

Economic plan

This plan identifies the areas prioritised for economic modelling. The final analysis may differ from those described below. The rationale for any differences will be explained in the guideline.

1 Guideline

Indoor air quality at home.

2 List of modelling questions

Review questions by scope area	<ol style="list-style-type: none"> 1) What are the most effective material and structural interventions for preventing or reducing the health impacts of indoor air pollution? 2) What are the most effective strategies for raising awareness of the risks of indoor pollution, particularly in those most at risk? 3) What are the most effective interventions to change people’s knowledge, attitude and behaviour to reduce their exposure to indoor air pollution?
Population	<p>All individuals in the United Kingdom as defined by the English Housing Survey, stratified into the following subgroups:</p> <ul style="list-style-type: none"> • Physical risk factors <ul style="list-style-type: none"> ○ Non decent homes ○ Usable floor area <90m² ○ Any damp homes • Excess risk factors (crowded homes, comorbidities, elderly people, socioeconomic factors, frailty, poverty) • Health condition
Interventions and comparators considered for inclusion	<p>Due to a scarcity of data and a wide range of potential interventions, a specific intervention in any specific patient group would have been difficult to model. The efficacy of the intervention in the model was determined by the relative reduction in the number of symptomatic cases of each health condition in dwellings in which the intervention was implemented.</p>
Perspective	<ul style="list-style-type: none"> • NHS, Personal Social Services (PSS) and local authority. • The cost of interventions incorporated a non-NHS/PSS perspective, dependent on dwelling tenure, was also incorporated into the model.
Outcomes	<p>Total costs (five years) (discount rate 3.5%). Health condition related population forgone QALYs (five years) (discount rate 3.5%). Number of symptomatic cases avoided (five years). Total number of events stratified per health condition (five years):</p> <ul style="list-style-type: none"> • Exacerbations • Health care professional visits • Hospitalisations. <p>Lifetime cost of paediatric asthma (discount rate 3.5%). Lifetime QALY’s forgone associated with paediatric asthma (discount rate 3.5%).</p>
Type of analysis	Cost calculator.
Issues to note	<p>A lack of evidence led to a number of assumptions. Another consequence of the paucity of evidence, or explicit list of interventions/ comparators meant we could not generate a specific “base case” set of results. Due to the nature of the literature, it was not possible to explicitly model the link between indoor air quality and outcomes. The literature focussed on particular pollutants and therefore, it was not possible to model the possibility that an intervention may reduce exposure to multiple pollutants simultaneously, and the effect that this may have. It was not possible to model the baseline risk of health conditions to be independent of the risk profile of the dwelling.</p>