

# The Review of the UK Material Deprivation Measures

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THE LONDON SCHOOL  
OF ECONOMICS AND  
POLITICAL SCIENCE ■



Centre for Analysis of Social Exclusion  
Research at LSE ■

# Background



In December 2021, the Department for Work and Pensions (DWP) commissioned the Centre for Analysis of Social Exclusion (CASE) at the London School of Economics and Political Science to conduct a review of the UK material deprivation measures. This followed a recommendation from the Office for Statistics Regulation to review the current set of questions that underpin UK material deprivation, and to determine a way to compare material deprivation across groups.

The aims of the Review were to explore:

- which material deprivation items for families with children, families with working-age adults and families with pensioners should be included in the Family Resources Survey (FRS);
- the advantages and disadvantages of different approaches for determining who is materially deprived;
- the advantages and disadvantages of developing a core set of questions for the whole population alongside measures aimed at working-age adults, children and pensioners;
- whether the advantages of updating the material deprivation measures outweigh the disadvantages.

The findings from the Review were published on 21 March 2024

<https://www.gov.uk/government/publications/review-of-the-uk-material-deprivation-measures>

Today's seminar covers key findings from the Review, the revised material deprivation measures, changes to data collection methodology and recommendations in relation to different approaches to determining who is materially deprived.

# Review of UK Material Deprivation Measures



## Key elements of the Review:

- Evidence review
  - Qualitative research with focus groups to help identify candidate socially perceived necessities
  - Test questions included in the Family Resources Survey (April, May and June 2022)
  - Analysis of test question data – statistical tests
  - Recommendations for changes to items and activities included in the UK measures, data collection methods and harmonisation
  - Recommendations in relation to the advantages of different approaches for determining who is materially deprived
- Estimates based on the revised material deprivation measures will be derived from new questions included in the FRS from 2023/24

# Outline



- Material deprivation concept
- Qualitative research findings
- Statistical analysis of test items and activities
- Revised material deprivation measures
- Changes to data collection methodology
- Assessment of different approaches to determining who is materially deprived

# Material Deprivation: definition



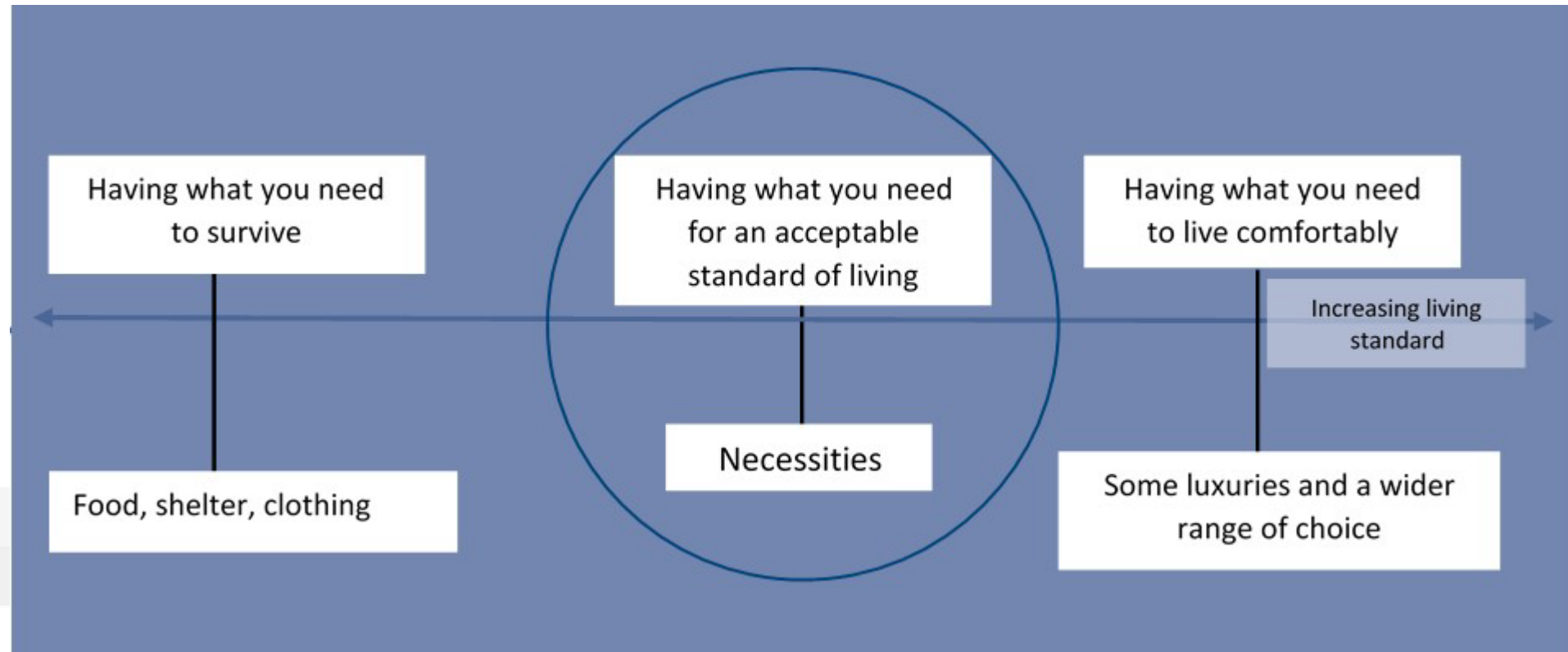
Commonly traced to Peter Townsend:

*Individuals, family and groups in the population can be said to be in poverty when they **lack the resources** to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or are at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from **ordinary living patterns, customs and activities**. (Townsend, 1979; 31)*

Key elements:

- resource constraints
- deprivation of necessities
- activities and amenities, as well as material goods
- relative to societal norms

# Material deprivation: concept



# Measuring Material Deprivation



Task: identification of an **indicative set** of socially perceived necessities which individually and combined are *suitable, valid, reliable* and *additive*

- i. What items and activities do the general public perceive to be **necessary** for a minimum acceptable standard of living
  - ii. Who lacks these necessities and **why**
    - lack of resources
    - other constraints (eg lack of access)
    - or 'simple absence'
  - iii. Who **counts** as deprived
    - which constraints
    - threshold: how many items (or weighted score)
- 
- Rapid review of existing evidence
  - Qualitative focus groups
  - Test questions; statistical analysis
  - Revised measure

# Qualitative research methods



## 13 focus groups with 61 people via Zoom

Different focus groups were established for: **parents** (including of young children), **working-age adults without dependent children**, and **older people** as well as **young people** (12-18yrs old) – this was to reflect possible variation in preferences, needs and constraints across the life cycle and across household types. **3 mixed-demographic groups** for final cognitive testing of items and questions.

**Sample:** People were recruited from across the **four UK nations** and considering a range of characteristics including **income** (16% on low incomes), **ethnicity** (14% ethnic minority background), **disability** (10% considered themselves disabled).

**103 questions discussed across 10 categories:** Financial Security; Home & living conditions; Health; Communications; Mobility; Food; Clothing; Social & Leisure Activities; Items & activities related to children; Things for oneself

These questions were **selected based on the assessment of 252 items and** activities from a range of sources: e.g. questions included in FRS, EU-SILC; Poverty and Social Exclusion surveys (1999 and 2012); Minimum Income Standard



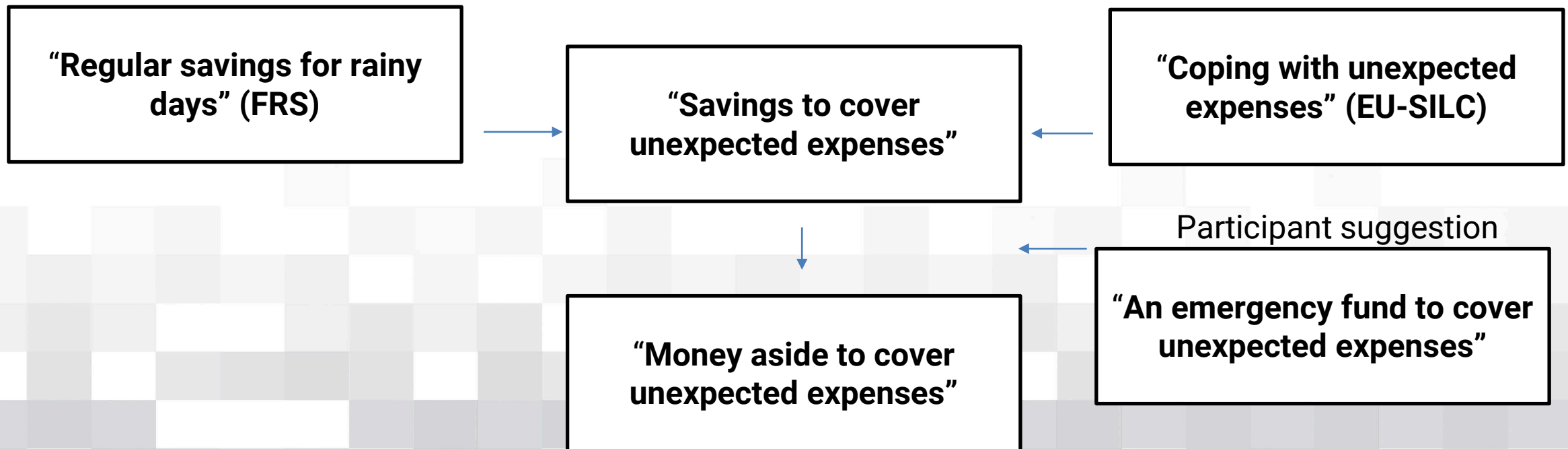
# Qualitative research methods and findings



During the focus groups questions were organised and presented to participants via Zoom Polls

Polls evolved throughout, items were added/ removed, wording changed

## Example:



# Qualitative research findings



**Importance of framing:** participants easily drifted their focus to more severe deprivation and destitution when thinking of ‘necessities’

**The phenomenon adaptation:** Participants discounted their own experience of deprivation and this shaped their judgements of items they had to do without at some point in their life, such as adequate flooring, to central heating, holidays or savings

**The pandemic had a clear impact** on people’s views of items such as internet access and access to devices; access to green spaces; social activities; holidays

**Other “cultural shifts”** have occurred: e.g. second-hand clothing; healthy life-styles; value of mental health

# Qualitative research findings and test questions



35 items and activities were short-listed for testing

Selection was based on:

- Focus groups poll results
- Qualitative data collected in the focus groups
- Information from existing sources on % agreeing item or activity a necessities
- Existing evidence on prevalence of items and activities
- Whether variation in taste is likely to affect views on whether an item or activity is a necessity
- Whether an item or activity is likely to be specialist for a particular sub-group of the population
- Whether an item or activity (or similar) is included in one of the existing UK material deprivation measures
- Whether items or activities were high or low value in terms of cost
- The relationship to other short-listed items or activities
- Other relevant existing evidence from the rapid evidence review

