

Armstrong Ambulance Service and Armstrong Billing Service



Town of Ashland Emergency Medical Dispatch and Ambulance Billing Services **TECHNICAL PROPOSAL**

March 2018



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March 1, 2018

Town of Ashland
Office of the Board of Selectman/Town Manager's Office
101 Main Street
Ashland, MA 01721

To whom it may concern:

Armstrong Ambulance and Armstrong Billing Service appreciate the opportunity to submit our proposal to provide Emergency Medical Dispatch and Ambulance Billing Services to the Town of Ashland.

Choosing to remain with Armstrong will ensure that the town continues to receive high quality EMD through Armstrong's state certified Secondary PSAP and the best revenue recovery system in the industry. As one of the most respected ambulance billing companies in Massachusetts, Armstrong takes great pride building relationships with our municipal partners and has the expertise, resources, technology and personnel in which to do so. We are confident that choosing to remain with Armstrong as your billing and collection provider will allow you to maintain the highest standard for ambulance billing and collection which will prove fiscally beneficial to the town. Our industry knowledge and certified ambulance coders will continue to provide Ashland with improved cash flow and reduction in write offs from errors and omissions allowing for better control of accounts receivables.

On behalf of the team at Armstrong, we look forward to the opportunity to discuss our proposal in greater detail with you.

Sincerely,

Richard Raymond, CEO
Armstrong Ambulance Service



WHO WE ARE

Raising The Standard Of Emergency Medical Services, Paving the Road to the Future of Mobile Healthcare.

At the heart of Armstrong Ambulance is a commitment to providing the best possible service and medical care to each patient-a commitment that began with our founder, William F. Armstrong, 72 years ago.

Armstrong provides a comprehensive range of patient-centric services, from emergent and non-emergent ambulance service to Emergency Medical Dispatch and ambulance billing services.

OUR HISTORY

The Story of Armstrong Ambulance

Armstrong Ambulance was founded in 1946, shortly after Bill Armstrong returned from his tour of duty with the U.S. Marine Corps. While living at home, he watched his mother, a registered nurse, care for friends and family when they were injured or sick, and was inspired to follow her example.

One day, Bill agreed to drive a neighbor to Massachusetts General Hospital for a routine treatment. While he was there he watched the ambulances arrive with the sick and injured, and it made an indelible impression on him. He realized that he wanted to dedicate his career to caring for people in need. It wasn't long before Bill and a partner bought their first Cadillac ambulance and went into business.

Armstrong Ambulance initially operated out of the Armstrong family home. As the company grew, Bill earned a reputation for care and compassion, and quickly became an industry leader. He was instrumental in forming the Massachusetts Ambulance Association, developed to ensure the highest standards of care by ambulance services statewide.

In the early 1980s, under Bill's leadership, Armstrong became a pioneer in the field of advanced life support. Today, Armstrong serves more than 100,000 patients annually while remaining true to Bill Armstrong's original commitment-to provide the highest quality care and service to people in need.

EMERGENCY MEDICAL DISPATCH

Approach

Armstrong Ambulance Communications Center is a Massachusetts certified EMD resource, utilizing Motorola's Emergency CallWorx[®] dispatching infrastructure, along with Dispatch Pro QA. Armstrong functions as a Secondary PSAP for several communities in Eastern Massachusetts. The center is staffed by EMD certified dispatchers. Armstrong works collaboratively with the Town's Primary Safety Answering point to ensure the correct resources are sent to every medical call as well as providing pre arrival instructions to the caller.

As part of our commitment to quality, calls received through our EMD center are reviewed by an independent third party. Professional Ambulance in Cambridge Massachusetts reviews the calls as part of the required Quality Assurance policies. By having an independent third party review the call, the Town of Ashland can be assured of a non-biased approach to quality improvement.

Capabilities

Number of certified call takers by maximum and minimum staffing.

Armstrong has eleven (11) certified EMD call takers. At peak day time hours, staffing includes six (6) EMD certified dispatchers and call takers. On evening and overnight hours, staffing drops down to three (3) with a minimum of two (2) EMD call takers.

Years of Experience

Armstrong has been providing EMD services since 2014.

Municipalities

Currently Armstrong provides Emergency Medical Dispatch to the following communities:

Town of Ashland
Town of Sherborn
City of Medford
Town of Watertown
Town of Maynard
Town of Littleton

Town of Lincoln
Town of Carlisle
Town of Weston
Hanscom AFB
Town of Stow
Town of Carlisle

References

1. Chief Frank Giliberti, Medford FD, fgiliberti.mfd@comcast.net 781-396-9400
2. Captain Thomas Rocca, Watertown PD, trocca@police.watertown-ma.gov 617-972-6535
3. Lt. David Bento, Sherborn PD, dbento@sherbornpolice.org 508-653-2424

Scope of Work

Emergency Medical Dispatch Services

1. Submit annual quality assurance to State 911

Armstrong, as a State Certified Emergency Medical Dispatch Resource (CEMDR) is required to be compliant with all of the applicable rules, regulations and statutes and certify such compliance annually to the State 911 Department.

