

Secondary Legislation Scrutiny Committee – Age Assessment Provisions



Submission of evidence from the Royal College of Paediatrics and Child Health (RCPCH).

The **Royal College of Paediatrics and Child Health (RCPCH)** is responsible for training and examining paediatricians, setting professional standards and informing research and policy. RCPCH ('the College') has over 22,000 members in the UK and internationally. We work to transform child health through knowledge, research and expertise, to improve the health and wellbeing of infants, children and young people across the world.

This document presents evidence to the Secondary Legislation Scrutiny Committee in relation to the following Statutory Instruments:

- The Justification Decision (Scientific Age Imaging) Regulations 2023
- The Immigration (Age Assessments) Regulations 2023

Our concerns are outlined in full below. In particular, RCPCH is concerned that a full impact assessment has not been carried out, that there is inconsistent use of language throughout both Instruments, and that there is insufficient evidence that 'scientific age imaging' methods provide an adequately specific age estimation for a diverse population. We additionally set out concerns in relation to application of the Age Estimation Scientific Advisory Committee's report on Scientific Methods of Age Estimation and provide additional evidence in relation to age ranges.

The RCPCH would welcome further discussion on this matter and can be contacted at health.policy@rcpch.ac.uk.

Draft Justification Decision (Scientific Age Imaging) Regulations 2023

We note that in the draft Justification Decision (Scientific Age Imaging) Regulations 2023, "the scientific age imaging practice" means radiography of one or more of the third molar, the hand and the wrist of an age-disputed person". Further we note that the use of computerised

tomography (CT scanning) is not to be used for the purposes of assessing age.

Within the Justification Decision (Scientific Age Imaging) Regulations 2023 (“the Justification Decision”) it is stated that the scientific age imaging practice may only be used to determine, using a likelihood ratio approach, whether there is more support for the age which the age-disputed person has been assessed to be following an appropriate, fair and reasonable age assessment, or for the age which the age-disputed person claims to be.

In relation to the above, several concerns arise:

Plain English

- “one or more of the third molar” does not make grammatical or medical sense. Presumably this is meant to mean “one or more of the third molar tooth or teeth”
 - This is not a scientifically sound conclusion as the “Biological evaluation methods to assist in assessing the age of unaccompanied asylum-seeking children” Report of the Interim Age Estimation Science Advisory Committee (October 2022) clearly found that whilst only one mandibular third molar is needed for assessment as development is generally comparable on the left and right sides, both sides must be imaged because if a difference is noted, the tooth on the less developed side is assessed to give the benefit of the doubt. In addition, if the root apices of the third molar on one side are curved and therefore unclear, the opposite side third molar can be assessed.
 - In the above circumstances it is clear that both the left and right third mandibular molar teeth must be radiographed if this methodology is proposed to be used and this makes the regulation text “one or more of the third molar” both scientifically inaccurate, and perverse.

Lack of clarity regarding the age assessment process

- The regulations do not make clear what an “appropriate, fair and reasonable age assessment” encompasses

Use of Likelihood ratios

- With regard to paragraph 4 of the Justification Decision, and its reference to “likelihood ratios” it must be noted that the committee’s report concluded that:
 - there is uncertainty about the data used to build the plots as they are based on a small number of studies (see for example paragraph 7.25 of the report).
- In such circumstances, until and unless further work takes place to quantify this uncertainty, and to ascertain a confidence interval for the likelihood ratio, the use of “likelihood ratios” in the way proposed, lacks adequate scientific accuracy.

Maturation changes

- The Age Estimation Scientific Advisory Committee [‘the committee’] set out clearly that “while all maturational changes happen in an essentially uniform way for most individuals, it is the timing of these changes that are important for age assessment. The difference in timing of maturation between males and females has been well documented, but there are many factors that can exert an impact on timing, such as socioeconomic factors”.
 - In short, the regulations do not adequately reflect the scientific conclusions of the committee as they fail to take into consideration factors such as socioeconomic background on the reliability of any biological age assessment methodology.

Age range rather than age

- The committee proposed that any use of biological assessment methods to assess age should wholly and exclusively be used to assess whether the range of ages which results from an assessment encompasses the UASC-claimed age and, in essence, reporting whether the claimed age was possible rather than assigning a specific age or age range.
 - This crucial scientific analysis is missing from the justification decision in the draft regulations and, accordingly, it is not clear that the justification decision is adequately justified.

The Immigration (Age Assessments) Regulations 2023

The explanatory notes to The Immigration (Age Assessments) Regulations 2023 [“the age assessment regulations”] state that:

- Regulation 2 specifies the four scientific methods: (a) the use of radiographs to assess the mandibular third molars; (b) the use of radiographs to assess the bones in the hand and wrist; (c) the use of magnetic resonance imaging (MRI) to assess the distal femur and proximal tibia; and (d) the use of MRI to assess the clavicle.

