Impacting R&D through pharmapayer collaboration: the AstraZeneca-HealthCore Partnership

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Outline

- Challenges faced by pharma R&D and the need for Real World Evidence (RWE)
- Gap in use of Real World Evidence (RWE) data for R&D
- How can we build data assets that can generate useful RWE?
- Case examples where RWE data have helped R&D



Challenge I: Lack of Translational Science

- In FDA's view, the applied sciences needed for medical product development have not kept pace with the tremendous advances in the basic sciences.
- The new science is not being used to guide the technology development process in the same way that it is accelerating the technology discovery process.

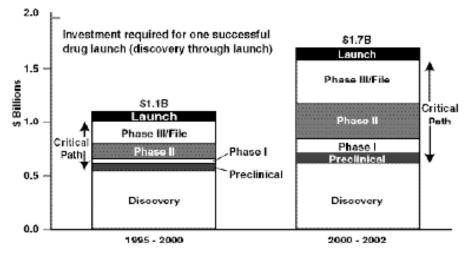


Innovation or Stagnation: Challenge and Opportunity on the Critical Path to New Medical Products. FDA, March 2004



Challenge II: Costly Attrition in Late Stage Development

- Chance of new compounds entering Phase I & reaching market decreased to 8% as compared to 14% 15 years ago
- For drugs completing phase 2, the failure rate in phase 3 has increased to 50% as compared to 20% 10 years ago
- Cost for launching a successful drug keeps increasing



SOURCE: Windhover's In Vivo: The Business & Medicine Report. Bain drug economics model, 2003



Challenge III: Long-term Safety – Needs Real World Evidence (RWE)

 Some drugs have been withdrawn from the market because of unexpected adverse effects that were not detected during Phase III clinical trials and were only apparent from long-term surveillance data from the wider patient community









Challenge IV: Comparative Effectiveness – Needs Real World Evidence (RWE)

- Need to demonstrate comparative effectiveness
 - Cost effectiveness Payer's willingness to pay
 - Clinical effectiveness (long term efficacy and safety) CER research and patient reported outcome for decision making by healthcare providers and patients
- Other related issues:
 - Lack of standardization of data (EHRs/EMRs) and analytical methods
 - Uncertainty in data quality and completeness in EHRs/EMRs
 - Uncertainty in regulatory environment