2. Maintain proper certifications as outlined in 560 CMR 5.00

Armstrong, as a State Certified Emergency Medical Dispatch Resource (CEMDR) is required to be compliant with all of the applicable rules, regulations and statutes and certify such compliance annually to the State 911 Department.

3. Provide pre arrival medical instructions to the caller.

Armstrong utilizes the Priority EMD system. All dispatchers are trained and certified in the use of the Priority cards and ProQA software. The ProQA software is the primary tool used for EMD at Armstrong which include pre-arrival medical instructions. The Armstrong dispatcher who answers the 911 line will remain on the phone with the caller providing instructions until such time that help arrives.

4. Work with the Town of Ashland to ensure that the proper resources are sent to each call.

While one dispatcher is on the line with the caller providing pre-arrival instructions, another Armstrong dispatcher will listen in and will provide updates as warranted directly to Ashland FD to ensure the proper resources are dispatched.

5. Ensure there is a quality assurance process in place.

Armstrong utilizes an independent QA/QI provider (Professional Ambulance) to ensure all of the required quality assurance standards for EMD are met and Armstrong will make all of their QA/QI records available to Ashland PD and FD as well as recordings of specific calls when requested and will work with Ashland PD and FD to determine the format and frequency of sharing QA data.

6. Maintain a continuity of operations plan for back-up dispatch operations.

Armstrong Ambulance has redundancies in place in case of power failure including an in house generator and UPS systems. Additionally the Communications Center has back up cell phone capability that allows for transfer of land lines to an offsite radio equipped location. As the state has recently migrated all PSAPs statewide to a new Next Gen 9-1-1 system utilizing the CallWorx[®] Platform, Armstrong is actively working to establish a plan for transferring 9-1-1 lines to an alternate answering point in the case of failure.

ARMSTRONG BILLING SERVICE

Approach

Armstrong Ambulance has compiled a team of EMS reimbursement and collection professionals with greater than 100 years combined experience in the industry that understands the complexities of ambulance billing and reimbursement. Our expertise provides each client with up-to-date information from a variety of sources including Centers for Medicare and Medicaid (CMS), Blue Cross & Blue Shield, American Ambulance Association and the Massachusetts Ambulance Association.

At Armstrong Billing Service, we know the best way to maximize revenue is to quickly and efficiently file healthcare claims. That's why we utilize Zoll Billing software which can interface with any patient care reporting to focus on the accurate, timely submission of EMS claims. Once the Town of Ashland submits a claim, it is filed electronically or by mail within 24-48 hours with the insurance carrier, resulting in a quick turn-around and fewer denials.

Armstrong uses the most sophisticated ambulance billing software available to the emergency services industry: RescueNet[®] by Zoll Data Systems of Boulder, Colorado. It is designed expressly for EMS billing and data management and is fully integrated software that has a proven track record of reliability and security. It operates in a Windows environment backed by a Microsoft SQL data base. All data that is entered into the system can be retrieved in easy "customizable" reports through a Web-based portal. Armstrong will let the Town of Ashland determine the amounts and types of reports necessary to run an efficient and productive operation. This access provides the Town with complete transparency to ensure that you are receiving the most accurate patient care reporting and reimbursement data available.

Capabilities

Number of billers and coders:

Armstrong has six (6) full time billers and two (2) certified coders.

Years of Experience

Armstrong has been in the business of billing ambulance claims since the company's inception 72 years ago. In 2009, Armstrong Ambulance recognized that many fire departments needed a higher level of expertise and experience in ambulance billing and collections. Armstrong Billing Services (ABS) was founded to meet that need, and bring our years of ambulance reimbursement knowledge and experience to our partners in the fire service.

Average percent of billing collections

The average percent of municipal billing collections is 88%.

Municipalities

1. Ashland, MA
2. Watertown, MA
3. Burlington, MA
4. Hanscom AFB, MA (Armstrong Ambulance)
5. Saugus, MA (Armstrong Ambulance)
6. Medford, MA (Armstrong Ambulance)
7. Woburn, MA
8. Arlington, MA

References

1. Chief Steven Yetman, Burlington FD syetman@burlington.org 781-270-1927
2. Chief Robert Jefferson, Arlington FD rjefferson@town.arlington.ma.us 781-316-3801
3. Chief Robert Quinn, Watertown FD rquinn@fire.watertown-ma.gov 617 972 6575

Scope of Work

Ambulance Billing and Collections

1. Utilize user friendly interface

Armstrong uses RescueNet[®] by Zoll Data Systems of Boulder, Colorado. It is designed expressly for EMS billing and data management and is fully integrated software that has a proven track record of reliability and security.

2. Provide equipment that will be used to document and bill all ambulance runs, including patient care.

Armstrong will continue to provide the Town of Ashland with two (2) Panasonic Tough Book Computers.

