

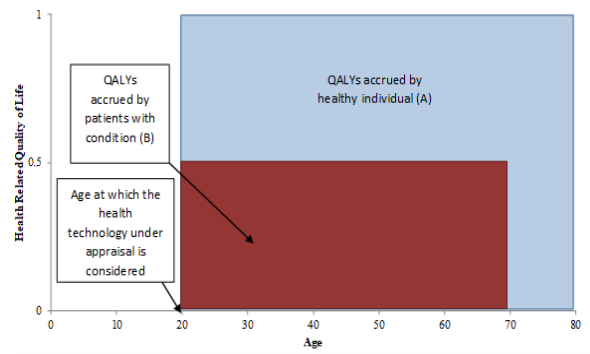
TECHNICAL SUPPORT DOCUMENT 23: CALCULATING SEVERITY SHORTFALL FOR NICE EVALUATIONS

Weights for “severity” were introduced into the NICE Methods Manual in 2022.

“Severity” is defined in terms of **Absolute** and **proportional shortfall**.

AS = A (General population QALYs) – B (Comparator QALYs)

PS = B/A



QALY weight	Proportional shortfall (PS)	Absolute shortfall (AS)
1	Less than 0.85	Less than 12
x1.2	0.85 to 0.95	12 to 18
x1.7	At least 0.95	At least 18

Highest category applies

- “Severity” is assessed from the point at which the technology is being considered
Not lifetime severity of the condition

General Population QALYs

1. Mean age and sex
2. Life tables (probability of death by age and sex)
3. Quality of life by age and sex
4. Discount rate

From CE model

ONS 2017 – 2019 Period Life Expectancy

NICE DSU report 2022

3.5% in all cases

Comparator QALYs

1. Direct from CE model for NHS comparator

Additional adjustments:

- Non reference case discount rate
- Model does not have a lifetime horizon
- Carer Quality of Life
- EQ-5D-3L not used for utility values
- Multiple comparators

Free programs do the calculations for you

- DSU Excel calculator [here](#)
- Schneider et al calculator [here](#)