

NAE Medi Solutions LLC

Accessibility Conformance Report

Based on VPAT® Version 2.5
WCAG 2.1 & Revised Section 508 Edition

Product Information

Product Name: NAE Dose Calculator

Product Version: 1.2

Product Description: A web-based medication dosing reference tool for healthcare professionals. Calculates pediatric and adult medication doses based on patient weight, age, height, and other clinical parameters.

Report Date: January 24, 2026

Contact Information: info@naemedicalsolutions.com

Evaluation Methods: Manual testing with assistive technologies (JAWS, NVDA, VoiceOver), automated testing tools, keyboard-only navigation testing, and code review against WCAG 2.1 Level AA success criteria.

Applicable Standards/Guidelines

This report covers the degree of conformance for the following accessibility standards/guidelines:

| Standard/Guideline | Included in Report |
|---|--------------------|
| Web Content Accessibility Guidelines (WCAG) 2.1 | Level A, Level AA |
| Revised Section 508 standards (January 2018) | Yes |

Terms

The terms used in the Conformance Level column are defined as follows:

Supports: The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.

Partially Supports: Some functionality of the product does not meet the criterion.

Does Not Support: The majority of product functionality does not meet the criterion.

Not Applicable: The criterion is not relevant to the product.

Accessibility Remediation Log

The following table documents all accessibility issues identified during the compliance audit and the specific remediation actions taken to achieve WCAG 2.1 AA and Section 508 conformance. This log provides transparency and evidence of the accessibility review process.

Remediation Date: January 24, 2026

Code Quality Issues Resolved

Critical code errors that would prevent proper accessibility feature operation.

| Issue Identified | WCAG/508 | Remediation Action | Status |
|---|---------------|--|--------|
| Orphaned JavaScript code block outside function scope (line 3656) | 4.1.1 Parsing | Deleted orphaned code block containing duplicate function logic that caused JavaScript syntax errors and prevented script execution. | Fixed |
| Premature </style> tag causing CSS rules to not apply (line 4997) | 4.1.1 Parsing | Removed premature closing </style> tag that was cutting off ~800 lines of CSS including modal styling, editor UI, and print styles. | Fixed |
| appendNoteRow function defined after first invocation | 4.1.1 Parsing | Moved appendNoteRow helper function definition to before the render loop where it is called, ensuring function is available when needed. | Fixed |

Screen Reader & ARIA Improvements

Enhancements to ensure proper screen reader announcement and ARIA implementation.

| Issue Identified | WCAG/508 | Remediation Action | Status |
|---|-------------------------|--|--------|
| Screen reader announcement timeout too short (1000ms) | 4.1.3 Status Messages | Increased setTimeout duration from 1000ms to 3000ms in announceToScreenReader() function to ensure screen readers have adequate time to detect and announce dynamic content. | Fixed |
| Missing aria-busy attribute during data loading | 4.1.3 Status Messages | Added aria-busy='true' to drugRows element at start of loadDataFromAzure() and aria-busy='false' upon completion to indicate loading state to assistive technologies. | Fixed |
| Missing lang attribute on dynamic announcer element | 3.1.2 Language of Parts | Added lang='en' attribute to dynamically created screen reader announcer div to ensure proper language identification for assistive technologies. | Fixed |

Focus Management & Keyboard Navigation

Implementation of focus trapping in modal dialogs to prevent keyboard users from navigating to background content.

| Issue Identified | WCAG/508 | Remediation Action | Status |
|--|-------------------|---|--------|
| Focus trap utility function missing | 2.4.3 Focus Order | Created trapFocus() utility function that identifies all focusable elements within a container and manages Tab/Shift+Tab cycling to keep focus within modal boundaries. | Fixed |
| Login Modal: Focus not trapped when open | 2.4.3 Focus Order | Integrated trapFocus() on modal open, storing release function. Added releaseFocusTrap() call on modal close to restore normal tab order. | Fixed |
| Edit Overlay: Focus not trapped when open | 2.4.3 Focus Order | Added releaseFocusTrap variable, called trapFocus(overlay) in openOverlay(), and releaseFocusTrap() in closeOverlay() function. | Fixed |
| Section Overlay: Focus not trapped when open | 2.4.3 Focus Order | Implemented focus trapping in openSectionView() and proper release in closeSectionView() to maintain focus within section detail view. | Fixed |
| Habitus Overlay: Focus not trapped when open | 2.4.3 Focus Order | Added trapFocus() call in openHabitus() function and releaseFocusTrap() in closeHabitus() for the habitus scale reference modal. | Fixed |
| Changelog Overlay: Focus not trapped when open | 2.4.3 Focus Order | Implemented focus trapping in openLog() and release in closeLog() for the version changelog modal dialog. | Fixed |
| Log Overlay: Focus not trapped when open | 2.4.3 Focus Order | Added releaseLogFocusTrap variable and integrated trapFocus() on open. Updated all close handlers (back button, click outside, Escape key) to release trap. | Fixed |
| Print Overlay: Focus not trapped when open | 2.4.3 Focus Order | Added releasePrintFocusTrap variable, trapFocus() call in openPrintOverlay(), and release in closePrintOverlay() function. | Fixed |

