

**National Institute for Health
and Care Excellence**

Child maltreatment: when to suspect maltreatment in under 18s

**Report A: formal consensus exercise
to define ‘independently mobile’**

NICE guideline CG89

Formal consensus definition of the term ‘independently mobile’ in recommendations 1.1.2, 1.1.5 and 1.1.6

December 2025

Final

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Formal consensus exercise to define ‘independently mobile’

1.1 Review question

This report summarises the formal consensus exercise for the review question:

What is the definition of the term ‘independently mobile’ in the context of the [Child maltreatment: when to suspect maltreatment in under 18s \(CG89\)](#) NICE guideline as used in recommendations 1.1.2 (bruises), 1.1.5 (lacerations, abrasions or scars) and 1.1.6 (burns or scalds).

Further technical detail can be found in the separate [technical appendices](#) for this report.

1.1.1 Summary of the formal consensus methods

See [Table 1](#) for a summary of the Background, Participants and Methodology used in this formal consensus exercise.

Table 1: Summary of the formal consensus methods

| | |
|---------------------|--|
| Background | The term ‘independently mobile’ is used in the Child maltreatment: when to suspect maltreatment in under 18s (CG89) NICE guideline but the guideline does not include a definition of the term. To address this gap in the current guideline, formal consensus methods were used to define ‘independently mobile’. |
| Participants | Nine experts working across various roles in the field of child maltreatment were recruited to form an Expert Working Group (EWG). |
| Methodology | <p>Formal consensus using a modified version of the nominal group technique. This included the following five phases:</p> <ol style="list-style-type: none"><u>Statement generation</u> Statements were generated using evidence from the 2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89) and underwent internal quality assurance by the NICE technical team with feedback from the social care advisor and consultant clinical adviser.<u>Round 1 voting</u> |

A first consensus questionnaire was developed with the statements. EWG members rated their level of agreement on a 9-point Likert scale for each statement. The NICE technical team calculated the percentage agreement for each statement.

3. Group discussion

The results from round 1 voting were fed back to EWG members anonymously and there was a facilitated discussion on the agreement for each statement. Statements with high agreement ($\geq 80\%$) were retained, statements with moderate agreement (60-80%) were re-drafted and statements with low agreement ($< 60\%$) were discarded unless simple changes were identified which made them fit for re-drafting. Statements were re-drafted based on group discussions and feedback from the first consensus questionnaire.

4. Round 2 voting

A second consensus questionnaire was developed with the re-drafted statements. EWG members rated their level of agreement for each statement using a 9-point Likert scale.

5. Final results

The NICE technical team calculated the percentage agreement for each statement and the results from round 2 voting were fed back to EWG members anonymously. Statements with high agreement ($\geq 80\%$) were retained for drafting a definition. All other statements were discarded. A facilitated discussion took place to finalise a definition of the term 'independently mobile' using the retained statements from rounds 1 and 2 and input from the NICE technical team including editorial advice.

Abbreviations: EWG: Expert Working Group; NICE: National Institute for Care and Excellence.

Further details on the formal consensus methods have been described in the formal consensus methods chapter published on the [NICE website](#). The first and second consensus questionnaires (which include the generated and re-drafted statements) are shown in the appendices of the formal consensus methods chapter.

1.1.2 **Methods and process**

Methods specific to this formal consensus exercise are described in the [formal consensus methods chapter](#).

Declarations of interest were recorded according to [NICE's conflicts of interest policy](#).

1.1.2.1 Search methods

The 2024 exceptional surveillance report was used as a source of evidence. Searches for the 2024 exceptional surveillance report were run on September 2023.

Since the 2024 exceptional surveillance report identified variation in the definitions of 'independently mobile' from both the evidence and expert input, further searches were not expected to return a definitive or more consistent definition. Therefore, no additional searches were conducted as part of this formal consensus exercise.

1.1.2.2 Formal consensus methods deviations

After round 2 voting, 3 statements with moderate agreement (78%) that bordered the threshold for high agreement were highlighted to EWG members. In line with the formal consensus methods, these statements were due to be discarded. Further discussions were facilitated with the EWG to confirm that discarding these statements was acceptable.