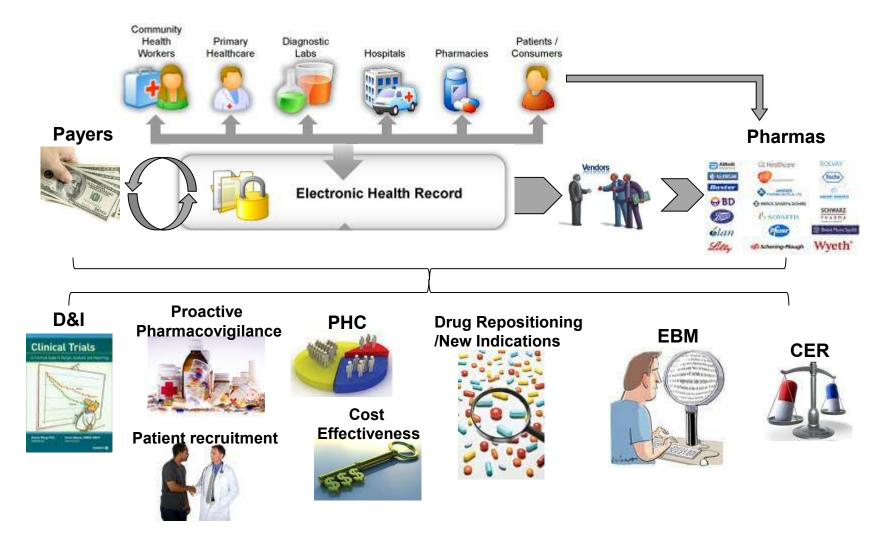






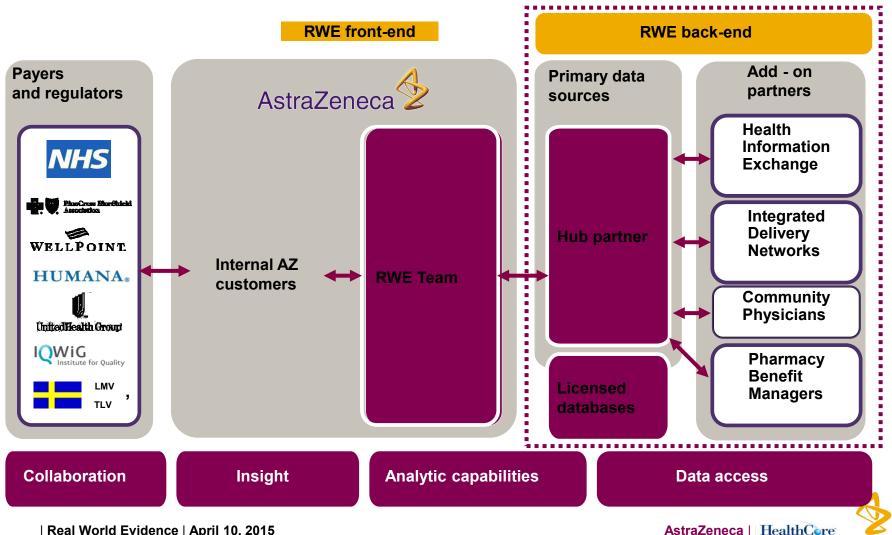


Potential Use of RWE in Pharma R&D





The RWE capability provides dedicated RWE analytics capability with enhanced data access for robust decision support **Build jointly**



THE WALL STREET JOURNAL.

Feb 3rd, 2011

AstraZeneca, WellPoint To Work On 'Real-World' Health Studies

Drug maker AstraZeneca PLC (AZN) and health insurer WellPoint Inc. (WLP) have teamed up to conduct what they're calling "real-world" studies to determine the most effective and economical treatments for chronic illnesses and other diseases. The partnership is part of a movement toward greater use of comparativeeffectiveness research...



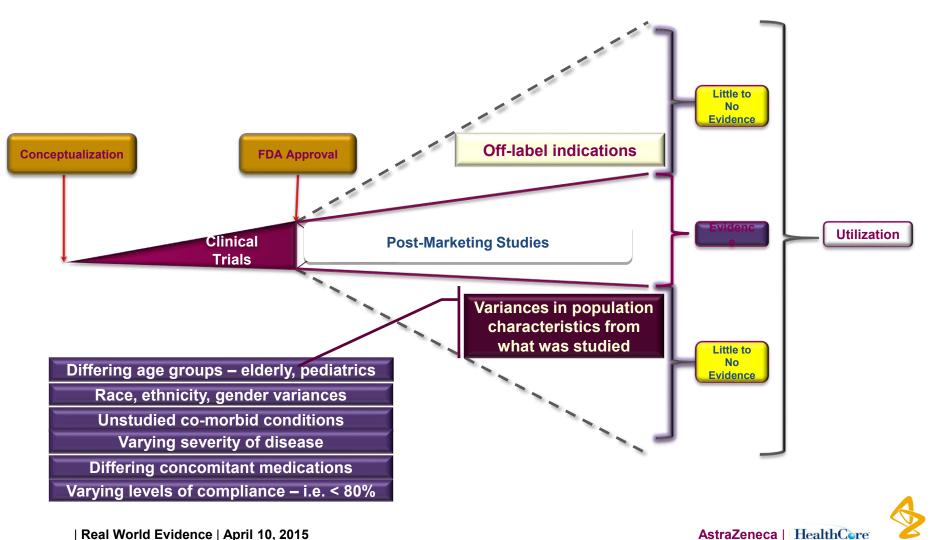
Feb 3rd, 2011

AstraZeneca, HealthCore Launch Outcomes Data Project, Seek Multi-Stakeholder Consortium

AstraZeneca and Healthcore, WellPoint's clinical outcomes research unit, have begun an evidence-development partnership to generate "real world" data on the most effective and economic ways to treat disease, with a focus on chronic ailments ..., but also addressing areas such as oncology...