3. Maintain all equipment

Armstrong will continue to maintain and provide all necessary updates to the tough books used by Ashland Fire.

4. Provide necessary training

Armstrong will provide training to all Ashland personnel on use of the Tough Books and associated billing software. Additionally, Armstrong will have an EMS billing specialist available when requested for in person meetings to answer questions and provide information and training on medical legal compliance and EMS best practices for billing compliance.

5. Maintain all data for billing

Armstrong will maintain all of Ashland's billing data for several years and will work with the Town to determine and meet all data retention requirements.

RECORDS AND REPORTS

1. Ensure the Town of Ashland has access to all ambulance data

Armstrong will ensure that the Town of Ashland has access to all ambulance data and will work with the Town to determine the format and frequency of data sharing.

2. Have the capability of providing data to the Town

Armstrong utilizes state of the art ambulance billing software which is capable of providing extensive reporting including:

- A weekly report of all collections, together with a copy of the deposit slip evidencing the deposit to the Town of Ashland's bank account.
- A monthly recap of reports including an aging report at the end of the month reflecting the balance of open receivables.
- All reports required by the Town, including: Commitments listings, listings of write offs, adjustments credits, and any other report determined necessary to be able to prove the balance from month to month.
- All records and correspondence relating to the Town of Ashland Accounts Receivable and billing services collection efforts will be available for examination by the Town of Ashland or its authorized representative.
- All reports can be provided to the Town in an electronic or paper format, as determined by the Town.

6. Furnish quarterly reports

Armstrong Billing will provide quarterly reports to the Town.

7. Ensure data is properly secured and stored

Armstrong's data storage meets all Federal HIPAA compliant storage and security requirements.



Attachments

Emergency CallWorx®	Section 1
RescueNet® Billing	Section 2
Panasonic Toughbook®	Section 3





Section 1

Emergency CallWorx[®]





Every second matters. Every call counts.™



NG9-1-1? VoIP? ALI? GIS? Telematics? Wireless 9-1-1? *Confused?*

Are you tired of integrating separate solutions that won't quite tie together?

You know the challenges ahead won't end with Next Generation 9-1-1. Unfortunately, many vendors you rely on today would have you believe that simply installing a Voice over Internet Protocol (VoIP) based solution prepares you for NG9-1-1. Emergency CallWorx® understands that isn't the case. We started with NG9-1-1 and VoIP as the beginning requirement — not the end. When you select Emergency CallWorx, you are getting a partner with products that go beyond those defined standards to deliver real value, benefits and lower costs.

Tackling one of the toughest 9-1-1 public safety dilemmas, Emergency CallWorx is pioneering the convergence of NextGen 9-1-1 Call Taking, Incident Management (CAD) and Mapping systems.

ECX is Innovation. Beyond Next Generation.

Our state-of-the-art solution is the only natively integrated, browser-based, dispatch-centric design in the industry. Using the latest software design and telephony technologies, our native i3-compatible application manages the receipt of emergency calls and seamlessly dispatches a response with a simpler, easier-to-use workflow approach and user interface designed to work the way you do, today. Emergency CallWorx was founded with a simple focus... build a world-class application that enhances the benefits derived from seamless support and utilization of the latest telephony, Internet and mobile standards while adhering to critical legacy standards from yesterday.

Our Vision is the New 9-1-1 Reality. It's clear that a new system architecture is needed to handle the rapidly changing technologies and performance requirements in today's environment and beyond. With decades of E9-1-1 expertise, our founders understand that adding a new layer or application each time a new technology emerged was simply not sustainable. By building and deploying the first natively integrated solution that streamlines the process of getting the right response to the right place at the right time, we are revolutionizing call taking, dispatching, mapping and reporting for public safety environments just like yours.

Emergency CallWorx has the right experience, industry allies and products to be your primary partner in the deployment and migration of your PSAP to NG9-1-1 and beyond.

Innovation. Beyond Next Generation.



Less Complexity. More Flexibility.

Emergency CallWorx **DispatchStation**® is a fully integrated NG9-1-1, Mapping and Computer Aided Dispatch (CAD) System. With **CallStation**®, you get the same functionality – excluding dispatching. Based on J2E Web 2.0 development tools, an ECX distribution of the Asterisk® softswitch from Digium, ESRI®-compatible “GIS centric” mapping technology and MySQL® database, our products provide a high level of robust, enterprise level functionality.

