

Table of Contents

About the Guide ..... 3

PathAI Voice ..... 3

PathAI Acronyms ..... 4

Terminology ..... 5

    Preferred Terms ..... 5

    Medical Terms ..... 6

    UI Terms ..... 7

Capitalization ..... 9

Grammar ..... 11

Punctuation ..... 16

Numbers ..... 20

## About the Guide

This guide provides editorial guidelines for content in PathAI instructional materials, technical documentation, reference information, training programs, marketing collateral, and user interfaces. It helps maintain a consistent voice in PathAI content. If you feel that something is missing, please contact the technical writing team.

## PathAI Voice

This page explains what tone to use when writing documentation.

### Use a Formal Voice

Medical device documentation requires a formal voice.

- Avoid using contractions and casual language when addressing the user.

### Avoid Technical Jargon

Use short, simple words when possible. Technical jargon often creates overly complicated writing that is vague and confusing.

- Stopping to look up an unfamiliar term can disrupt a reader's attention and result in miscommunication if they don't find the right definition.

### Be Brief and Specific

Make sure you're not providing too much detail in the body of your document.

- Don't inundate the reader with information.
- Delete words from sentences when possible.
- Rephrase sentences if they are not concise.

## PathAI Acronyms

This page has a list of acronyms used in PathAI documentation. Capitalized letters indicate where the acronym comes from. Use an acronym if the term appears two or more times in the text. Write out the full term once, immediately followed by the abbreviation in parentheses.

### For example:

Save the information in a data transfer specification (DTS) file.

Term	Definition
<b>CTLA4</b>	Cytotoxic T-Lymphocyte-Associated protein 4
<b>CRN</b>	Clinical Research Network
<b>DZI</b>	Deep Zoom Image
<b>IFU</b>	Instructions For Use
<b>FMEA</b>	Failure Mode and Effects Analysis
<b>H&amp;E</b>	Haemotoxylin and Eosin
<b>HIPAA</b>	Health Insurance Portability and Accountability Act
<b>HER2</b>	Human Epidermal growth factor Receptor 2
<b>NAFLD</b>	NonAlcoholic Fatty Liver Disease
<b>NASH</b>	NonAlcoholic SteatoHepatitis
<b>NAS</b>	NAFLD Activity Score
<b>NCR</b>	Negative Control Reagent
<b>PD-1</b>	Programmed Cell Death protein 1
<b>PD-L1</b>	Programmed Death-Ligand 1
<b>ROI</b>	Region Of Interest
<b>RUO</b>	Research Use Only
<b>SVS (Aperio)</b>	Style sheet autoSaVe file Digital slide image file created by an Aperio ScanScope slide scanner, contains a series of TIFF images.
<b>TME</b>	Tumor MicroEnvironment
<b>WSI</b>	Whole Slide Image

## Terminology

The terminology section explains which terms to use when writing PathAI documentation. "Terms" refers to words, phrases, and acronyms. When words have variable spellings, defer to the Preferred Terms page to see which form is used by the documentation team. The UI and Medical Terms pages are references for commonly used vocabulary.

Use an acronym if the term appears two or more times in the text. Write out the full term once, immediately followed by the abbreviation in parenthesis.

## Preferred Terms

The following section provides clarification on the spelling of words often confused between being compound words, two independent words, or hyphenated words.

### Compound Terms

The following table show compound words, one word that consists of two words placed together to form a new meaning. Compound words are not separated by a space or hyphen.

email	logout	login	cybersecurity	lockout
username	workflow	dashboard	nonalcoholic	workstation
metadata	thumbnail	endpoint	smartphone	timestamp
signout	filename	whitespace		

### Two Word Terms

The following table shows words that often appear together but are separated by a space.

log in	log out	deep zoom	macro image	scroll wheel
time point				

### Hyphenated Terms

The following table shows words that are separated using a hyphen. Terms that use nouns as adjectives and terms with prefixes are often hyphenated.

