European Payer Advisors' Use of Observational Studies for Health Care Reimbursement Decisions

Susan Hogue,[1] Kelly Hollis,[1] Lori McLeod,[1] Andrew P Brogan,[1] Anne Heyes[2]

[1]RTI Health Solutions, Research Triangle Park, NC, United States; [2]RTI Health Solutions, Manchester, United Kingdom

BACKGROUND

- As cost-containment pressures across Europe intensify, the evidentiary hurdles to justify reimbursement and coverage for new drugs will continue to grow.
- Clinical trial safety and efficacy data alone are no longer adequate to meet the needs of all health care decision makers, driving a need for robust, complementary sources of real-world data related to the humanistic and societal burden of disease and to the safety, effectiveness, and value of available treatments.
- The perceived need for and acceptance of real-world, clinical, patient-centered, and/or economic outcomes through observational studies varies across stakeholders, organizations, and geographic regions.

OBJECTIVE

- To better understand how decision makers use observational studies to inform health care reimbursement and/or market access decisions for new health care products. This project extends a study on payer decision makers in the United States.

METHODS

- Reviewed published literature, health technology assessment (HTA) reports, and third-party websites to identify the types of observational studies most valuable to payer advisors in Europe.
- Conducted 10 qualitative one-on-one interviews with payer decision makers from the RTI Health Solutions (RTI-HS) European Union Payer Advisory Panel.

RESULTS AND DISCUSSION

What type of observational study data (OSD) do you use, how often, and when?

France

- OSD do not have a significant impact on decision making in the initial French National Authority for Health (HAS) evaluation of a medical technology.
  - Some burden of illness and subpopulation data may be examined, but not as part of an added value assessment of a medical technology.
  - Starting October 5, 2013, health economics data will be required for the initial HAS evaluation as part of the law on funding of social security [LFSS]) implementation, and observational data will likely become more important as a result.
- Payer advisors/HAS primarily use OSD in the re-evaluation process (e.g., 5-year HAS re-evaluation)

Germany

- OSD are viewed with a lower confidence than data from randomized, clinical trials (RCTs). Also, with the advent of the Act on the Reform of the Market for Medical Products (AMNOG), decision making is primarily based on additional benefit assessment, with little input from economic evaluations (e.g., cost-effectiveness, cost-benefit). Therefore, OSD have minimal impact on decision making, unless arbitration fails between the manufacturer and the GKV-SV (Lead Association of German Sickness Funds) and a cost-benefit assessment is commissioned.

Italy

- When available, OSD are integral parts of medical technology evaluations. One payer advisor indicated that Italy has been an early adopter in using OSD in the evaluation of medical technologies, with guidelines for observational studies released in 2008.
  - OSD are only used when a manufacturer presents these data, and one payer advisor indicated that occurred in approximately 15%-20% of evaluations.
  - Observational studies are more common in re-evaluations of medical technologies.
- OSD are used more for formulary listing decisions than pricing- or reimbursement-level decisions.

Spain

- The central government rarely uses OSD but will consider it in re-evaluations of medical technologies.
- Regional governments use OSD more frequently to "see what is happening in the real world" as mechanisms to control costs.

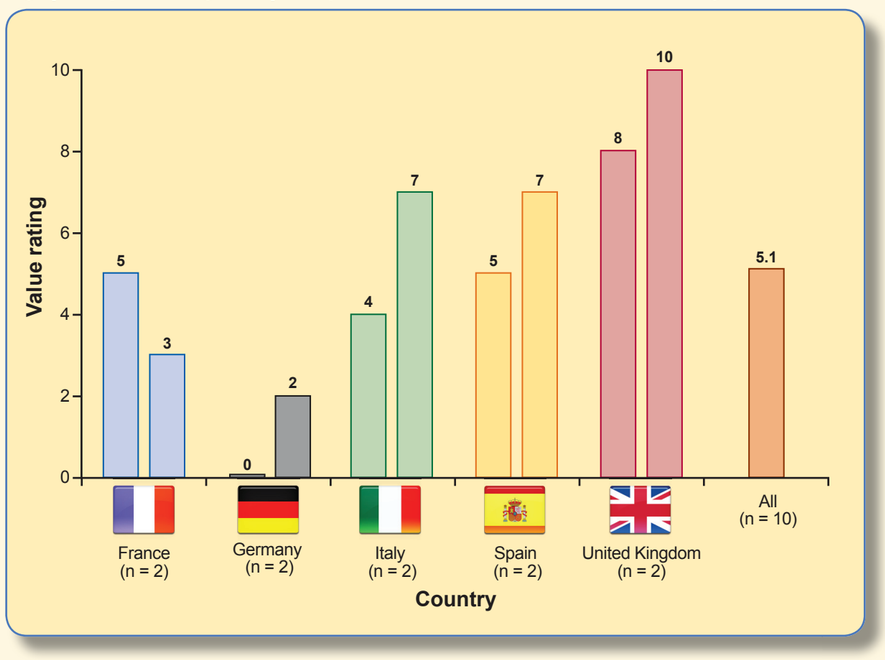
United Kingdom (UK)

