

# Nova Guide specification

Nova Guide is a digital adoption platform for NHS clinical systems. It shows staff step-by-step guidance on the screens they already use, and gives the organisation the governance, analytics and clinical safety controls to run that guidance across its estate. This specification covers delivery and compatibility, content and authoring, targeting, governance, data protection, security, hosting, accessibility and clinical safety.

| KEY                                 |                                  |                                                                                                                                                                                                                                            |                     |
|-------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                                     | Standard                         | On from the start                                                                                                                                                                                                                          | Configurable        |
|                                     |                                  | Set up by you                                                                                                                                                                                                                              | Opt-in              |
|                                     |                                  |                                                                                                                                                                                                                                            | Off until turned on |
| <b>1 Platform</b>                   |                                  |                                                                                                                                                                                                                                            |                     |
| 1.1                                 | <b>Components</b>                | A browser extension carrying the guidance layer and the Nova Guide Studio authoring tools; a web portal for review, publishing, withdrawal, analytics and administration; and the Nova Guide service, defined in Microsoft Azure UK South. | Standard            |
| 1.2                                 | <b>Applications covered</b>      | Web applications used in Microsoft Edge or Google Chrome: web-based EPRs, clinical systems, and administrative systems such as e-learning, rostering and referral portals. Desktop applications are outside its scope.                     | Standard            |
| 1.3                                 | <b>Multiple applications</b>     | One organisation manages any number of applications, each with its own content, settings and analytics.                                                                                                                                    | Configurable        |
| 1.4                                 | <b>Citrix</b>                    | Where the browser is published through Citrix, the extension is installed in the published image.                                                                                                                                          | Configurable        |
| <b>2 Delivery and compatibility</b> |                                  |                                                                                                                                                                                                                                            |                     |
| 2.1                                 | <b>Browsers</b>                  | Microsoft Edge and Google Chrome, Manifest V3. The extension's identity is fixed by its signing key and is the same on every machine.                                                                                                      | Standard            |
| 2.2                                 | <b>Managed deployment</b>        | Installed and configured centrally by browser policy through Microsoft Intune, using the Nova Guide policy pack. Policy enrolls applications by web address and can state the ward and site each workstation serves.                       | Configurable        |
| 2.3                                 | <b>Page script</b>               | One script tag, as an alternative to the extension, for applications the organisation controls. The tag can pass who is signed in and their staff attributes.                                                                              | Configurable        |
| 2.4                                 | <b>Footprint</b>                 | Guidance layer under 50 kB compressed, a limit enforced on every build. Authoring tools load only when an author opens them.                                                                                                               | Standard            |
| 2.5                                 | <b>Effect on the application</b> | Nova Guide draws in its own isolated layer (a closed shadow root) and makes no change to the application's page or code. No integration with the application is needed.                                                                    | Standard            |
| 2.6                                 | <b>Page structures</b>           | Single-page navigation, frames and shadow DOM.                                                                                                                                                                                             | Standard            |
| 2.7                                 | <b>Shared links</b>              | A web link opens a named guide in its application, by either delivery route.                                                                                                                                                               | Standard            |
| <b>3 Content</b>                    |                                  |                                                                                                                                                                                                                                            |                     |
| 3.1                                 | <b>Guides</b>                    | Steps of five kinds: explanation, click, enter any value, enter a set value, and hover. Optional introduction card and step images.                                                                                                        | Standard            |
| 3.2                                 | <b>Questions</b>                 | A step offering two to six answers, each leading to a step in the same guide. Every answer's destination is shown to the reviewer.                                                                                                         | Standard            |