re-upload	web-based	sign-on	inter-observer	non-supporting
user-upload	anti-virus	role-based	pre-populated	color-coded
pop-up	role-specific	drop-down	trial-specific	site-level
re-scan	AI-powered	anti-malware	pre-fill	
re-add	read-only	allow-list	re-upload	
un-assign	system-wide	double-check	dot-plot	
non-validated	role-specific	pre-loaded	platform-required	
shift-click	micron-per-pixel	lab-level	algorithm-specific	

## Medical Terms

Term	Definition
<b>Histological Scoring</b>	Tool by which semi-quantitative data can be obtained from tissues, pathologists scoring tissue as part of diagnostic process
<b>Histotechnician</b>	Clinical laboratory technician who prepares body tissue samples for examination by a pathologist
<b>Label</b>	Defined by the FDA as "all labels and other written, printed, or graphic matter"
<b>Hepatocellular Ballooning (Score)</b>	Quantitative NAS component score for regions of hepatocellular ballooning evaluated by the algorithm on the non-artifact region of the slide.
<b>Lobular Inflammation (Score)</b>	Quantitative NAS component score for lobular inflammation evaluated by the algorithm on the nonartifact region of the slide
<b>Fibrosis (Score)</b>	Quantitative CRN Fibrosis Stage evaluated by the algorithm on the non-artifact region of the slide
<b>H &amp; E staining (Used with Tissue Overlays)</b>	Combination of two histological stains: hematoxylin and eosin
<b>Evaluable Tissue</b>	Area (mm <sup>2</sup> ) of tissue determined to be evaluable by the algorithm. Evaluable tissue excludes regions of artifact
<b>Percentage Artifact</b>	Percentage (%) of the slide, including non-tissue area, determined to have artifacts from the pre-analytic, analytic, or post-analytic process such as slide preparation, staining and scanning by the algorithm

## UI Terms

This section contains lists of terms that clarify user interface (UI) terminology.

### Verbs

The following table lists verbs that describe interactions with the GUI.

Term	Definition
<b>Click/tap</b>	Pressing, tapping, touching, and releasing of a mouse button or touch screen
<b>Press</b>	Physically pressing a button on the user keyboard
<b>Type</b>	Pressing a key to type into a text box
<b>Hold</b>	Clicking, tapping, or pressing and holding a UI element

### Nouns

The following table lists nouns that describe interface elements.

Term	Definition
<b>Button</b>	GUI element that executes an action when clicked
<b>Dialogue</b>	Pop-up window that appears before/after an action
<b>Icon</b>	Graphical element that represents a capability or a concept
<b>Menu</b>	Graphical control that presents options for interactions with the interface
<b>Overlays</b>	Provides contextual information and options in form of an additional layer on top of the current state of the interface
<b>Page</b>	Screen in a finished product, usually used by marketing teams
<b>Panel/pane</b>	Separate section of a screen, terms panel and pane are used interchangeably
<b>Screen</b>	Window where information is presented, usually used by software developers and technical writing team
<b>Tab</b>	Element that can be opened on an interface, typically groups a set of actions
<b>Text field</b>	Area in the GUI where the user enters information
<b>Toolbar</b>	Row of buttons, often near the top of an application window, that controls software functions
<b>Wizard</b>	Series of dialogues that walks a user through the sequence of steps to perform a particular task

---

## Variable Terms

The following table shows different word forms and their use.

Word Variations	Usage Clarification
<b>Login</b>	Login refers to the screen where the user logs in
<b>Log in</b>	Log in describes the act of logging in
<b>Logout</b>	Logout refers to the screen where the user logs out
<b>Log out</b>	Log out describes the act of logging out

## Capitalization

PathAI uses title case capitalization for titles, headings and subheadings in documentation. Sentence case is used for everything else.

### Title Case

Title case is required for titles and subtitles. It is also used referencing the product and service names, blogs, article titles in citations, book titles, titles of employees (Chief Financial Officer or Senior Pathologist), and similar situations. Follow these rules when using title case:

- Always capitalize the first and last words of a title.
- Capitalize all nouns, verbs, adverbs, adjectives, and pronouns.
  - Verbs include *is* and other forms of *to be*.
  - Adverbs include *then*, *there*, and *too*.
  - Pronouns include *this*, *that*, and *its*.