1.1.3 Evidence used for the formal consensus exercise

1.1.3.1 Included studies

Study selection

Studies were identified from the [2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s \(NICE guideline CG89\)](#) which examined the evidence in relation to bruising in children who are not independently mobile.

Studies used to inform statement generation were those that provided definitions of terms related to independent mobility such as 'independently mobile', 'not independently mobile', 'non-mobile', 'pre-mobile', and 'early mobile'.

Definitions from 13 studies were used to generate statements. Nine studies were identified as part of the 2024 exceptional surveillance of child maltreatment (Bilson 2018, Bilson and Talia 2022, Collins 2017, Feldman 2020, Hibberd 2007, Kemp 2015, Kemp 2021, Pierce 2016 and RCPCH 2020) and 4 studies were identified by checking the included studies list of the RCPCH 2020 systematic review (Carpenter 1999, Kemp 2014, Sugar 1999 and Wedgwood 1990). The included studies that informed statement generation are summarised in [Table 2](#).

1.1.3.2 Excluded studies

Details of studies that did not inform statement generation, along with the primary reason for exclusion, are given in **appendix C** in the technical appendices document.

1.1.4 Summary of studies included in the formal consensus exercise

Table 2: Summary of studies that informed statement generation in the formal consensus exercise

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|--|--|--|--|--|
| <p>Bilson 2018</p> <p>Study type: Narrative review</p> <p>Study dates: Policies were accessed from the internet in July and August 2016</p> <p>Location: England</p> <p>Funding source: Not reported</p> | <p>N=91 Local Safeguarding Children Boards (LSCBs) with policies, protocols or procedures on bruising on pre-mobile infants.</p> | <p>Topic expert feedback from the 2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89)</p> | <p>Procedure defines pre-mobile in relation to age</p> <p>Procedure includes all babies aged under 6 months and older pre-mobile (61 policies): A baby who is not yet crawling, bottom shuffling, pulling to stand, cruising or walking independently. This includes all babies under the age of six months</p> <p>Procedure includes all babies aged under 12 months and older pre-mobile (1 policy): No definition</p> <p>Procedure with no age-based definition</p> | <p>Statement 7: A child who can crawl, bottom shuffle, pull to stand, cruise or walk is independently mobile. This does not include children who can roll or sit, or children under the age of 6 months.</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|--|---|---|--|---|
| | | | <p>Pre-mobile: Babies who can roll classified as pre-mobile (10 policies)</p> <p>Pre-mobile: Babies who are able to roll not classified as pre-mobile (4 policies)</p> <p>Procedure with no definition of pre-mobile</p> <p>Procedure has no definition of pre-mobile (15 policies)</p> | |
| <p>Bilson and Talia 2022</p> <p>Study type: Narrative review</p> <p>Study dates: December 2020</p> | N=148 local authority procedures on bruising in pre-mobile infants (including 53 distinct procedure documents). | Topic expert feedback from the 2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89) | <p>Pre-mobile defined by mobility, rolling children are treated as mobile</p> <p>No definition (35 local authorities)</p> <p>A baby who is not yet rolling, crawling, bottom shuffling, pulling to stand, cruising or</p> | <p>Statement 4: A child who can roll, sit, crawl, bottom shuffle, pull to stand, cruise or walk is independently mobile.</p> <p>Statement 6: A child who can crawl, bottom shuffle, pull to stand, cruise or walk is independently mobile. This</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|---|------------|------------------------------|---|--|
| <p>Location: England</p> <p>Funding source: The research was funded in part by the Wellcome Trust</p> | | | <p>walking independently (HIPS safeguarding manual, 12 local authorities)</p> <p>Pre-mobile defined by mobility, rolling children are treated as pre-mobile</p> <p>A baby who is not crawling, bottom shuffling, pulling to stand, cruising or walking independently – babies who can roll or sit independently are classed as non-mobile (Southwest Child Protection Procedures, 29 local authorities)</p> <p>All children aged under 6 months and older are pre-mobile</p> <p>A child who is not yet crawling, bottom shuffling, pulling to stand, cruising or walking independently, this includes all children under the age of six</p> | <p>does not include children who can roll or sit.</p> <p>Statement 7: A child who can crawl, bottom shuffle, pull to stand, cruise or walk is independently mobile. This does not include children who can roll or sit, or children under the age of 6 months.</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|---|---|--|---|---|