# Analytical framework: assessment of test items

**Suitability:** publically perceived support for items - % of survey respondents agreeing that an item is a necessity (necessary for an acceptable standard of living in the UK today)

**Validity:** whether items are valid indicators of material deprivation - assessed by estimating the correlation between lacking an item and independent variables which are known to be correlated with material deprivation (low income and low savings)

**Reliability:** Item Response Theory models used to assess the severity and discrimination of each candidate item included in a composite material deprivation scale; Cronbach's Alpha used to assess the internal consistency of a scale. Alpha provides an estimate of how closely related the items are as a group, and can be used to assess if each item provides additional information from other items included in a scale

**Additivity:** assess whether deprivation of short-listed necessities is additive; that is, the degree of deprivation increases in line with the number of items lacked

# Revised measures



- Test results were combined with other relevant information and consultation with advisory group and steering group members to short-list items for revised material deprivation measures
- Factors taken into account included: number of test fails/borderline fails, item cost, prevalence, broad or narrow relevance, whether likely to be affected by tastes/preferences, dimension, whether inclusion would help in the development of a whole population measure
- Revising the measures creates breaks in the series which limits the ability to track changes in material deprivation over time. The benefits from revising the measures (updating the component necessities and data collection methodology) were weighed up against the impact of a discontinuity in the series (against the backdrop that the Covid-19 pandemic had already disrupted the time series). It was established early on that there was no point in making small changes and that any revision should take the opportunity to make wholesale improvements to the measures
- The benefits from revising the measures were considered to outweigh the downside and the recommendation to revise the UK material deprivation measures was accepted

# Summary of changes to number of items included in material deprivation measures



	Working-age Adults	Children	Pensioners
Household-level	11	11	11
Individual-level	10	11	8
Total number of items/activities	21 (previous 9)	22 (previous 21)	19 (previous 15)

- Common set of 11 household-level items (responses from one adult in each household)
- Age-group specific individual-level items with some harmonisation
- Beneath these summary changes, considerable revisions made to each of the measures
- Revisions include changes to data collection methods to improve the quality and reliability of data collected on material deprivation, and harmonisation across age groups

# Previous material deprivation measure: Working-age adults



Do you (and your family/and your partner) ...

have enough money to keep your home in a decent state of decoration?

have a holiday away from home for at least one week a year, whilst not staying with relatives at their home?

have household contents insurance?

make regular savings of £10 a month or more for rainy days or retirement?

replace any worn out furniture?

replace or repair major electrical goods such as a refrigerator or a washing machine, when broken?

Do you have a small amount of money to spend each week on yourself (not on your family)?

Do you (and your partner) keep up with bills and any regular debt repayments?

In winter, are you able to keep this accommodation warm enough?

# Revised material deprivation measure: Working-age adults

## Household-level items

Without cutting back on essentials, are you able to pay regular bills like rent, mortgage, electricity or [{If GB} Council tax /{If NI} Rates]?

Are you able to put money aside to cover unexpected expenses?

Could you cover the cost of replacing or repairing appliances such as a washing machine, fridge or cooker if they broke?

Is your home kept in a good state of decoration and repair?

In cold weather, is your home kept adequately warm?

Is your home damp free?

Do you have reliable access to the internet at home?

Does everyone in your household have use of a computer or tablet for work, education or accessing services?

Does everyone in your household have access to transport that is reliable, timely, safe and affordable?

Are your heating, electrics, plumbing, drains in good working order?

Do you have home contents insurance?

## Individual-level items

Do you regularly have money worries at the end of the month?

Do you make regular payments to a workplace or private pension?

Do you eat three meals a day?

Do you eat fresh fruit and/or vegetables every day?

Do you have appropriate clothes for work or job interview?

Do you attend regular dental appointments?

Do you (your partner and your dependent children) have a break away from home at least once a year?

Do you go out socially at least once a month?

Do you see friends and family at least once a month?

Do you have a small amount of money to spend each week on yourself (not on your family)?



# Items and activities in the revised material deprivation measures: household-level



	Working-age	Children	Pensioners
Able to pay bills without cutting back on essentials	✓	✓	✓
Able to put money aside for unexpected expenses	✓	✓	✓
Cover cost of repair or to replace appliances	✓	✓	✓
Home in good state of decoration/repair	✓	✓	✓
Home adequately warm in cold weather	✓	✓	✓
Home damp free	✓	✓	✓
Reliable access to internet at home	✓	✓	✓
Access to computer/tablet	✓	✓	✓
Adequate access to reliable transport	✓	✓	✓
Heating/electrics/plumbing in good working order	✓	✓	✓
Home contents insurance	✓	✓	✓

