



RxHub FAQ

What is RxHub?

The RxHub National Patient Health Information Network™ is the nation's only network providing authorized physicians with secure access for more than 200 million patient records with prescription coverage. Prescription eligibility, formulary and benefits, and medication history information is provided - for consenting patients - to authorized physicians at the point of care. This real-time decision support information is used by physicians to effectively manage the patient's use of medications and enables the most clinically appropriate and cost effective medication therapy to be prescribed for the patient.

In a recent study by the Gorman Group it was stated that approximately **70 percent** of the safety and savings advantages of ePrescribing resulted from doctors being given immediate access to patient level medication histories, safety alerts, and preferred drug options before prescriptions are transmitted to the pharmacy. The clinical and economic ePrescribing decision support information enables physicians to generate and submit **Informed Prescriptions** electronically to the patient's choice of retail or mail order pharmacies.

Results include:

- ✓ Improved Patient Safety through real-time **Informed Prescriptions**
- ✓ Streamlined processes enabling clinical workflow efficiencies
- ✓ Overall cost savings for the delivery of healthcare services in the United States

RxHub was founded in February 2001 by the three largest Pharmacy Benefit Managers (PBMs) – CVS Caremark, Express Scripts, and, Medco Health Solutions – resulting in a nationwide, ePrescribing information exchange network. The network is open to all ePrescribing stakeholders to ensure the fastest route to widespread adoption and cost effective healthcare delivery. RxHub utilizes (and develops) industry transactional standards to securely communicate consenting patient information in real-time between ePrescribing stakeholders and provides clinical decision support information (patient eligibility, benefits, formulary, and medication history) for more than 200 million patients to physicians at the point-of-care. RxHub does not alter clinician or patient relationships or business relationships between payers, pharmacies, and technology vendors and operates under a cost recovery business model.

The RxHub National Patient Health Information Network™ operates in real-time enabling clinicians to access and prescribe prescription therapy for patients. Authorized clinicians can access vital clinical and economic decision support information – patient prescription eligibility, benefits, formulary, and medication claims history – at the point of care. Patient information is transmitted securely over a standardized channel and is subject to strict privacy controls consistent with HIPAA requirements and applicable federal and state laws. Clinicians are then able to transmit electronic prescriptions to the pharmacy of the patient's choice.

RxHub promotes greater efficiency and patient safety while reducing clinical workflow costs through real-time delivery of necessary clinical and economic decision support information, at the point of care, through a nationwide utility information exchange that connects prescribers, pharmacies and payers. By assuring that vital information can be easily accessed at the point of decision making, RxHub enables clinicians to provide the informed continuity of care necessary to reduce costly errors and improve patient safety.

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The benefits of using RxHub are extended to Patients, Clinicians, Pharmacists and Payers.

- Patients can optimize their prescription drug benefits, choose any pharmacy of their choice, whether it be a retail or home delivery service, and enjoy greater convenience and reduced hassles of prescription delivery.
- Clinicians can use any RxHub certified electronic prescribing tool to improve patient safety – informed by the patients’ prescription drug benefits, and save time in the prescribing and renewal process.
- Pharmacists can increase productivity in the prescription delivery process, delivering the safest possible medical care, and improve quality of patient care.
- Health Benefit Plans can improve formulary compliance, achieve more efficient generic/therapeutic interchange, and reduce administrative time and cost.

RxHub's mission is to continue its leadership position as the network exchange for the flow of vital patient information to physicians and other health care providers so that they can improve the continuity of care and make informed decisions that will keep patients safe. As part of our mission to improve patient safety, RxHub is actively working to reduce the risk and occurrence of medication errors and adverse drug events (ADEs), and to lower the number of deaths, injuries and disabilities that result annually. RxHub continues to demonstrate and enhance the value of electronic connectivity and interoperability among industry participants to achieve safer outcomes for all Americans. RxHub is extending its connection beyond the ambulatory setting in order to assist in reducing patient medication errors in hospitals.