| | | | months. Please note however that some babies can roll from a very early age and this does not constitute self-mobility (No reference, 72 local authorities) | |
| <p>Carpenter 1999</p> <p>Study type: Observational</p> <p>Study dates: July 1996 to April 1997</p> <p>Location: England</p> <p>Funding source: Not reported</p> | <p>N=177 babies aged between 6 and 12 months from health visitor hearing test clinics and surveillance clinics who were undergoing developmental checks. Babies were examined for bruises once a week for 12 weeks.</p> | <p>Included in the RCPCH 2020 systematic review</p> | <p>Independently mobile</p> <p>Babies up to about 9 months are not as independently mobile</p> | <p>Statement 3: All children aged up to 9 months are not independently mobile.</p> |
| <p>Collins 2017</p> <p>Study type: Observational</p> | <p>N=105 children with bleeding disorders and 328 children without bleeding disorders, aged <6 years from six haemophilia centres,</p> | <p>Pragmatic search for new evidence from the 2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in</p> | <p>Pre-mobile</p> <p>Non rolling, rolling over and sitting</p> | <p>Statement 6: A child who can crawl, bottom shuffle, pull to stand, cruise or walk is independently mobile. This does not include children who can roll or sit.</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|---|---|--|---|--|
| <p>Study dates: Not reported</p> <p>Location: UK and Canada</p> <p>Funding source: The study was funded by the Medical Research Council UK and support was received from the UK Clinical Research Network and National Institute for Social Care and Health Research Wales.</p> | <p>well-baby clinics, hospital outpatient clinics and mother and baby groups. Children were examined for bruises.</p> | <p>under 18s (NICE guideline CG89)</p> | <p>Early mobile</p> <p>Crawling or cruising</p> | |
| <p>Feldman 2020</p> <p>Study type: Observational</p> <p>Study dates: March 2020 to March 2017</p> | <p>N=63 infants with initially explained bruises, and 46 infants with initially unexplained bruises (after initial clinical evaluation), aged</p> | <p>Pragmatic search for new evidence from the 2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89)</p> | <p>Not independently mobile</p> <p>Infants younger than 6 months</p> | <p>Statement 2: All children aged up to 6 months are not independently mobile.</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|--|--|---|---|---|
| <p>Location: US</p> <p>Funding source: Not reported</p> | <p>younger than 6 months.</p> | | | |
| <p>Hibberd 2007</p> <p>Study type: Observational</p> <p>Study dates: 2005 to 2011</p> <p>Location: UK</p> <p>Funding source: The project was undertaken without any specific funding support. A subset of previously unanalysed data was used from Kemp 2015, and this study</p> | <p>N=372 children aged 0 to 13 years with bruises from unintentional injuries.</p> | <p>Previous surveillance of the guideline and pragmatic search for new evidence from the 2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89)</p> | <p>Non mobile</p> <p>Not yet sitting</p> <p>Not yet mobile</p> <p>Sitting</p> | <p>Statement 5: A child who can sit, crawl, bottom shuffle, pull to stand, cruise or walk is independently mobile. This does not include children who can roll.</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|---|--|--|--|--|
| was funded by the Medical Research Council and financed the research team who undertook the study. Baxter Healthcare funded a clinical fellowship for phase one of the study. | | | | |
| <p>Kemp 2014</p> <p>Study type: Observational</p> <p>Study dates: November 2003 to December 2011</p> <p>Location: Wales</p> <p>Funding source: Medical Research Council</p> | N=506 children, aged <6 years, referred to two paediatric child protection teams for suspected physical abuse. | Included in the RCPCH 2020 systematic review | <p>Baby</p> <p>Pre-mobile, rolling or sitting</p> <p>Early mobile</p> <p>Crawling or cruising</p> <p>Walking</p> <p>Walking independently</p> | Statement 6: A child who can crawl, bottom shuffle, pull to stand, cruise or walk is independently mobile. This does not include children who can roll or sit. |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|--|--|---|--|---|
| <p>Kemp 2015</p> <p>Study type: Observational</p> <p>Study dates: Phase 1 April 2005 to December 2007 and Phase 2 April 2008 to August 2011</p> <p>Location: Wales</p> <p>Funding source: The MRC funded the research team who undertook the study. Baxter Healthcare funded a clinical fellowship for phase one of the study.</p> | <p>N=328 children aged (<6 years) whose parents were recruited from well-baby clinics, hospital outpatient clinics and mother and baby groups in the local community. Bruises were recorded on a body chart, weekly for up to 12 weeks.</p> | <p>Previous surveillance of the guideline from the 2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89)</p> | <p>Pre-mobile</p> <p>Subdivided into baby not yet rolling over and those able to roll over</p> <p>Early mobile</p> <p>Crawling or cruising</p> <p>Walking</p> <p>No further description</p> | <p>Statement 6: A child who can crawl, bottom shuffle, pull to stand, cruise or walk is independently mobile. This does not include children who can roll or sit.</p> |