#### **For example:**

About This Manual

System Is Too Busy

- Don't capitalize articles, conjunctions, and prepositions of four or fewer letters unless they are first or last word in the title.
  - Articles include *a*, *an*, and *the*.
  - Conjunctions include *and*, *but*, *or*, *nor*, and *if*.
  - Prepositions of four or fewer letters include *on*, *to*, *in*, *up*, *of*, and *for*.

#### **For example:**

Viewing and Releasing Reports

Overview of CTLA Algorithm Results

Viewing Reports and Releasing Samples to the Sponsor

- Always capitalize the first letter in a hyphenated word and the first letter following the hyphen.



**For example:**

Installing System-Wide Anti-Virus Software

Using Single Sign-On at Work



**Sentence Case**

Most situations call for sentence case capitalization. Usually that means capitalize the first words of a sentence or standalone phrase. The following rules apply to sentence case:

- Capitalize proper nouns.
- Use lowercase for everything else.
- Always capitalize the first word of a new sentence. If a sentence starts with a word that's supposed to be lowercase, change its wording.
  - Don't use internal capitalization unless it's part of a brand name.
- Don't use all uppercase for emphasis.

**Note:** When referencing user interface elements, always use the casing found in the element.

**For example:**

Element Referenced	Example
	Click the <b>Invite user</b> button in the upper right hand corner.
	When you're ready, click the <b>Submit Valid Slide Sets</b> button.

## Grammar

Aim to use simple grammar. A seventh grader should be able to understand your writing.

### Verbs and Voice

Write in the present tense by default and use active voice whenever possible.

- Active voice describes a sentence where the subject performs the action.

**For example:**

James fixed the bug.

- Passive voice happens when the subject receives an action. Writers avoid using passive voice because it sounds formal and less-action oriented.

**For example:**

The bug was fixed by James.

- Avoid subjunctive mood in documentation.
  - Eliminate the words *would*, *should*, and *could*.
  - Replace them with a word that describes a specific condition: *may*, *might*, *can*, *need to*, *recommend*, or *suggest*.

### Person

Person refers to the point of view represented by a statement and determines which pronoun to use.

- In general, use second-person pronouns such as *you* and *your*.
- Avoid using singular first-person pronouns *I*, *me*, and *my*, and plural first-person pronouns *we* and *ours*.
  - If the company wants to make a recommendation, use the company name, "PathAI recommends...", and not "we recommend".

## Prepositions

Prepositions are typically small common words that we use before nouns, pronouns or noun phrases. "In," "at," "on," "of," and "to" are all prepositions. Limit prepositional phrases. Remove prepositional phrases (preposition + article + noun) from a sentence if the meaning of the sentence is clear without it.

For example:

<b>Incorrect</b>	The best outcome for this scenario would be FDA approval.
<b>Correct</b>	The best outcome would be FDA approval.

Below is another example of limiting prepositional phrases:

<b>Incorrect</b>	This allows users to get access to the repository.
<b>Correct</b>	This allows users to access the repository.

## Nouns and Pronouns

Nouns are either common or proper. Most nouns are common nouns and should not be capitalized. Proper nouns, however, should be capitalized wherever they occur. Proper nouns are unique people, places, and things. If there's more than one of a thing, it is not a proper noun. For example, there are many senior pathologists, so senior pathologist is a common noun. There's only one Senior Pathologist Annie Lee, making it a proper noun. Most technology concepts, product categories, and features are common nouns. Proper nouns include:

- Names and titles of individuals
- Named places, organizations, events, shows, corporate programs, etc.
- Product names
- Titles of books and other published works
- Managed standards, like Bluetooth
- Diseases named after regions and people are not common nouns, so they are capitalized. Other diseases are not.

### For example:

Influenza, coronavirus, and cancer aren't capitalized in the middle of a sentence.

West Nile virus and Ebola virus are capitalized because they are named after locations.