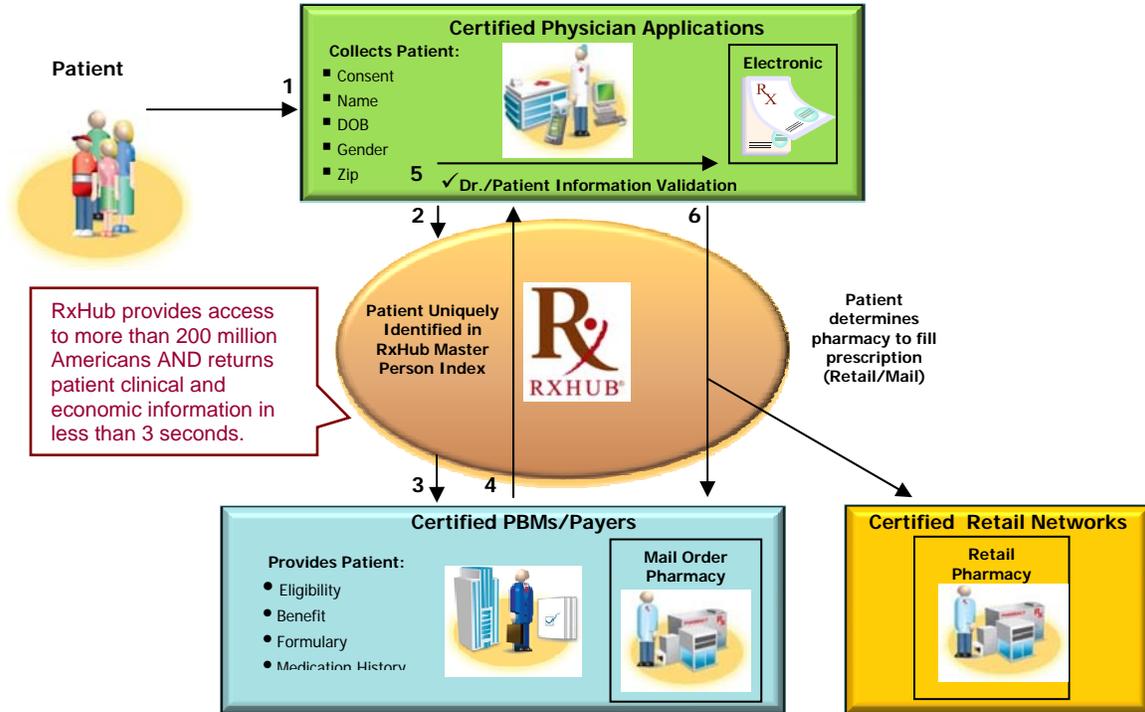


RxHub was the first ePrescribing network accredited by the Electronic Healthcare Network Accreditation Commission (EHNAC) in March 2007. EHNAC is an accrediting agency that provides independent peer evaluation of an organization’s ability to perform at industry-established levels. In Maryland and New Jersey, EHNAC accreditation is required of any entity processing healthcare transactions on behalf of healthcare organizations located in those states. EHNAC has been properly authenticated and registered with the Office of the United States Attorney General and Federal Trade Commission as an entity that is capable and qualified to develop and measure national standards of healthcare clearing house HIPAA privacy and security.

RxHub was also designated as an approved network for certifying criteria related to ePrescribing by the Certification Commission for Healthcare Information Technology (CCHIT) in March 2007. The CCHIT is a recognized certification authority in the United States for certifying health information technology products - an independent, nonprofit organization that sets the benchmark for electronic health records (EHRs).

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What is RxHub *Informed* ePrescribing?



- Step 1:** Patient visits a physician using an RxHub certified technology application.
- Step 2:** The authorized physician obtains patient consent, Name, DOB, Gender and Zip and submits a request for patient pharmacy eligibility, formulary & benefits, and medication history to RxHub.
- Step 3:** RxHub uniquely identifies the patient in the master patient index and forwards the request for patient pharmacy eligibility, formulary & benefits, and medication history to the PBM/Payer(s) that hold the patient pharmacy claims data.
- Step 4:** PBM/Payer(s) find patient eligibility, formulary & benefits, and medication history information and return it to RxHub who forwards onto requesting physician.
- Step 5:** Physician and patient validate eligibility, formulary & benefits, and medication history information. The physician uses the decision support information to effectively manage the patients' use of medications and counsel the patient on the most clinically appropriate and cost effective medication therapy. The physician generates the informed prescription and the patient selects the pharmacy to fill the prescription.
- Step 6:** The physician routes the electronic prescription to the patient's choice of retail or mail order pharmacy.

