

# 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@naemedolutions.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.

<b>Issue Identified</b>	<b>WCAG/508</b>	<b>Remediation Action</b>	<b>Status</b>
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
<b>TOTAL ISSUES IDENTIFIED AND RESOLVED</b>	<b>18</b>

**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.

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.

<b>Criteria</b>	<b>Conformance Level</b>	<b>Remarks and Explanations</b>
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.

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@naemedolutions.com](mailto:info@naemedolutions.com) to report the issue and request assistance.

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**Date:** January 24, 2026