There was evidence that total staff, RN, and LPN hours had positive effects on some resident outcomes and magnitude of effect differed for different nursing staff.

Conclusions. No definitive conclusion could be drawn on whether changing nursing staff time or nursing staff coverage models would affect residents' outcomes based on the research evidence gathered in the SR. RWE analysis helped to fill a gap in the available published literature and allowed policy makers to better understand the impact of revising current regulations based on actual outcomes.

OP49 MAIC-ing Use Of Trials? Study Of Matching-Adjusted Indirect Comparisons

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Introduction. When conducting a Network Meta-Analysis (NMA) for a Health Technology Assessment (HTA), the submitting company typically will have access to Individual Patient Data (IPD) from their own trials, but only aggregate data (AgD) for the comparator. In this case, they can re-weight the IPD so that the covariate characteristics in the IPD trials match that of the AgD trials, using the increasingly popular method of Matching-Adjusted Indirect Comparison (MAIC).

Methods. We carried out a simulation study to investigate this method in a Bayesian setting. We simulated three IPD trials comparing treatments A and B (AB-IPD trials), and one aggregate data trial comparing treatments B and C (BC-AgD trial). We investigated two options of weighting covariates: 1. all three studies are weighted separately to match the BC-AgD trial (MAIC Separate Trials). 2. patients are weighted across all three IPD studies to match the BC-AgD trial, but the NMA still considers each trial separately (MAIC Pooled Trials). We compared the results of the MAIC to a standard NMA and a mixed IPD/AgD NMA. We applied these methods to a network of treatments for multiple myeloma.

Results. MAIC can provide more accurate estimates of the relative treatment effects than a standard NMA in the BC-AgD trial population. However, MAIC may decrease the accuracy of the relative treatment effects in the overall population. Treatment rankings were unchanged when applying MAIC to the multiple myeloma network.

Conclusions. MAIC is beneficial as a sensitivity analysis to demonstrate that results hold across patient populations. If there is a difference in relative treatment effects attributable to population imbalances, then it is useful to be able to quantify this difference. However, we recommend using either a standard NMA or a mixed IPD/AgD NMA for the base case analysis, given the potential bias that can arise in an MAIC.

OP50 IQWiG And GRADE – An Exemplary Comparison Of Methods

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Introduction. Efforts to harmonize health technology assessment (HTA) processes and methods across Europe are currently intensified. In this context, the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach has been proposed as a "common ground" in joint HTAs. However, GRADE has been primarily developed to support authors of clinical guidelines. Therefore, it is unclear whether HTA reports based on GRADE are compatible with the methods currently applied by European HTA organizations.

Methods. We contrasted IQWiG's methods paper and publications by the GRADE Working Group with regard to the following domains: 1) risk of bias (RoB) assessment 2) prerequisites for "greater benefit" (assuming that IQWiG's "greater benefit" corresponds to a GRADE assessment of at least low certainty and a small important effect) and 3) consideration of non-randomized studies (NRS). We present illustrative differences and highlight similarities.

Results. Overall, RoB assessments are very similar under both approaches. However, we identified several important differences. In case of very severe publication bias, IQWiG methods preclude drawing a conclusion, whereas GRADE requires only downgrading the certainty of evidence while still allowing for a conclusion on effect sizes. Secondly, IQWiG generally requires a statistically significant effect for a "greater benefit", while GRADE does not (statistically non-significant effects would only necessitate downgrading the certainty of results for imprecision). Another difference is that in general, NRS are not included in IQWiG assessments when randomized studies (RS) are available and thus possible. In contrast, preliminary GRADE guidance recommends considering NRS in addition to RS when the RS evidence is of low or very low certainty.

Conclusions. While GRADE and IQWiG's method share some similarities, our exemplary analysis shows that there are some notable differences. Therefore, GRADE should not be used "out of the box" for European HTAs. To foster further discussion, more research (including a comprehensive comparison of methods and an analysis of resources for adaptation) is needed.

OP52 Use Of Intention To Treat And Magnitude Of Treatment Effects

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Introduction. Intention to treat (ITT) is a gold standard strategy to analyze the results of randomized controlled trials (RCTs). ITT analysis has been considered a methodological indicator of the quality of clinical trials. The extent to which the use of ITT is related to the treatment effects observed in RCTs has not been rigorously explored. Therefore, the main objective of this study was to determine the association between biases related to attrition and missing data and the use of intention to treat principle, and changes in effect size estimates in RCTs.

Methods. This was a meta-epidemiological study. A random sample of RCTs included in meta-analyses was identified. Data extraction including assessments of the use of intention to treat principle, missing data and drop-outs was conducted independently by two