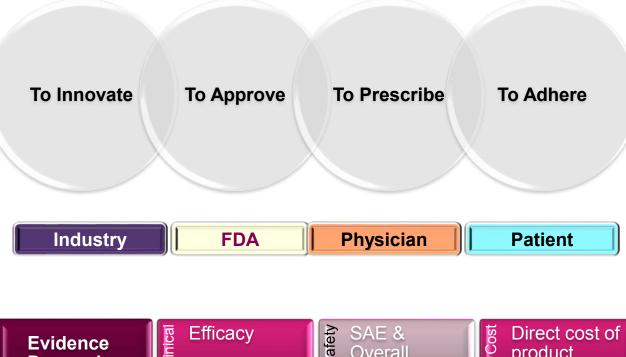


Key Contributors to Evidence Gaps



Shifting Landscape

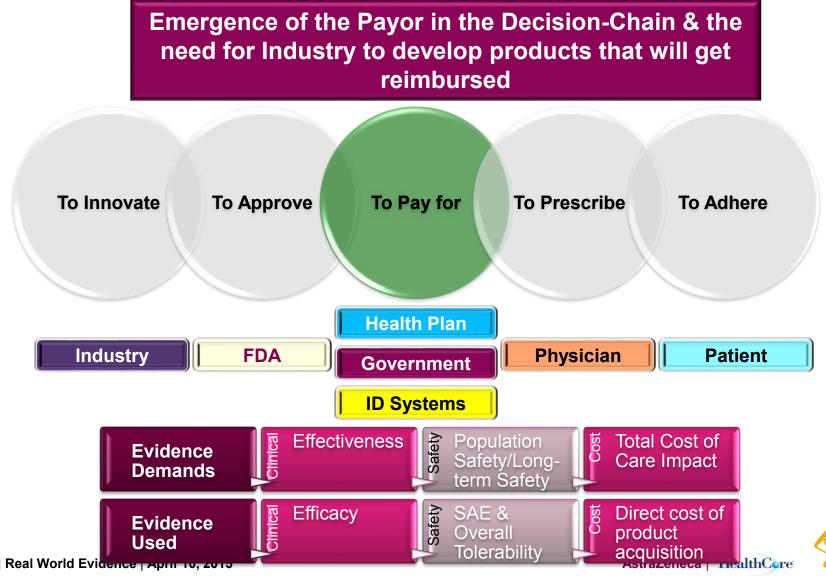
Traditional Environment for Decision-Making





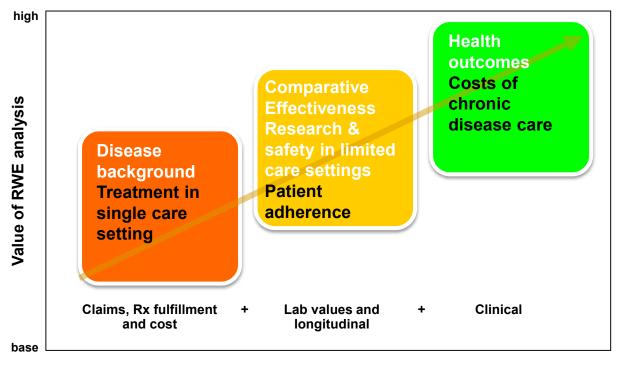


Shifting Landscape



The value of RWE data to customers

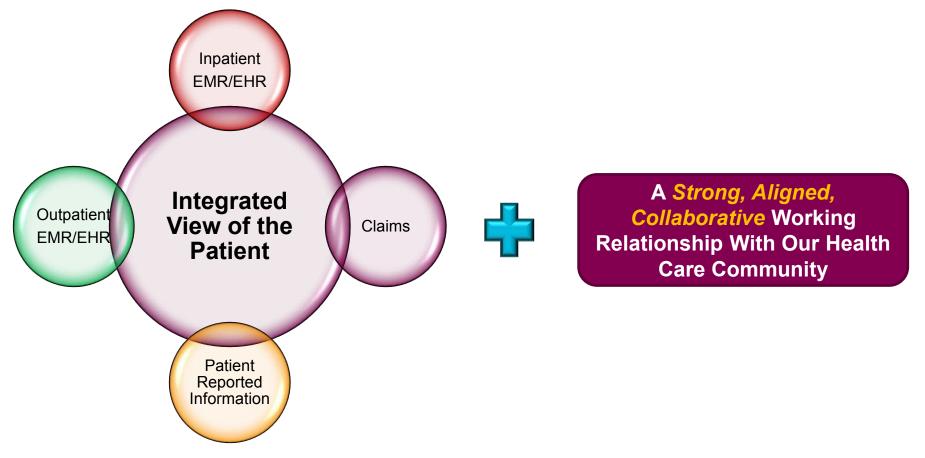
Strong correlation between data integration and RWE value