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How Are Clinicians Informed by Data Provided through RxHub?

RxHub ePrescribing provides clinicians with real-time, patient-specific decision support information, for consenting patients, to prescribe the most medically appropriate and cost effective prescription at the point of care and enables physicians to electronically transmit prescriptions to the patient's pharmacy of choice.

RxHub Patient Eligibility Information

Patient Name:	Health Plan Name:
Address:	PBM Name:
Date of Birth:	Retail/Mail Benefit Status:
Gender:	Student Status:
Cardholder Name:	Formulary, Cov/Copay ID:
Group Name:	BIN:

RxHub Patient Formulary Information

Formulary Status:
(Preferred, On Formulary, Off Formulary, Not Covered)

Formulary Alternatives:
(Age Limit, Product Exclusion, Gender Limit, Med Necessity, Prior Auth, Qty Limit, Resource Link, Text Message, Step Meds, Step Therapy)

Drug Coverage Information: *(Min, Max, \$, Tier and/or %)*

Drug Co-pay Information:

CMS Formulary Information:

RxHub Patient Medication History Information

Date Range:	Reported Pharmacies:
Drug Name:	Pharmacy Phone Number:
Oldest Fill Date:	Reported Prescribers:
Most Recent Fill Date:	PBM/Payer Source:
Number of Fills:	Days Supply:
	Quantity Dispensed:

Decision Support Information

RxHub certified partner ePrescribing Applications are provided real-time patient demographic information including pharmacy benefit and therapeutic formulary information at the point of care.

Formulary information along with the dispensing logic in an ePrescribing Application allows clinicians easy selection of medications that are preferred by the patient's health plan which meet therapeutic guidelines and are cost effective for the patient.

Medication history from payer claims databases with the DUR functionality of an ePrescribing Application can help identify:

- Drug interactions/duplications
- Adverse drug reactions
- Dosage modifications
- Adherence to prescribed drug treatment
- Previous therapeutic interventions
- SIG: directions to the patient can be derived via Fill Dates, Days Supply, and Quantity Dispensed.



The electronic prescription is generated using the clinical and economic decision support information provided via RxHub by certified ePrescribing Application partners of RxHub.

RxHub Patient Prescription Information

Patient ID:	NCPDP Provider ID:
Patient Name:	Prescriber Routing:
Address:	Prescriber ID:
Date of Birth:	
Gender:	NOTE: Clinicians may also
Cardholder Name:	include selection of
Group Name:	Brand/Generic medication,
BIN:	dosage, refills, SIG, etc.

Electronic Prescription

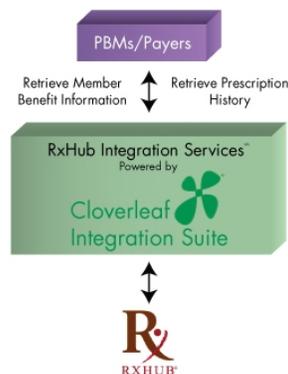
Electronic prescriptions are then securely transmitted to the pharmacy of the patient's choice. Refill prescriptions can also be transmitted by the pharmacy to the patient's physician office.

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What Services Are Offered By RxHub?

Electronic connectivity between payers, physicians, and pharmacists is essential to improving patient safety and managing health care costs. Patients can feel confident knowing their physicians are empowered to make the right treatment decision at every point of care. The services offered by RxHub include:

- **RxHub PRN:** provides electronic delivery of Payer/PBM member data to clinicians in an ambulatory care setting
 - Eligibility information including Master Person Index search
 - Physician Office (Point of Care)
 - Pharmacy (Point of Dispensing)
 - Formulary and benefit information
 - Dispensed medication history
 - Delivered to the clinic setting via an RxHub certified system technology vendor
- **RxHub SIG:** provides direct electronic conveyance of prescriptions between doctor and pharmacy.
 - Physician and pharmacy distribution lists
 - New prescription routing to patients choice of retail or mail order pharmacy
 - Renewal/Refill prescription routing from pharmacy to physician
 - Prescription Change request
 - Prescription Fill Status from pharmacy to physician (future)
 - Delivered to the clinic setting via an RxHub certified system technology vendor
- **RxHub MEDS:** provides clinicians convenient access to up-to-date medication history for patients they are treating in an inpatient setting
 - Master Person Index search
 - Dispensed medication history
 - HL7 Interface (ADT, ORU, and RDS formats)
 - Delivered to the acute care setting via an RxHub certified distribution partner
- **RxHub Integration Services:** provides a quick, secure, easy, cost-effective and certified connectivity for PBMs and Payers to the RxHub National Patient Health Information Network™, through the Cloverleaf Integration Suite, to provide a wide range of ePrescribing decision support information at the point of care.