| <p>Kemp 2021</p> | <p>N=780 Children aged <6 years with bruising from physical abuse (medical records of</p> | <p>Pragmatic search for new evidence from the 2024 exceptional surveillance of child</p> | <p>Pre-mobile</p> | <p>Statement 6: A child who can crawl, bottom shuffle, pull to stand, cruise or walk is independently mobile. This</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|--|--|--|--|--|
| <p>Study type: Observational</p> <p>Study dates: 2003 to 2011</p> <p>Location: UK and Canada</p> <p>Funding source:</p> | <p>children referred to two paediatric child protection teams), accidents (children from well-baby clinics, hospital outpatient clinics and mother and baby groups) or inherited blood disorders (children attending six haemophilia centres).</p> | <p>maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89)</p> | <p>Non rolling, rolling over and sitting</p> <p>Mobile</p> <p>Crawling, bottom shuffling, cruising or walking</p> | <p>does not include children who can roll or sit.</p> |
| <p>Pierce 2016</p> <p>Study type: Observational</p> <p>Study dates: December 2011 to February 2013</p> <p>Location: US</p> | <p>N=2,488 infants aged ≤12 months presenting to the paediatric emergency department of 3 free-standing, tertiary care children's hospitals designated as Level I trauma centres with child abuse paediatricians on staff.</p> | <p>Topic expert feedback from the 2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89)</p> | <p>Non mobile</p> <p>0 to 2 months</p> <p>Able to roll and transitioning to sitting without support</p> <p>3 to 5 months</p> <p>Starting to crawl or pulling to stand</p> | <p>Statement 1: All children aged up to 2 months are not independently mobile.</p> <p>Statement 9: A child who can pull to stand, cruise or walk is independently mobile. This does not include children who can roll, sit, crawl or bottom shuffle.</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|--|---|---|--|---|
| Funding source: The research was supported by the Eunice Kennedy Shriver National Institute of Child Health & Human Development of the National Institutes of Health | | | 6 to 8 months Transitioning from cruising to ambulation 9 to 12 months | |
| RCPCH 2020 Study type: Systematic review Study Dates: 1950 to January 2019 Location: UK Funding source: Funded by NSPCC | N=6 studies on bruising in pre-mobile children. | Pragmatic search for new evidence from the 2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89) | Baby Pre-mobile, rolling or sitting (Kemp 2014) Sits, crawls, walks (Carpenter 1999) Pre-mobile Inability to crawl, cruise or walk (Pierce 2016) | No definitions were used to draft statements as these were sourced from the original studies. |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|--|---|---|---|---|
| | | | <p>Sub-classified as: not rolling and rolling (Kemp 2015)</p> <p>Pre-cruisers</p> <p>No upright ambulation (Sugar 1999)</p> <p>Group A</p> <p>Children who had motor development no better than crawling (Wedgwood 1990)</p> <p>Group B</p> <p>Children who could cruise (Wedgwood 1990)</p> | |
| <p>Sugar 1999</p> <p>Study type: Observational</p> | <p>N=973 children aged <36 months attending well-child visits. Children were examined for bruises.</p> | <p>Included in the RCPCH 2020 systematic review</p> | <p>Pre-cruiser</p> <p>No upright ambulation (all infants younger than 6 months were pre-cruisers)</p> | <p>Statement 8: A child who has upright ambulation is independently mobile.</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|---|--|---|--|--|
| <p>Study dates: Not reported</p> <p>Location: US</p> <p>Funding source: Not reported</p> | | | <p>Cruiser</p> <p>Walking holding onto another person's hands or furniture</p> <p>Walker</p> <p>Two or more independent steps</p> | |
| <p>Wedgwood 1990</p> <p>Study type: Observational</p> <p>Study dates: Not reported</p> <p>Location: England</p> <p>Funding source: Not reported</p> | <p>N=56 children aged <4 years who were admitted or referred to the admission unit at Derbyshire Children's Hospital were examined for accidental bruising.</p> | <p>Included in the RCPCH 2020 systematic review</p> | <p>Group A (no definition)</p> <p>Children who had motor development no better than crawling</p> <p>Group B (no definition)</p> <p>Children who could cruise</p> <p>Group C (no definition)</p> | <p>Statement 10: A child who can cruise or walk is independently mobile. This does not include children who can roll, sit, crawl, bottom shuffle or pull to stand.</p> |

