

eDocumentation



The WebV eDocumentation Solution allows Patient medical documents to be created, updated, and completed in an electronic format, with completed documents automatically attached to patient records. Documents can also be attached to referrals. The module supports accurate and complete data capture via customisable properties which help ensure that documents are filled in correctly; for example, questions can be marked as mandatory and if multiple documents are required these documents can be set as a package for users to work through.



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Module Origin

The Problem

Faced by the considerable challenge, set nationally, of becoming paperless by 2020, key staff within the Northern Lincolnshire and Goole NHS Foundation Trust approached the WebV Systems team to develop an e-documentation solution. They asked for a digital solution that would:

- Cut down on the amount of paper used in Patients notes
- Make it easier to input and access accurate information
- Reduce the risk of loss or duplication of important records

The WebV Solution

The WebV team worked collaboratively with the nursing staff to build a system that enables medical documents to be created, updated and completed electronically. Key functions of the solution include:

- Once completed, documents are automatically attached to patient records
- Documents can be added to patient referrals.
- Questions are marked as mandatory to ensure essential information is always collected.
- If multiple documents need to be filled in, they are grouped together as a package, making it clearer and easier for staff to gather a full picture of a patient's condition and needs.

A key concern highlighted by the clinical team during the commissioning process was that multiple documents used across the hospital collected the same information, leading to patients being asked the same questions multiple times. Though data that may change over time, for example weight or current medication, obviously needs to be updated, it is frustrating for patients to keep being asked questions for which the answers never change. So, the module has been designed to capture and permanently store answers to those questions across a patient's record.

More recently the module was developed to allow:

- Images and diagrams to be attached to documents used in clinical annotation, for example a surgeon can now mark up a picture to show exactly where an incision should be made.
- Voice recognition software
- Styluses, with touch screens

This additional functionality makes it quicker and easier for clinical staff at all levels to complete documents.

The benefits for patients, staff and the Trust

The system has had a far more widespread impact than simply helping the Trust with compliance with the national drive towards paperless working, it has:

- Created a more efficient system for patient data collection and sharing
- Has saved a huge amount of staff time, freeing up clinical teams to deliver better patient care
- Given clinical staff easy access to comprehensive and, crucially, accurate patient information.

All essential data is logged by operating a system of

- Drop-down menus
- Mandatory questions
- Linked documents

These minimise the risk of input error and overcoming problems caused by mislaid or illegible paper documents. It also helps to ensure clinical staff are fully informed about their patients, giving them greater opportunity to make the right decisions on treatment and care.

Where the Module can be used

The eDocumentation Module can be utilised anywhere within Wards and departments that currently have a paper-based form process which is better served by an electronic data capture solution. Data recorded can be held against a patient record.

eDocumentation

Document Manager

- Patient based list of outstanding documents, showing status and actions to start/resume/complete
- Search for and add new packages/documents to patient record
- Patient based module for completing selected document (from Document Manager), allows user to save draft/complete/amend (depending on document properties)
- Document viewer for the Patient record (Timeline)
- Retrieves latest version of the completed document
- Ability to complete a document.
- Ability to send completed packages via email, with audit trail including who sent the email and the date and time of package completion.
- Editing a document functionality including, saving draft, amending and completing a document.
- Completed patient packages added to timeline with package name displayed as the event.
- Ability to view completed document from the document list and after completing a package.
- Further actions from completing a document include viewing document in the timeline and returning to package list.
- Auto expand all documents on view.
- Display package version within the event report.
- Amended documents and packages showing as status Amended.
- Can select current time when using time picker property.
- Warning displayed when trying to exit a document without saving draft.

- Ability to filter patient document list by code, name, category, specialty and status.
- Subpanel titles which reflect the current step in flow.
- Ability to see documents in a table format for completed and amended status.
- Navigation is hidden when the document only contains one section in mobile view.
- Set property descriptions are visible in the document when entering values.
- Ability to return to menu/display package documents as a further action following submission of a document amendment.

