



Software to Improve Healthcare Efficiency



## Interbit Data Product Backgrounder

### Overview

*Interbit Data's software solutions help healthcare organizations improve operational efficiency by automating and securing information distribution, enabling access to critical data during system downtime or failure, and optimizing workforce scheduling and management.*

### Technological Innovation to Support Improvements in the Quality of Patient Care

In the last decade, the healthcare industry has experienced numerous challenges. Hospitals are taking care of more patients but seeing their resources diminish, which raises concerns over the quality of patient care. The main on-going challenges for healthcare organizations are the need to control costs, maintain efficiencies, control their own markets, create a high degree of vertical integration, and embrace technology to address these challenges and remain competitive. Technology has become more mission critical as governmental and industry demands for more documentation and greater confidentiality have steadily increased. At the same time, the costs for implementing technology have risen dramatically.

To comply with HIPAA patient information management, security and reporting requirements and meet with the data interoperability requirements for economic stimulus funding offered by the American Recovery and Reinvestment Act of 2009 (ARRA), healthcare organizations must implement specific data technologies, regardless of whether they have full resources to do so. In addition to possessing a healthcare information system (HCIS), healthcare organizations must automate the process of taking information from the HCIS and distributing it as necessary to the other various parties involved in patient care, and also integrating it in patients' electronic medical records (EMRs) maintained by physicians and other clinicians. Manual handling of patient data not only consumes time and creates delays in getting that data to where it is needed; it also diminishes the privacy of that data. Even more risky is the potential for errors when data is manually transcribed. By fully automating their data management and distribution, healthcare organizations can eliminate the time sink, delays, security risks and errors involved with manual data handling.

Because the HCIS maintains all patient health records, including important and up-to-date information on medications, healthcare organizations also need to ensure that they can always access the HCIS, even during periods of downtime or system failure. Possessing technology to safeguard HCIS data and make it available at any time it's needed, regardless of system status, is another must.

However, even as healthcare organizations recognize that it is becoming more essential, as well as required, to have these capabilities, they need technology solutions that are cost-effective, easy to

implement and simple to use. Most importantly, an investment to automate data management, distribution and security processes must offer immediate payback.

## Software Solutions to Improve the Operational Efficiency of Healthcare Organizations

Interbit Data's solutions address healthcare organizations' needs in the following areas:

- **Information distribution** – Automating the transfer of critical information to multiple departments and in the recipients' delivery method eliminates costly and time-consuming manual data handling. Information is distributed via email, fax, encrypted file or the industry standard HL7 format and easily integrated into physicians' practice EMRs.
- **Business continuance and downtime protection** – A healthcare facility's information system is central to providing quality patient care, therefore it is critical to protect the organization from IT service interruptions and ensure that up-to-date patient data is readily available in the event of a network or system outage.
- **Workforce scheduling and optimization** – To maintain quality patient care, hospitals need to ensure that they are appropriately staffed when needed. Giving hospitals the ability to automate scheduling tasks allows them to efficiently allocate staff, ensure adequate coverage and reduce the costs of temporary and staff overtime.

## Information Distribution

Interbit Data's information distribution products deliver information securely and efficiently from the HCIS to multiple recipients. Data and files are transferred over the Internet in numerous types of formats and delivery methods as required by the end-user, including the HL7 messaging standard. Patient confidentiality is protected to maintain HIPAA compliance.

## Report Distribution:

### Product supporting MEDITECH Client-Server and 6.0 platforms:

- **NetDelivery C/S and 6.0** – Accurately distributes data and/or reports generated from an organization's MEDITECH client/server system to those who need the data and in the format most beneficial to them. Combining the capabilities of NetDelivery, Distribution Wizard and Desktop Fax, this product allows users to securely distribute reports and/or data via fax, encrypted print stream, encrypted file or email and to define by user and location what distribution method to use. Reports are collated and directed to the proper recipients based on user-defined rules using data extracted from the reports. NetDelivery C/S and 6.0 allows unlimited faxing from PC-based applications (C/S demand Fax) and offers support for inbound fax routing using Direct Dial Numbers (DDI, MSN), Caller Identification (CSID) or Line Routing to route incoming faxes directly to a department or user. By allowing documents to be delivered via fax, email and/or secure remote print, NetDelivery C/S and 6.0 increases satisfaction, streamlines delivery to both local and remote users and reduces the demand for fax lines.

