Report title: NHS Lanarkshire Public Website Accessibility Audit

Evaluation commissioner: Yvonne Law, Lead Web and Digital Officer

Evaluator: Jason Lucchesi, Web Communications Officer

Evaluation date: 17/02/2022

Conformance target: [WCAG 2.1 AA Level](#)

Contents

1. Executive Summary

This report describes the conformance of the NHS Lanarkshire website with [W3C's Web Content Accessibility Guidelines (WCAG)](). The review process is described in Section 5 below and is based on evaluation described in [Accessibility Evaluation Resources]().

Based on this evaluation, the NHS Lanarkshire website is close to meeting WCAG 2.1, Conformance Level AA. Detailed review results are available in Section 6 below. Resources for follow-up study are listed in Section 7 below. Feedback on this evaluation is welcome.

2. Background about Evaluation

Conformance evaluation of web accessibility requires a combination of [semi-automated evaluation tools](#) and manual evaluation by an experienced reviewer. The evaluation results in this report are based on evaluation conducted on the following date(s): 17/02/2022. The website may have changed since that time.

3. Scope of Review

Name of website: NHS Lanarkshire

Purpose of site: To provide information related to the NHS services for people living in North and South Lanarkshire

Base URL of site: https://www.nhslanarkshire.scot.nhs.uk/

URLs included in review:

When deciding on a sample of pages to test, we chose based on:

- our most popular pages

- pages that gave a good example of each one page type

- pages that include all types of formatting, such as images, multimedia content, interactive elements, web forms and sliders/carousels

The full list of URLs are given below:

1. https://www.nhslanarkshire.scot.nhs.uk/
2. https://www.nhslanarkshire.scot.nhs.uk/news/
3. https://www.nhslanarkshire.scot.nhs.uk/services/occupational-therapy/

4. https://www.nhslanarkshire.scot.nhs.uk/services/occupational-therapy/mentalhealth/

5. https://www.nhslanarkshire.scot.nhs.uk/hospitals/university-hospital-hairmyres/

6. https://www.nhslanarkshire.scot.nhs.uk/services/pre-registration-pharmacist-training/

7. https://www.nhslanarkshire.scot.nhs.uk/services/neonatal/

8. https://www.nhslanarkshire.scot.nhs.uk/strategies/mental-health-wellbeing-2019-24/

9. https://www.nhslanarkshire.scot.nhs.uk/services/

10. https://www.nhslanarkshire.scot.nhs.uk/experts/

11. https://www.nhslanarkshire.scot.nhs.uk/foi/

12. https://www.nhslanarkshire.scot.nhs.uk/data-protection-notice/

13. https://www.nhslanarkshire.scot.nhs.uk/corporate-policies/

14. https://www.nhslanarkshire.scot.nhs.uk/corporate-policies/human-resources-policy/

15. https://www.nhslanarkshire.scot.nhs.uk/download/whistleblowing-policy/

16. https://www.nhslanarkshire.scot.nhs.uk/complaints/

17. https://www.nhslanarkshire.scot.nhs.uk/careers/

18. https://www.nhslanarkshire.scot.nhs.uk/get-involved/consult-engage/

19. https://www.nhslanarkshire.scot.nhs.uk/publications/

20. https://www.nhslanarkshire.scot.nhs.uk/kwttt/

21. https://www.nhslanarkshire.scot.nhs.uk/services/weight-management-service/nhs-staff-health-wellbeing/

22. https://www.nhslanarkshire.scot.nhs.uk/novel-corona-virus-covid-19/

23. https://www.nhslanarkshire.scot.nhs.uk/services/physiotherapy-msk/

24. https://www.nhslanarkshire.scot.nhs.uk/a-z-of-services/

25. https://www.nhslanarkshire.scot.nhs.uk/services/adult-learning-disability-service/treatments-medicine-and-health-matters/having-chemotherapy-treatment/

All pages were reviewed with semi-automated tools and manually.

