

Infection Prevention & Control

The WebV Infection Prevention & Control Module is used by Infection Control staff to build a caseload of patients with infections and to document signs, symptoms, and historical cases, as well as actions to be taken along with the next review. The module can also group patients and link them together to document outbreaks in wards or units, displaying all the information recorded on individual patients as well as the infection events, involved staff and linked cases.



WebV Systems Team, Diana Princess of Wales Hospital,
Scartho Road, Grimsby, N.E. Lincolnshire, DN33 2BA
Tel: 03033 303 570 www.webv-solutions.com

Module Origin

The Problem

Effective prevention and control of infections is a key clinical priority across the NHS and essential to keeping patients safe. The Northern Lincolnshire and Goole NHS Foundation Trust used a paper-based system to identify and track infections, however, it didn't provide quick and easy access to the detailed information nursing staff needed to comply with national standards and offer patients the best possible care.

Clinical specialists in infection control and prevention at the Princess of Wales Hospital in Grimsby, realised a customised electronic system could be the answer. They asked the WebV team to design a solution which would help to identify infections and associated issues more efficiently, allowing clinical staff to intervene quickly and improve patient care.

The WebV Solution

The WebV team collaborated with the infection control staff throughout the module's development to ensure the complexities of their requirements were fully understood. The module developed has become a front line surveillance system which allows staff to:

- track bugs, organisms and infected patients,
- helps to comply with national standards.
- build caseloads of patients with infections,
- accurately document signs, symptoms and historical cases.
- record actions to be taken
- highlights when the next review is needed.

By grouping patients and linking cases together the module can document outbreaks in wards or units, displaying all the patient information needed and identifying the staff involved. It also incorporates an infection control audit tool.

The benefits for patients, staff and the Trust

The module supports the early intervention so vital to the effective control and prevention of infections by alerting staff to potential issues or infection hotspots far more quickly. The solution streamlines and standardises the workload of the infection control team. It saves time and improves communication, allowing colleagues on different shifts to pick up cases and offer continuity of care.

The audit dashboard also ensures that Trusts can meet Care Quality Commission and Health Protection England requirements for infection prevention and control.

Where the Module can be used

The IPC Module can be utilised within a Trusts Infection Control Environment by IPC Staff. Similarly it can be utilised within Community based IPC Teams.

Infection Control Module

Release v3.0

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| <p>Infection Prevention & Control</p> | <p><u>Cases</u> Cases enable Infection Control (IC) staff to manage their workload of patients in a manageable way by highlighting new patient alerts and recording/updating key details.</p> <ul style="list-style-type: none"> • Live filterable Display of IC cases for management of IC workload, detailing: <ul style="list-style-type: none"> o Responsible site o Current ward o Status o Organism o Assignee o Review Status o Outbreak Status • Users can create manual cases using Patient, Site, Assignee and status. • Automatic IC case creation when positive results come from Pathology system on specific organisms. • Included direct link to pathology system to review historic relevant microbiology reports. • Cases track a patient’s IC details including: <ul style="list-style-type: none"> o View all case basic details including, latest review information, patient demographics and current status. o Infection events – including ability to auto update and manually update multiple infection events per case, managing them individually allowing user to resolve one by one. o Ability to view the patient’s organism history from the case by linking the pathology result history to the infection events. o Signs &symptoms – Ability to log details and resolve symptoms o Actions – Ability to assign actions to a case and resolve. o Review – Ability to set review dates which can be viewed/sorted on the case table for managing workload. o Ability to view patients IC case history. • Ability to set bed management status • Users can set the current assignee to a case • Ability to amend the responsible site. • Ability to close cases with recorded reason. • On closing cases it will auto resolve all outstanding infection events. <p><u>Outbreaks</u> Outbreaks enables the IPCN staff to monitor, manage and log the events that happen during an outbreak within the Trust, which also allows tailored historic lookups of previous outbreaks.</p> <ul style="list-style-type: none"> • Users can create new outbreak events by recording the site, ward, Date/Time and primary symptom. • Users can filter the outbreak table by location/site, Status, primary organism and current assignee • Users can sort the Outbreak event table by review date of the outbreaks. • Ability to select and view the full details of any outbreak , Outbreak cases track the details of the event by recording: |
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| | <ul style="list-style-type: none"> o Primary Organism – Although multiple organisms may be present in the outbreak event the main responsible organism can be specified in the outbreak o Primary symptom – although multiple symptoms may be present in the outbreak the key symptom can be noted against the outbreak. o Infection Events & Signs/Symptoms – These two fields are auto populated with the organisms and symptoms that are active on the cases that are linked to the outbreak. o Linked Cases – Here IPCN staff can search all cases and pull them across into the Outbreak event (auto populating the pre mentioned fields) once pulled into the outbreak users have the ability to directly access the case from the outbreak. o Linked Staff – Here IPCN staff can manually add staff details that have been affected by the outbreak, Staff are added by using the staff members WebV Username for auditability and reporting. o Reviews – Outbreak events have their own review feature where details and issues that are not related to patients, can be noted and updated against the entire outbreak. <ul style="list-style-type: none"> • Lost Bed Days can be recorded daily within outbreak reviews, with each recorded loss this number is tallied in the “Total Bed Days Lost” field on the outbreak details page. • Outbreak Review status and details can be viewed in the overview. • Users have the ability to assign a current responsible IPCN to an outbreak event • Ability to set the operational status of the ward involved in the outbreak to either Partially Closed or Fully Closed with comment and date/time. • Ability to close outbreak event by date/time. |
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Release v3.01