|                    |                             |                                                                                                                                                                                                                      |              |
|--------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 3 . 3              | <b>Handoff</b>              | A final step that continues in another of the organisation's applications, with a link to the guide there.                                                                                                           | Standard     |
| 3 . 4              | <b>Tooltips and beacons</b> | Notes pinned to a control and markers that draw attention to it. A marker whose control cannot be found is not shown.                                                                                                | Standard     |
| 3 . 5              | <b>Field hints</b>          | Advice under a field, for three fixed rules: numbers with an optional length, NHS number with the Modulus 11 check, and UK date. The typed value stays in the browser, and the field stays editable and submittable. | Standard     |
| 3 . 6              | <b>Announcements</b>        | A title, up to 500 characters and up to three buttons that start guides. Shown once per person, or once per session on a shared workstation, and never over a guide in progress.                                     | Standard     |
| 3 . 7              | <b>Launcher</b>             | A button on each screen listing the guidance for that screen, grouped into chapters, with recent announcements on an Updates tab. It never takes keyboard focus on its own.                                          | Standard     |
| 3 . 8              | <b>Organising content</b>   | Chapters, serving windows with start and end dates, comments on each item, and a printable PDF of any guide.                                                                                                         | Standard     |
| 3 . 9              | <b>Audiences</b>            | Content offered to particular segments, defined as rules over staff group, ward, site or any attribute the organisation supplies.                                                                                    | Configurable |
| 3 . 10             | <b>Declared tasks</b>       | A recorded workflow measured for completion and drop-off, with nothing shown to staff. Measured when workflow analytics (8.2) is on.                                                                                 | Opt-in       |
| <b>4 Authoring</b> |                             |                                                                                                                                                                                                                      |              |
| 4 . 1              | <b>Recording</b>            | The author carries out the task with Nova Guide Studio open. Each click is captured as a step while the application responds as normal, and a recording continues across screens.                                    | Standard     |
| 4 . 2              | <b>Drafted wording</b>      | Each step's wording is drafted from the control's accessible name. Text from table cells, rows, links and headings is never used, and a name containing an NHS number, a date or a run of five digits is refused.    | Standard     |
| 4 . 3              | <b>Target quality</b>       | Each target is graded as it is captured, and fragile targets are flagged to the author.                                                                                                                              | Standard     |
| 4 . 4              | <b>Preview</b>              | Plays the guide through the real guidance layer, with analytics off.                                                                                                                                                 | Standard     |
| 4 . 5              | <b>Screenshots</b>          | Step images captured during authoring, switched on per application. NHS numbers and dates are detected and filled before upload, and the author can fill further areas.                                              | Opt-in       |
| <b>5 Targeting</b> |                             |                                                                                                                                                                                                                      |              |
| 5 . 1              | <b>Identification</b>       | Several signals for each control (attributes, accessible name, text and structure), weighted by how uniquely each one identifies it. Frames and shadow roots are searched.                                           | Standard     |
| 5 . 2              | <b>Ambiguity</b>            | Where two controls cannot be told apart, position on the page does not decide between them. The target is reported lost and the step shows a lost state.                                                             | Standard     |
| 5 . 3              | <b>Page scoping</b>         | A step resolves only on the screens it was recorded for.                                                                                                                                                             | Standard     |
| 5 . 4              | <b>Assurance</b>            | Every build replays an adversarial test application under seeded mutation, and a single wrong match fails it.                                                                                                        | Standard     |

## 6 Governance and approval

|       |                           |                                                                                                                                                                                                                                                                      |              |
|-------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 6 . 1 | <b>Roles</b>              | Admin, moderator, contributor and reviewer, with each person's role in the organisation recorded in its own words.                                                                                                                                                   | Standard     |
| 6 . 2 | <b>Risk tiers</b>         | Set per organisation from a clinical template (navigational, procedural, clinical) or a standard template. Each tier names the approving role and whether the approver must hold a professional registration or be someone other than the author.                    | Configurable |
| 6 . 3 | <b>Approval binding</b>   | An approval binds a named person to the SHA-256 hash of the exact content, recomputed at every publish. A change of risk tier needs approval again.                                                                                                                  | Standard     |
| 6 . 4 | <b>Emergency approval</b> | Two approvers and a recorded reason, with a retrospective review due within 48 hours.                                                                                                                                                                                | Standard     |
| 6 . 5 | <b>Publishing</b>         | Each item is published on its own. Every change rebuilds a bundle signed with ECDSA P-256, and the browser verifies the signature before reading it.                                                                                                                 | Standard     |
| 6 . 6 | <b>Publishing checks</b>  | Publishing refuses content that is unapproved or changed since approval, approved in the wrong role or without a required registration, approved under a different tier, branching to a step that does not exist, or carrying an identity different from its record. | Standard     |
| 6 . 7 | <b>Audit trail</b>        | Approvals, withdrawals and comments are recorded with the person and the time. Approval records are kept when a team member leaves.                                                                                                                                  | Standard     |