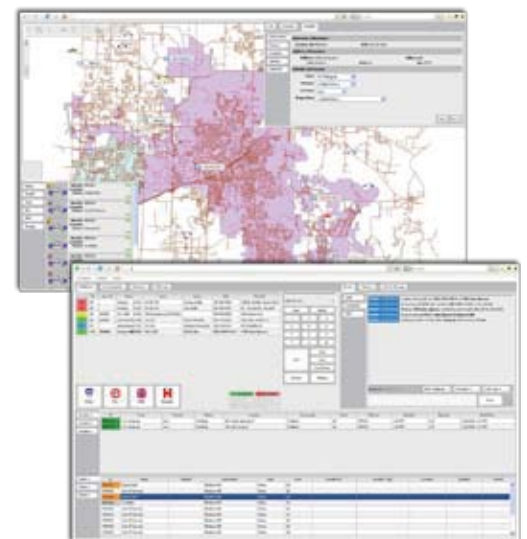
Our applications provide NG9-1-1, non-traditional communications, integrated messaging, Phase II wireless and VoIP caller-specific mapping features, complete 9-1-1 call-to-dispatch reporting functionality and flexible network installations such as remote hosting. Our browser-based architecture eliminates complex firmware and driver problems at the operator's console and easily integrates with third party mapping or CAD systems via standard interfaces.

Quality Support Services

Emergency CallWorx products are designed to be the most easily installed and maintained in the industry, but we recognize that your personnel may desire additional training or support. We offer several methods for our customers to request assistance 24x7, 365 days per year. From telephone support to our standard remote monitoring program, we deliver timely, flexible and reliable service to meet all your support requirements. Emergency CallWorx also provides a range of implementation services from factory staging of hardware and network components to on-site technical support for installation into multi-vendor environments.

Emergency CallWorx Product Suite:

- **DispatchStation**® – The complete workflow from receipt of E9-1-1 calls to dispatching field resources and sending information to mobile users. Call taking and dispatching is available directly from the Map, supporting traditional 9-1-1, Mapped ALI and CAD within the only integrated workflow and reporting system available in the industry.
- **CallStation**® – Delivers call taking and mapping, at a lower cost, for agencies that have a dispatch application, but need to add the latest VoIP, wireless mobile and NG9-1-1 enhancements. Call taking is available directly from the Map with the support of traditional 9-1-1 and Mapped ALI features in one smooth workflow. CAD interfaces are provided.
- **AdminiStation**® – Using a web browser, authorized personnel can configure and manage many aspects of the applications and database.
- **WebAccessory**® – Local and mobile authorized users can view real-time calls, incident data and reports, as well as send and receive messages and more from remote locations using a browser.



Browser-Based Intuitive User Interface Design



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Section 2

RescueNet[®] Billing



RescueNet Billing

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Next-Generation Automated Billing and Collections

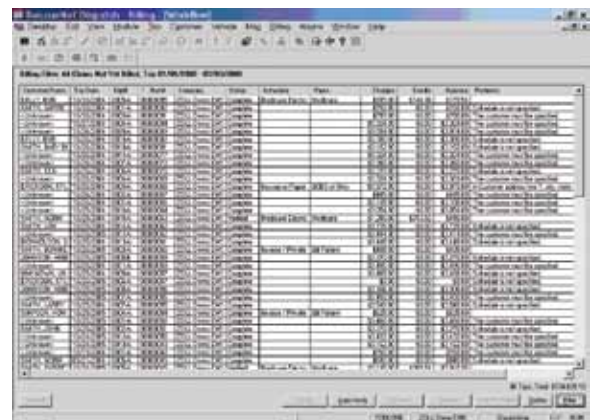


Work Smarter with Intelligent Workflow

RescueNet® Billing automates the billing process so you can get paid on time. Its intuitive features help your billers organize their workday and avoid mistakes that can lead to denials. Keep claims from slipping through the cracks, speed up collections, and generate powerful business analysis and productivity reports. RescueNet Billing monitors claims for errors and reduces receivable turnaround times to help you maximize your cash flow. It shares a common database with RescueNet Dispatch and ePCR, so the information collected by your call takers, dispatchers, and field staff is immediately available to your billers. This eliminates time consuming and error-prone duplicate data entry. RescueNet Billing provides managers with a high-level view of the department's workload. The most widely used Windows®-based EMS billing system enables you to slash your receivables, improve cash flow, reduce staff hours, and easily stay Medicare-, Medicaid-, and HIPAA-compliant.



The foundation of efficiency is based on the ability to identify what work needs to be done and to prioritize that work. To build successfully on that foundation, you need to easily access the details of that work and the account data that underlies those details. RescueNet Billing's workflow feature spots the problem areas of your A/R and gives your billers simple, one-step access to information. Workflow makes it easy to find, organize and prioritize your billing and collections efforts.



In-depth filter definition to define workflow/billing filters



On-screen interactive operations reports:
As changes are made to trips, workflow immediately reflects those changes.

RescueNet Billing Today:
A summary of important Workflow filters to help
prioritize and organize claims to be worked by
individual billers.

