21. Generalisability: Discuss the generalisability (external validity) of the study results

**Example**

“How applicable are our estimates to other HIV-1-infected patients? This is an important question because the accuracy of prognostic models tends to be lower when applied to data other than those used to develop them. We addressed this issue by penalising model complexity, and by choosing models that generalized best to cohorts omitted from the estimation procedure. Our database included patients from many countries from Europe and North America, who were treated in different settings. The range of patients was broad: men and women, from teenagers to elderly people were included, and the major exposure categories were well represented. The severity of immunodeficiency at baseline ranged from not measureable to very severe, and viral load from undetectable to extremely high.”

**Explanation**

Generalizability, also called external validity or applicability, is the extent to which the results of a study can be applied to other circumstances.[216](http://journals.lww.com/epidem/Fulltext/2007/11000/Strengthening_the_Reporting_of_Observational.28.aspx#R216-28) There is no external validity per se; the term is meaningful only with regard to clearly specified conditions.[217](http://journals.lww.com/epidem/Fulltext/2007/11000/Strengthening_the_Reporting_of_Observational.28.aspx#R217-28) Can results be applied to an individual, groups or populations that differ from those enrolled in the study with regard to age, sex, ethnicity, severity of disease, and co-morbid conditions? Are the nature and level of exposures comparable, and the definitions of outcomes relevant to another setting or population? Are data that were collected in longitudinal studies many years ago still relevant today? Are results from health services research in one country applicable to health systems in other countries?

The question of whether the results of a study have external validity is often a matter of judgment that depends on the study setting, the characteristics of the participants, the exposures examined, and the outcomes assessed. Thus, it is crucial that authors provide readers with adequate information about the setting and locations, eligibility criteria, the exposures and how they were measured, the definition of outcomes, and the period of recruitment and follow-up. The degree of nonparticipation and the proportion of unexposed participants in whom the outcome develops are also relevant. Knowledge of the absolute risk and prevalence of the exposure, which will often vary across populations, are helpful when applying results to other settings and populations.