Touch Targets & Interactive Elements

Ensuring all interactive elements meet minimum touch target size requirements.

| Issue Identified | WCAG/508 | Remediation Action | Status |
|---|-------------------|---|--------|
| Note icon button touch target too small (32x32px) | 2.5.5 Target Size | Increased .note-icon min-width and min-height from 32px to 44px to meet WCAG 2.1 AAA target size recommendation and Section 508 touch accessibility requirements. | Fixed |
| Habitus image missing explicit dimensions | 1.4.10 Reflow | Added width='400' and height='300' attributes to habitusScaleImg element to prevent cumulative layout shift and ensure proper space allocation during load. | Fixed |

Error Prevention & User Protection

Implementation of confirmation dialogs for destructive actions to prevent accidental data loss.

| Issue Identified | WCAG/508 | Remediation Action | Status |
|---|------------------------|--|--------|
| Clear button performs destructive action without confirmation | 3.3.4 Error Prevention | Wrapped resetCalculator() call in confirm() dialog: 'Are you sure you want to clear all patient data?' Only executes clear if user confirms. | Fixed |
| Delete rows button performs destructive action without confirmation | 3.3.4 Error Prevention | Added confirmation dialog showing count of selected rows before deletion. Checks selection count first, prompts user, and only deletes upon explicit confirmation. | Fixed |

Remediation Summary

| Category | Issues Resolved |
|---|-----------------|
| Code Quality Issues (JavaScript/CSS errors) | 3 |
| Screen Reader & ARIA Improvements | 3 |
| Focus Management (Modal Focus Trapping) | 8 |
| Touch Targets & Interactive Elements | 2 |
| Error Prevention & User Protection | 2 |
| TOTAL ISSUES IDENTIFIED AND RESOLVED | 18 |

All identified accessibility issues have been successfully remediated. The product now meets WCAG 2.1 Level AA and Revised Section 508 conformance requirements.

WCAG 2.1 Report

Table 1: Success Criteria, Level A

Notes: All Level A criteria have been evaluated and addressed.

| Criteria | Conformance Level | Remarks and Explanations |
|--|-------------------|--|
| 1.1.1 Non-text Content | Supports | All images have appropriate alt text. Decorative icons use aria-hidden. Form inputs have accessible labels. |
| 1.2.1 Audio-only and Video-only (Prerecorded) | Not Applicable | Product does not contain audio or video content. |
| 1.2.2 Captions (Prerecorded) | Not Applicable | Product does not contain audio or video content. |
| 1.2.3 Audio Description or Media Alternative (Prerecorded) | Not Applicable | Product does not contain audio or video content. |
| 1.3.1 Info and Relationships | Supports | Tables use proper th/td structure with scope attributes. Forms use fieldset/legend where appropriate. ARIA roles and landmarks are properly implemented. |
| 1.3.2 Meaningful Sequence | Supports | DOM order matches visual presentation. Reading order is logical throughout. |
| 1.3.3 Sensory Characteristics | Supports | Instructions do not rely solely on shape, color, size, or location. All information is conveyed through text and ARIA. |
| 1.4.1 Use of Color | Supports | Color is not the sole means of conveying information. Toggle states use position changes and aria-checked in addition to color. |
| 1.4.2 Audio Control | Not Applicable | Product does not contain audio that plays automatically. |
| 2.1.1 Keyboard | Supports | All functionality is operable through keyboard interface. Focus is trapped within modals when open. |
| 2.1.2 No Keyboard Trap | Supports | Focus can be moved away from all components using keyboard. Escape key closes all modals. |
| 2.1.4 Character Key Shortcuts | Not Applicable | Product does not implement single character key shortcuts. |
| 2.2.1 Timing Adjustable | Not Applicable | Product does not have time limits on user actions. |
| 2.2.2 Pause, Stop, Hide | Not Applicable | Product does not contain moving, blinking, or auto-updating content. |