## 7 Withdrawal and alerts

|       |                         |                                                                                                                                                                                                                                                                                         |          |
|-------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 7 . 1 | <b>Scope</b>            | One item, one application or the whole organisation.                                                                                                                                                                                                                                    | Standard |
| 7 . 2 | <b>Who can withdraw</b> | Anyone in a content role, with a reason recorded. Admins and moderators restore.                                                                                                                                                                                                        | Standard |
| 7 . 3 | <b>Reach</b>            | Workstations check every 30 s. Withdrawn content stops within about a minute, and a guide in progress stops and says it was withdrawn.                                                                                                                                                  | Standard |
| 7 . 4 | <b>Fail-closed</b>      | A workstation that cannot reach the withdrawal list for 15 min stops showing guidance.                                                                                                                                                                                                  | Standard |
| 7 . 5 | <b>Alerts</b>           | A step of a live guide that fails to find its control five times within eight hours opens an alert on the portal's overview and the guide's page, and is emailed once to the organisation's admins and moderators. It stays open until marked fixed, revised, unpublished or withdrawn. | Standard |

## 8 Analytics and data

|       |                           |                                                                                                                                                                                                                                                         |          |
|-------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 8 . 1 | <b>Events recorded</b>    | Guide started, step completed, guide completed or abandoned; helpful and unhelpful answers; step not found, ambiguous, matched through a weaker signal or found slowly; tooltip viewed; beacon clicked or dismissed; field hint shown; session started. | Standard |
| 8 . 2 | <b>Workflow analytics</b> | Task step reached, task completed and screen viewed, showing where people stop in a declared workflow.                                                                                                                                                  | Opt-in   |
| 8 . 3 | <b>Never recorded</b>     | Patient data, page text, typed values and web address parameters. Screens are recorded by path only, and the event definitions have no field that could carry the rest.                                                                                 | Standard |
| 8 . 4 | <b>Pseudonymisation</b>   | Staff identifiers replaced on arrival by HMAC-SHA256 with a key held for each organisation.                                                                                                                                                             | Standard |
| 8 . 5 | <b>Small numbers</b>      | Counts of fewer than five people are withheld.                                                                                                                                                                                                          | Standard |