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What Security Does RxHub Employ to Protect Data?

Payers will make drug history available only for members of health plans who choose to participate under their existing agreements with payers. Patient information is transmitted with the patient's consent, consistent with the requirements of HIPAA and applicable federal and state laws. At RxHub, security practices are an integral part of our service. We encrypt all transactions in transit over public networks. We employ firewalls and other network security controls. We take steps to secure our internal systems and have designed security into our transaction infrastructure.

Who Can Join RxHub?

RxHub is open to all. RxHub's mission is to accelerate electronic prescribing. Our objective is to provide the standard communication hub where electronic prescription information can be exchanged among all the participating parties in the prescription delivery chain. Current partners of RxHub include the following stakeholders:

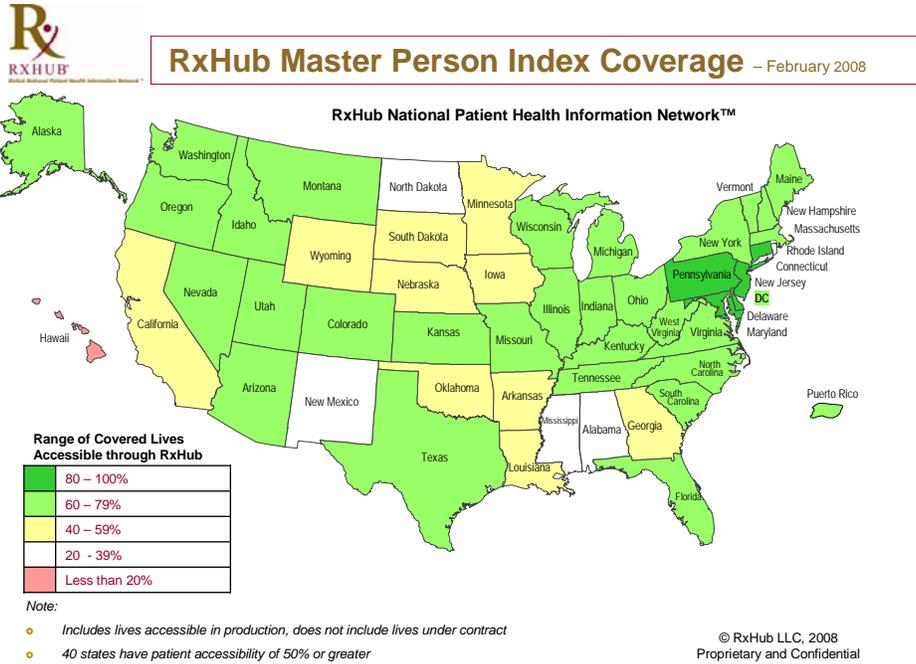
Payers

Payers certified with RxHub supply access to more than 200 million patient records for consenting patients in the United States. These patients are represented by the following RxHub partners:

- ACS
- Aetna
- Argus
- BCBS Florida
- BCBS Illinois
- BCBS Minnesota
- CAQH
- Care First (Argus)
- Catalyst Rx
- CVS Caremark
- EDS
- Express Scripts
- First Health
- Independence Blue Cross (Argus)
- Independent Health (SXC)
- MC-21
- Medco Health Solutions
- MedMetrics (SXC)
- PharmaCare (CVS Caremark)
- Presbyterian Health
- Regence (Argus)
- RESTAT
- SXC
- WellPoint

The current national coverage access represented by RxHub can also be demonstrated with the following U.S. map which illustrates the percentage of lives accessible through RxHub in relation to the state population.

