

Insights From the IMI GetReal Project: the HTA Perspective

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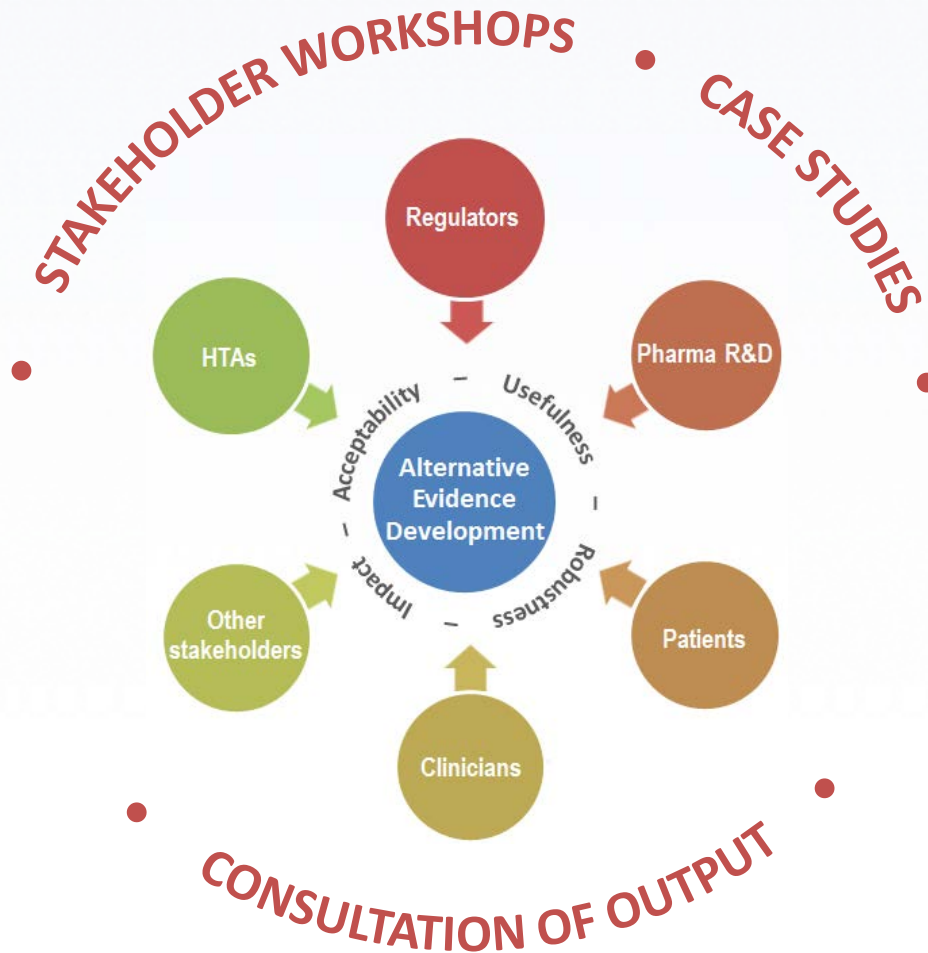
CDDF Workshop, London 6 July 2016



