



CASE STUDY

Kno2: Interoperability as a Service™ Helps Presbyterian Manors of Mid-America Eliminate their Fax Machines

THE BACKGROUND

The U.S. Census Bureau reports by the year 2030, [older people are projected to outnumber children for the first time in U.S. history](#). By this time, baby boomers will be older than age 65. By 2035, there will be 78 million people 65 years and older compared to 76.7 million under the age of 18. As the U.S. population ages, demands will be seen throughout the healthcare industry, with the greatest impacts anticipated in hospitals, skilled nursing, assisted living, and residential care facilities.

With this expanding population and their care requirements, coupled with changing reimbursement models, the need for electronic and interoperable patient information exchange has never been higher.

The goal is to shift the focus away from treating the sick and toward keeping patients healthy, or at least healthier, lowering the cost of care while improving quality of care delivery for the patients. This cannot be achieved unless every provider involved in a patient's care is able to share patient information securely, at the right time, in the right place and in a format that is actionable by the care team. Antiquated fax machines as a primary method of communication simply will not work.

We quickly recognized the need to move from traditional faxing via physical devices, to a HIPAA-compliant, MatrixCare-compatible, electronic faxing and Direct messaging platform.

THE CHALLENGE

This was no different for Presbyterian Manors of Mid-America (PMMA), a non-profit, faith-based organization that has been providing quality senior services guided by Christian values for more than 70 years. PMMA has 17 senior living communities, two hospices in Kansas and Missouri, and a new campus in development in Colorado Springs. They provide independent living, assisted living, memory care, long-term care, short-term rehabilitation, and skilled nursing for more than 2,300 seniors.

“Initially our clinical team decided to change pharmacy vendors, said Anthony Porter, IS – Systems Analyst at PMMA, “and those pharmacy vendors provided our current fax process, so this led to a search for a suitable fax software replacement that included both current technology and healthcare compliancy.” Porter continues, “We quickly recognized the need to move from traditional faxing via physical devices, to a HIPAA-compliant, MatrixCare-compatible, electronic faxing and Direct messaging platform.”

PMMA needed to satisfy requests of employees and other providers to move to a digital communication method. Additionally, PMMA wanted to move to a centralized management process for handling patient information that provided the ability to audit

incoming and outgoing messages. They did have an electronic fax number setup at a few of their locations, but the majority of patient information was being faxed from a range of different brand/model multi-function devices at each location.

They realized that simplifying the process of obtaining and consuming documentation would reduce the administrative workload while making vital information available faster in the EMR. First and foremost, PMMA wanted to make sure the information was secure and reduce the cost associated with equipment and maintenance, phone lines, paper and toner, not to mention the time associated with shredding paper.

The solution needed to support Direct secure messaging as a viable transition to interoperable exchange because PMMA’s ultimate desire is to eliminate faxing in all their communities.



THE SOLUTION

The answer was to enable secure electronic document exchange for all locations that would offer fast implementation, high scalability, ease of use and affordability.

PMMA recognized that Kno2: Interoperability as a Service™ was its fastest path to interoperability because it checked all the boxes:



PMMA was able to eliminate the use fax machines in every location.



Kno2 enables cloud faxing and Direct secure messaging in a single solution.



Kno2 protects and encrypts all patient information (PHI) in transit and at rest within HIPAA-compliant data centers.



PMMA was able to create a new, centralized workflow for the receipt of resident information.



Kno2 is integrated with MatrixCare, allowing information to easily be consumed into a resident's electronic medical record.



Kno2 tracks all releases by patient, making audit information available.



PMMA was able to plan their roll out schedule due to the vast network and communities they serve.

PMMA began implementing Kno2 in August, 2018 and finished deploying in April, 2019. Each community has a handful of both electronic fax numbers and Direct messaging addresses so they can connect with every provider and referral source in each community. Incoming faxes and Direct messages are evaluated by Kno2's Intake rules and distributed to the appropriate staff members. Porter reports, "We were able to push effectively to our staff across all locations. The Kno2 team have been with us every step of the way and enjoyable to work with."

