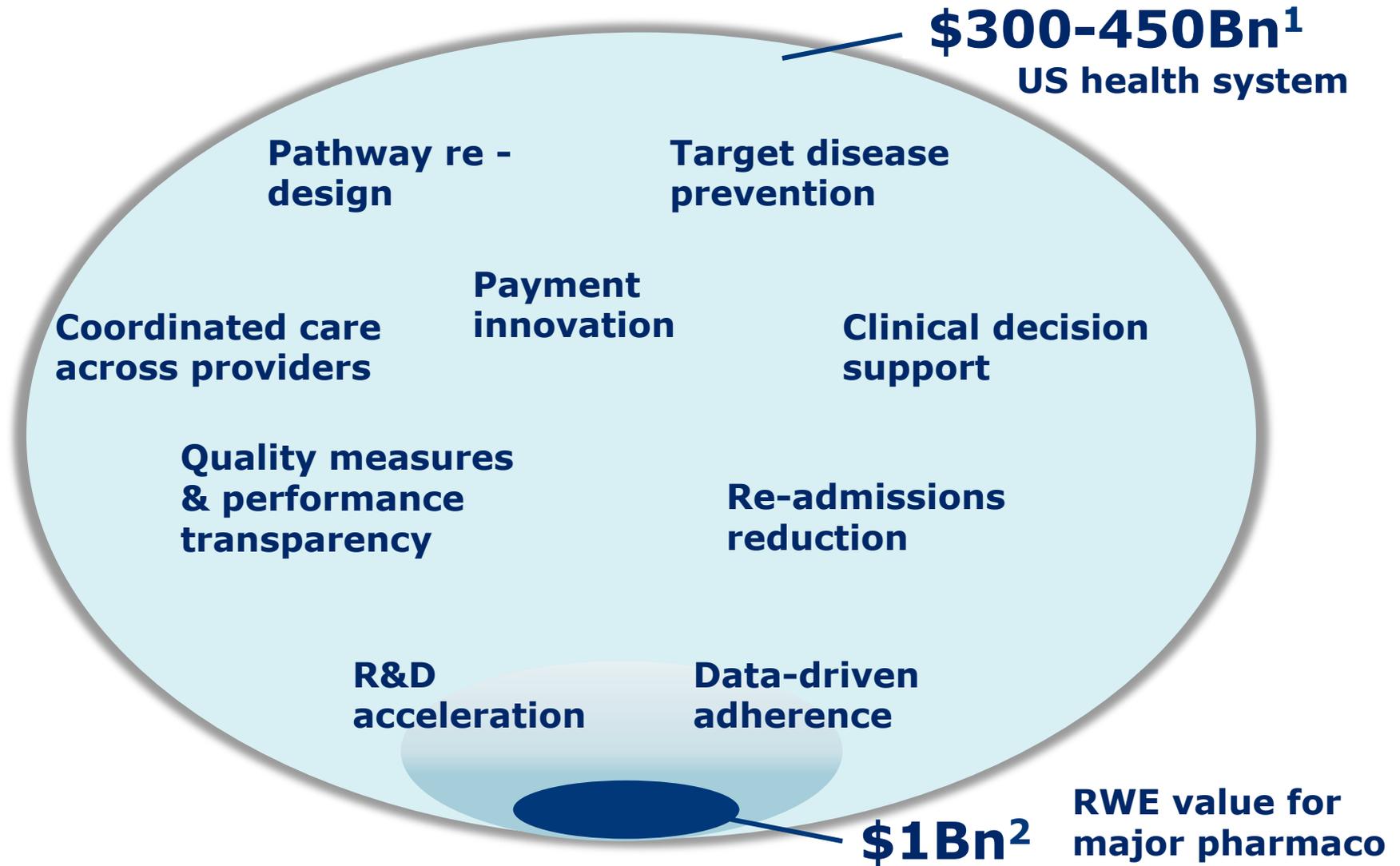


Creating value from a patient's point of view

RWE turns Big Data into healthcare's most powerful currency via an objective understanding of health outcomes, costs and quality



Big Data & RWE value at stake



1. Centre of US healthcare Reform. McKinsey & Company
2. "Breaking new ground with RWE : How Some Pharmacos are Poised to Realize a \$1 Billion Opportunity". IMS Health White Paper

Practical questions

1. Which **RWE applications** create \$1bn value for life science?
2. What **RWE capabilities** do companies need to build?
3. How do company **RWE transformations** happen?
4. What innovations does RWE need to embrace, to give back **to overall healthcare** system?

