



Baxter

ICNET

CLINICAL SURVEILLANCE SOFTWARE

NATIONAL SUITE

OUTBREAK MANAGER

Tackling the complex challenges of managing infectious disease outbreaks across human populations

Infectious disease outbreaks in human populations continue to remain a significant threat to public health worldwide. Outbreaks can have devastating impacts on human health contributing to morbidity, extended lengths of hospital stay, additional treatment-related costs and in severe cases, mortality.¹ The economic disruption caused by outbreaks is significant with economic losses due to an infectious disease pandemic projected at around \$60billion per year globally.²

The emergence of new infectious diseases and the rise of antimicrobial resistance make controlling the spread of infectious disease increasingly complex. Health responders and infection prevention professionals experience challenges in preventing, controlling, and contending with outbreaks and face workload challenges, time pressures and psychological effects stemming from outbreaks.⁴

The application of new technologies is helping Ministries of Health and Public Health agencies understand more about outbreaks, including the detection of more complex, long-term outbreaks. **ICNET** Outbreak Manager provides access to the latest data analysis and visualisation technologies to provide actionable insight into this evolving field.

**\$30-\$100
billion**

estimated
global impact of the
SARS epidemic³



MORE EFFICIENT, MORE EFFECTIVE OUTBREAK MANAGEMENT

ICNET Outbreak Manager helps public health bodies more efficiently tackle the complex challenges of managing infectious disease outbreaks. Our robust data collection, visualisation and analysis tools are designed to facilitate investigation, management and reporting activities to help streamline and strengthen outbreak management workflows when dealing with population-wide outbreaks.

COLLECT: Rich data collection in an integrated environment ensures a complete and accurate picture of an outbreak or multiple outbreaks.

- Allows all sources of infection within a facility to be documented
- Use for outbreaks involving humans, animals and/or environmental reservoirs
- Supports management of multiple, concurrent active outbreaks
- Case definitions ensure a consistent approach to inclusion of cases and contacts



INVESTIGATE & TRACK: Robust visualisation tools bring transparency and accessibility to available data — helping to quickly identify patterns and relationships within outbreaks, saving investigative effort and driving timely action. Users can also track and share progress towards defined goals.

- **EPIDEMIOLOGICAL CURVE** illustrates the course and type of outbreak, informing teams about mode of transmission, outbreak status, and impact of intervention.
- **NETWORK DIAGRAM** visually tracks chains of transmission between people, animals and objects over time, helping users to:
 - Understand potentially large and complex network of interrelated individuals
 - Identify index patients and super spreaders
 - Focus control measures where most critical
- **SYMPTOM TRACKING** allows teams to monitor and record patient symptoms on a daily basis, giving a clear picture of facility status to help manage the outbreak and determine when patients can be moved.
- **DASHBOARD** provides a snapshot of most important information, allowing users to quickly understand current status of an outbreak.

COORDINATE: Comprehensive outbreak and case management functionality help Ministries of Health and Public Health agencies coordinate intervention activities with built-in tools to help analyse interventional needs and allocate resources accordingly.

- Suitable for outbreaks across entire populations, a single location or multiple locations
- Ability to link multiple outbreaks for shared data sets and reporting, for an integrated approach to disease management
- Outbreak distribution map helps identify overall resource utilisation and where resources are most needed

PREVENT: Timely identification of threats and trends help drive proactive intervention to avoid further spread of infection.