Date which review conducted: 17/02/2022

Natural language(s) of website: English

4. Reviewer(s)

- **Name of reviewer:** Jason Lucchesi

- **Organization with which reviewer(s) is/are affiliated:** NHS Lanarkshire

- **Contact information for reviewer(s):** web@lanarkshire.scot.nhs.uk

- **Reviewer(s) areas of expertise:**

  - Web technologies

  - Validation tools for Web technologies

  - Web Content Accessibility Guidelines and Techniques

  - Approaches for evaluating Web accessibility

  - Use of a variety of evaluation tools for Web site accessibility

  - Disability barriers, assistive technologies, and adaptive strategies

- **Natural language(s) with which reviewer(s) is/are fluent, or familiar:** English

5. Review Process

- **Identify WCAG 2.1 Level for which conformance was tested:** WCAG 2.1 Level AA

- **Identify evaluation and validation tools used, and versions thereof:**

  - https://wave.webaim.org/

Description of manual reviews (usability testing of accessibility features) used:

Each URL, highlighted in the Scope of the review in section 3, was manually tested. To identify disabilities, we reviewed the WCAG as well as the work carried out by the government. From this we created a reference for testers so that they were more aware while testing. This can be found in the section 8 Appendices under Persona Summary. We used a range of adaptive technologies designed for people with disabilities/impairments. This may include:

- **NVDA:** a screen reader and application used by those who are blind.
- **ZoomText:** a magnification application used by those with low vision.
- **JAWS**: a screen reader used by blind people to access Web pages.
- **Dragon Naturally Speaking**: voice activated software used by those that do not use a conventional input device such as a keyboard or mouse.
- **Keyboard Only**: some users with mobility impairments have difficulty making precise movements required by pointing devices such as a mouse; therefore, a keyboard is used as the exclusive input device.
- **Readability**: Manual checks were made to assess the suitability of a Web page for those with colour blindness and dyslexia.
- **Deaf/Hard of hearing**: Manual checks were made to assess the suitability of a web page for those with hearing impairments.
- **Learning difficulties**: Manual checks were made to assess the suitability of a web page for those with learning difficulties.

Results and Recommended Actions

This website is close to meeting WCAG 2.1 AA. Accessibility features in which this site is strong include the majority of text on the website adheres to contrast ratio guidelines. Alt tags have been used well across the website. ARIA has been applied to all relevant elements.

Recommended priorities for addressing inaccessible features of site

- Colour contrast ratio of text in banner heading, headlines, main body copy, links and buttons should be reviewed.
- Sliders/carousel's should be removed from all webpages.
- Alt tags should be reviewed on all images.
- PDF's are inaccessible to various degrees. All of these documents should be available in an accessible format.

Detailed results of the testing can be found in the section 8 Appendices under Testing.

7. References

- Web Content Accessibility Guidelines (WCAG) Overview

    https://www.w3.org/WAI/intro/wcag

- Web Content Accessibility Guidelines 2.1

    https://www.w3.org/TR/WCAG21/

- Techniques for WCAG 2.1

    https://www.w3.org/WAI/WCAG21/Techniques/

- Accessibility Evaluation Resources

    http://www.w3.org/WAI/eval/

- Web Accessibility Evaluation Tools List

  https://www.w3.org/WAI/ER/tools/

- Using Combined Expertise to Evaluate Web Accessibility

  https://www.w3.org/WAI/eval/reviewteams

8. Appendices

Testing

Home Page

https://www.nhslanarkshire.scot.nhs.uk/

The Problem	Who It Impacts	Software Used
Information for you – Publications. Contrast ratio of text and background too low.	People with poor eyesight.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
Information for you – Freedom of Information. Contrast ratio of text and background too low.	People with poor eyesight.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
"Not found what you are looking for?" Search button has a poor contrast ratio.	People with poor eyesight.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A

