NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

DIAGNOSTICS ASSESSMENT PROGRAMME

Equality impact assessment – Scoping

Artificial Intelligence software for reducing suspected skin cancer referrals through early detection of benign skin lesions: early value assessment (provisional title)

The impact on equality has been assessed during this assessment according to the principles of the NICE Equality scheme.

1. **Have any potential equality issues been identified during the scoping process (scoping workshop discussion, assessment subgroup discussion), and, if so, what are they?**

   During scoping there were potential issues raised by experts and the BAD that some technologies have not been tested in a representative sample of the population and this may consequently have poor performance in people with darker skin tones (types 5 and 6 on the Fitzpatrick scale). Certain skin cancers may look different in different skin tones and this may lead to greater number of false negatives or false positives within this population.

   The NG34 guideline also highlights that people with light skin colour or fair hair are more likely than others to develop skin cancer. But people with darker skin are often diagnosed with skin cancer at a more advanced stage compared to people with white or lighter skin.

   Another potential equality issue noted was that AI technologies face limitations by focusing on a limited number of skin cancers which risks missing rare but serious cancer types.

   It was also noted that AI technologies are aimed at those with fewer than 3 lesions. Experts mentioned that after a certain age it is more likely to find lesions on a total skin examination which are unable to be assessed in a teledermatology appointment.

   People from lower socioeconomic groups may be at greater risk of skin cancer as they may find it difficult to afford sunscreen. However, some experts noted that people from higher socioeconomic groups were at greater risk of skin cancer, but those in lower socioeconomic groups were less likely to be diagnosed.

Outdoor workers may be at higher risk due to longer periods of sun exposure.

Rural populations may be disadvantaged as there is a requirement to travel to centres for image capture appointments necessary for assessment by the AI technology.

The AI technology DERM is not eligible for use in people under 18.

2. **What is the preliminary view as to what extent these potential equality issues need addressing by the committee?**

If evidence is available on the use of the software in different skin colours and different socioeconomic groups it will be considered by committee. If no evidence or limited evidence is available on the accuracy of AI software to analyse skin lesions on black and brown skin the committee will need to consider access to the technology in these populations.

3. **Has any change to the draft scope been agreed to highlight potential equality issues?**

No. The EAG's analysis will include an assessment of evidence on subgroups based on skin colour and socioeconomic status.

4. **Have any additional stakeholders related to potential equality issues been identified during the scoping process, and, if so, have changes to the stakeholder list been made?**

No additional stakeholders have been identified.

Approved by Associate Director (name): Rebecca Albrow

Date: 25/10/2023