- OSD are critical as they are used in cost-effectiveness/cost-utility analyses and can help fill data gaps for economic evaluation (e.g., extrapolating 3-5 year RCT data to > 10-year time horizons in cost-effectiveness/cost-utility analyses).
- Once approved, medical technologies are rarely re-evaluated in the UK (by the National Institute for Health and Care Excellence [NICE] and Scottish Medicines Consortium [SMC]); therefore, postmarketing registries and OSD are not of particular value for HTA while OSD could be required for postauthorization safety studies (PASS).

How high of a priority is OSD in decision making? (Figure 1)

- Payer advisors in the UK rated OSD higher than other countries surveyed.
  - The payer rating OSD priority as a 10 indicated:
    - "Observational study data are crucial to filling in the gaps of RCTs. RCTs are over a short period of time, provide no resource use data and often do not include a relevant comparator arm. RCTs are designed for the regulatory approval process [not for determining whether a medical technology is good value for money]."
- OSD is a low priority in Germany.
  - The payer rating OSD priority as a 0 indicated:
    - "Need to proceed slowly and educate and be transparent. Need to link observational study data to confirmed results [e.g., RCTs]."
- OSD received middling ratings in France, Italy, and Spain.

Figure 1. On a scale of 0 to 10, where 0 means "not a priority at all" and 10 is an "extremely high priority," how high of a priority is observational data in decision making?



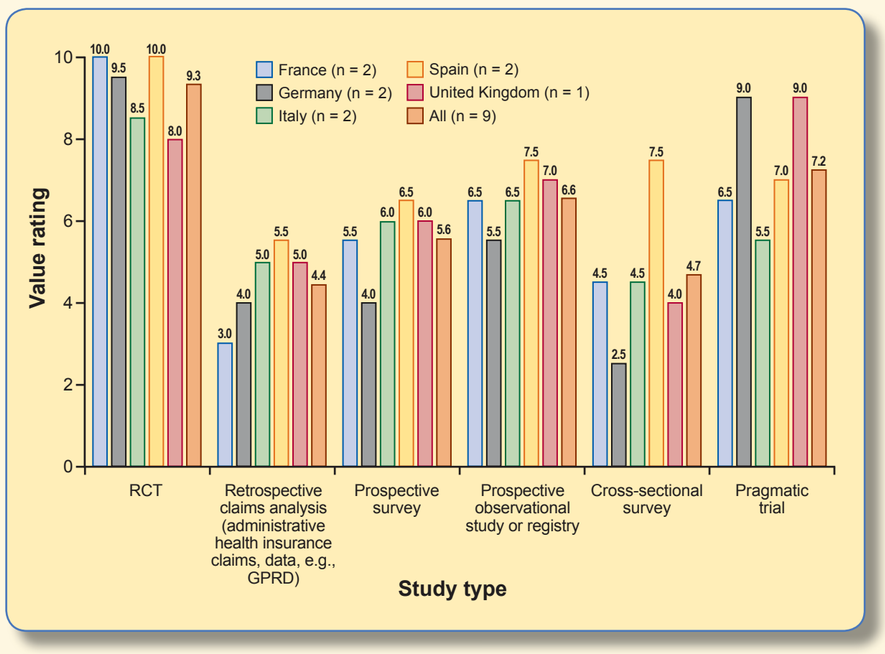
What observational study designs are most robust in your opinion?

- Payer advisors generally thought that prospective studies have more merit than retrospective or cross-sectional studies. However, payer advisors indicated that the quality and transparency of the data are key and noted that the different types of observational studies are used for different purposes.

Ratings of Specific Study Types (Figure 2)

- Payers rated the following study types as having the highest values: RCT, pragmatic trial (~23% lower than RCTs), prospective observational study or registry (~39% lower than RCTS).
- Payers rated the following studies as having the lowest values: cross-sectional survey (~50% lower than RCTs), retrospective claims analysis (~50% lower than RCTs), prospective survey (~33% lower than RCTs).