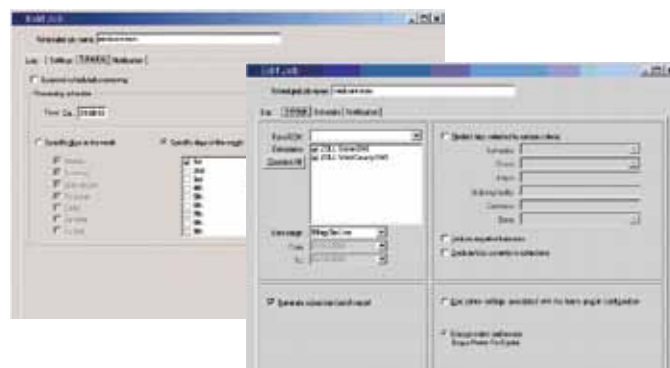


Automated Billing and Electronic Submissions

The faster you can get a claim correctly billed and submitted, the sooner the cash will be in the bank. RescueNet Billing makes it easy for you to get your claims submitted as quickly as possible by automating the billing process. The process of billing trips and generating electronic claims, and/or printing paper claims, is simple with RescueNet Billing.



RescueNet Billing Schedules:
Automate your billing cycles and let the system ensure timely invoices/claims go out to customers and insurance payors.

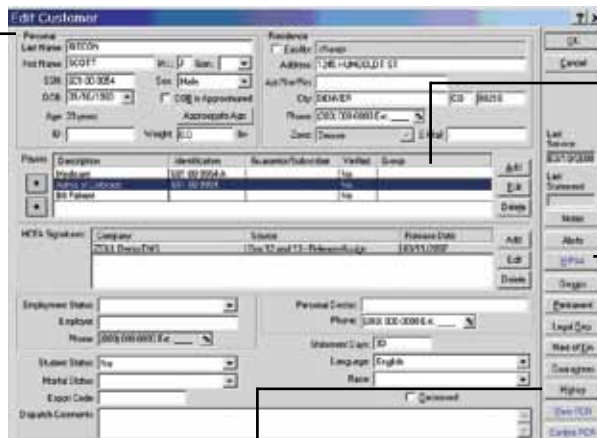


RescueNet Scheduled Batch Processing:
Configure jobs to generate paper and electronic claim batches automatically at any time during the night or day.

Claims are re-verified during the batch processing to ensure accuracy and completion, reducing the possibility of denials.

Easily Manage Critical Patient Information

Customer information is all stored in one location



Sort customer payors in the most appropriate billing order

Log all HIPAA documentation received from customers

Track the changes made to customer information and who did the changes

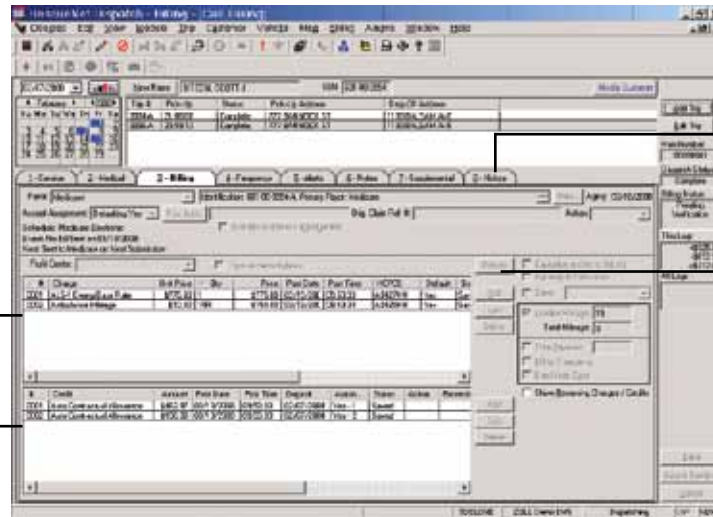
Capture permanent address, legal rep and next of kin information to facilitate collection efforts

Fast, Well-Organized Data Entry

Easy user interface for reviewing and entering trip information

Automated entry of charges and contractual allowances for primary payor

Add payments directly to each trip



History log of all actions done to trip

Add denials directly to each trip

Attach files/important records to the trip

RescueNet Billing Modules – Get more out of your technology investment

RescueNet Billing includes several modules provided to streamline the cost recovery process. This saves your department time and money associated with administrative services and allows you to focus on life-saving operations.

Electronic Claims Module

RescueNet Billing Electronic Claims Modules (ECMs) allow for the creation of files for electronic submission to carriers for billing. Standard ECMs are available for different carriers and custom ECMs can be developed as needed. The development and testing of ECMs requires extensive time and resources. RescueNet Billing comes with four ECMs: Medicare for one state, Railroad Medicare, Medicaid for one state, and one of the following Clearinghouse ECMs: WebMD, THIN (Texas), ET&T, Gateway EDI, ZirMed, and NHS.

RescueNet Code Review with Billing

When you use RescueNet Code Review with RescueNet Billing, you can view ECGs with easy access to this record if you're required to print and forward it to an insurance company for additional evidence as to the patient's condition and course of treatment when medical necessity is in question. Also your billing office staff can quickly access the record later if a legal matter requires this documentation to be produced for evidence.

Paper Forms

Standard Paper Forms are available for different carriers and custom forms can be developed as needed. A set of standard forms come with RescueNet Billing including a patient invoice, a facility invoice, a collection letter, HCFA 1500, etc. and all state-specific forms for one state.