Language inconsistency

- There is an inconsistency in language between the Age Assessment Regulations and the Justification Decision insofar as radiology of the third molar tooth/teeth is concerned.

Lack of systematic review of the safety of MRI

- The committee did not, to our knowledge, conduct a systematic review of the evidence surrounding the safety of MRI in UASC – particularly about whether the use of this modality could re-trigger adverse mental health symptoms in young people exposed to trauma prior to or during their journey. This systematic review is urgently required and if there is a paucity of evidence, the default should be that this modality is not used until its safety has been proven through academic research.

Need for impact assessment

- A full impact assessment is required given the impact of the age assessment regulations on things such as access to radiography, access to MRI, reporting of radiographs and/or MRI, and the potential impact this may have on both waiting times for UASC (during which time, as a mere fact of life, the person’s age will increase and retrospective extrapolation of the outcome of the radiographic or MRI processes will not be possible) and for non-UASC waiting for their own radiographs and MRI scans.

Lack of scientific accuracy

- Neither the Justification Decision nor the Age Assessment Regulations are scientifically sound. The committee found that:
 - There is no method, biological or social worker-led, that can predict age with precision therefore, biological assessment of age should consider whether the age claimed by the UASC is 'possible' rather than be used to answer the specific question of how old that person is or whether they are under or over 18 years of age.
 - There is uncertainty in the data used to predict the maturation points of the teeth and bones particularly as there is limited data on UASC population groups
- The above conclusions have been misinterpreted, or not adequately considered, in the regulations and the justification decision.

Information provision to UASC

- The committee also recommended that UASC should be provided with clear information explaining the risks and benefits of biological evaluation in a format that allows the person undergoing the process to give informed consent and no automatic assumptions or consequences should result from refusal to consent.
 - The above conclusion inadequately features in the governments plans regarding age assessment.

Lack of precedent

- The Second Edition of the European Asylum Support Office Practical Guide on age assessment (2018) provides an overview of the methods in use in the EU+ states. While the methods in use are known, the detail of how they are used in age assessment and how they are combined and weighted compared to other evidence, is less clear. In those circumstances, there is no precedent elsewhere within the EU+ states for the position which is being advocated in the Justification Decision and the Age Assessment Regulations.

Methods to reduce ionising radiation exposure

- It is vital – to protect children from ionising radiation exposure – that if the government does intend to approve the use of radiographs to assess the stage of maturation of the mandibular third molar teeth, that Regulations must mandate dose-reducing methodologies including the use of sectional orthopantomograms (OPG) compared to full OPGs (**Benchimol et al., 2018**) and the use of the extra-oral bitewing setting on an OPG machine (**Little et al, 2020**).

Age range

- The committee reported that it is possible to assess an age range from third molar development in adolescence and young adults with a standard deviation of around two years for both males and females (**Liversidge and Marsden, 2010**). Accordingly, using this methodology will only ever provide an age range which for any UASC child aged 16 years and 1 day or older will produce a range of **two years** ie crossing beyond age 18 (ie adulthood). In those circumstances there does not appear to be any scientific justification to the use of this methodology in children who have a self-stated age of more than 16 years old.
- The committee found that there is considerable variability between groups in respect of radiography of the third molar teeth – the youngest individuals reaching maturity are aged under 17 in American Hispanics whereas in Thailand they are over 17. At age 18 the proportions with mature third molars vary ten-fold from 3% to 30%. The point where 50% of individuals have reached maturity, the median age at which maturity is reached, ranges from 18.7 years in Chile to 20.8 years in Thailand, fully two years later (see raw data in Appendix 2 of the committee's report). It does not appear that adequate (or indeed any) research has been undertaken involving children from the countries which most frequently appear on the list of countries from where children claim international protection in the UK. In such circumstances the extrapolation of data not stemming from children from those countries where asylum is most frequently claimed in the UK, is unsafe and there is no scientific evidence of its accuracy of use in children from countries other than those represented in the study.
 - This means that not only is there no certainty (even on a reasonable belief or balance of probabilities approach) of the

age (or age range) that will be generated following use of this methodology and that leads to this approach being both unethical and potentially health-harming given the adverse effects of ionising radiation which are well documented.

- The committee reports that it is possible to assess age throughout the adolescent period with a standard deviation of 1.5 to 2 years for both females and males (**Levesque et al., 1981**) and this brings with it the same problem as described above – use of any of these methods on children whose stated age is 16 years and 1 day and above, will not be robust.

