care environment, and data analytics. **CONCLUSIONS:** The integration of pharma-
cogenomic testing with real-world studies offers an important opportunity to iden-
tify sub-groups of patients for whom treatment is more effective in terms of clin-
ical, and safety outcomes. Alongside resource utilization and cost of care data, this
evidence can be used to populate cost-effectiveness and other health economic
analyses to inform physician and payer decision-making.

**PRM5**

**VALIDITY OF REQUIRING A MINIMUM DURATION OF POST-INDEX ENROLLMENT IN RETROSPECTIVE DATABASE STUDIES**

Lanes SF
United BioSource Corporation, Lexington, MA, USA

**OBJECTIVES:** Retrospective database studies commonly use an inclusion criterion
requiring that subjects have a minimum duration of post-index enrollment (i.e.,
follow-up). Such a criterion can simplify analysis and facilitate computation of
annual costs. In clinical trials, however, similar strategies, such as analyses re-
stricting to patients with minimum durations of follow-up can distort outcomes
as problematic because reasons for discontinuation may be related to study end-
points (i.e., informative censoring).

**METHODS:** We reviewed methodologic litera-
ture and we used a health insurance claims database to evaluate the impact on
health care utilization and costs of excluding subjects lost to follow-up. **RESULTS:**
Excluding from analysis subjects with incomplete follow-up may be valid if pat-
ients are missing at random. Unfortunately, this assumption can rarely be verified
because endpoints are usually unknown for patients who are lost to follow-up.
In an insurance claims database, an inclusion criterion requiring one year of fol-
low-up decreased health care utilization and average annual costs by 8% for a
random sample of subjects, and by 17% among subjects with a serious illness.

**CONCLUSIONS:** Subjects are lost to follow-up in both clinical trials and retrospec-
tive database studies (e.g., by exiting the database). Study populations should not
be defined in such a way as to exclude subjects lost to follow-up; instead, subjects
lost to follow-up should be considered as a missing data problem. In retrospective
database studies, just as in clinical trials, if endpoints among subjects lost to fol-
low-up differ from endpoints among subjects remaining in the database, restrict-
ing analysis to patients with minimum durations of follow-up can distort outcomes
as problematic because reasons for discontinuation may be related to study end-
points (i.e., informative censoring).

**PRM8**

**GENERAL TRANSFERABILITY OF MODEL-BASED ECONOMIC EVALUATIONS**

Carwell C, McWilliams F, Williamson KA, Faulds D
Adis, Auckland, New Zealand

**METHODS:** Economic evaluations of drug therapy are important, but time con-
suming and costly. Analyses that are easily transferable (i.e. adjustable to a differ-
ent jurisdiction without completely rebuilding the model) may potentially save
time and resources. We aimed to develop a tool to assess and summarize the
general transferability of model-based analyses. **METHODS:** Medline was searched
for literature on transferability published between 2002 and June 2011. Existing
checklists for economic evaluations were adapted to create a checklist of 16 key
factors to assess the general transferability of model-based analyses. This tool
was used to score 11 recently published economic evaluations and identify how well
specific factors were addressed. **RESULTS:** Transferability scores of the selected
papers ranged from 53-91%, illustrating the wide variability in the quality of re-
porting. Across all studies, the least well addressed transferability factors included
the discussion of the generalizability of the study results (lacking or incomplete in all
studies), the treatment of resource use and costs employed in the analysis
(particularly separate reporting of resource use and unit costs), and adequate de-
scriptions of the method and/or populations used to derive utility values. The best
addressed transferability factors included those relating to country, currency and
discount rates. Even if studies scored highly overall, it may still be difficult to
transfer the findings to a different setting if they failed to report insufficient detail
on one or two key parameters. **CONCLUSIONS:** The general transferability of a
model-based economic evaluation from one country or jurisdiction to another can be
quickly assessed by the appraisal of key transferability factors. It is important that authors ensure that they report their economic analysis
in a detailed and transparent fashion.

**PRM9**

**RELEVANCE AND QUALITY OF THE PHARMAECONOMIC LITERATURE OF FDA RECENTLY APPROVED DRUGS: A SYSTEMATIC REVIEW**

Werghsing AL, Raisch DM, Borrego M
University of New Mexico College of Pharmacy, Albuquerque, NM, USA

**OBJECTIVES:** There are currently a myriad of meta-analysis techniques in
application. While some guidelines and recommen-
ded practices exist, there are very few papers that compare meta-analysis
techniques in application. **OBJECTIVES:** To review primary meta-analysis methods and
their assumptions, and apply various meta techniques to data and compare the results.
We then explored random effect models and meta regression. Each of these
techniques models treatment heterogeneity. Other more advanced techniques ex-
mained included mixed treatment comparisons (MTC) and Bayesian approaches.
**RESULTS:** Estimates of treatment effect differed depending on the meta technique
applied. When a fixed effect model was applied to estimate the effect of a vaccina-
tion against tuberculosis, the log odds ratio was 0.06 (confidence interval [CI:
0.50, 0.34]). After testing for heterogeneity and fitting a random effects model, the
estimate was reduced to -0.741 [CI [-1.12, -0.352]], and the CI became wider.
When covariates were added to the model to explain the heterogeneity, the treat-
ment effect was reduced even further. Additional techniques were applied as well,
such as Bayesian MTC. **CONCLUSIONS:** The findings from the study were sensitive to the
methods used, in addition to the methodology applied. To ensure that proper
tools are used, it is critical to estimate an unbiased outcome.

**RESEARCH ON METHODS - COST METHODS**