The Problem	Who It Impacts	Software Used
"Not found what you are looking for?" Input box placeholder text has a poor contrast ratio.	People with poor eyesight.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
"Not found what you are looking for?" Missing form label from input box.	People using screen readers.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: JAWS, Wave
Cookie opt in pop up. Contrast ratio too low for "ok" and "read more".	People with poor eyesight.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
How can we help buttons are read as "blank" by screen reader when using the keyboard to tab through the page links.	People who use keyboard navigation and screen reader.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: NVDA (2021.3.1)

Recent News

https://www.nhslanarkshire.scot.nhs.uk/news/

The Problem	Who It Impacts	Software Used
Sentence "For media enquiries out of hours," is hard to understand with a screen readers pace of reading.	People who use screen readers	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: NVDA (2021.3.1)

News Article

The Problem	Who It Impacts	Software Used

Service Main page - (OT)

https://www.nhslanarkshire.scot.nhs.uk/services/occupational-therapy/

The Problem	Who It Impacts	Software Used
Metadata attribute value within "data-icon" being read aloud as part of the link when using keyboard navigation and screen reader.	People who use keyboard navigation and screen reader.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: NVDA (2021.3.1)

Service (OT Mental Health)

https://www.nhslanarkshire.scot.nhs.uk/services/occupational-therapy/mentalhealth/

The Problem	Who It Impacts	Software Used
Banner slider does not allow for content to be read aloud	People who use screen reader.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: NVDA (2021.3.1)
Banner slider automatically moves to next slide. Unable to pause.	People who use keyboard navigation or screen reader.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: NVDA (2021.3.1)

The Problem	Who It Impacts	Software Used
Banner slider text has poor contrast ratio.	People with poor eyesight.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A

Service (OT – Children and Young People)

https://www.nhslanarkshire.scot.nhs.uk/services/occupational-therapy/children-and-young-people/

The Problem	Who It Impacts	Software Used
Motor Skills box contrast ratio poor.	People with poor eyesight	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
Education Programme box contrast ratio poor.	People with poor eyesight	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
Workshops for parents box contrast ratio poor.	People with poor eyesight	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A

Hospital Page

https://www.nhslanarkshire.scot.nhs.uk/hospitals/university-hospital-hairmyres/

The Problem	Who It Impacts	Software Used

The Problem	Who It Impacts	Software Used
Contrast ratio of dropdown buttons are low	People who have poor eyesight	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
Page content is too long and complex	People who have learning disabilities	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A

Pre-Registration Pharmacist Training

https://www.nhslanarkshire.scot.nhs.uk/services/pre-registration-pharmacist-training/

The Problem	Who It Impacts	Software Used
Quotation slider has poor contrast ratio	People who have poor eyesight	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
Slider cannot be paused	People who use keyboard navigation	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
Slider automatically moves to the next section	People with learning disabilities	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A
Meet the NHS Lanarkshire Pharmacy Team content in white has a low contrast ratio	People who have poor eyesight	**Browser**: Chrome (93.0) **OS**: Windows 10

		Tools: N/A

Neonatal

https://www.nhslanarkshire.scot.nhs.uk/services/neonatal/

The Problem	Who It Impacts	Software Used

Mental Health and Wellbeing

https://www.nhslanarkshire.scot.nhs.uk/strategies/mental-health-wellbeing-2019-24/

The Problem	Who It Impacts	Software Used

Services

https://www.nhslanarkshire.scot.nhs.uk/services/

The Problem	Who It Impacts	Software Used
Non-urgent planned care procedures postponed content too long and complex.	People who have learning disabilities or low reading level	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A

Experts

https://www.nhslanarkshire.scot.nhs.uk/experts/

The Problem	Who It Impacts	Software Used
Title text has a low contrast ratio	People with poor eyesight	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A