### **Products supporting MEDITECH MAGIC platform:**

- **NetDelivery** – Securely and accurately distributes information and reports from a healthcare organization’s HCIS to its user community. Organizations define by user and location how the data is sent, choosing from 14 distribution methods, such as fax, file, email or directly to a printer. Reports can be distributed in PRN, TIF, TXT or PDF formats to simplify the review and printing process for users. Reports can be sent to multiple recipients, improving efficiency, and outbound queues can be centrally managed to improve the management of your communications. Remote locations can retrieve the data from the HCIS via the Internet on demand, on schedule or in real-time. All connections are validated and all data passing through the Internet is encrypted using 128-bit encryption algorithms to improve HIPAA compliance.
- **Integration Module** – Securely transfers patient data and reports from a healthcare organization’s HCIS, reformats it into HL7 messages and enables integration into physicians’ electronic medical records (EMRs). Integration with a physician’s EMR becomes as easy as printing a report.

Integration Module is fully integrated with either NetDelivery or NetDelivery C/S, helping healthcare organizations that seek ARRA economic stimulus funding to establish meaningful use of data interoperability.

- **Distribution Wizard** – Efficiently collates reports generated by the MEDITECH HCIS and directs them to the proper recipients based on user-defined rules using data extracted from the reports. Collating reports that are printed in batches saves time spent determining which reports go to each persons. By extracting the recipients and destinations from the reports, organizations increase accuracy of who receives the report, improve security by not sending reports to the wrong persons, and save staff time and effort ensuring reports were received on time by the right person. The Distribution Wizard is fully integrated with NetDelivery and the MEDITECH faxing routines in both the Magic and client/server systems, therefore documents can be delivered via fax, email, and/or secure remote print.
- **Document Manager** – Easily assembles numerous electronic files into a single document and delivers it to various recipients, such as patients, insurance companies, attorneys and others. Medical records personnel no longer need to gather information from different departments separately and send it separately to recipients. By streamlining the assembly of requested reports and documents, Document Manager simplifies the collection of data, saves time creating and delivering reports, eliminates waste and other problems associated with printing documents and provides greater control over the final document format. Users can manage how a document is assembled, determining format and layout and creating a cover page and table of contents, if necessary. Document Manager operates as easily as a printer, assembling any files that can be printed to a LaserJet printer and sending documents to any designated users. Reports and documents created with Document Manager may be distributed via NetDelivery or written to removable storage.

## Network Faxing:

### *Product supporting MEDITECH Client-Server and 6.0 platforms:*

- **NetFax C/S and 6.0** – Seamlessly integrates with the MEDITECH client/server system for directing faxes to defined users. Combining the capabilities of NetFax, Distribution Wizard and Desktop Fax, this solution can be used instead of fax appliances, and expansion is as simple as adding multiple modems. Logs are maintained on the server and communicated directly to the MEDITECH audit trail. Errors can be printed directly to a console printer for follow-up.

Reports are collated and directed to the proper recipients based on user-defined rules using data extracted from the reports. NetFax C/S and 6.0 allows unlimited faxing from PC-based applications (C/S demand Fax) and offers support for inbound fax routing using Direct Dial Numbers (DDI, MSN), Caller Identification (CSID) or Line Routing to route incoming faxes directly to a department or user. By allowing documents to be delivered via fax, email and/or secure remote print, NetFax C/S and 6.0 increases satisfaction, streamlines delivery to both local and remote users and reduces the demand for fax lines.

### *Products supporting MEDITECH MAGIC platform:*

- **NetFax** – Seamlessly integrates with a healthcare information system for directing faxes to defined users. NetFax is designed to replace dedicated fax appliances, and expansion is as simple as adding multiple modems. Logs are maintained on the server and communicated directly to the MEDITECH audit trail. Errors can be printed directly to a console printer for follow-up. NetFax can be upgraded to the NetDelivery product.
- **Desktop Fax Option** – Simply integrates fax and email functionality in different environments without the need for extensive modifications. Sending a fax message is as easy as printing a document, as the product supports all important network protocols for the fax server connection. Desktop Fax is integrated with Windows printing routines to simplify the faxing process. Users can choose to email rather than fax a document through the same routine to reduce the demand for fax lines.

## Business Continuation

Interbit Data's business continuation products give healthcare providers continuous access to patient data in the event of scheduled downtime or unexpected system failure or network outage. Clinicians depend heavily on the organization's HCIS, and uptime and availability are critical to patient care and safety.

The HIPAA Security Rule (2005) mandates that healthcare organizations have a contingency plan to respond to emergencies pertaining to access of electronic personal health information (PHI) records. Therefore, the organization needs business continuity procedures that ensure information is available to clinicians at any time, regardless of system or network downtime.

- **NetSafe** – Automatically captures and preserves patient information and reports from the healthcare information system on any location on the network, making critical data available for

lookup, review or printing whenever needed and ensuring consistent delivery of patient care when systems are unavailable. Data elements are automatically extracted from the captured reports and the reports are stored at locations throughout the network at regular intervals to ensure the most recent patient data is available. Data is encrypted to maintain confidentiality.