|                                                      |                                     |                                                                                                                                                                                                                                                               |              |
|------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| 8.6                                                  | <b>Shared workstations</b>          | Workstations and people are counted separately, and progress through a guide is stored only for an identified person.                                                                                                                                         | Standard     |
| 8.7                                                  | <b>Audience attributes</b>          | Ward, site and staff group are read in the browser from the page tag or workstation policy. They are not sent to Nova Guide or recorded in events.                                                                                                            | Configurable |
| 8.8                                                  | <b>PULSE</b>                        | Proficiency, Uptake, Loyalty, Satisfaction and Engagement, each shown with its formula and fraction, beside content health for every application.                                                                                                             | Standard     |
| 8.9                                                  | <b>Retention</b>                    | Events kept for 24 months by default, then deleted by a nightly scheduled job. The period is agreed with each organisation.                                                                                                                                   | Configurable |
| <b>9 Security and identity</b>                       |                                     |                                                                                                                                                                                                                                                               |              |
| 9.1                                                  | <b>Sign-in</b>                      | Microsoft Entra ID single sign-on with the organisation's own directory, using OpenID Connect with PKCE and no client secret.                                                                                                                                 | Standard     |
| 9.2                                                  | <b>Organisation isolation</b>       | Every record belongs to one organisation, identified from the sign-in token.                                                                                                                                                                                  | Standard     |
| 9.3                                                  | <b>Authored content</b>             | Structured text only, so HTML supplied by an author is never rendered. Links must use https, and images load only from Nova Guide's own storage.                                                                                                              | Standard     |
| 9.4                                                  | <b>Network boundaries</b>           | The administration interface accepts requests only from the portal's address. Application pages reach a narrow delivery and authoring interface with no approval, publishing or withdrawal.                                                                   | Standard     |
| 9.5                                                  | <b>Secrets</b>                      | Managed identities for storage and email, and the database credential held in Azure Key Vault.                                                                                                                                                                | Standard     |
| <b>10 Hosting and continuity</b>                     |                                     |                                                                                                                                                                                                                                                               |              |
| 10.1                                                 | <b>Region</b>                       | The database, file storage, application services and keys are defined in Microsoft Azure UK South.                                                                                                                                                            | Standard     |
| 10.2                                                 | <b>Services</b>                     | Azure Container Apps, Azure Database for PostgreSQL Flexible Server, Blob Storage, Key Vault and Application Insights, defined as infrastructure code. Alert email is sent through Azure Communication Services with its data location in the United Kingdom. | Standard     |
| 10.3                                                 | <b>Backup</b>                       | Point-in-time restore of the database, with 35 days of backups.                                                                                                                                                                                               | Standard     |
| 10.4                                                 | <b>If Nova Guide is unavailable</b> | Staff carry on in the application without guidance. Withdrawal stays fail-closed (7.4).                                                                                                                                                                       | Standard     |
| <b>11 Accessibility</b>                              |                                     |                                                                                                                                                                                                                                                               |              |
| 11.1                                                 | <b>Standard</b>                     | WCAG 2.2 AA, which meets the Public Sector Bodies Accessibility Regulations 2018.                                                                                                                                                                             | Standard     |
| 11.2                                                 | <b>Behaviour</b>                    | Nova Guide never moves keyboard focus. Tab and Escape always leave it, and each step is announced to screen readers through a live region.                                                                                                                    | Standard     |
| 11.3                                                 | <b>Testing</b>                      | axe-core with the WCAG 2.2 AA rules on every portal screen, a keyboard order check and a 375-pixel width check on every build.                                                                                                                                | Standard     |
| <b>12 Clinical safety and information governance</b> |                                     |                                                                                                                                                                                                                                                               |              |
| 12.1                                                 | <b>Clinical Safety Officer</b>      | A named Clinical Safety Officer, a registered clinician, is accountable for Nova Guide's clinical risk management.                                                                                                                                            | Standard     |
| 12.2                                                 | <b>DCB0129</b>                      | A clinical risk management plan and a hazard log kept with the code, with each control linked to the test that checks it.                                                                                                                                     | Standard     |

|      |                        |                                                                                                                                                                     |          |
|------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 12.3 | <b>DCB0160</b>         | The clinical safety case, a customer hazard log and the risks controlled on the deploying side, supplied to each organisation for its own assessment.               | Standard |
| 12.4 | <b>Data protection</b> | A description of the data Nova Guide processes and why, for each organisation's data protection impact assessment, including a separate note on workflow analytics. | Standard |
| 12.5 | <b>DTAC</b>            | An evidence pack for the Digital Technology Assessment Criteria, available on request.                                                                              | Standard |
| 12.6 | <b>Defect register</b> | Engineering defects are recorded with a safety triage, and linked to the hazards they bear on.                                                                      | Standard |

## About this sheet

Issue 2, October 2026. It describes Nova Guide clause by clause; the product sheet describes what it does for staff and for the teams who run it.

## Nova Guide by Nexus Nova

Nexus Nova Ltd, registered in England and Wales, company number 13906254.

For a demonstration or the assurance documents:

[novaguide.io/contact](https://novaguide.io/contact)