

VPAT Accessibility Conformance Report

(Based on ITI VPAT®)

Name of Product	SimChart NG
Date Last Updated	June 10, 2026
Completed by	Jay Nemchik (Elsevier Digital Accessibility Team)
Applicable Standards/Guidelines	This document rates SimChart NG according to the W3C WCAG 2.1 A and AA requirements.
Contact for More Information	Elsevier Digital Accessibility Team accessibility@elsevier.com
Testing Tools and Methods	• Hands-on keyboard operation • DevTools/Code inspection • Mozilla Firefox 115 and Chrome 124 on Windows 11 22H2 • NVDA screen reader 2023.3 • WAVE Browser Extension • Color Contrast Analyzer • W3C Web Accessibility Initiative (WAI) Pages • Elsevier Accessibility Checklist
Document Sections	This review document includes all WCAG 2.1 A and AA checkpoints, organized into 7 logical sections: • Visuals • Keyboard • Headings and Structure • Labeling • Multimedia • Usability • Mobile User Experience
Pages Covered	Add SimChart Item, Choose Content, Configure Case Study, Configure EHR, Assignment Grading, Individual Student Grading, Case Study Information, Charting Summary, Vital Signs, Pharmacy Orders, Case Study Quiz, Clinical Setup.
Terms	• Supports: The functionality of the product has at least one method that meets the criteria without known defects or meets with equivalent facilitation. • Partially supports: Some functionality of the product does not meet the criteria. • Does not support: Majority of functionality of the product does not meet the criteria. • Supports (N/A): According to W3C on conformance, "If there is no content to which a success criterion applies, the success criterion is satisfied."
Notes/Terminology	• "AT" stands for Assistive Technology such as screen readers, voice input, etc.

Conformance Summary

WCAG 2.1 Success Criterion	Level	Evaluation
1.1.1: Non-text Content	A	Supports
1.2.1: Audio-only and Video-only (Prerecorded)	A	Supports (N/A)
1.2.2: Captions (Prerecorded)	A	Supports (N/A)
1.2.3: Audio Description or Full Text Alternative	A	Supports (N/A)
1.2.4: Captions (Live)	AA	Supports (N/A)
1.2.5: Audio Description	AA	Supports (N/A)
1.3.1: Info and Relationships	A	Partially supports
1.3.2: Meaningful Sequence	A	Supports
1.3.3: Sensory Characteristics	A	Supports
1.3.4: Orientation (2.1)	AA	Supports
1.3.5: Identify Input Purpose (2.1)	AA	Supports (N/A)
1.4.1: Use of Color	A	Supports
1.4.2: Audio Control	A	Supports (N/A)
1.4.3: Contrast (Minimum)	AA	Partially supports
1.4.4: Resize text	AA	Supports
1.4.5: Images of Text	AA	Supports
1.4.10: Reflow (2.1)	AA	Partially supports
1.4.11: Non-Text Contrast (2.1)	AA	Supports
1.4.12: Text Spacing (2.1)	AA	Supports
1.4.13: Content on Hover or Focus (2.1)	AA	Partially supports
2.1.1: Keyboard	A	Partially supports
2.1.2: No Keyboard Trap	A	Supports
2.1.4: Character Key Shortcuts (2.1)	A	Supports (N/A)
2.2.1: Timing Adjustable	A	Supports
2.2.2: Pause, Stop, Hide	A	Supports (N/A)
2.3.1: Three Flashes or Below Threshold	A	Supports (N/A)
2.4.1: Bypass Blocks	A	Supports
2.4.2: Page Titled	A	Supports
2.4.3: Focus Order	A	Partially supports
2.4.4: Link Purpose (In Context)	A	Supports
2.4.5: Multiple Ways	AA	Supports
2.4.6: Headings and Labels	AA	Supports
2.4.7: Focus Visible	AA	Supports
2.5.1: Pointer Gestures (2.1)	A	Supports (N/A)
2.5.2: Pointer Cancellation (2.1)	A	Supports
2.5.3: Label in Name (2.1)	A	Supports
2.5.4: Motion Actuation (2.1)	A	Supports (N/A)
3.1.1: Language of Page	A	Supports
3.1.2: Language of Parts	AA	Supports (N/A)