Automated Electronic Remittance and Batch Credit Processing

Processing payments has never been easier. A biller can select whether to add a payment or denial directly into each trip. Or they can process an EOB using the batch credits module to quickly add all credits and denial in one step without having to open each individual trip.

Assign Target Total to batch for easy reconciliation

Enter secondary credits (i.e. adjustments and write-offs) as payments are entered

System can automatically calculate appropriate expected amounts

Distribute payments over multiple legs of a trip

Automatically selects the next payor and appropriate schedule for each trip

Capture co-insurance and deductible amounts for electronic filing of secondary claims

The Flexible Auto-Fill option makes it simple to handle tasks such as writing off small balances and posting facility payments

DANTOM ECM

DANTOM Systems, Inc. develops collection letters, invoices and statements, and provides high-speed laser printing and mailing services. If you're using DANTOM Systems for any of these services, you can use the RescueNet Billing DANTOM Electronic Claims Module (ECM) to easily generate an electronic data file that contains all of the information DANTOM needs to process your invoices or collection letters. Then you can simply upload the data file to DANTOM Systems for processing. The DANTOM ECM also enables you to receive updated address information from DANTOM if you subscribe to that service. This module lets you reduce FTE's, and/or clerical staff, allocated to the printing, collating, and mailing of patient invoices and collection letters. Because many EMS organizations and billing services send multiple invoices and notices to a patient while trying to collect on a bill, there is an exponentially higher number of claims that are processed for patient billing. Plus you can reduce overhead costs for printing supplies.

Medifax Utility

Medifax-EDI, Inc. is a company that, in addition to providing other services, sends eligibility requests to carriers nationwide on behalf of healthcare providers. If you're working with Medifax, you can use the RescueNet Billing Medifax Utility to easily generate an electronic data file that contains eligibility requests you need Medifax to process. Then you can simply upload the data file returned from Medifax using the data transmission software provided by them.

Scanned Documents Applications (Image Viewer and Auto-Attach for Scanning)

These applications enable you to attach scanned documents to your trip records either automatically by attaching files to trips based on file name, or manually by keying in the run number to a viewed image. One great way to use this application is to attach scanned copies of the patient care report to the trip so it's handy for billing. This solution can help you realize your dream of the paperless office. Use the integrated scanning interface to

scan and link either a single document or a batch of documents quickly and efficiently. Attach copies of run reports, physician certification statements, EOB's and more to the claims you bill from RescueNet Billing. Don't waste time going back and forth to the file room to retrieve important documents you need each day. Instead you can view and print them directly from your RescueNet Billing workstation as needed. Secure file storage as mandated by HIPAA can be expensive for some organizations with limited office space. As a result, it's more cost effective to store documents offsite. Offsite storage requires another mechanism for staff in the billing office to access records required for billing, working denials and follow-up collections. Scanning is the perfect solution since each of the relevant documents are ready and available to the system users as they work the claim for viewing and printing. Prioritize your billing and collections efforts.

Even if storage is not an issue, the process of searching for, copying, and filing supporting documents in a billing office requires time and is a redundant task that can increase staffing costs. The scanning solution requires that each document only be filed once by scanning it into the system, then the permanent filing of a printed copy. Any subsequent need for that document is easily met by accessing it via RescueNet Billing for viewing or printing.

With the Scanned Document Application you can:

- Efficiently attach scanned images that have been scanned in with a batch of documents.
- Attach a single document to a single trip record or to multiple trip records.
- Attach a single document to multiple trip records with the same incident number in one easy step.
- Include a comment with any attachment.

Acceptable file types:

- Adobe® Portable Document Format (PDF) files with a .pdf file extension.
- Joint Photographic Experts Group (JPEG) image files with a .jpg file extension.
- Graphics Interchange Format (GIF) image files with a .gif file extension.
- Tagged Image File Format (TIFF) image files with a .tif file extension.



Membership Module

This module enables you to create and maintain your membership program, including tracking and reporting membership fees, printing renewal invoices and membership cards. It can track head-of-household and dependents, create new customers in RescueNet Billing, and update existing customers when necessary. Members are indicated in RescueNet Billing so your billing staff can appropriately handle accounts.

Questionnaire

The RescueNet questionnaire enables users to define a series of questions and answers or statements and choices. This feature is designed to allow the capture of additional information in a logical format.

A typical use for the questionnaire is qualification for transportation. Both questions and responses can be logged to the history of a call. Call type and priority can be set based on questionnaire responses.

Security

Security is used to control access to the RescueNet system, allowing for great flexibility in defining user access. Security can be used on two levels, system-wide and user-specific, or a combination of both.

Security allows for predefined configurations for users that can be saved and titled (e.g. dispatchers, call takers, and billers) and alleviates the need to define a security configuration for each user every time.