- Collective nouns like company take a singular pronoun. Don't use a plural pronoun, like they, for a collective noun.

**For example:**

<b>Incorrect</b>	PathAI has announced the release of a new product. They have published an article on the topic.
<b>Correct</b>	PathAI has announced the release of a new product. The company has published an article on the topic.

## Plural Noun

The following table includes rules for plural nouns.

Noun	Plural Form	Examples
<b>Common and proper nouns ending in s</b>	If the noun ends in s, add es.	the Johnsons the Joneses biases
<b>Singular abbreviation</b>	Add an s, even if the abbreviation ends in s.	IFUs NASs
<b>Plural abbreviation</b>	If an abbreviation already represents a plural, don't add an s.	MIB (Men in Black)
<b>Single letter</b>	Add an apostrophe and an s. The letter itself (but not the apostrophe or the ending s) is italic.	x's
<b>Number</b>	Add an s.	the 2000s
<b>Variable</b>	Don't add (s) to a word to indicate that it could be either singular or plural unless you have no other choice. Use the plural form instead.	Wait for x minutes.

## Nouns as Adjectives

Nouns can be used to modify or describe another noun. The word "user" is often used to modify other nouns in documentation – when this occurs, hyphenate the word it is modifying. You might see the term "user-roles" or "user-actions", which specify the roles and actions belong to the user.

**For example:**

Noun as Adjective	Noun
box	office
race	horse
user	action
user	roles

## Pronoun Reference Rules

Pronouns are used in place of nouns in a sentence. When pronouns are used, it should be unmistakably clear which noun the pronoun is standing in for, otherwise the sentence can be confusing.

**For example:**

<b>Incorrect</b>	Separate Daniel and Alexander and then give him a detention for fighting.
<b>Correct</b>	Separate Daniel and Alexander and give Daniel a detention for fighting.

In the incorrect example above, it's unclear who is getting the detention. Using the original noun clarifies things for the readers.

Here's another example that demonstrates when to rephrase:

<b>Incorrect</b>	The mother called the daughter back to clean up her mess.
<b>Correct</b>	When the daughter made a mess, the mother called her back to clean it up.

It's unclear who the pronoun *her* refers to in the incorrect sentence. The fault pronouns reference is fixed in the second example.

## Dangling and Misplaced Modifiers

Modifiers are single words or phrases that modify other words or phrases. Position a modifier to make it clear what it modifies.

If you keep sentences short and simple and use active voice, you probably won't run into dangling or misplaced modifiers.

- A *dangling modifier* doesn't modify anything in the sentence.
- A *misplaced modifier* is too far from the thing it modifies or too near to something else that it could modify.

The following table shows examples of misplaced and dangling modifiers.

Example	Meaning
<b>Only the selected text is deleted.</b>	Nothing other than the selected text is deleted.
<b>The selected text <i>only</i> is deleted.</b>	<i>Only</i> could modify <i>is deleted</i> or <i>text</i> . This sentence could mean one of two things: <ul style="list-style-type: none"><li>• The selected graphics aren't deleted.</li><li>• The text is deleted but not archived.</li></ul>
<b>There are files <i>that can't be removed</i> on the disk.</b>	The phrase <i>that can't be removed</i> modifies <i>the files</i> . This sentence clearly explains that the files can't be removed, and they are on the disk.
<b>There are files on the disk <i>that can't be removed</i>.</b>	The phrase <i>that can't be removed</i> probably modifies the <i>disk</i> , but the writer may have intended to modify <i>files</i> . This sentence could mean one of two things: <ul style="list-style-type: none"><li>• The files can't be removed.</li><li>• The disk can't be removed.</li></ul>

## Punctuation

This section outlines how you should use punctuation in your writing. It's important to remember that the more punctuation you add, the more complex a sentence becomes.

### Apostrophe

The following table shows when to use an apostrophe and examples.