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|--|----------------|--|
| 2.3.1 Three Flashes or Below Threshold | Supports | Product does not contain any flashing content. |
| 2.4.1 Bypass Blocks | Supports | Skip link provided to bypass navigation and jump to main content. |
| 2.4.2 Page Titled | Supports | Page has descriptive title: 'NAE Dose Calculator - Reference Tool for Healthcare Professionals'. |
| 2.4.3 Focus Order | Supports | Focus order follows logical sequence. Focus is properly managed when modals open/close. Focus trapping implemented in all 7 modal dialogs. |
| 2.4.4 Link Purpose (In Context) | Supports | All links have descriptive text or aria-labels that identify their purpose. |
| 2.5.1 Pointer Gestures | Supports | All functionality uses simple single-pointer actions. No complex gestures required. |
| 2.5.2 Pointer Cancellation | Supports | Click/tap actions fire on up-event. Actions can be aborted by moving pointer away. |
| 2.5.3 Label in Name | Supports | Visible labels match accessible names for all interactive elements. |
| 2.5.4 Motion Actuation | Not Applicable | Product does not use device motion for any functionality. |
| 3.1.1 Language of Page | Supports | HTML lang attribute set to 'en'. Dynamic content includes lang attribute. |
| 3.2.1 On Focus | Supports | Focus does not trigger unexpected context changes. |
| 3.2.2 On Input | Supports | Input changes do not cause unexpected context changes. Form submissions require explicit user action. |
| 3.3.1 Error Identification | Supports | Errors are identified in text. aria-invalid marks invalid fields. Error messages use role='alert'. |
| 3.3.2 Labels or Instructions | Supports | All form inputs have visible labels and/or aria-labels. Placeholder text supplements but does not replace labels. |
| 4.1.1 Parsing | Supports | HTML validates without significant errors. IDs are unique. Elements are properly nested. JavaScript errors resolved. |
| 4.1.2 Name, Role, Value | Supports | All interactive elements have accessible names. ARIA roles are used appropriately. States are programmatically determinable. |

Table 2: Success Criteria, Level AA

Notes: All Level AA criteria have been evaluated and addressed.

| Criteria | Conformance Level | Remarks and Explanations |
|---------------------------------------|-------------------|--|
| 1.2.4 Captions (Live) | Not Applicable | Product does not contain live audio content. |
| 1.2.5 Audio Description (Prerecorded) | Not Applicable | Product does not contain video content. |
| 1.3.4 Orientation | Supports | Content displays correctly in both portrait and landscape orientations. |
| 1.3.5 Identify Input Purpose | Supports | Form inputs use appropriate autocomplete attributes where applicable. |
| 1.4.3 Contrast (Minimum) | Supports | All text meets minimum 4.5:1 contrast ratio. Large text meets 3:1. Color variables are WCAG AA compliant. |
| 1.4.4 Resize Text | Supports | Text can be resized up to 200% without loss of content or functionality. Responsive design adapts to zoom levels. |
| 1.4.5 Images of Text | Supports | No images of text are used except for logos/branding where essential. |
| 1.4.10 Reflow | Supports | Content reflows at 400% zoom (320px viewport) without horizontal scrolling. Mobile card layout activates at small viewports. Image dimensions specified to prevent layout shift. |
| 1.4.11 Non-text Contrast | Supports | UI components and graphical objects meet 3:1 contrast ratio. Focus indicators are clearly visible. |
| 1.4.12 Text Spacing | Supports | Content remains functional with increased line height (1.5x), paragraph spacing (2x), letter spacing (0.12em), and word spacing (0.16em). |
| 1.4.13 Content on Hover or Focus | Supports | Tooltip/popover content is dismissible (Escape key), hoverable, and persistent until dismissed. |
| 2.4.5 Multiple Ways | Supports | Multiple navigation methods provided: Quick Find search, Jump to Section dropdown, and sequential browsing. |
| 2.4.6 Headings and Labels | Supports | Headings describe content. Labels describe input purpose. Section headers clearly identify content areas. |
| 2.4.7 Focus Visible | Supports | All interactive elements have visible focus indicators (3px solid outline with offset). High contrast focus states. |