QA/QI

The RescueNet QA/QI module enables the capture of procedures and interventions, medications administered, and vital signs and Glasgow Coma scores for patients on an individual trip. Users can define their procedures and medications, and select them from pick lists. This module also captures associated crew members, amounts and times, and the success of procedures and medications.

Professional Reports

When reporting on your billing operations and accounts receivable is the highest priority, arm yourself with RescueNet Professional Reports. The Professional Reports package provides over 100 professional reports for RescueNet that assist you with quickly reporting on the status of your business at every stage of the billing process. With RescueNet Billing and Professional reports you can quickly report on all sales and receivables activity over a period of time to analyze and monitor trends in your accounts receivable. Evaluate claim aging based on billing schedules and events to improve internal process and follow-up efforts in your billing office. Monitor user productivity by department and function with various user activity reports. Stay ahead of insurance eligibility verification in pre-billing by reporting on expiring verification of patient insurances. These are just a few examples of the many reporting options available in the Professional Reports package for RescueNet Billing.

Proven Solutions

RescueNet Billing is a component of the RescueNet Suite of integrated data management solutions for fire and EMS that are designed to reduce duplication of processes, simplify data sharing, and increase efficiency and data accuracy in order to achieve performance excellence. Our suite of solutions also helps improve patient care, enhances quality of service, and maximizes profitability.





www.zoll.com

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Section 3

Panasonic Toughbook®





Panasonic recommends Windows® 7.

TOUGHBOOK 19

- Convertible Notebook to Tablet Design
- Sunlight-viewable Up to 6000 Nit in Direct Sunlight
- Full Magnesium Alloy Case with Hand Strap
- Shock-mounted Flex-connect Hard Drive with Quick-release
- Optional 4G LTE or 3G Gobi™ Mobile Broadband

Rugged, lightweight, wireless and convertible.

If you want a fully-rugged, lightweight, wireless laptop that converts from a powerful notebook PC to a convenient tablet PC with one quick swivel, then the Toughbook® 19 is for you. The first tablet PC to be certified¹ for MIL-STD-810G and IP65, it features a full magnesium alloy case capable of withstanding a 6-foot drop¹—ideal for working in challenging environments and mission-critical situations. At only five pounds, it's good on the go with a hand strap, Wi-Fi, a brilliant LED screen capable of up to 6000 nit in direct sunlight, and optional embedded 4G LTE or 3G Gobi™ mobile broadband.



IP65

6-FOOT
DROP RATING

MIL-STD-
810G

The first
MIL-STD-810G
certified tablet PC¹

1.800.662.3537

panasonic.com/toughbook/19

TOUGHBOOK®

SOLUTIONS FOR BUSINESS

Panasonic recommends Windows® 7.



DURABILITY

- MIL-STD-810G certified (6' drop, shock, vibration, rain, dust, sand, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, explosive atmosphere)¹
- MIL-STD-461F certified¹
- IP65 certified sealed all-weather design¹
- Optional class I division 2, groups ABCD certified model
- Hard drive heater
- Full magnesium alloy case with hand strap
- Shock-mounted flex-connect hard drive with quick-release
- Pre-installed replaceable screen film for LCD protection

SOFTWARE

- Genuine Windows® 7 Professional 32-bit² or Genuine Windows® 7 Professional 64-bit²
- Panasonic Utilities, Panasonic Dashboard, Recovery Partition

CPU³

- Intel® Core™ i5-3320M vPro™ Processor
- 2.6GHz with Turbo Boost up to 3.3GHz
- Intel® Smart Cache 3MB

STORAGE & MEMORY

- 4GB SDRAM (DDR3L-1333MHz) standard, expandable to 8GB^{4,5}
- 500GB 7200rpm hard drive (shock-mounted flex-connect with quick-release)⁵
- Optional 128GB and 256GB reinforced flex-connect solid state drives (SSD)⁵

DISPLAY

- 10.1" XGA sunlight-viewable LED 1024 x 768 (touchscreen or optional dual touch)
- TransfectivePlus and Panasonic Circulumin™ technology
- 1-6000 nit (depending on lighting conditions and settings)⁶
- AR, AG and circular polarizer
- Intel® HD Graphics 4000 video controller, max. 1544MB shared VRAM with 32-bit⁴
- External video support up to 1280 x 1024 at 16.7 million colors
- Concealed mode (configurable)

AUDIO

- Intel® high-definition audio compliant
- Integrated speaker
- Keyboard volume and mute controls

KEYBOARD & INPUT

- Touchscreen or dual touch (touchscreen and digitizer models)
- Integrated stylus holder
- 82-key with dedicated Windows® key
- Pressure-sensitive touchpad with vertical scrolling support

EXPANSION SLOTS

- PC card type II
- SD card (SDXC)
- ExpressCard/54

INTERFACE

- Docking connector
- VGA
- Headphones/speaker
- Microphone/line in
- Serial
- Ext. antenna conn. (x 2)
- USB 3.0 (x 1), USB 2.0 (x 1)
- IEEE 1394a (FireWire)
- 10/100/1000 Ethernet
- 56K Modem
- Dedicated 100-pin
- D-sub 15-pin
- Mini-jack stereo
- Mini-jack stereo
- D-sub 9-pin
- 50 ohm coaxial
- 4-pin
- 4-pin
- RJ-45
- RJ-11