Apostrophe	Example
Possessive form of a singular noun	The data scientist's work
Possessive form of a plural noun not ending in <i>s</i> , add <i>'s</i> at the end	The women's conference
Plural noun ending in <i>s</i> , only <i>'</i> should be added at the end	The students' scores improved
Contractions ( <i>can't</i> , <i>don't</i> , <i>it's</i> )	The input isn't valid

**Note:** It's is a contraction of it is. Its with no apostrophe is the possessive word for nouns without gender.

### Colons and Semicolons

When a colon appears in a sentence, it serves as a silent arrow pointing to the information after it. It is meant to give the silent impression of "as follows", "which is/are", or "thus".

- Include a colon at the end of a phrase that introduces a list.

**For example:**

The following colors are used for tissue overlays:

- Red
  - Orange
  - Black
- Use colons at the end of a statement followed by a second statement that expands on it.

**For example:**

Chapter 3 expands on two topics: viewing colored overlays results and viewing quantitative scoring results.

- Colons should not separate a noun from its verb, a verb from its object, a preposition from its object, or a subject from its predicate.

**For example:**

<b>Incorrect</b>	The three types of muscle in the body are: cardiac, smooth, and skeletal.
<b>Correct</b>	There are three types of muscle in the body: cardiac, smooth, and skeletal.

- When you use a colon in a sentence, lowercase the word that follows it unless:
  - The colon introduces a direct quotation

**For example:**

What does it mean when I see a message that asks: "Are you trying to visit this site?"

- The first word after the colon is a proper noun

**For example:**

We're considering three cities for the event: Los Angeles, Munich, and Tokyo.

## Periods

- Don't use end punctuation in headlines, headings, subheadings, UI titles, UI text, or simple lists.
- Don't use periods when a phrase ending with a colon introduces a bulleted list. Use a colon to introduce the bulleted list instead.
- When a phrase ending with a colon introduces a bulleted list:
  - If one or more list elements complete the introductory phrase preceding the colon, use a period after every list element.



- If all list elements are short phrases (three words or fewer), don't end them with periods, even if they form a complete sentence together with the list introduction.
- If one or more list elements are complete sentences, use a period after every element, even if a list element contains three or fewer words.
- If a phrase in quotation marks ends a sentence, the period should be outside of the quotation marks.

**For example:**

A pop-up warning reads "Access Denied".

**Commas**

- If a sentence contains more than a comma or two and ending punctuation, consider rewriting it to make it more clear.
- If a list contains more than three items, or item names are long, consider moving them to a bulleted list to improve readability.
- The following table shows when to use commas and examples.

Commas	Examples
Before the conjunction in a list of three or more items	PathAI algorithms help diagnose NAFLD, NASH, and breast cancer.
After an introductory phrase	With Confluence, you can collaborate on your team's wiki.
To join independent clauses with a conjunction, such as <i>and</i> , <i>or</i> , <i>but</i> , or <i>so</i>	Select New, and then select Images.
In a series of two or more adjectives that precede a noun, if the order of the adjectives can be reversed or if they can be separated by <i>and</i> without changing the meaning	Confluence is an innovative, remote-friendly platform for collaborative writing.

## Hyphens

- Use hyphens when a word has a prefix (*pre-*, *re-*, *de-*).

**For example:**

The text fields are pre-populated.

- Please reference the lists of hyphenated and compound terms in the "[Preferred Terms](#)" on [page 5](#) section for more information.

## Numbers

When writing about numbers that appear in the user interface, write them exactly as they are presented. Otherwise, follow the guidelines laid out below.

### Inline Numbers

- Spell out any numbers that begin a sentence.
- Spell out zero – nine.
- Use numeric characters for all two digit numbers.

**For example:**

There are 10 ways to use lists.

Ten slides have been processes.

### Dates

- Write the date in a Month, Day, Year format.
- Spell out the full month when writing a date.
- Include a comma after the day.

**For example:**

This IFU was published July 8, 2022.

### Figures

- Include the numeric character in figure captions.

**For example:**

Figure 1 – Slide Viewer Screenshot

### Magnifications

- Write the number of the magnification followed by an x.

**For example:**

Increase the magnification to 40x.