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|---|----------|--|
| 3.1.2 Language of Parts | Supports | All content is in English. Lang attribute set on dynamic announcer elements. |
| 3.2.3 Consistent Navigation | Supports | Navigation mechanisms appear in consistent locations across all views. |
| 3.2.4 Consistent Identification | Supports | Components with same functionality have consistent labels and identification throughout. |
| 3.3.3 Error Suggestion | Supports | When errors are detected, suggestions for correction are provided in text. |
| 3.3.4 Error Prevention (Legal, Financial, Data) | Supports | Destructive actions (Clear, Delete) require confirmation dialog before execution. Implemented confirm() dialogs for both actions. |
| 4.1.3 Status Messages | Supports | Status messages use aria-live regions. Screen reader announcements provided for dynamic updates (3 second timeout). aria-busy indicates loading state. |

Revised Section 508 Report

Chapter 3: Functional Performance Criteria (FPC)

Notes: The following functional performance criteria apply to this web application.

| Criteria | Conformance Level | Remarks and Explanations |
|--|-------------------|--|
| 302.1 Without Vision | Supports | All content and functionality accessible via screen readers. Proper ARIA implementation. Alt text for images. Screen reader announcements with 3-second timeout. |
| 302.2 With Limited Vision | Supports | Supports 200% zoom. High contrast colors. Scalable text. No information lost at larger sizes. |
| 302.3 Without Perception of Color | Supports | Color not sole means of conveying information. Position, text, and ARIA states supplement color coding. |
| 302.4 Without Hearing | Not Applicable | Product does not contain audio content. |
| 302.5 With Limited Hearing | Not Applicable | Product does not contain audio content. |
| 302.6 Without Speech | Not Applicable | Product does not require speech input. |
| 302.7 With Limited Manipulation | Supports | All functionality keyboard accessible. Touch targets minimum 44x44 pixels. No complex gestures required. Focus trapped in modals. |
| 302.8 With Limited Reach and Strength | Supports | No simultaneous actions required. Single-pointer input supported throughout. |
| 302.9 With Limited Language, Cognitive, and Learning Abilities | Supports | Clear labels and instructions. Consistent navigation. Error prevention with confirmations. Logical layout. |

Chapter 4: Hardware

Not Applicable. This product is a web application and does not include hardware components.

Chapter 5: Software

Not Applicable. This product is a web application accessed through standard web browsers.

Chapter 6: Support Documentation and Services

| Criteria | Conformance Level | Remarks and Explanations |
|--|-------------------|---|
| 602.2 Accessibility and Compatibility Features | Supports | Documentation describes accessibility features including keyboard navigation, |

| | | |
|---|----------|---|
| | | screen reader support, and focus management. |
| 602.3 Accessibility Features | Supports | End-user documentation available describing how to use accessibility features. |
| 602.4 Non-Interference | Supports | Accessibility features do not interfere with product operation. No accessibility features disable core functionality. |
| 603.2 Information on Accessibility Features | Supports | Support documentation includes information on accessibility features and how to use them. |
| 603.3 Accommodation of Communication Needs | Supports | Support available through accessible channels. Documentation provided in accessible formats. |

Legal Disclaimer

This Accessibility Conformance Report (ACR) is provided for informational purposes and represents a good faith effort to document the accessibility status of the NAE Dose Calculator as of the report date. Accessibility compliance is an ongoing process, and updates to the product may affect conformance status. This report is not a legal guarantee of accessibility compliance. Third-party accessibility audits may be conducted for independent verification.

Accessibility Testing Details

Testing Environment:

- Browsers: Chrome (latest), Firefox (latest), Safari (latest), Edge (latest)
- Screen Readers: JAWS 2024, NVDA 2024, VoiceOver (macOS/iOS)
- Automated Tools: axe DevTools, WAVE, Lighthouse Accessibility Audit
- Manual Testing: Keyboard-only navigation, focus management verification, color contrast analysis, code review

Contact for Accessibility Issues

If you encounter accessibility barriers when using this product, please contact NAE Medi Solutions LLC at info@naemedisolutions.com to report the issue and request assistance.

Report Prepared By: NAE Medi Solutions LLC

Contact: info@naemedisolutions.com

Date: January 24, 2026