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| Infection Prevention & Control | <ul style="list-style-type: none"> • Rebuilt ICM Interface • Organisms configuration • Updated list of monitored organism • Current site default view of cases • Requesting clinician and location display on the event report • Infection origin added to the event information • Amended wording to answers for care settings • Case updates to current location when patient moves ward/site |
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Release v3.20

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| Infection Prevention & Control | <ul style="list-style-type: none"> • Patient demographics bar added to all panels. • Certain organisms added to the Community list of cases. • New organisms added to cases are highlighter. • Most recent events are logged at the top of the Actions List. • Moved display of text to be left aligned. • Time field has been removed from Date of Onset recording. • Ability to record Isolation Information • Removed new organism flag when the infection events have been opened and being viewed by the Infection Control team. • Ability to remove patients from an outbreak. • Community lists restricted to C Diff, GDH and MRSA organisms. • Display the time recorded for date of onset within Signs and Symptoms section. |
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| | <ul style="list-style-type: none"> • List of events reordered to show most recent at the top of the list. • Alignment of text altered within the Action and Review section and the Infection Event comments. • Time field removed from the Review section. • Demographic bar added to all outbreak panels. • Results pulled through at stage Completed (level H) rather than Technically Validated (level N). • Updated the "isolation within Timeframe" display. |
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Release v3.30

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| Infection Prevention & Control | <ul style="list-style-type: none"> • Improved structure and performance for infection control module • Previously applied filters on the case table are remembered when user next visits the page • Ability to add staff members to outbreaks as a free text entry • Filtering ability added to the outbreak page • Date of admission displayed within the case details underneath Organisation • Ability to attach and record data capture forms against certain organisms that require national auditing • Ability to perform a case search • Spot check recording functionality • Ability to create, edit and view linked reviews, linked infections and linked symptoms • Permission restricted ability to reopen a closed case • "GRE Carrier" field added to sign and symptom • Enabled manual updates to the bed days lost field on outbreak • Cases created at the same time results are received by the laboratory system • Document collection added to outbreak details panel • Users are alerted when trying to create a new case when there is already an existing open case • Corrected New Organism flag status once case has been opened and viewed • Ability to record optional spot check when reviewing a patient • Tick appears when editing a symptom within a patient case • Ability to edit the Operational Status of a case • Removed Sample status from outbreak review • Reviewed by added to outbreak details • Diagnostic requests are not automatically requested when a sample already has a request made • Table filters are remembered on return to the Infection Control Module after following navigation to other areas of the system • Updates to bed management and location filters • Outbreak monitoring functionality added to outbreaks section • Historic cases reordered so that the newest display first. Case title has been updated to show that a historic case is being viewed |
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Release v3.40

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| Infection Prevention & Control | <ul style="list-style-type: none"> • New Infection events are added to the top of the list • Individual patient monitoring for gastroenteritis symptoms added to the outbreak screen • Ability to manually add an infection event |
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