NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

DIAGNOSTICS ASSESSMENT PROGRAMME

Equality impact assessment – Guidance development

Heart failure algorithms for remote monitoring in people with cardiac implantable electronic devices

Consultation

1. Have the potential equality issues identified during the scoping process been addressed by the committee, and, if so, how?

   The following were identified as potential equality issues relating to the condition:

   - Heart failure may have a substantial and long-term adverse effect on a person's ability to carry out normal day-today activities. People with these conditions may be classified as having a disability and therefore protected under the Equality Act 2010 from the point of diagnosis.

   - Heart failure is more commonly identified in men than women and mainly affects older people over the age of 65 who live in lower socio-economic groups. Age and gender are protected characteristics under the Equality Act (2010).

   - The NICE guidelines for acute heart failure recommends that testing for serum natriuretic peptide levels should be offered to people who are suspected to have acute heart failure. Clinical experts highlighted that in practice these tests are rarely used. People who are obese, have an African or African–Caribbean family background, or people having treatment with diuretics, angiotensin-converting enzyme (ACE) inhibitors, beta-blockers, angiotensin II receptor blockers (ARBs) or mineralocorticoid receptor antagonists (MRAs), can have a reduced serum natriuretic peptide levels (NICE NG106). The technologies may offer an added benefit to people for whom testing for the natriuretic peptide surrogate biomarker may not be well suited.

   The following were identified as potential equality issues relating to the technology:

- Apart from the technologies which are able to use a landline, access to technologies for remote monitoring may be restricted in some populations due to internet or smart phone requirements. This may mean that older people, or people in rural or lower socio-economic areas could be less able to adopt algorithm-based remote monitoring as they may not have access to a home Wi-Fi connection or a smartphone.

- People with cognitive or physical impairment may struggle to use the transmitter hardware or smartphone apps for these technologies and may require a carer to assist them.

- Wider availability of remote monitoring technologies may allow greater access to care for people who are less able to afford travel to in-person appointments (due to costs associated with travel, poor public transport, time taken from work, physical impairments or anxiety).

  The committee considered the accessibility and equality issues related to the use of HF algorithms. No health-related quality of life (HRQoL) data was identified for people with HF algorithms or their carers. The committee recommended further research on patient reported outcomes to understand the experiences of patients who have HF algorithms. With this research, HF algorithms could address some inequalities. The inequality issues that are related to use of HF algorithms will not impact clinical practice based on the committee's recommendations for use in research only. Studies researching HF algorithms should be conducted in a way that is reflective of all patient groups to avoid further equality issues.

2. Have any other potential equality issues been raised in the diagnostics assessment report, and, if so, how has the committee addressed these?

   No other potential equality issues were raised in the assessment report.

3. Have any other potential equality issues been identified by the committee, and, if so, how has the committee addressed these?

   Management of HF is heterogeneous, which could mean that some centres would be unable to easily implement HF algorithms into their services. The committee discussed that for HF algorithms to be used effectively in clinical practice, staffing and infrastructure protocols

should be implemented to ensure heart failure is properly managed and alerts are responded to in a timely manner. This should include systems for remote contact between people and their healthcare professionals and in-person contact if necessary. This consideration is in section 3.24 of the first consultation document.

Committee noted that people may feel confined to their homes to ensure their data is being transmitted. If patients are not within range of connectivity, their data will not be transmitted until they are back within range. This consideration is in section 3.25 of the first consultation document.

Committee noted that non-English speaking people may have accessibility issues if translators are not available for remote follow ups. This consideration is in section 3.26 of the first consultation document.

4. Do the preliminary recommendations make it more difficult in practice for a specific group to access the technology compared with other groups? If so, what are the barriers to, or difficulties with, access for the specific group?

   No

5. Is there potential for the preliminary recommendations to have an adverse impact on people with disabilities because of something that is a consequence of the disability?

   No

6. Are there any recommendations or explanations that the committee could make to remove or alleviate barriers to, or difficulties with, access identified in questions 4 or 5, or otherwise fulfil NICE's obligations to promote equality?