With NetSafe, users can define and capture an unlimited number of reports and rules, scan reports for locations to automatically deliver data to the right location and recipient, and store data at an unlimited number of locations throughout the network. Data is indexed for easy access to specific information. Reports can be sent to multiple locations to ensure data availability and improve staff efficiency. Users can view report data online, removing the need to print the reports, and they can search reports for individual patient data. NetSafe's comprehensive logging capability allows users to create an audit trail. Logs of all reports are stored on a central server.

- **MPrint Server** – Automatically directs reports to PC hard drives by defining the PCs and/or their printers throughout the organization as MEDITECH devices. Defining PCs as HCIS devices enables printing to a hard drive without user intervention. Defining printers as devices provides printer sharing with other users. Printers can be shared even when they do not have Network Interface Cards (NICs) or terminal server ports. Reports can be automatically directed to PC hard drives via MEDITECH spooling utilities. Because MPrint Server runs as a background service on the Microsoft Windows platform, users can define multiple instances and rules in one program, obtaining better performance and simpler operation.

### Workforce Scheduling

With healthcare labor consuming the largest portion of the average hospital's operating budget, effective and efficient scheduling of resources is a necessary operational requirement. Plus, with the current shortage of qualified registered nurses, healthcare workforce management has become a major operational challenge.

Scheduling staff effectively is more complex than simply assigning staff to shifts — it involves many elements and needs to consider all areas of the organizations. The challenges healthcare organizations face with scheduling and workforce management include having the right skills scheduled at the right time to meet the current patient demand for care, scheduling staff only when they are required, and utilizing staff so that costs are kept to a minimum and within budget.

Interbit Data's workforce scheduling solution ensures that healthcare organizations schedule the optimal number of employees and types of skills for guaranteeing positive patient outcomes.

### Driving Healthcare Efficiency Has Broad Impact on Organizations

Interbit Data's software products are cost-effective solutions that are compatible with all MEDITECH HCIS platforms, eliminating any obsolescence due to migration.

While they are comprehensive and provide advanced functionality and intuitive features, the company's products are simple and straightforward to use. Interbit Data's solutions differentiate themselves from similar products by offering greater flexibility, better reliability and very low maintenance. The company succeeds with service as well as by providing customers with a high level of support and the ability and

willingness to customize a solution to a user's more specific needs. The company's technical services team provides full support in every customer deployment to ensure a smooth and painless implementation with minimal disruption to the organization.

Customers reap numerous benefits, such as time savings, decreased costs and reduced errors and waste. Most importantly, patient information is secured and privacy is maintained. By improving efficiency, hospitals and physicians' offices increase productivity and morale, thus heightening their overall ability to provide optimal patient care.

### **Benefits to Three Important Organizational Areas**

Interbit Data's solutions offer benefits in three areas of the healthcare organization:

#### ***Financial***

Eliminating paper-based processes and automating previously manual processes allows organizations to significantly reduce waste and overhead costs. Interbit Data customers experience tremendous cost savings and ROI as a result of:

- Reducing their reliance on paper, thereby reducing spending on paper and printer supplies
- Streamlining workflow and reducing staff time with quick access to information
- Securing patient records with strict user controls
- Increasing patient safety and reducing the need for temporary staff by having the right staff in place at the right time
- Integrating patient information into practice management and EMR applications to ensure healthcare personnel have consistent, correct information regarding their patients
- Achieving meaningful use for data interoperability to be eligible for funding offered by the 2009 American Recovery and Reinvestment Act (ARRA)

#### ***Clinical***

By eliminating hard copy reports and manual scheduling and having access to the correct and most up-to-date information when it's needed, healthcare organizations decrease response time when delivering vital care to patients and improve patient service. With Interbit Data's solutions, healthcare organizations enable themselves to:

- Improve the availability and flow of information and staff
- Enhance communications
- Reduce the potential for error
- Secure access to critical patient information

- Have the information they need to aid in decision-making
- Improve efficiency by automating scheduling to ensure they have the right people in the right place at the right time
- Ensure continuous access to patient information in the event of an unplanned system or network outage to maintain uninterrupted patient service

### *Technology*

Integrating information from the hospital information system can be time-consuming and complex without the right technological tools. By using Interbit Data's solutions, healthcare organizations have rules-based technology that promises:

- Significant improvements in the utilization and efficiencies of healthcare resources
- Quick and easy installation and operation to ensure a quick ROI
- Low maintenance to save IT staff time and enable them to work on other mission-critical projects
- Everything necessary to address the broad range of user requirements with no hidden costs

### *Appendix A*

#### **System Information**

Interbit Data's software solutions are both client and server-side and run on the following: Windows Server 2000, 2003 and 2008, and Windows XP Pro, Vista, and Windows 7.



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