WCAG 2.1 Success Criterion	Level	Evaluation
3.2.1: On Focus	A	Supports
3.2.2: On Input	A	Supports
3.2.3: Consistent Navigation	AA	Supports
3.2.4: Consistent Identification	AA	Supports
3.3.1: Error Identification	A	Supports
3.3.2: Labels or Instructions	A	Partially supports
3.3.3: Error Suggestion	AA	Supports
3.3.4: Error Prevention (Legal, Financial, Data)	AA	Supports
4.1.1: Parsing	A	Supports
4.1.2: Name, Role, Value	A	Partially supports
4.1.3: Status Messages (2.1)	AA	Supports (N/A)

WCAG 2.1 A and AA Success Criteria

Visuals

WCAG 2.1 Checkpoint	Conformance Level	Remarks
1.1.1: Non-Text Content (A) Provide text alternatives for non-text content (e.g. images)	Supports	All images, icons, and graphs include text equivalents.
1.3.3: Sensory Characteristics (A) Do not rely on sensory characteristics of components such as shape, size, visual location, orientation, or sound	Supports	Content does not rely on sensory characteristics.
1.4.1: Use of Color (A) Color is not used as the only visual means of conveying info	Supports	Color is not used as the only means of conveying information.
1.4.3: Color Contrast (Minimum) (AA) Text has enough contrast with the background (4.5:1 for small text and 3:1 for large text)	Partially supports	Text has enough contrast with its corresponding background in most areas. Exceptions: The selected date for the date picker used in several areas does not have enough contrast. Charting Summary: The data labels in the charts do not have enough contrast at 2.08:1.
1.4.4: Resize Text (AA) Text can be enlarged up to 200% without loss of functionality.	Supports	Users can resize browser text to 200% without loss of functionality.
1.4.5: Images of Text (AA) Text is used rather than images of text, except where the presentation of text is essential, such as logos	Supports	No images of text are used other than for Logos or essential presentation.
1.4.10: Reflow (AA) Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:	Partially supports	At small screen sizes, all content is displayed in one scrolling direction. Exceptions: Clinical Setup: At small viewport settings, the sticky elements cover the main content of the page.

Vertical scrolling content at a width equivalent to 320 CSS pixels; Horizontal scrolling content at a height equivalent to 256 CSS pixels.		
1.4.11: Non-Text Contrast (AA) User interact components and graphical objects have a contrast ratio of at least 3:1 against adjacent color(s).	Supports	UI components and graphical objects pass the minimum contrast ratio of 3:1.
1.4.12: Text Spacing (AA) In content implemented using markup languages that support the following text style properties, no loss of content or functionality occurs by setting all the following and by changing no other style property: Line height (line spacing) to at least 1.5 times the font size; Spacing following paragraphs to at least 2 times the font size; Letter spacing (tracking) to at least 0.12 times the font size; Word spacing to at least 0.16 times the font size.	Supports	All content can be adjusted to the minimum text spacing requirements without loss of readability or functionality.
1.4.13: Content on Hover or Focus (AA) Where receiving and then removing pointer hover or keyboard focus triggers additional content to become visible and	Partially supports	There are not many instances of content that appears on hover or focus. Some of them are hoverable and dismissable, such as the Date Pickers. Exceptions: Individual Student Grading: The time spent tooltip is not hoverable or dismissable.

then hidden, the following are true: - Dismissable - Hoverable - Persistent		Assignment Grading: The time spent tooltip is not hoverable or dismissable.
2.3.1: Three Flashes or Below Threshold (A) No more than three flashes in a 1-second period, or the flashes are below the defined thresholds	Supports (N/A)	No flashing content exists.

Keyboard

WCAG 2.1 Checkpoint	Conformance Level	Remarks
1.3.2: Meaningful Sequence (A) The correct reading sequence can be programmatically determined	Supports	The correct reading sequence is logical with the DOM order matching the visual order in most places.
2.1.1: Keyboard (A) All functionality is available from a keyboard, except for tasks such as drawing	Partially supports	Most parts of the site have proper keyboard operability. Exceptions: Choose Content: Users should be able to move between radio buttons with the arrow keys. Case Study Information: The Phase buttons in the navigation list should not be reachable by keyboard, as mouse users cannot navigate between steps either.
2.1.2: No Keyboard Trap (A) The user can use the keyboard to move through page elements and is not trapped on a particular element	Supports	No keyboard traps exist on any page.
2.1.4: Character Key Shortcuts (A) If a keyboard shortcut is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at least one of the following is true: Turn off	Supports (N/A)	No keyboard shortcuts are implemented on the site.