   N/A

7. Have the committee's considerations of equality issues been described in the diagnostics consultation document, and, if so, where?

   Yes (see section numbers in previous sections).

Approved by Associate Director (name): Rebecca Albrow

Date: 01/05/2024

Second consultation

1. Have any additional potential equality issues been raised during the first consultation, and, if so, how has the committee addressed these?

   Algorithm-based remote monitoring systems are ideally positioned to reduce inequalities in access to healthcare. The committee heard that many people, particularly those from ethnic minority groups and lower socioeconomic backgrounds, do not seek medical assistance until they need to attend emergency services. Heart failure algorithms could benefit these people, because signs of decompensation would be detected and healthcare professionals automatically alerted, before the person needs to seek emergency assistance. People who are unable to advocate for themselves or who have less awareness of their symptoms would benefit from heart failure algorithms. Algorithm-based remote monitoring could also benefit people who are less mobile or live in remote areas. This is because following an alert, initial follow up may be a remote phone call interaction to determine if in-person follow up is necessary. This will reduce the need for unnecessary travel to in-person hospital appointments. See section 3.26 of the consultation document.

   A comment was received during the first consultation indicating that heart failure algorithms can allow for timely triaging of resources to allow for translators to be made available. This equality issue was removed from the guidance as it is likely that heart failure algorithm pathways can address this potential issue.

   The committee considered digital inclusion and the need for internet access. Smart phone access is not a requirement for heart failure algorithms to be used. The committee also noted that the technology is incorporated into the person's CIED, and does not need the person to engage directly with the technology themselves. The equality consideration regarding digital inclusion has been updated to remove smart phone requirements and potential difficulties with patients using the technology. See section 3.27 of the consultation document.

   The committee noted that specialist staff should be available to review alerts, and protocols should be in place to ensure heart failure is properly managed and alerts are responded to in a timely manner. This could create inequity in access to the heart algorithms because of the differences in how centres currently manage heart failure and alerts. One SCM indicated that initiatives and directives are in place to steer heart failure services in the right direction. The guidance has

been updated to reflect this. See section 3.29 of the consultation document.

2. If the recommendations have changed after consultation, are there any recommendations that make it more difficult in practice for a specific group to access the technology compared with other groups? If so, what are the barriers to, or difficulties with, access for the specific group?

   No

3. If the recommendations have changed after consultation, is there potential for the preliminary recommendations to have an adverse impact on people with disabilities because of something that is a consequence of the disability?

   No

4. If the recommendations have changed after consultation, are there any recommendations or explanations that the committee could make to remove or alleviate barriers to, or difficulties with, access identified in questions 2 and 3, or otherwise fulfil NICE's obligations to promote equality?

   No

5. Have the committee's considerations of equality issues been described in the diagnostics guidance document, and, if so, where?

   Yes. See sections 3.26-3.29.

Approved by Associate Director (name): Lizzy Latimer

Date: 09/07/2024

Final diagnostics guidance

1. Have any additional potential equality issues been raised during the second consultation, and, if so, how has the committee addressed these?

   No additional potential equality issues were raised during the second consultation.

2. If the recommendations have changed after consultation, are there any recommendations that make it more difficult in practice for a specific group to access the technology compared with other groups? If so, what are the barriers to, or difficulties with, access for the specific group?

   The recommendations did not change after the second consultation.

3. If the recommendations have changed after consultation, is there potential for the preliminary recommendations to have an adverse impact on people with disabilities because of something that is a consequence of the disability?

   The recommendations did not change after the second consultation.

4. If the recommendations have changed after consultation, are there any recommendations or explanations that the Committee could make to remove or alleviate barriers to, or difficulties with, access identified in questions 2 and 3, or otherwise fulfil NICE's obligations to promote equality?

   The recommendations did not change after the second consultation.

5. Have the committee's considerations of equality issues been described in the diagnostics guidance document, and, if so, where?

   Yes. See sections 3.27-3.30.

Approved by Associate Director (name): Lizzy Latimer

Date: 22/10/2024