| Study details | Population | How the study was identified | Term(s) and definition(s) used in the study that relate to independent mobility | Statement where the study definition was used |
|---------------|------------|------------------------------|---|---|
| | | | <p>Children who could walk on the flat, but could only crawl upstairs</p> <p>Group D (no definition)</p> <p>Children who could walk, but who walked upstairs putting both feet on a stair before attempting the next stair</p> <p>Group E (no definition)</p> <p>Children who could walk, but who usually walked upstairs with only one foot on a stair before attempting the next stair.</p> | |

Abbreviations: HIPS: Hampshire, Isle of Wight, Portsmouth and Southampton; NSPCC: National Society for the Prevention of Cruelty to Children; RCPCH: Royal College of Paediatrics and Child Health

1.1.5 Summary of the results of the formal consensus exercise

1.1.5.1 Statement generation

According to the evidence, independent mobility was defined using age or physical development milestones or a combination of these. Therefore, statements were generated by the NICE technical team in 2 categories; independent mobility determined by age, and independent mobility determined by physical development milestones. Statements were designed to be clear and concise, to ensure that EWG members could understand and rate them consistently and without ambiguity. Each statement was based on a definition reported in the included studies. Ten statements were generated and are shown in [Table 2](#) next to the definition of terms related to independent mobility that were reported and used to inform the statement.

1.1.5.2 Round 1 voting

The EWG were presented with 10 statements for voting in round 1 of the formal consensus exercise. One of these statements reached high agreement ($\geq 80\%$, statement 8) and was retained for drafting the definition of independently mobile. Eight statements had low agreement ($< 60\%$), and of these, 7 were discarded (statements 2, 3, 5, 6, 7, 9 and 10). One statement with low agreement was redrafted (statement 4) as it bordered the threshold for moderate agreement and simple changes were identified from comments submitted by EWG members in the first consensus questionnaire. One statement had moderate agreement (60-80%, statement 1) and was redrafted. The first consensus questionnaire results: Statements with percentage agreement and next actions are shown in **Appendix A** in the technical appendices document.

1.1.5.3 Round 2 voting

The EWG were presented with 19 statements for voting in round 2 of the formal consensus exercise. Following discussions, the EWG agreed to split statement 1 into 2 separate statements (statements 1a and 1b), and statement 4 included 17 separate physical development milestones to be considered as indications of independent mobility (statements 4a-q).

Nine of the statements reached high agreement (80%, statements 1b, 4h-k, 4m, and 4o-q) and were retained for drafting the definition of independently mobile. All statements with low agreement (<60%, statements 4a, 4e-f, and 4n), and moderate agreement (60-80%, statements 1a, 4b-d, 4g and 4l) were discarded. The second consensus questionnaire results: Statements with percentage agreement and next actions are shown in **Appendix B** in the technical appendices document.

1.1.6 Economic evidence

Economic evidence was not relevant to the formal consensus exercise.