• Remap • Active only on focus		
2.4.3: Focus Order (A) Users can tab through the elements of a page in a logical order	Partially supports	Tab order is logical on the site in most areas. Focus management works properly for some modal windows. Exceptions: Configure Case Study: The Date Picker widget should manage focus like a modal dialog. Configure EHR: The Date Picker widget should manage focus like a modal dialog. Charting Summary: Attempting to tab past the Search Charts input when the dropdown is open causes focus to jump to the bottom of the page. Pharmacy Orders: The Date Picker widget should manage focus like a modal dialog. Individual Student Grading: There are invisible tab stops after the tablist. Clinical Setup: The Date Picker widget should manage focus like a modal dialog.
2.4.7: Focus Visible (AA) The page element with the current keyboard focus has a visible focus indicator	Supports	Most elements use a custom-styled visible focus.
3.2.1: On Focus (A) When a UI component receives focus, this does not trigger unexpected actions.	Supports	Focusable elements do not cause unexpected actions when receiving focus.

Headings and Structure

WCAG 2.1 Checkpoint	Conformance Level	Remarks
1.3.1: Information and Relationships (A) Info, structure, and relationships can be programmatically determined	Partially supports	Headings are used on most pages. Lists are typically used to group related content. Landmarks are used in several places. Several pages are missing h1s. Exceptions: Add SimChart Item: The steps should be in an ordered list. Choose Content: The steps should be in an ordered list. Configure EHR: The steps should be in an ordered list.

		Case Study Information: The Case Study Overview and Phases should be in an ordered list. Charting Summary: Two h1s are used on the page.
2.4.1: Bypass Blocks (A) Users can bypass repeated blocks of content.	Supports	Headings and landmarks exist, allowing screen reader users to skip repetitive content. A skip link exists in areas where there is repetitive navigation.
2.4.6: Headings and Labels (AA) Headings and labels are clear and consistent.	Supports	Headings and labels used are clear and descriptive.
3.1.1: Language of Page (A) The language of the page is specified	Supports	The language is defined as lang="en" on all pages.
3.1.2: Language of Parts (AA) Specify the language of text passages that are in a different language than the default language of the page.	Supports (N/A)	There are no instances of text that are in a different language than the page default.
4.1.1: Parsing (A) Use valid, error-free HTML	Supports	HTML and CSS passes concerning these 4 specific criteria: (i) elements have complete start and end tags, (ii) elements are nested according to their specifications (iii) elements do not contain duplicate attributes (iv) any IDs are unique, except where the specifications allow these features.

Labeling

WCAG 2.1 Checkpoint	Conformance Level	Remarks
1.3.5: Identify Input Purpose (AA) The purpose of each input field collecting information about the user can be programmatically determined when: The input field serves a purpose identified in the Input Purposes for User Interface Components section; and the content is implemented using technologies with support for identifying	Supports (N/A)	There are no fields for which the autocomplete attribute applies.

the expected meaning for form input data.		
2.4.2: Page Titled (A) The page has a title describing its topic or purpose	Supports	The title changes accordingly for most pages and is typically descriptive.
2.4.4: Link Purpose (In Context) (A) The purpose of each link can be determined from the link text or surrounding context.	Supports	Links used have an identifiable purpose from the link text or surrounding context.
2.5.3: Label in Name (A) For user interface components with labels that include text or images of text, the name contains the text that is presented visually.	Supports	All user interface components have the visible label as the first part of the programmatic label.
3.2.4: Consistent Identification (AA) UI components used across the web site are identified consistently on every page.	Supports	UI components are consistent across the site in terms of HTML implementation and labelling.
3.3.1: Error Identification (A) Input errors are clearly marked and described to the user.	Supports	Input errors are displayed well visually and programmatically.
3.3.2: Labels or Instructions (A) Items requiring user input are clearly labeled or have clear instructions.	Partially supports	Most input areas have clear labels which are programmatically assigned. Exceptions: Choose Content: The radio buttons for choosing content do not have labels. When creating an EHR, the objectives textareas do not have labels. Configure Case Study: The Scheduling headings should be group labels for the following input elements. The Grading heading should also be a group label for its radio buttons. Search Students does not have a label. Configure EHR: The Scheduling headings should be group labels for the following input elements. The Grading heading should also be a group label for its radio buttons. Search Students does not have a label. All Students checkbox does not have a label. Assignment Grading: The Statuses select label is not descriptive of its purpose.