Freedom of Information

https://www.nhslanarkshire.scot.nhs.uk/foi/

The Problem	Who It Impacts	Software Used

Data Protection Notice

https://www.nhslanarkshire.scot.nhs.uk/data-protection-notice/

The Problem	Who It Impacts	Software Used

Corporate Policies

https://www.nhslanarkshire.scot.nhs.uk/corporate-policies/

The Problem	Who It Impacts	Software Used

Human Resources Policy

https://www.nhslanarkshire.scot.nhs.uk/corporate-policies/human-resources-policy/

The Problem	Who It Impacts	Software Used

Whistleblowing Policy

https://www.nhslanarkshire.scot.nhs.uk/download/whistleblowing-policy/

The Problem	Who It Impacts	Software Used

Complaints

https://www.nhslanarkshire.scot.nhs.uk/complaints/

The Problem	Who It Impacts	Software Used
NHS Model Complaints heading text within the 3 boxes has a poor contrast ratio	People with poor eyesight	**Browser**: Chrome (93.0) **OS**: Windows 10

| | | **Tools**: N/A |
| | | |

Careers

https://www.nhslanarkshire.scot.nhs.uk/careers/

The Problem	Who It Impacts	Software Used

Consult Engage

https://www.nhslanarkshire.scot.nhs.uk/get-involved/consult-engage/

The Problem	Who It Impacts	Software Used

Publications

https://www.nhslanarkshire.scot.nhs.uk/publications/

The Problem	Who It Impacts	Software Used

Weaning

https://www.nhslanarkshire.scot.nhs.uk/services/infant-nutrition/weaning/

The Problem	Who It Impacts	Software Used

Know who to turn to

https://www.nhslanarkshire.scot.nhs.uk/kwttt/

Now redirects to Expert's page, already checked as part of this review

The Problem	Who It Impacts	Software Used

Staff health and well being

https://www.nhslanarkshire.scot.nhs.uk/services/weight-management-service/nhs-staff-health-wellbeing/

The Problem	Who It Impacts	Software Used

Covid pages

https://www.nhslanarkshire.scot.nhs.uk/novel-corona-virus-covid-19/

The Problem	Who It Impacts	Software Used

MSK Physio

https://www.nhslanarkshire.scot.nhs.uk/services/physiotherapy-msk/

The Problem	Who It Impacts	Software Used

A-Z

https://www.nhslanarkshire.scot.nhs.uk/a-z-of-services/

The Problem	Who It Impacts	Software Used
Tab menu cannot be used with keyboard navigation	People who use the keyboard to navigate.	**Browser**: Chrome (93.0) **OS**: Windows 10 **Tools**: N/A

Easy Read

https://www.nhslanarkshire.scot.nhs.uk/services/adult-learning-disability-service/treatments-medicine-and-health-matters/having-chemotherapy-treatment/

The Problem	Who It Impacts	Software Used

Persona Summary

Persona Name	Disabilities or Impairments	Devices and technology	Type	Issues
Ashleigh	Partially sighted, screen reader user	JAWS	Screen Reader	Screen reader unable to read parts of a website. Screen reader can't read forms if they don't have proper labels. Descriptions of images are missing or lacking.
Christopher	Rheumatoid arthritis	Dragon NaturallySpeaking	Speech Recognition	video players and navigation menus can be difficult to use
Claudia	Partially sighted, screen magnifier user	ZoomText	Screen Magnifier	pop-ups, long content, forms not spaced out
Pawel	Asperger	na	na	Distracted by movement such as banners or video. Stressed by stressed, too much text or too many links.
Ron	Older user with multiple conditions	na	na	He doesn't know how to adjust his browser settings, colours lack contrast, text too small
Saleem	Profoundly deaf user	na	BSL	Captions just say things like 'music playing' and don't have the song words. Finds it difficult to read large blocks of text. Because his English isn't great, if something isn't easy to understand, he needs it in BSL. Requires to get text messages over calls.
Simone	Dyslexia	dyslexia software	Screen Reader	Finds it difficult to learn anything new, takes a long time to write out forms, requires assistance with spelling (such as

				using search engines), prefers simplified language, longer reading time