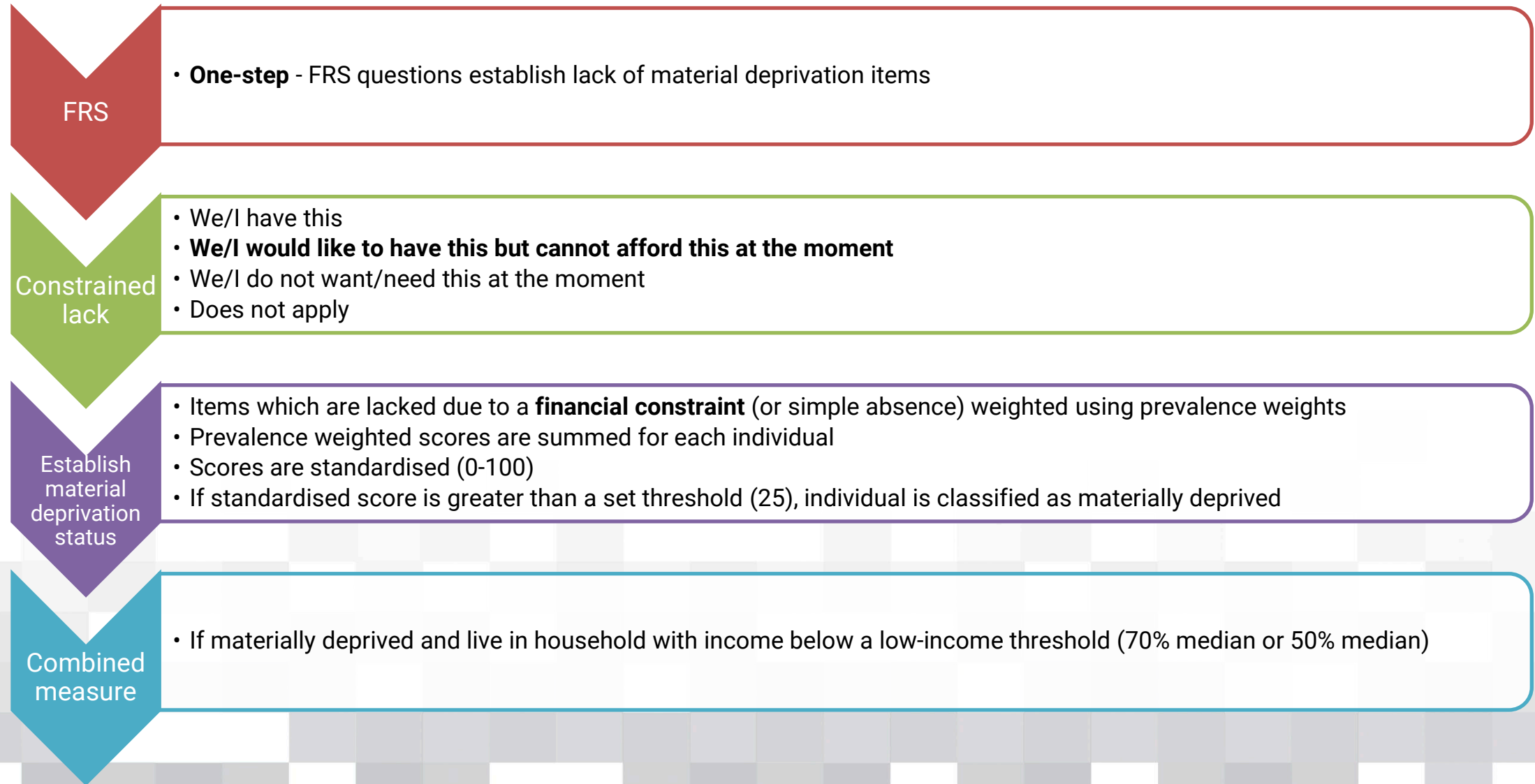
Key:  represents a new item/activity;  represents a revised item/activity