1.1.7 Expert Working Group discussions and interpretation of the results of the formal consensus exercise

1.1.7.1 Independent mobility determined by age

In round 1 voting, EWG members did not agree that a child's age at 6 months (statement 2) or 9 months (statement 3) is indicative of non-independent mobility. Given the variability in children's abilities at these ages, they felt the development range was too broad and highlighted that many will accomplish milestones consistent with independent mobility at these ages. EWG members suggested that a definition of independent mobility based on physical development milestones, rather than age would be more useful. However, the EWG moderately agreed that children under 2 months are not independently mobile (statement 1).

During discussions, EWG members highlighted that young children are less likely to be independently mobile and so the importance of careful scrutiny for any injury is higher. However, EWG members suggested that 3 months may be a more appropriate age cut-off, and to accurately reflect the terminology used in practice this should be expressed in weeks.

In round 2 voting, EWG members agreed that whilst there are exceptions, children aged up to 12 weeks typically lack the muscle strength, coordination and neurological maturity needed for independent mobility (statement 1b).

1.1.7.2 Independent mobility determined by physical development milestones

In round 1 voting, all EWG members agreed that a child who has upright ambulation is independently mobile (statement 8). However, they felt the term 'upright ambulation' was ambiguous and should be replaced with the word 'walking'. Further, the EWG felt that the statement did not provide clarity on other children who have independent mobility without upright ambulation.

All other statements had low agreement and variable views were indicated (statements 4-7 and 9-10). The level of agreement on statements was somewhat confounded by a single rating being used across a range of physical development milestones. For instance, EWG members indicated that crawling and bottom shuffling were accepted as horizontal forms of independent mobility. However, the agreement ratings did not reflect this as there were variable views on other physical development milestones such as rolling and sitting which were presented alongside these in the first consensus questionnaire. In response, the EWG were able to indicate their level of agreement separately for each of the physical development milestones in the second consensus questionnaire.

EWG members felt more information was needed to understand some of the physical development milestones listed in the statements. For example, the word 'roll' did not capture the distinction between a child who can roll from front to back and/or back to front, roll unaided or roll across a space, and the wording could impact on whether the child would be considered independently mobile. Similarly, the word 'sit' did not differentiate between a child that could sit without support (sit unaided), a child who had been propped up in a seated position, for example with cushions (sit aided), or a child who could move themselves into a seated position. Through discussions, EWG members agreed on the appropriate wording of statements to be presented in the second consensus questionnaire.

EWG members discussed how a child may interact with the environment to gain mobility such as pull to stand, cruise or walk using furniture or a walking aid. EWG members agreed that using an object to achieve these milestones could be an indication of independent mobility but that using a person to gain mobility (such as pulling to stand whilst holding a person's hands) would not be, as it is difficult to rule out active assistance being offered by that person. EWG members highlighted that many children would have crawled or bottom shuffled before pulling to stand, cruising or walking and subsequently would already be considered independently mobile. However, this would not apply to

all children. All EWG members agreed that children who can walk unaided are independently mobile.

The EWG highlighted that young children can climb before they can walk, and this was likely to be indicative of independent mobility. EWG members noted that climbing was not included in previous terms (either from the literature or current practice) used to describe independent mobility and that the inclusion of climbing in a definition might be useful in practice. The EWG also suggested that physical development milestones related to the upper body may need consideration, as a child could hit themselves with an object or toy and cause injury. Therefore, statements on voluntary grasping and climbing were added to the second consensus questionnaire.

The EWG were concerned that the inclusion of too many milestones in a definition of independently mobile may cause confusion for professionals and potentially increase the risk of misrecognising child maltreatment. Therefore, the EWG were cautious to include only physical development milestones that were likely to indicate independent mobility in the second consensus questionnaire.

EWG members carefully considered defining independent mobility in a literal sense, whilst acknowledging how the ability for a child to perform a physical development milestone might provide a reasonable explanation for injury. For example, whilst a child who can sit is not necessarily independently mobile, a child can fall over and injure themselves from a seated position. The EWG discussed the potential for all physical development milestones to lead to injury in a child, depending on environmental factors, such as the child being placed at height, or given access to objects that could cause damage (such as a rattle or toy). However, the EWG highlighted that not all milestones were indicative of independent mobility, and this was reflected in the round 2 agreement ratings.