WIRELESS

- Optional integrated 4G LTE mobile broadband
- Optional integrated 3G Gobi™3000 mobile broadband
- Intel® Centrino® Advanced-N 6235 802.11a/b/g/n
- Bluetooth® v4.0 + EDR (Class 1)
- Security
- Authentication: LEAP, WPA, 802.1x, EAP-TLS, EAP-FAST, PEAP
- Encryption: CKIP, TKIP, 128-bit and 64-bit WEP, Hardware AES
- Dual high-gain antenna pass-through
- Slide on/off switch

POWER SUPPLY

- Lithium ion battery pack (10.65V, typical 5700mAh, minimum 5400mAh)
- Battery operation: 10 hours (touchscreen), 9.5 hours (dual touch)⁷
- Battery charging time: 3.5 hours⁷
- AC Adapter: AC 100V-240V 50/60Hz, auto sensing/switching worldwide power supply

POWER MANAGEMENT

- Suspend/Resume Function, Hibernation, Standby, ACPI BIOS

SECURITY FEATURES

- Password Security: Supervisor, User, Hard Disk Lock
- Kensington cable lock slot
- Trusted platform module (TPM) security chip v.1.2
- Computrace® theft protection agent in BIOS⁸
- Intel® Anti-Theft Technology
- Optional fingerprint reader
- Optional SmartCard reader

WARRANTY

- 3-year limited warranty, parts and labor

DIMENSIONS & WEIGHT

- 8.5"(L) x 10.7"(W) x 1.9"(H)
- 5.1 lbs.



INTEGRATED OPTIONS⁹

- 4G LTE mobile broadband
- 3G Gobi™3000 mobile broadband (EV-DO Rev. A, HSPA)
- 3MP camera with auto focus and dual LED light¹⁰
- GPS receiver
- Backlit keyboard – sealed rubber or plastic emissive
- SmartCard reader
- Fingerprint reader
- HDD and battery lock

SELECT ACCESSORIES⁹

- AC Adapter (3-prong) CF-AA6503A2M
- Lithium Ion Battery Pack CF-VZSU48U
- Battery Charger CF-VCBTB2W
- LIND 5-Bay Battery Charger PACH518-1858-P
- LIND Car Adapter 120W CF-LNDDC120
- LIND Car/AC Adapter 90W (with USB port) CF-LNDACDC90
- LIND Car Adapter 90W MIL-STD CF-LNDMLDC90
- ToughMate ComUniversal Jr. Carrying Case TBCCOMUJR-P
- ToughMate Always-on 19 Case TBC19AOCSP-P
- ToughMate 19 "X" Hand Strap TBC19XSTP-P
- ToughMate Shoulder Strap TBCTMSS-P
- LaCie External USB Multi Drive TT-DVDRW8XL91U
- Memory Cards CF-WMBA1104G
- 4GB DDR3 CF-VEB191AU
- Desktop Dock
- Vehicle Dock
- No pass-through
- Dual pass-through
- Zebra 4" Bluetooth Printer See Website
- PDRC Backlit Keyboard CF-WEB194AC
- iKey Keyboards PZ420BT
- Dual Touch Replacement CF-VKBL03AM
- Stylus (for Digitizer) See Website
- Touchscreen Replacement Stylus CF-VNP012U
- Tether CF-VNP003U
- LCD Protector Film for Touchscreen and Dual Touch CF-VNT002U
- CF-VPF11U

Please consult your reseller or Panasonic representative before purchasing.

¹Tested by national independent third party lab following MIL-STD-810G Method 516.6 Procedure IV for transit drop test and IEC 60529 Sections 13.4, 13.6.2, 14.2.5 and 14.3 for IP65.

²A full set of Windows XP drivers are available at panasonic.com/toughbook/support.

³An Intel Core i7 processor is also available.

⁴Total usable memory will be less depending upon actual system configuration. Maximum of 4GB of memory when equipped with camera. Windows 7 64-bit max. VRAM is 1696MB.

⁵1GB = 1,000,000,000 bytes.

⁶1000 nit without ambient light assistance. Up to 6000 nit in clear, sunny conditions under direct sunlight.

⁷Battery performance features such as charge time and life span can vary according to the conditions under which the computer and battery are used. Battery operation and recharge times will vary based on many factors, including screen brightness, applications, features, power management, battery conditioning and other customer preferences. Battery testing results from MobileMark 2007.

⁸Requires software and activation to enable theft protection.

⁹Accessories and Integrated Options may vary depending on your notebook configuration. Visit Panasonic website for more accessories and details.

¹⁰Camera replaces the second memory slot located on the bottom of the PC.

1.800.662.3537

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