3.3.3: Error Suggestion (AA) When the user makes an input error, give suggestions for valid input.	Supports	There are no forms on the site that would give error suggestions.
4.1.2: Name, Role, Value (A) For all UI components, the name, value, and role can be programmatically determined.	Partially supports	Most UI components properly communicate their state programmatically. A few custom components are missing proper ARIA attributes or roles. Exceptions: All Modal Dialogs: The wrong ARIA is used to try and label modals. Add SimChart Item: The current step text should have aria-current="step". Choose Content: Tabpanels for the Quick View tabs should have role="tabpanel". Information modal needs a properly descriptive label. Configure Case Study: The Date Picker widget needs a label. Configure EHR: The Date Picker widget needs a label. Case Study Information: The current phase on the left should have aria-current="step". Charting Summary: The navigation links that drill down into the navigation menu should be buttons. Clinical Setup: Information modal needs a properly descriptive label.
4.1.3: Status Messages (AA) In content implemented using markup languages, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus.	Supports (N/A)	There are no status messages of the type described by this criterion.

Multimedia

WCAG 2.1 Checkpoint	Conformance Level	Remarks
1.2.1: Audio-only or Video-only (Prerecorded) (A)	Supports (N/A)	No pre-recorded audio-only or video-only content was reviewed.

Provide alternatives for pre-recorded audio-only or video-only content.		
1.2.2: Captions (Prerecorded) (A) Provide captions for pre-recorded audio	Supports (N/A)	There is no pre-recorded audio on the site.
1.2.3: Audio Description or Media Alternative (Prerecorded) (A) Provide alternatives for pre-recorded synchronized audio/video	Supports (N/A)	There is no pre-recorded synchronized audio/video on the site.
1.2.4: Captions (Live) (AA) Provide captions for live audio in synchronized audio/video.	Supports (N/A)	There is no live audio in synchronized audio/video.
1.2.5: Audio Description (Prerecorded) (AA) Provide an audio description of pre-recorded video.	Supports (N/A)	There is no pre-recorded video on the site.
1.4.2: Audio Control (A) Audio can be paused and stopped, or the audio volume can be changed.	Supports (N/A)	There is no audio content on the site.
2.2.2: Pause, Stop, Hide (A) Users can stop, pause, or hide moving, blinking, scrolling, or auto-updating information.	Supports (N/A)	There is no moving, blinking, or scrolling content.

Usability

WCAG 2.1 Checkpoint	Conformance Level	Remarks
2.2.1: Timing Adjustable (A) Users are warned of time limits shorter than 20 hours and time limits can be turned off or extended	Supports	SimChart has a time limit, but users are made aware and given the option to extend.

2.4.5: Multiple Ways (AA) More than one way is available to navigate to other web pages.	Supports	Nearly all pages are part of a process that exempts them from this criterion. The few pages that are static have multiple ways.
3.2.2: On Input (A) Changing the setting of a checkbox, radio button, or other UI component does not trigger unexpected changes in context.	Supports	User inputs do not cause unexpected actions.
3.2.3: Consistent Navigation (AA) Navigation menus are in the same location and order on every web page.	Supports	Navigation menus are consistently in the same place and in same order on most pages.
3.3.4: Error Prevention (Legal, Financial, Data) (AA) For web pages with legal or financial commitments, input can be reviewed and corrected before final submission, and submissions can be reverted.	Supports	No data submissions on the site require legal or financial commitments. No data submissions allow for a users' profile to be deleted.

Mobile User Experience

WCAG 2.1 Checkpoint	Conformance Level	Remarks
1.3.4: Orientation (AA) Content does not restrict its view and operation to a single display orientation, such as portrait or landscape, unless a specific display orientation is essential.	Supports	Content is not restricted to a single display orientation.
2.5.1: Pointer Gestures (A) All functionality that uses multipoint or path-based gestures for operation can be operated with a single pointer without a path-based gesture, unless a multipoint or path-	Supports (N/A)	There is no content on the site that requires multipoint or path-based gestures.

based gesture is essential.		
2.5.2: Pointer Cancellation (A) For functionality that can be operated using a single pointer, at least one of the following is true: • No Down-Event • Abort or Undo • Up Reversal • Essential	Supports	All content that can be operated with a single pointer can be undone or is performed on the up-event.
2.5.4: Motion Actuation (A) Functionality that can be operated by device motion or user motion can also be operated by user interface components and responding to the motion can be disabled to prevent accidental actuation, except when: • Supported Interface • Essential	Supports (N/A)	There is no content on the site that is activated by motion or actuation.