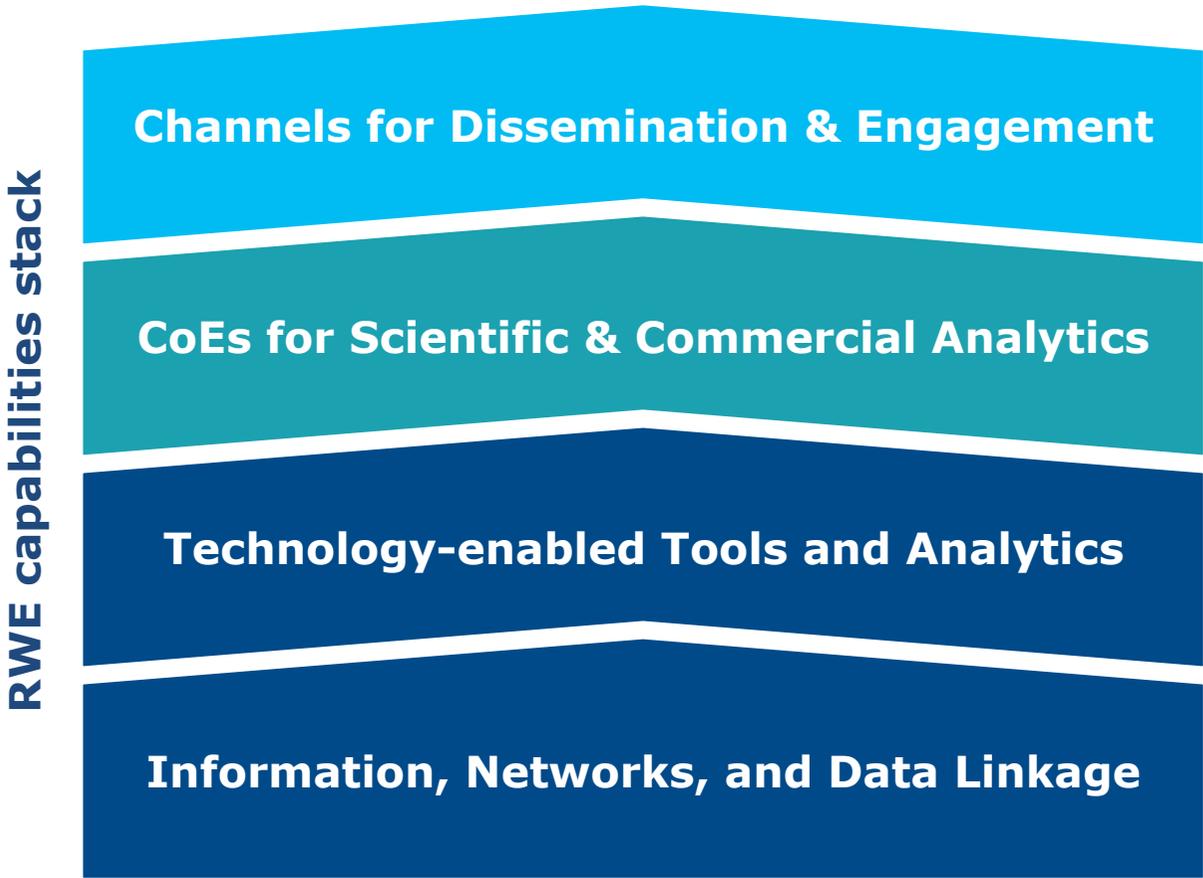
1. RWE applications creating \$1bn...



Selected companies already capturing \$400-500m

*Selected operational opportunities only; excludes increased R&D pipeline throughput and better pricing

2. "Platform" capabilities are required to capture...



Business specific
setup/build

Partially consolidated
capabilities/build

Consolidated
capabilities/buy

4. RWE innovations and health system contributions

Making RWE happen

- Tech-enabled **analytics platforms** – (beyond SaS & Excel!)
- **Privacy preserving** technologies
- **Federated access** models / Remote analytics
- **Convergence** in research methods: pRCTs, hybrid prospective-retrospective methods (EMR-eCRF)
- **Predictive analytics**

RWE contributions to healthcare system

- **Real time Medicines usage** (Uptake metrics / utilization)
- **Payment by use** / outcomes
- **Adherence** programs
- Commissioning / benefits design: & **Patient segmentation**
- Stratified pathways algorithms
- Expert **diagnostic algorithms**
- Expert **treatment algorithms**

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