# Items and activities in the revised material deprivation measures: individual-level

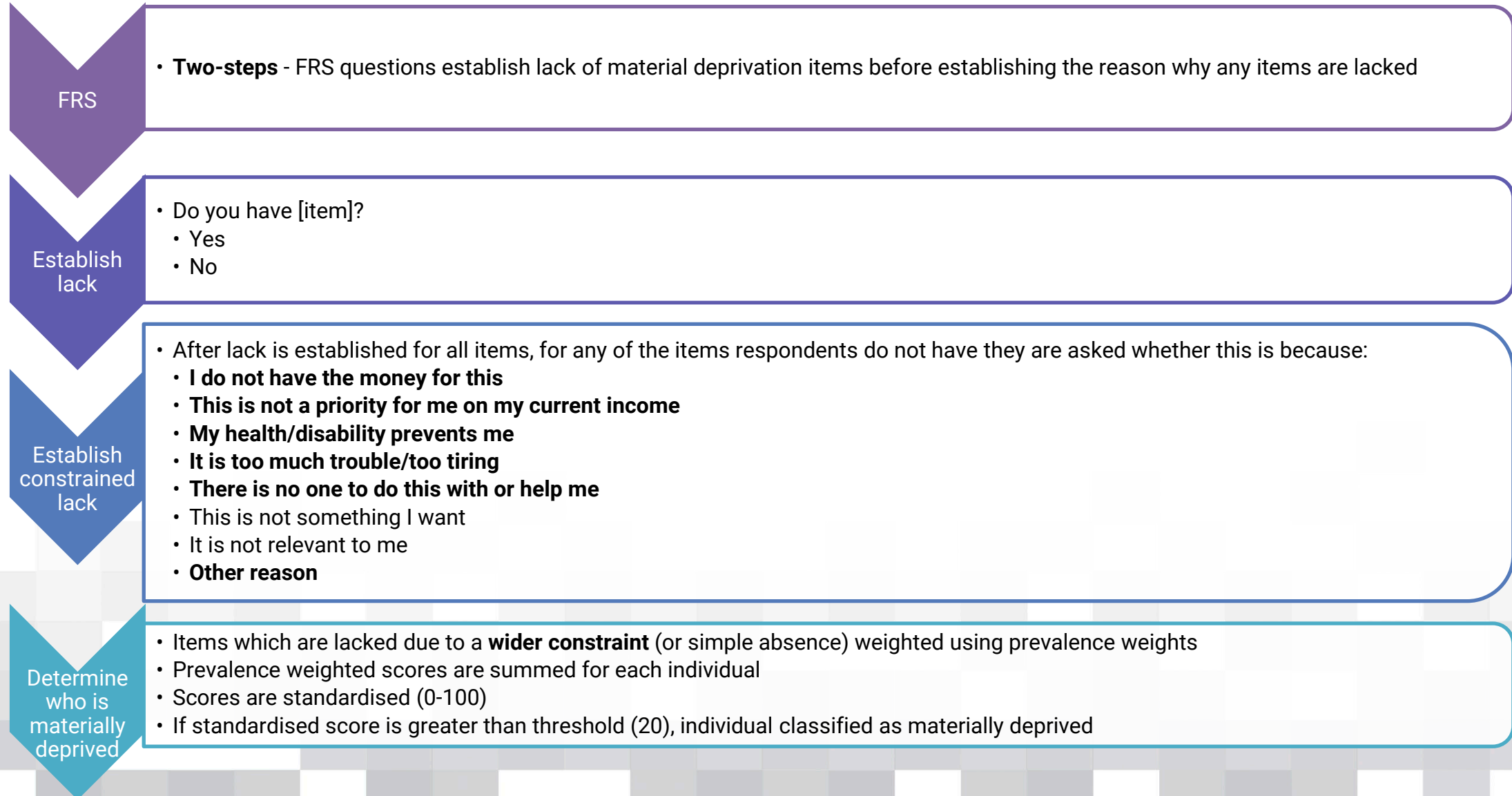


	Working-age	Children	Pensioners
Three meals a day	✓	✓	✓
Fresh fruit and/or vegetables every day	✓	✓	✓
Annual break away from home	✓	✓	✓
Without regular money worries	✓		✓
Regular pension payments	✓		
Appropriate clothes for work/job interview	✓		
Regular dental appointments	✓		✓
Go out socially at least monthly	✓		✓
See friends and family at least monthly	✓		✓
Small amount of money for oneself	✓		✓
School trips		✓	
Enough clothes feel comfortable wearing		✓	
Organised weekly activity outside school		✓	
Friends round monthly		✓	
Age suitable toys/games/outdoor equipment		✓	
Enough bedrooms for children 10+ years		✓	
Toddler/nursery/playgroup at least weekly		✓	
Place for homework		✓	

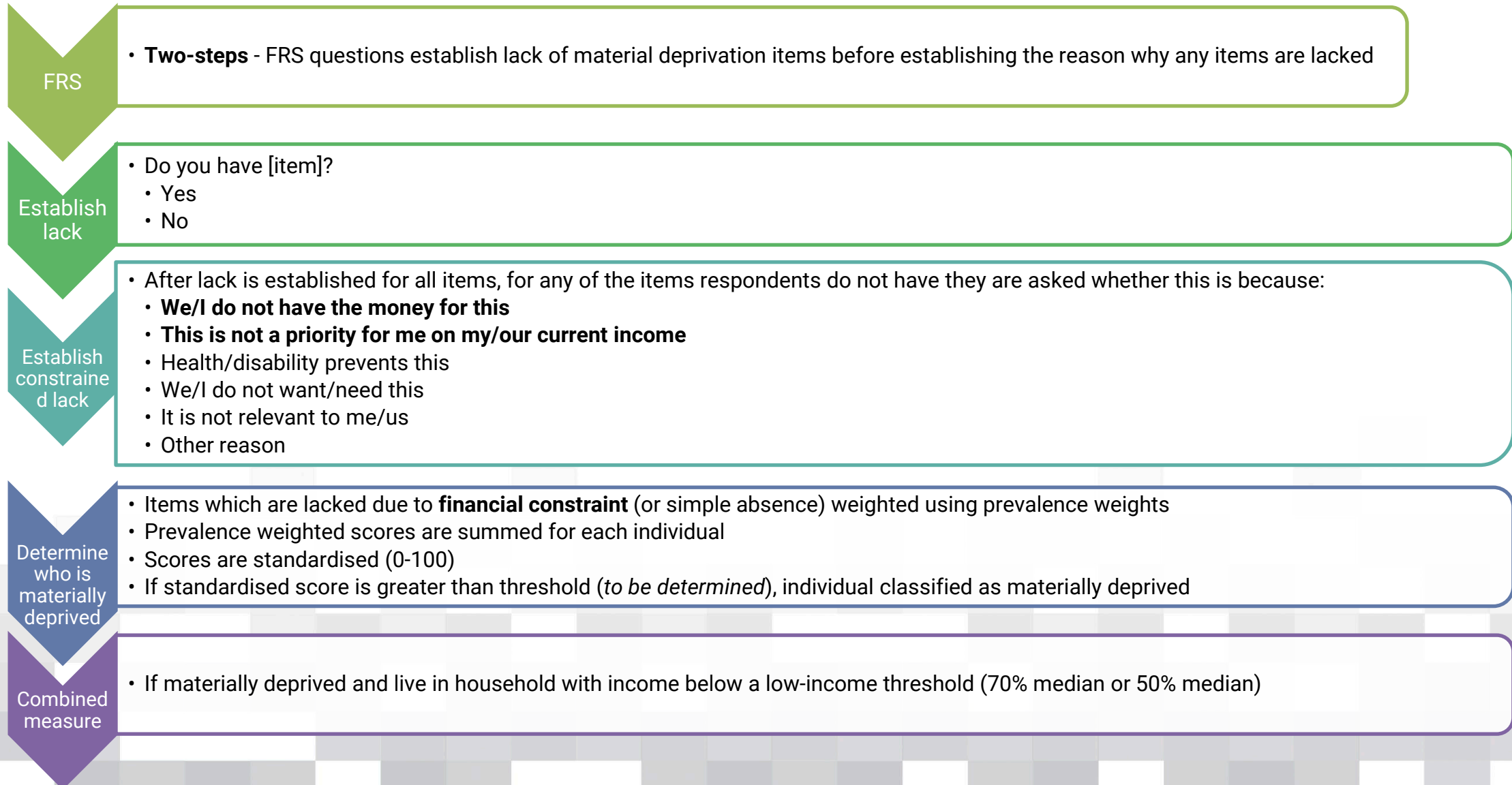
# Previous method for determining who is materially deprived (working-age adults and children)