Figure 2. On a scale of 0 to 10, where 0 is a study type with no value in decision making and 10 is a study type with the highest value in decision making, please rate the following study types



- Payer advisors in Germany and the UK rated pragmatic trials higher.
  - German payers indicated that pragmatic trials can be particularly useful in decision making when they are randomized and provide economic information.
  - One payer advisor in the UK rated pragmatic trials higher than RCTs:
    - "A standard problem for HTA advisors is that the licensing studies bear little resemblance to the 'real world', so pharma struggles to estimate the likely effectiveness and cost-effectiveness in practice and we [HTA advisors] have to make a decision based on considerable uncertainty. Pragmatic trials suggest the data produced will be a better reflection of how the medicine works in real world circumstances and with a limited willingness to trade the scientific purity (absence of avoidable bias) in an RCT design for some of this realism [in a pragmatic trial]."
- Payer advisors in Spain rated cross-sectional surveys higher than payer advisors in other European countries, citing their importance when providing data on incidence and prevalence, but noting that other uses of cross-sectional surveys are less valuable to decision making.
- Both payer advisors in the UK indicated that it was difficult to rate the different observational study types because each has different purposes; one was unwilling to provide ratings for this reason.

If Pharma gave you observational data, how would you use it in decision making?

- OSD provided by Pharma are highly scrutinized and should be published in reputable journals and conducted by an academic or third-party research institute to minimize bias.
- In the UK, OSD provided by Pharma are most commonly used as input data for cost-effectiveness/cost-utility analysis.
  - One payer advisor in the UK noted that OSD must be used in proper context for the type of decision making.
- In France, Italy, and Spain, OSD are accepted, but used in decision making differently than in the UK.
  - OSD help define the market and routine care in the initial evaluation of medical technologies.
  - Postmarketing observational studies are more common in re-evaluations to provide data on real-world use of medical technologies.
- For Germany, both payer advisors were skeptical of OSD provided by Pharma and would consider OSD only if other data were not available.
  - One payer advisor indicated that the Institute for Quality and Economic Efficiency in Health Care (IQWiG) has a rating system for certainty of results: highest (e.g., RCT), moderate, and low (e.g., observational studies) .

Are OSD used in pricing negotiations?

- In France, pricing negotiations are not public. Both payer advisors indicated that they are not privy to negotiations; however, economic discussions take place, and OSD may be considered, particularly as they apply to estimating the market size, budget impact, and cost-effectiveness.
- In Germany, pricing is largely based on additional benefit as outlined in AMNOG. Negotiations on refund rates (net pricing) for medicines with additional benefit occur between the National Association of Sickness Funds (GKV) and are not public. These negotiations consider observational studies, particularly as they relate to market size, budget-impact, and cost-effectiveness.
- In Spain and Italy, studies in addition to RCTs are not required but are useful in defining market size, efficacy, budget-impact, and/or cost-effectiveness.
- In the UK, price is based on cost/quality-adjusted life-years, and OSD can be key for economic evaluation. Value-based pricing will be implemented in the UK starting January 2014.

Would medicine/HTA dossiers including OSD help give favorable recommendations?

- 70% of payers indicated that inclusion of observational study data is helpful and in some cases essential.
- For Germany, both payers were apprehensive about OSD included in the medicine/HTA dossier.
  - One stated that OSD in the medicine/HTA dossier is not helpful and likely indicates that the RCT data are lacking.
  - The other stated that OSD is helpful only in select instances.
- For France, one payer thought that OSD could be helpful in re-evaluations but unlikely to be helpful in initial evaluations
  - The other indicated that OSD will be an integral component in the medicine/HTA dossier and the implementation of the economic requirements of LFSS after October 5, 2013.

CONCLUSIONS

- Observational studies help inform payer decision making, but the validity and robustness of the results are often scrutinized; publication in peer-reviewed journals lends critical credibility.
- Most registration trials are either placebo-controlled or are noninferiority; this lack of head-to-head comparative data can limit decision makers.
  - Supplementing RCT data with robust OSD is decision-making tool that is used by many payer advisors in Europe.
  - As Fleurance et al. (2010) note, "Observational studies can link together data sets that offer a wealth of information about real-world interventions and outcomes."
- As reimbursement decision makers continue to rigorously review new drug therapies, accurate, robust, peer-reviewed published and generalizable real-world data will become particularly important for economic evaluations, outcomes, and health care budget management, both in the United States and Europe.

REFERENCES

1. Hogue S, Scott A, van Amerongen D, Hollis K, McLeod L, Brogan AP. Value In Health 2013;16(5):906.
2. Fleurance RL, Naci H, Jansen JP. Health Aff (Millwood). 2010 Oct;29(10):1826-33.

CONTACT INFORMATION

Susan Hogue, PharmD, MPH

RTI Health Solutions
Phone: +1.919.541.6213;
E-mail: shogue@rti.org

Presented at: ISPOR 16th Annual European Congress
November 2-6, 2013
Dublin, Ireland