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Technology Partners for Clinics

Technology Partners certified with RxHub represent more than 50,000 clinicians in the ambulatory setting. Since 2002, clinicians utilizing the RxHub PRN service requested more than 133 million eligibility and coverage requests and 14 million medication history requests for patients at the point of care. These clinicians are represented by the following RxHub partners:

Achieve Healthcare	H2H Solutions	RxNT
Allscripts	Health Vision	SafeMed
Athena Health	InstantDx	SAGE
Axlotl	iScribe	ScriptRx
Bond Medical	MA Share	Sequel Systems
Caregroup (MA Share)	McKesson	SoapWare
Catalis Health	MD Offices	SSIMED
Cerner	Medical Info. Systems	STI Computer
Chart Connect	MedicWare	Synamed
Community Computer	MediNotes	Virtual Medical Network
Dairyland	MedKeeper	Waiting Room Solutions
DAW Systems	MedPlus	Zix Corporation
DrFirst	MedPort	Zynchros
eClinical Works	Misys Healthcare	
eHealth Solutions	NewCrop	
ElectroMed	NextGen	
Emdeon	OA Systems	
EPIC	Phytel	
ePocrates	Prematics	
First Point	Pulse Systems	
Gold Standard	Regenstrief INPC	



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Technology Partners for Hospitals

In addition, RxHub has technology partners who offer medication claims history to the acute care setting. Since 2004, the clinicians utilizing the RxHub MEDS service requested more than 3.3 million medication claims history requests for patients at the point of care. These clinicians are represented by the following RxHub partners:

DB Motion	Healthcare Systems	Quovadx
DrFirst	InterMedHx	Regenstrief Institute
GE Healthcare	Patient Keeper	Siemens Healthcare

RxHub is returning, on average, the following number of drug records for a 12 month period per patients found in RxHub data sources by age category:

Patient Age Range	Average Drug Records per Patient found in PBM/payer database sources
0 – 17	7
18 – 44	17
45 – 61	31
62 – 64	40
65 – 69	42
70 – 74	44
> 75	46
Overall Average	28

Technology Partners for Emergency Preparedness

RxHub has partnered with **ICERx.org** for the sole purpose of providing real-time patient prescription information to authorized licensed prescribers and pharmacists who are caring for evacuees in times of disaster. **ICERx.org** is activated when a disaster is announced by the federal government or a state governor, allowing authorized users access to a patient's medication history information during the point of care.

Retail and Mail Order Pharmacies

Retail and home delivery pharmacies within the United States are certified with RxHub. Since 2003, more than 1.4 million new prescription and prescription refills were routed between prescribers and pharmacists through the RxHub SIG service. These clinicians are represented by the following RxHub partners:

Major eRxNetwork Retail Pharmacy Chains

ACME Pharmacy
Aurora Pharmacy
Dominicks
Drug Fair
Duane Reade
Fred's Pharmacy
Giant Eagle
Hannaford Food & Drug
Medicine Shoppe

Meijer Pharmacy
Pathmark Pharmacy
Publix Pharmacy
Safeway
Shopko Pharmacy
Shoprite Pharmacy
Vons
Weis Pharmacy
Winn Dixie

Mail Order Service

CVS Caremark Mail Order
Express Scripts Mail Services
Medco Mail Order



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How Has RxHub Participated in the Industry?

RxHub has participated in many levels of the healthcare delivery industry including technical standards in addition to the Federal and State levels.

Industry Standards:

- Accredited Standards Committee (ASC X12)
- American Health Information Community (AHIC)
- Certification Commission for Healthcare Information Technology (CCHIT)
- Council for Affordable Quality Healthcare (CAQH) CORE
- Electronic Healthcare Network Accreditation Commission (EHNAC)
- Health Information Technology Standards Panel (HITSP)
- Health Level 7 (HL7)
- National Drug Council for Prescription Drug Program (NCPDP)
- Workgroup for Electronic Data Interchange (WEDI)
- RxHub Participant Workgroups

Industry Initiatives:

- Centers for Medicare & Medicaid Services (CMS) 2006 pilots
 - Achieve Health
 - Massachusetts
 - RAND
 - Ohio KePro
- Connecting for Health – Markle Foundation
- eHealth Initiative
- Hurricane Katrina relief effort / ICERx.org
- National Alliance for Health Information Technology
- National Committee on Vital Health Statistics (NCVHS)
- Nationwide Health Information Networks (NHIN) 2006 prototypes
 - Accenture
 - CSC
 - Northrop Grumman