Data Paradigms: The Big Picture



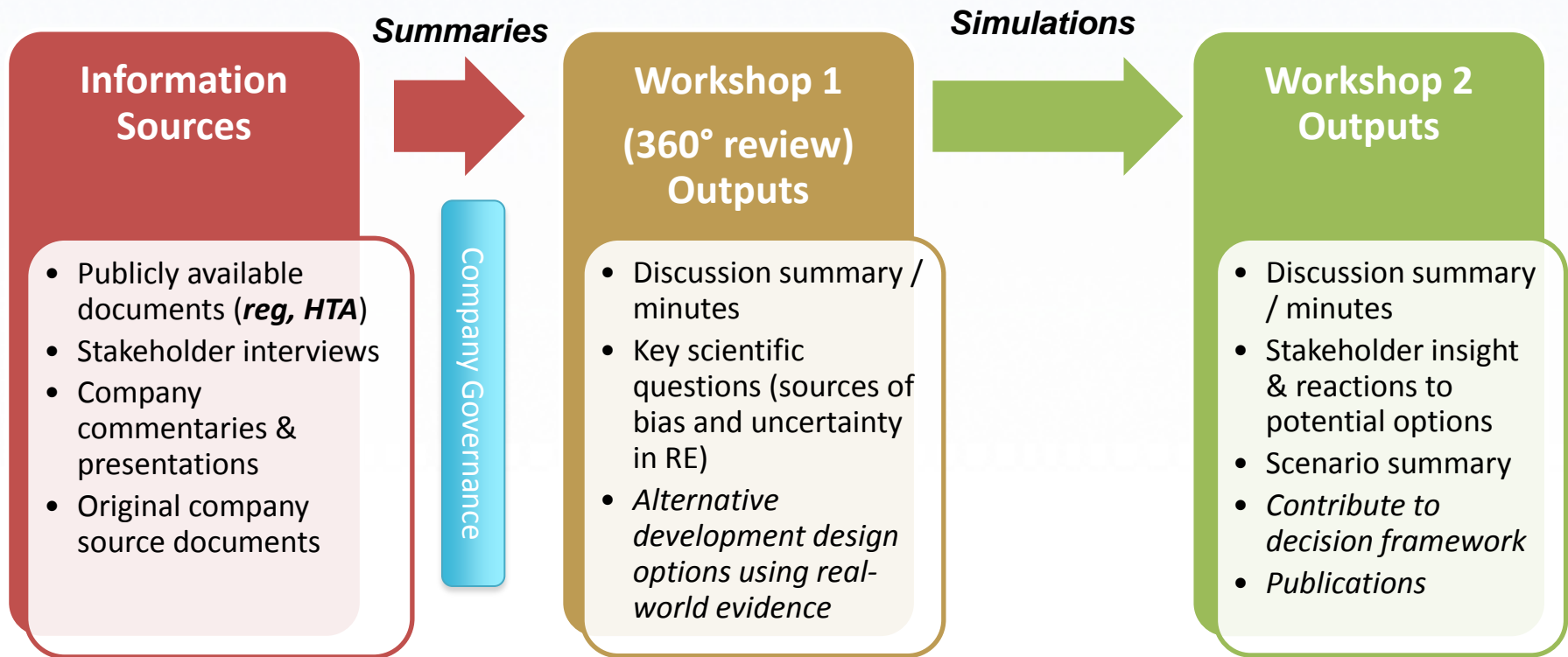
GetReal Facilitates Dialogue Between Stakeholders



Objectives

- Shared understanding of the technical and process issues from each perspective
- Shared understanding of the technical and process issues from each perspective
- Exploration of novel methodological solutions
- Compilation of best-practice recommendations
- Future research agenda
- Collaboration and trust

GetReal WP1 Case Studies: Redesigning the Development Pathway



Case Studies (I)

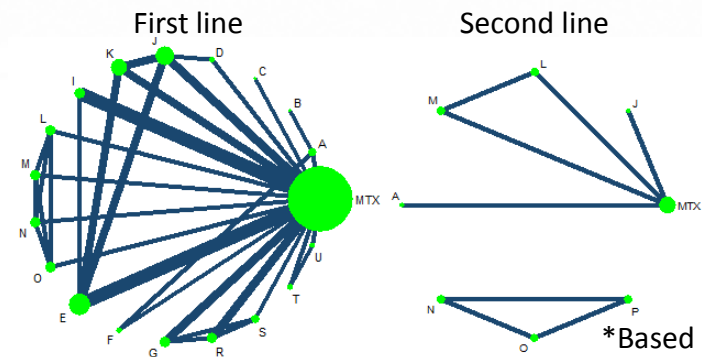
RWE for informing relative effectiveness of drugs used in different lines of treatment

“How to optimise an evidence base using first-line evidence to inform second-line effectiveness estimates?”

