# Number needed to treat

The number needed to treat (NNT) is an epidemiological measure used in communicating the effectiveness of a health-care intervention, typically a treatment with medication. The NNT is the average number of patients who need to be treated to prevent one additional bad outcome (e.g. the number of patients that need to be treated for one of them to benefit compared with a control in a clinical trial). It is defined as the inverse of the absolute risk reduction. It was described in 1988 by McMaster University's Laupacis, Sackett and Roberts.

The ideal NNT is 1, where everyone improves with treatment and no one improves with control. The higher the NNT, the less effective is the treatment.

NNT is similar to number needed to harm (NNH), where NNT usually refers to a therapeutic intervention and NNH to a detrimental effect or risk factor.