Document Administration

- Create new Packages/Documents
- Search for and edit existing packages/documents
- Add/remove documents to new or existing packages.
- Create/edit documents
- Configure documents to be amendable/draftable/removable
- Add new/existing sections to document and modify to create new versions
- Add new/existing properties to sections and modify to create new versions
- Ability to create a package.
- Ability to create a document.
- Ability to mark a package as inactive.
- Synchronisation functionality.
- Ability to revise documents.
- Functionality to discard unpublished documents.
- Warning message displayed when revising a published document.
- When revising a document, further action added to configure the new document.
- Ability to filter document settings table by statuses under review and suspended.
- Functionality to attach email addresses to packages.
- When publishing a document that has unpublished properties, ability to publish all in one action.
- Additional further actions available when completing a document.
- Sections
 - o Ability to create a section.
 - o Ability to (re)order sections within a document.
 - o Ability to delete a section from a document
 - o Section descriptions set as optional.
- Properties (Questions)
 - o Functionality to create a property.
 - o Default properties created within the document builder to be set as non-searchable.
 - o Filters added to the properties table for code, name statuses and types.
 - o Ability to search for document properties by code, name, type and updated date.
 - o Ability to add properties to a document.
 - o Ability to reorder values in both select properties.
 - o Information property created with font formatting features.
 - o Inline text input property created.
 - o Ability to add Yes/No and Yes/No/N/A inline properties.
 - o Ability to search for image by code, name and updated date within image property.
 - o New date and time picker added.

- o Time picker property created.
- o Text box character limit restricted to 10,000 characters.
- o Ability to add a new value to both selection properties.
- o Extended character limit for selection property.
- o Text input property character limit set to 10,000 characters.
- o Summary removed when adding a value.
- o Removed return to document option from further actions when removing a property.
- o Character limits for property and section descriptions set as 500 characters.
- o Ability to remove a value on a property.
- o Created option to return to the document after configuring property values.
- o Ability to include images within information properties.
- o Clear Values option added to single select property.
- o Confirmation tick removed from single select property.
- o Clear value functionality added to the date and time picker.
- o Ability to configure property values as a further action after creating a selection property.
- o Ability to amend property type (to one of the same family) once created.
- Rules
 - o Ability to configure rules against properties and sections and set both at the point of adding the property to the document.
 - o Functionality to set properties as mandatory.
 - o Visibility icon reflects the rule status of the property in configuration mode.
 - o Information properties restricted to being non-mandatory.
 - o Ability to add rules against multi-selection property values
 - o Ability to return to document when adding a rule.
 - o Ability to set image annotation as a mandatory property.
 - o When removing a property (that is no longer required) from a document, any attached rules are removed.
 - o Disabling property values removes all rules associated with the disabled value.
- Ability to set a document to be summarisable.
- Persistent Data

o Persistent and episodic persistent data can be set against properties.

Note: - Persistent data is loaded into a document when it is originally started. If a further document is then started on the patient that contains some of the persistent properties of the original document, the persistent data will not update either of the two in-progress documents. Only completion (submission) of one of the documents will update persistent data on the patient. This updated persistent data will then be seen when a new document is opened on the same patient containing the same persistent properties.

Generic

- Created new property search.
- Permission restricted ability to remove/abandon packages that have certain statuses from the document library.
- Updated status colour for Abandoned packages in the package list.
- Option to view previously completed documents in a tabular view/format.
- Ability to print packages
- Improved formatting of completed packages and documents
- Electronic signature property which is used to show when a user has authorised and completed a document or referral
- List of anatomical sites

- When adding a package, packages that have been marked as Favourite are presented to the user prior to searching
- When trying to add an already existing property to a document, the property displays as grey in the property search list with an informative message to advise that the property has already been added to the document
- When trying to add an already existing document to a package, the document displays as grey in the document search list with an informative message to advise that the document has already been added to the package
- Incomplete mandatory fields are highlighted when trying to complete a document
- When revising a document, the user is not required to change document details before saving their changes
- Displays configured text for sub header properties with the ability to reconfigure
- Ability to change a property type to a different property type within the same family after the property has been created

Patient Summary

- Outstanding document list shows the latest 5 outstanding documents with a further link to view all outstanding documents.
- For single document packages, code, version, category and specialty are displayed in the footer.
- Ability to return to the timeline after completing a document.
- For summarisable documents, empty properties are hidden.