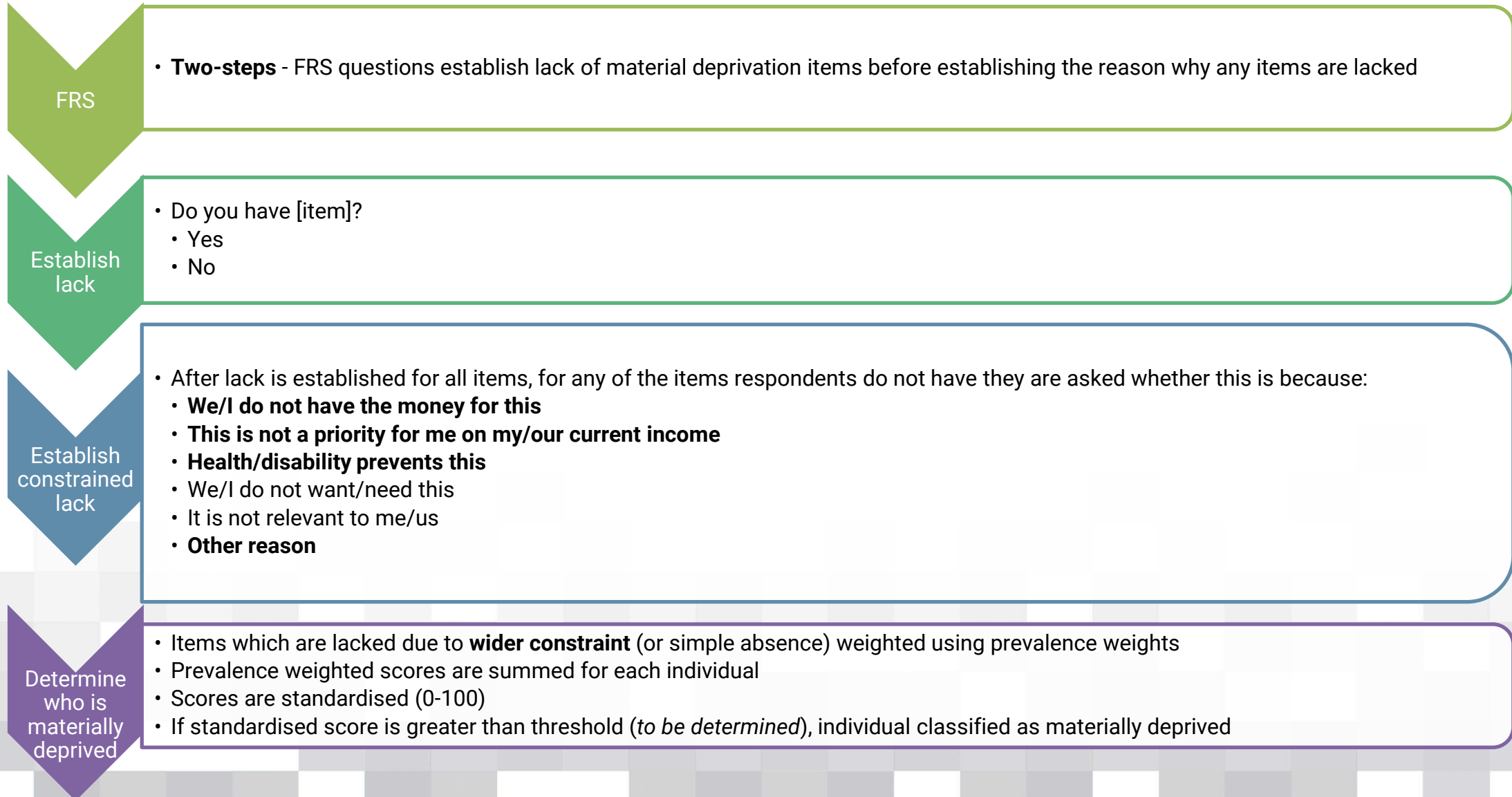
# Previous method for determining who is materially deprived (pensioners)