In round 2 voting, EWG members did not consider children who could voluntarily grasp to be independently mobile (statement 4a). There was

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moderate agreement for statements on rolling but none of these reached high agreement (statements 4b-d). The EWG discussed how a neglectful environment, such as leaving a child unattended on a changing table where they could fall from height would be the important factor in assessing maltreatment in a child who may be rolling, rather than the movement of rolling itself. Children who could sit (either aided or unaided) were not considered independently mobile (statements 4e-f). There was moderate agreement on the movement to a seated position (statement 4g) and standing unaided (statement 4l). A child who could walk with aid was not considered independently mobile as this could include active assistance by a person (statement 4n).

Children who could crawl, bottom shuffle, pull to stand (using an object or unaided), cruise (using an object) or walk (using an object or unaided) were considered independently mobile (statements 4h-k, 4m and 4o-q).

1.1.7.3 Drafting the definition of independently mobile

Through discussions, 9 of the 10 statements with high agreement were consolidated into the definition of independently mobile (statements 1b, 4h-k, 4m, and 4o-q). Since the words 'upright ambulation' were deemed confusing by EWG members and the meaning of the statement was captured by other milestones, statement 8 was not used. The wording of the definition was edited for clarity and in line with the NICE style guide.

The EWG discussed ways in which the definition of independently mobile may support professionals (such as clinicians, practitioners and health visitors). For example, through difficult conversations with parents and carers and in the establishment of clear criteria for referral where child maltreatment is suspected. The EWG were mindful that the definition should be easy to understand and to implement and felt that the example milestones provided would be particularly helpful for professionals who were less experienced with child development to decide whether explanations for injuries were plausible.

The EWG discussed how policies in England supported further investigation of maltreatment in all children who are not independently mobile, including urgent referrals to paediatrics and social care services. By clarifying in the definition that typically, children aged under 12 weeks would not have the muscle strength, coordination and neurological maturity for independent mobility, EWG members were confident that young children would be highlighted as the most vulnerable and prioritised for further investigation. EWG members emphasised that questions should be asked about all injuries and further investigations conducted when there is suspicion of child maltreatment.

EWG members highlighted that independent mobility is one factor in the assessment of child maltreatment, and it should be looked at in the context of other factors, such as those proposed in recommendations 1.1.2 (bruises), 1.1.5 (lacerations, abrasions or scars) and 1.1.6 (burns or scalds) in the Child maltreatment: when to suspect maltreatment in under 18s (CG89) NICE guideline.

1.1.7.4 Other considerations

There were discussions on statements, which in round 2 voting showed a moderate level of agreement that bordered the threshold for high agreement (78%) and subsequently were to be discarded. EWG members centred discussions on statement 4d (roll across a space) as there were different views on whether rolling was indicative of independent mobility. Further, since other statements on rolling also did not reach high agreement, discarding this statement meant excluding the physical development milestone of rolling from the definition of independent mobility. Since professionals are required to exercise additional caution and investigation of injuries in children who are not independently mobile (in these cases, there is a higher risk of injuries being caused by maltreatment), EWG members were confident to discard the statement on rolling. They felt that additional caution in the assessment of

injuries in children who are rolling might be a positive outcome in practice, but this did not imply that maltreatment should be assumed.

1.1.8 Definition of the term ‘independently mobile’ that is supported by this report

This report supports the following definition of ‘independently mobile’:

A child should be considered independently mobile if they can do any of the following:

- crawl
- bottom shuffle
- pull themselves up into a standing position using an object, for example, furniture
- move into a standing position unaided
- climb, for example onto furniture or stairs
- cruise (that is, move from place to place holding onto an object, for example, furniture)
- walk using a push-along walker
- walk unaided

Children under 12 weeks typically lack the muscle strength, coordination and neurological maturity needed for independent mobility. However, age alone should not be used to determine whether a child is independently mobile.

1.1.9 Recommendations supported by this report

This report supports the interpretation of recommendations 1.1.2, 1.1.5 and 1.1.6. No new recommendations were made or amended from this report.

Documents containing the evidence that was used to develop the recommendations can be found in the [Evidence Section](#) of the Child maltreatment: when to suspect maltreatment in under 18s (CG89) NICE guideline.

1.1.10 References

1.1.10.1 Evidence used to inform statement generation

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