Overcoming Barriers to International Collaboration & Transferability

Addressing Research/Technical Issues

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Research/Technical Issues

- Maximizing transferability of CMFs:
  - Issues
  - Research protocols
  - Study approaches
- Information for decision-makers
- Assessing existing CMFs
Research/Technical Issues

- Data issues
- Statistical Rigor
- Aggregating Results from Multiple Studies
- Regional Differences
- Documentation
Data Issues

- Data sets available
- Making more data available
- Sample sizes sufficient
Statistical Rigor (Frank Gross)

- Before-after
  - Comparison group
  - Empirical Bayes
  - Full Bayes
- Cross-sectional
- Case-control
- Cohort
- Alternative methods
Aggregating Results from Multiple Studies (Rune Elvik)

- Which studies to include
- Weighting data by precision
- Weighted regression analysis
- Fit a summary function to the data
- Aggregate data points
Regional Differences

- Crash reporting variations
- Definition of sample size
- Vehicle fleets vary
- Cultural influences
Documentation

- Circumstances under which CMFs were developed
  - Safety condition before countermeasure
  - Full description of what was implemented
  - Roadway characteristics
  - Statistical analysis performed
Questions

• How should we deal with multiple treatments?
• How can we test the transferability of CMF’s?
• How might we calibrate CMF’s across developed and developing countries?
• How robust must a study be to be acceptable?
Summary

• A lot of work is needed
• Best use of limited research dollars
• How to maximize the international application of research results
• How can we overcome the barriers that have been discussed?