# Revised method for determining who is materially deprived (standardised – working age and children)



# Revised method for determining who is materially deprived (standardised - pensioners)



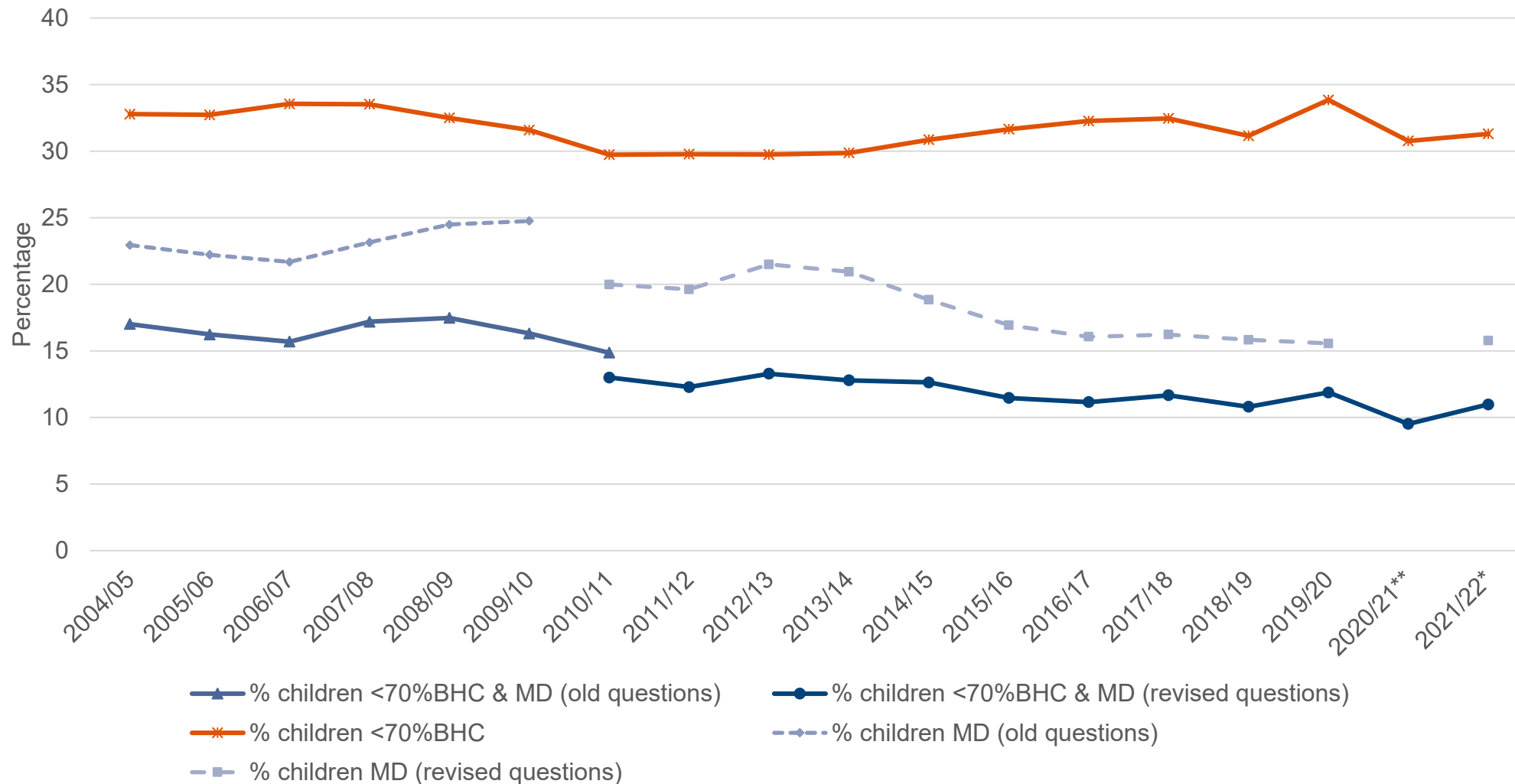
# Assessment of different approaches for determining who is materially deprived



In addition to revising the necessities included in the material deprivation measures and the data collection methodology, the Review also assessed a number of approaches for determining who is materially deprived:

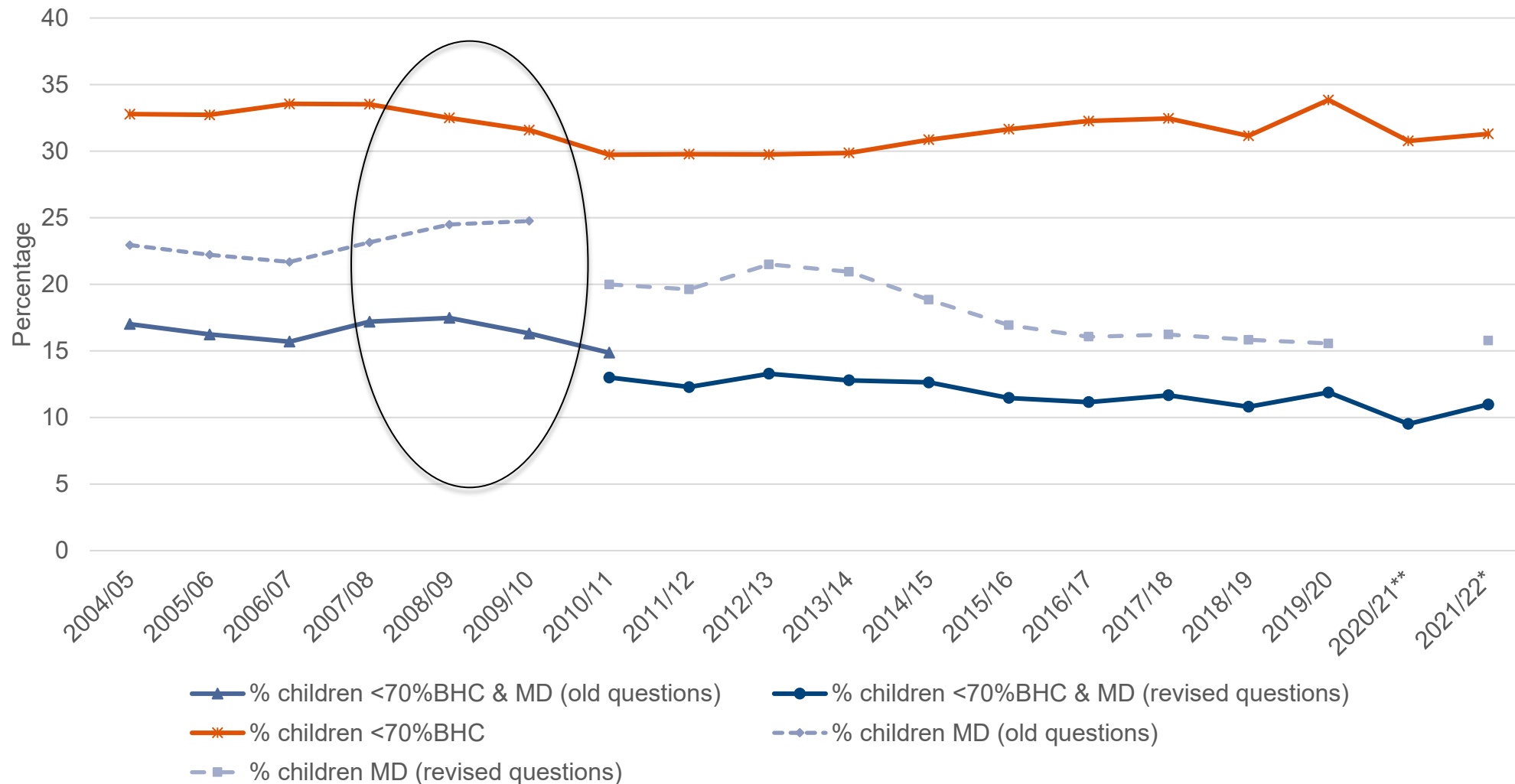
- How to determine optimum material deprivation thresholds
- Advantages and disadvantages of prevalence weighting items and different types of measure
- **Combining material deprivation status with a low-income indicator**
- Simple absence versus constrained lack
- **Whole population or household-level material deprivation measures**

# Combining material deprivation with low-income status – child measure (previous)





# Combining material deprivation with low-income status – child measure (previous)



# Recommendations



- (a) Alongside publishing the HBAI low-income series and the combined low income and material deprivation series (a legal requirement for the child poverty measure), DWP publishes a new HBAI headline series on material deprivation alone.
- (b) HBAI headline statistics for combined measures are based on After Housing Costs and not Before Housing Costs income. This is a more realistic measure of the resources available to spend on necessities and consistent with other HBAI headline series.

# Whole population material deprivation measure



A number of steps have been taken to harmonise material deprivation measures for the three age groups. These include:

- Standardised data collection methodology
- Common set of household-level items
- Three individual-level items common to the three age groups (three meals a day, daily fresh fruit and/or vegetables and an annual break away from home)
- Common items in working-age and pensioner measures (with the exception of 2 additional items in working-age measure – suitable clothes for work/interview and regular pension payments)

However, key differences remain between the measures for working-age adults, children and pensioners. These include:

- The use of financially constrained lack to define deprivation of items for working-age adults and children and a wider definition of constrained lack for pensioners
- Although still to be determined for the revised measures, different thresholds have previously been used to determine who is materially deprived
- Poverty measures for working-age adults and children have previously combined material deprivation status with a low-income threshold

These differences make it difficult to compare material deprivation rates between age groups but would need to be addressed in the development of an all-age measure

# Whole population material deprivation measure



## Estimates of material deprivation rates based on different measures by age group

	Constrained lack	Financially constrained lack	Financially const. lack combined with low-income	Const. lack pensioners/ fin. const. lack children & working-age
Children	20.62	17.58	10.63	17.58
Working-age adults	17.80	15.50	9.03	15.50
Pensioners	7.57	5.58	3.01	7.57
All-age	16.48	14.07	8.21	14.45
Sample size	10,532	9,356	9,356	10,532

Source: Authors' analysis of FRS test question dataset (April, May and June 2022)

Note: These estimates are based on deprivation score thresholds of 17 for children, 24 for working-age adults and 24 for pensioners. These may not be optimum thresholds.

# Recommendations



If DWP wishes to pursue this further, the following work should be considered:

- (a) For a measure based on the core household-level items alone, determine an optimum deprivation threshold, whether the measure should be based on wider constrained lack or financially constrained lack of items and whether material deprivation status should be combined with a low-income indicator.
- (b) Assessing whether an alternative approach to defining household-level material deprivation could be based on whether any household member is classified as materially deprived according to the age-group specific measures which have passed statistical tests and validation from qualitative research.
- (c) Exploring whether estimates from the age-group specific material deprivation measures can be added together and combined to provide valid whole population estimates.

Without further research, we recommend material deprivation is measured at the individual-level, based on the tried and tested measures for working-age adults, children and pensioners.

# The Review of the UK Material Deprivation Measures



The final report and summary can be downloaded here

<https://www.gov.uk/government/publications/review-of-the-uk-material-deprivation-measures>