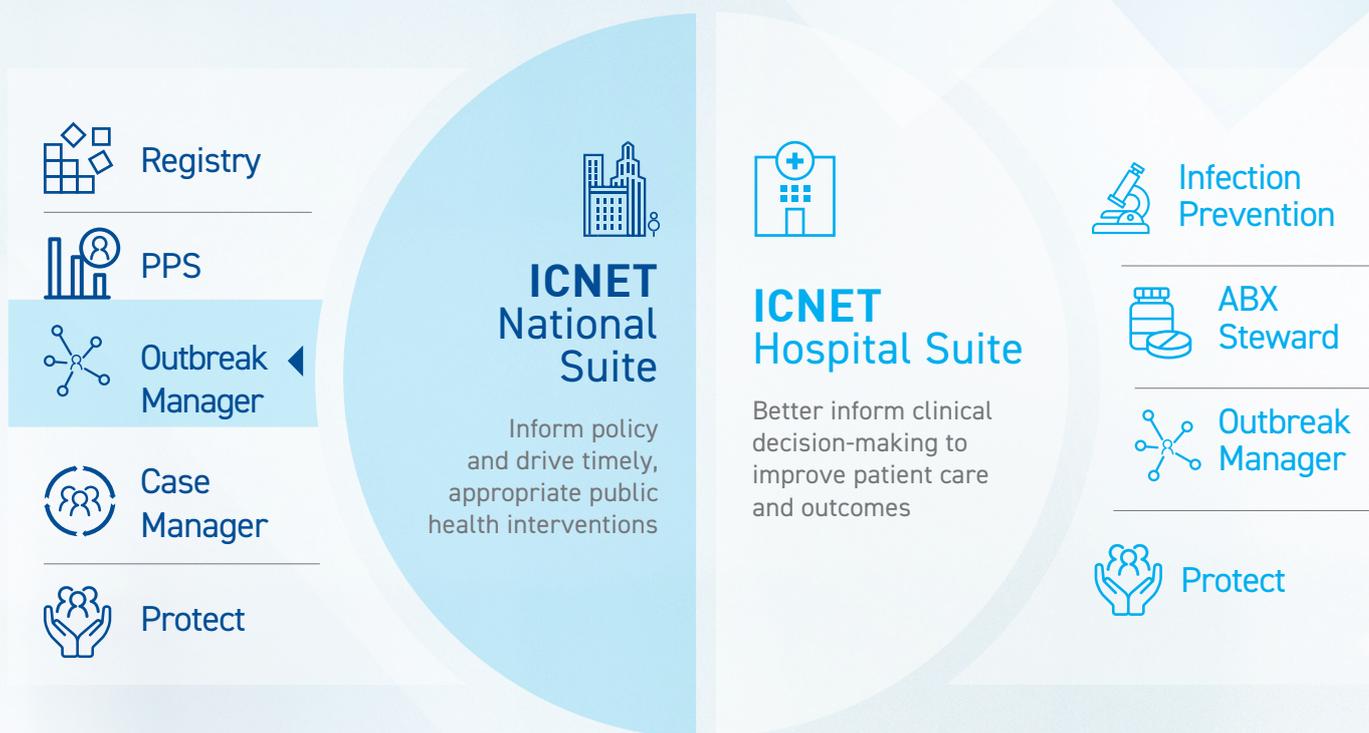
- Contact Tracing helps identify additional individuals at risk based on proximity to cases of interest
- In-system, email and SMS alert functionality to reach users in any setting



MORE CLINICAL EXPERIENCE

ICNET represents nearly 20 years of expertise in clinical surveillance software⁵, and Outbreak Manager continues this tradition of clinical rigor and excellence. The newest component of our clinical surveillance platform was developed in partnership with Public Health Wales in support of NHS key strategic drivers and aligns with effectiveness standards for the NICE Evidence Standards Framework for Digital Health Technologies.

ICNET software is now in use in more than 40% of NHS Trusts and Health Boards in the UK.⁵ Globally, we partner with more than 1,200 facilities.⁵



A MORE Integrated Approach to a Complex Challenge

ICNET is the only platform to provide a seamless solution across the hospital and public health settings, ensuring **MORE** people are protected.

ICNET Hospital Suite supports infection prevention professionals within the healthcare facility setting, while **ICNET** National Suite supports public health communicable disease professionals at the mass population level. Together they support a holistic approach to clinical surveillance, outbreak management and antimicrobial stewardship, with customisability to meet the specific needs of your organisation.

Effective clinical surveillance has been shown to improve health outcomes by providing early warnings of emerging threats and data to identify and act on long-term trends.⁶

1. Sadique Z, Lopman B, Cooper BS, Edmunds WJ. Cost-effectiveness of ward closure to control outbreaks of norovirus infection in United Kingdom National Health Service Hospitals. *J Infect Dis.* 2016;213:S19-26. 2. GHRF Commission (Commission on a Global Health Risk Framework). The neglected dimension of global security: A framework to counter infectious disease crises. 3. Smith RD. Responding to global infectious disease outbreaks: Lessons from SARS on the role of risk perception, communication and management. *Social Science & Medicine.* 2006;63(12):3113-3123. 4. Musau J, Baumann A, Kolotylo C, O'Shea T, Bialachowski A. Infectious disease outbreaks and increased complexity of care. *Int Nurs Rev.* 2015; 62: 404-11. 5. Data on file. Baxter International, 2019. 6. Jim O'Neill. Review on Antimicrobial Resistance. Tackling drug-resistant infections globally: final report and recommendations. May 2016.

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