Regional Health Information Organization (RHIO) Initiatives:

- Arkansas
- California: CALRHIO
- Florida: ePrescribe Florida
- Georgia
- Illinois: E-Rx Collaborative
- Indiana: IHIE/Regenstrief Institute
- Maine
- Maryland/DC Collaborative
- Massachusetts: MA Share – Rx Gateway
- Michigan: SEMI
- New Hampshire
- New Jersey: BCBS NJ/Horizon/Caremark
- New Mexico: Prescription Improvement Coalition
- New York: Bronx RHIO, THINC RHIO
- North Carolina: BCBS NC/NCHICA
- Rhode Island: RIQI
- Tennessee
- Vermont: VITL
- Others

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What Are Some of the Community Successes Attributed to RxHub?

Patient Safety Improved

Electronic eprescribing improves patient care and safety as evidenced by a recent highly publicized drug recall. Upon receiving notice about an immediate drug recall, Dr. Salvatore Volpe, a physician practicing in Staten Island, NY used his eprescribing application, *PocketScript*, to search for patients who had been prescribed the medication in the past. By accessing patient medication history through the application in less than a minute, the physicians and staff found every patient that needed to be notified without combing through a single chart. Physicians notified their patients of the recall and identified an alternative prescription to issue in its place. "Having access to this data allowed us to identify those patients at risk, and contact them immediately to change their prescription to a safer alternative," said Dr. Salvatore. "This convenient tool is evidence of the value of medication office automation in improving patient safety and improving medical practice efficiency."

Drug Duplication Identified

The same physician also reports that a 72 year old female was brought to the emergency department with a head injury. Both the patient and her family had given the triage nurse the patient's medication history information. However, when the triage nurse reviewed the medication history provided electronically through RxHub, it was identified that the patient had been taking both the brand and generic of a prescribed medication. Having the ability to compare patient medication history, provided electronically at the point of care, the physician was able to diagnose the patient with duplicate therapy and resolve the issue. The physician stated this program is absolutely remarkable.

Drug Interaction Identified

Dr. William Land, M.D. of California reports that since using the ePrescribing technology provided by *RxNT*, he finds it invaluable to his practice. "Prescription writing is easy because patient information and medication history are available immediately," stated Dr. Land. The system cross references the medications and identifies when there is a medication interaction before sending the prescription to the pharmacy. The solution is also portable, enabling secured prescribing anywhere in the world. "Overall, ePrescribing pays for itself in convenience and time savings."

Patient Care Improved

Dr. J. Marc Overhage, M.D., Ph.D. of *Regenstrief Institute* in Indianapolis reports that the month following Hurricane Katrina, the number of patients entering some emergency departments in Indianapolis from Louisiana and Mississippi increased 6000% and 500% respectively. "In the first seven months that the system was in place, medication history requests from Indianapolis Emergency Departments to RxHub included patients from 49 states. Given the rapid flight of these survivors, it is highly unlikely that many brought with them accurate medication history information. But with a national electronic medication records, clinicians in Indianapolis were able to obtain medication histories even if a patient's paper records was permanently destroyed. Indianapolis physicians believe that this level of insight improved patient care for those fleeing the hurricane ravaged areas of the South," stated Dr. Overhage.



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Community Successes Attributed to RxHub (continued)

Efficiency Gained

Dr. Alice Tanner, M.D. of Maryland reports that eprescribing is much easier for patients who are on chronic medications. Once child in her practice is on ten medications and requires new prescriptions every 30 days because she is on medical assistance. "For her alone, it is worth it", said Dr. Tanner. "ePrescribing is much easier, more accurate, and more convenient for patients." Dr. Tanner uses the *DrFirst Rcopia* ePrescribing solution sponsored by CareFirst.

National Infrastructure Demonstrated

A physician at Hendry Regional Medical Center in Florida reports that a man was brought into the emergency department with trauma from a fall off a roof. Even though the man was from Pennsylvania, the Florida emergency department physician was able to quickly locate and review this patient's medication history through her certified RxHub technology partner, *Healthcare Systems*.

For more information on RxHub, please visit www.rxhub.net