Caution regarding the use of a methodology for an unintended purpose

- In relation to assessment of the hand and/or wrist, the committee's report sets out an important conclusion which is that caution is advocated in the use of a methodology that is not designed for the purpose to which it is applied and against which it has not been tested adequately.
- In such circumstances, and for the reasons given in paragraph 4.39 of the committee's report, any regulations must contain prohibitions on the use of automated bone age estimation software.

Maturation of the distal radius

- It should be noted that the distal radius is more likely than not to be visible on a radiograph of a wrist.
 - The committee found that the timing of the final maturational stage of the distal radius means that the approach of radiography of the distal radius (wrist) this approach has limited value in assessing a male who is aged 18 years or over and a female who is aged 16 years or older, since it is around this age that maturity is reached. A radiograph of a mature hand and wrist would only permit an expert to say that the individual was skeletally mature in this region but not how much time had elapsed since maturity was reached. Therefore,

it is the presence of immaturity that is of discriminatory value and something that would be most likely seen if the male was younger than 18 years or the female was younger than 16 years. However, the presence of a mature distal radius does not rule out a claimed age of 17 years in a male.

- This means that even if a mature distal radius is seen on radiograph of a male, this does not rule out that they are a child.
- The committee found that it is possible to assess age from hand/wrist images throughout the adolescent period with a standard deviation of between 0.3 and 1.4 years for females and 0.2 and 2 years for males (**Hackman and Black, 2013; Chiang et al., 2005; and Tisè et al., 2011**).

Wide standard deviation

- For all of the reasons set out earlier, because of the wide standard deviation, such methodologies are of no utility in and of themselves in determining the age of a female, with a stated age of 16.6 years or more or a male with a stated age of 16 years or more [as the result of that assessment may produce an age of 18 when, in actual fact, the patient is aged 16, for example]
- In relation to MRI of the distal femur and proximal tibia (ie the bones around the knee) the committee found that it is possible to assess age throughout the adolescent period for both females and males with a standard deviation of between 0.6 to 2.5 years for females and 1.5 to 3 years for males (**Auf der Mauer et al., 2019; Dedouit et al., 2012; Kramer et al., 2014; Vieth et al., 2018**). Such wide ranges are of no utility in determining, for legal purposes, a child's age.

Socioeconomic factors

- The committee found that socioeconomic factors can have a negative or positive impact on growth and maturation, and due to areas of deprivation and advantage within any population, can impact individuals within the same ethnic group in different ways (**Bogin, 1988; Eveleth and Tanner, 1990; Garn, 1980**). Accordingly, given the high likelihood that children seeking asylum (refuge, international protection) in the UK will have suffered from adverse socio-economic factors and deprivation, further research is required

before assessment of growth and maturation is used in a legal age assessment process. The committee describes this in the following terms and when looked at through this lens, it makes the regulations and justification decision even more perverse:

“...any age assessment is given as an age range, allowing for differences influenced by ethnicity and socioeconomic impact to be considered. It is also why the more appropriate question to be asked in relation to UASC is ‘is the claimed age possible?’ rather than the more definitive ‘how old is the individual?’”

The need for statutory guidance

- If the justification decision and the regulations are approved then it is essential that consideration is given to the environment within which any imaging or assessment would take place.
- In line with the Department of Health quality criteria for young people friendly health services young people need to be seen and assessed in an environment that is appropriate to their age and development. Ideally, young people who state they are under the age of 18 should be provided with a waiting area separate from adults and staffed by professionals who are skilled in communicating with young people. The area should be welcoming and designed to put young people at ease. Young people should be allowed to wear their own clothes wherever possible rather than be expected to change into ‘hospital’ wear. A young person should be able to bring a friend or supporter with them to their appointment as this will help to put them at ease and not feel alone. To minimise the time in an assessment environment, facilities should be set up in such a way that all the necessary images can be captured at one appointment.
 - In such circumstances Statutory Guidance needs to be issued to accompany the justification decision and the regulations. That statutory guidance must also – in a way that is consistent with the United Nations High Commissioner for Refugees’ guidelines on international protection (for example, UNHCR, 2009, para. 75) – set out how to deal with those situations where there is a discrepancy between the claimed / suspected age and the biological or social worker-led evaluation outputs.

In conclusion

- We note that, in conclusion, the committee found that there is no infallible method for either biological or social-worker-led age assessment that will provide a perfect match to chronological age.
- In such circumstances the ethics, accuracy, and appropriateness of using the methods set out in the Justification Decision or the Regulations are, at very best, very questionable and, at worst, wholly inappropriate and may be harmful to health.