Six analyses ranging from ‘naïve’ pooling methods to more complex NMA models using both RCT and registry data

Simulations in rheumatoid arthritis but learnings generalisable

	Networks of evidence	1 st line	2 nd line	
Scenario A	1 st line RCTs	Study 1	✓	-
		Study 2	✓	-
		...	✓	-
		Study j	✓	-
	2 nd line RCTs	Study j+1	-	✓
		Study j+2	-	✓
		...	-	✓
	Study n	-	✓	
Scenario B	1 st and 2 nd line registry data	Unit 1	✓	✓
		...	✓	✓
		Unit k	✓	✓



Case study leads: Univ. of Leicester & Amgen

Jenkins et al. 2016 (manuscript)

Case Studies (I)

Workshop questions to stakeholders:

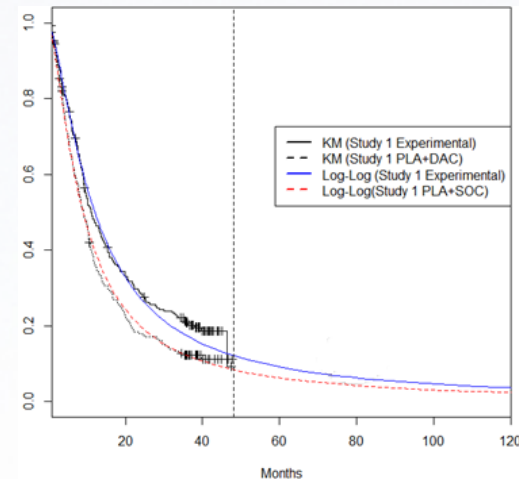
- Could you envisage using these approaches in the decision making process?
- What issues might stand in the way of adopting these methods?
- What modifications to these methods would you consider?
- Are there situations where these methods would be particularly useful (or not)?
- How can we better communicate the results from these methods and their impact on REA to engage a broad range of stakeholders?

Case Studies (II)

Using RWD to inform relative effectiveness of treatments in metastatic melanoma

Intended analyses:

- 1) Integrating phase III/IV RCT data with registries data to establish long-term outcomes
- 2) Predictive modelling of relative effectiveness (via network meta-analysis or propensity scoring)
- 3) Prediction of long term effects RCT data, using RWE



Base Case: Non-informative extrapolation of the RCT

Approach 1: Extrapolate the RCT using scientific publications, by recreating IPD from published Kaplan Meier curves and use a long-term follow up study as a reference

Approach 2: Extrapolate the RCT by re-creating IPD from the summary data available from the SEER-Medicare database

Approach 3: Extrapolation of the RCT using combined sources of RWD

Access to RWD is a barrier

Integration of RWD with RCT - planned approach:

- Access patient-level data from 3 European countries (NL, FR, IT)
- Pool data from different registries; quality & comparability
- Examine long-term outcomes (sp. overall survival)



Country X

General Procedure:

- Application form
- Research proposal
- Scientific advice committee
- Advisory committee
- Decision: In principle can see benefit of combining data from multiple countries, however access risks own publications



Country Y

General Procedure:

- Contact the secretariat
- Highlight objectives of GetReal case study
- Invitation to 1st workshop
- Acceptance but.....
- Cancellation on morning of workshop
- Repeated invitations to discuss, no replies



Country Z

General Procedure:

- Contact the principal investigator
- Highlight objectives of GetReal case study
- Invitation to 1st workshop
- Acceptance and....
- Substantial contribution to 1st workshop
- Unfortunately, the timelines to submit a proposal to the steering committee and get access to the data were outside the case study timelines



Case Studies (III)

Using social media to collect patient perspectives on QoL in melanoma (stages I-IV)

QoL may be difficult to assess and/or collect in RCTs & registries

Current QoL questionnaires may insufficiently reflect patients' needs according to literature and patient organisations

Aim: Explore the potential for health data collected via social media to supplement evidence on relative effectiveness, or how it could be developed to meet such a goal



Research questions:

1. How do patients on social media compare to the general melanoma patient population?
2. What do patients find important regarding quality of life?
3. How do these aspects relate to questionnaires on quality of life?
4. Is there a difference in patient perspectives on public and closed social media sources?