The long-term value here is better, faster and more secure communication tools, resulting in a higher level of service for those in our care. We look forward to our next steps in our path to interoperability.

THE RESULTS

PMMA have successfully ported over 86 fax numbers and are currently processing an average of 10,000+ fax messages per month. According to ReferralMD's article on [30 Healthcare Statistics that Keep Hospital Executives up at Night](#), the average organization spends \$20 in labor to file each paper document. Based on PMMA's fax volume, they save approximately \$200,000 per month, or \$2.4M per year.

PMMA removed fax functionality from 70+ physical fax devices in their office; 25 or more of those were standalone fax devices that were retired completely. As a result, PMMA has reduced operating expenses associated with maintaining those devices, a reduction in paper and toner cartridges, not to mention occasional downtime.

Previously, there was a delay in getting documentation scanned and added to the resident's chart in MatrixCare, and now the information is made available to clinical staff

immediately after receipt. Employees and caregivers can now send and receive documents electronically, using a consistent workflow rather than having to walk to a fax machine or leave one application to use yet another application. In Kno2, the process for handling an incoming fax and an incoming Direct message is the same. As a result, PMMA is preparing for interoperable exchange...and when that transition occurs, there will be no disruption to their daily workflow.

The screenshot shows the MatrixCare interface for a resident named Estella R. Jones. The dashboard includes a 'Vitals' section with the following data:

Vital	Value	Unit	Date
Temperature	98.70	°F	03/20/2019
Respiration	19	bpm	03/20/2019
Pulse	68	bpm	03/20/2019
Blood Pressure	134/89	mmHg	03/20/2019
O ₂ Saturation	97	%	03/20/2019
Weight	186	lbs	03/20/2019

Below the vitals, there is a 'Resident Info' section with the following details:

Category	Value
Living Will	Unknown
Health Care Proxy	No
Pharmacy	Integration Pharm 10.6P LTC-ABC
Religion	Unknown
Resident Story	Upload
Resident Summary	Resident Summary

With Kno2, all messages are tracked and can be audited. If a fax is not received or misplaced on the other end, PMMA users can locate the message and simply right click and send again, rather than locating the paperwork and standing at a fax machine to try and wait for the paperwork to be scanned, hoping the transaction goes through successfully.

While PMMA continues to strive for interoperability, moving to electronic fax is the first step in the process. A Kno2 fax analysis is now available to PMMA, reporting the top send/receive fax numbers that have a Direct address for use instead of fax. PMMA can now send Direct messages where possible and electronic fax when necessary.

Porter reports, “The long-term value here is better, faster and more secure communication tools for the PMMA team, resulting in a higher level of service for those in our care. We are really happy we moved forward with implementing Kno2 to centralize and improve our patient information exchange workflows with external providers.” Porter continues, “We have dramatically improved our fax processes and are working to transition to interoperable exchange. We look forward to our next steps in our path to interoperability!”



About Kno2

Kno2® is leading healthcare's path to interoperability across every patient care setting. Kno2: Interoperability as a Service™ (IaaS) turns on connectivity to millions of healthcare providers and the capability to send, receive, find and use patient information with everyone. Kno2's IaaS enables access to providers via cloud faxing, Direct secure messaging, patient information query and patient care networks (Referrals, ACOs, HIEs) guided by connectivity assessments and analytics. Contact us to discover your path to interoperability.



About MatrixCare

MatrixCare enables long-term, post-acute care (LTPAC) organizations to provide better health outcomes for seniors while successfully managing risk in out-of-hospital care delivery. Current and multiyear winner of the Best in KLAS Award for Long-Term Care Software, MatrixCare is trusted by thousands of senior living, skilled nursing, and accountable care organizations; life plan communities; and private-duty, home health and hospice agencies. MatrixCare's active care management platform helps providers connect and collaborate to keep America's seniors healthy and optimize outcomes for the populations under their care. MatrixCare is a wholly owned subsidiary of ResMed (NYSE: RMD, ASX: RMD). To learn more, visit www.matrixcare.com and follow @MatrixCare on Twitter.