Data richness and integration

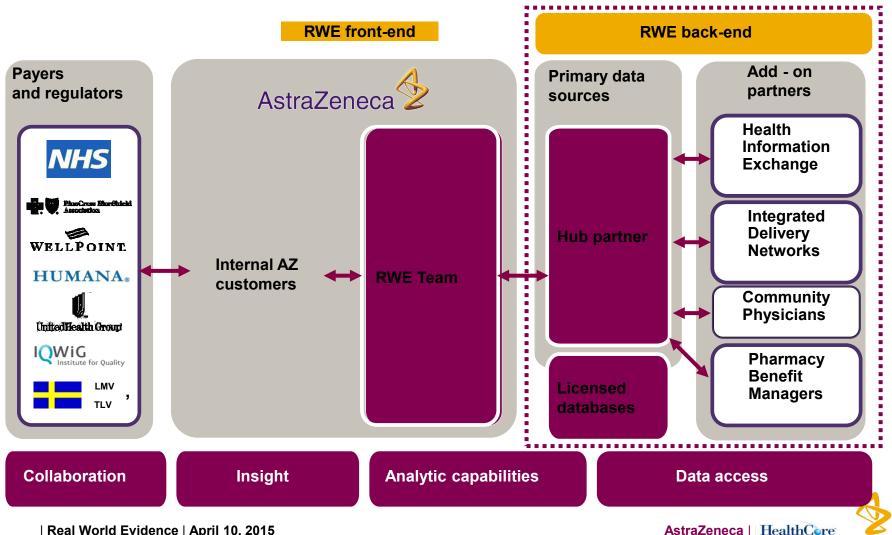


Data integration is key to quality of RWE results

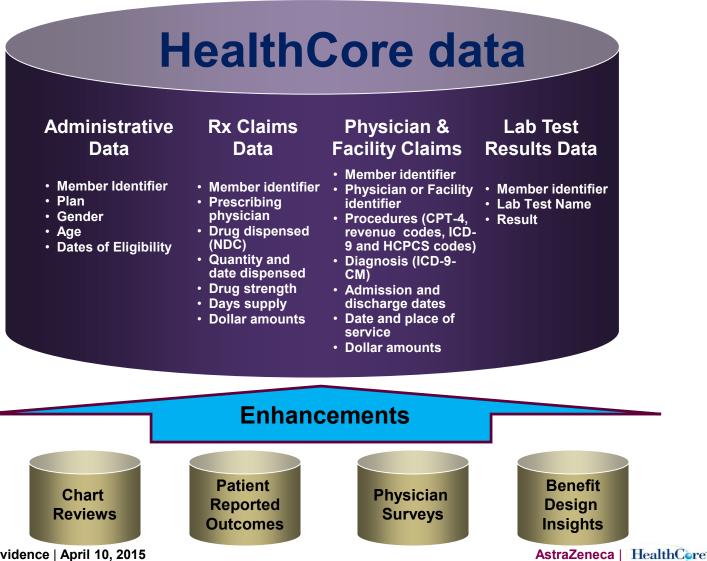




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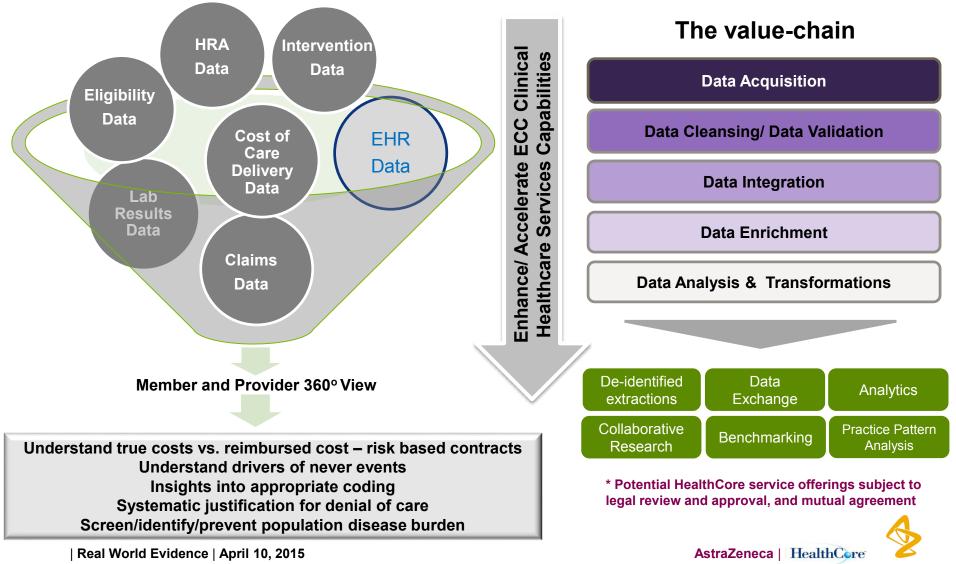


Data Environment - Elements





Advancing Outcomes Research Patient 360⁰ Proof of Concept *



Use of RWE for R&D Case Examples:

- Early drug development team requires data on treatment patterns in oncology to assess 'line of therapy fit' for their compound
- Market sizing for potential indications requires deep understanding of 'unmet' need- example: not all hyperlipidemics may be potential targets for a new compound but only those with unmet need/experiencing treatment failure may be targeted
- Comparative effectiveness studies on competing products enable R&D to assess value proposition potential of compounds