Example GetReal Outputs



Original research

- Drivers of effectiveness
- Analytical methods
- Prediction models
- Methodological guidance



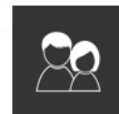
Methods

- Detection of bias
- Adjustment of bias
- Aggregate RWD in NMAs
- Individual patient RWD in NMAs



Summaries

- Study types
- Sources of data
- Methods
- Literature reviews



Case studies

- Retrospective analyses of relative effectiveness issues
- Disease area specific issues
- Stakeholder views



Tools

- Software
- Checklists & templates
- Design options for pragmatic clinical trials

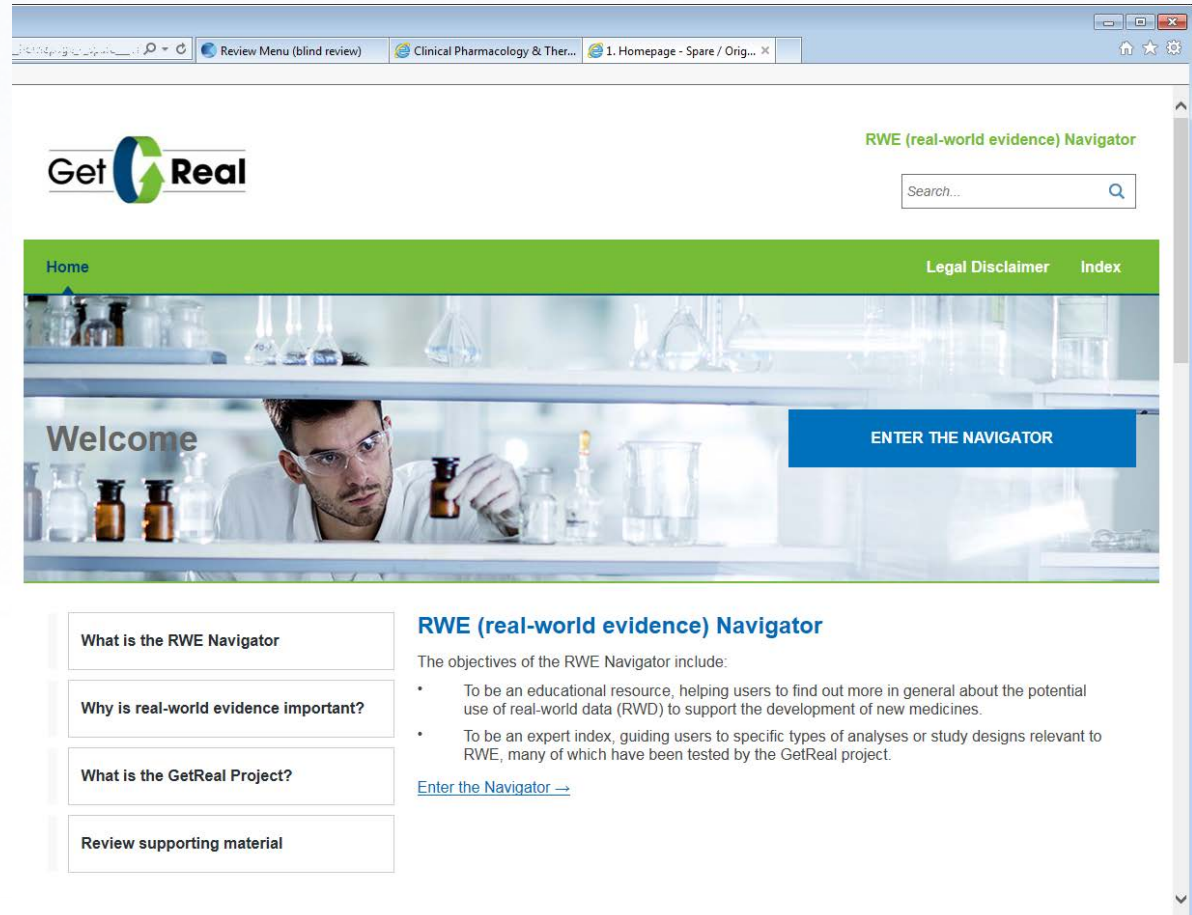
**Illustrative examples – not a complete list of GetReal outputs*

Real-World Evidence Framework

Two main functions:

An **educational resource** to help find out more in general about the potential use of RWD to support the development of new medicines

An expert resource to **guide users to specific types of analyses or study designs** relevant to RWE, many of which have been tested by the GetReal project



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