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# IMPROVING MEDICATION ADMINISTRATION IN A CCRC SETTING

### **Category:**

Impacts and Benefits of:

- ePrescribing/ Medication Ordering
- Medication Administration

## **Organization Name**

Elim Park

### **Organization Type**

Continuing Care Retirement Community (CCRC)

### **Organization Description**

Elim Park is a not-for-profit, interdenominational, nationally accredited continuing care retirement community (CCRC) whose mission is to provide quality care through comprehensive wellness programs and medical facilities. Located in Cheshire, Connecticut, Elim Park is designed to serve people 60 years and better and has earned its outstanding reputation by adhering to and setting very high standards for quality health care, housing and services.

#### Services:

- Residential, Independent living
- Assisted Living Services
- Post-Acute/Short-term rehabilitation
- Residential Care
- Skilled Nursing

### **Project Description**

Elim Park is improving quality of care and staff efficiencies by implementing an integrated electronic medical record (EMR) with a mobile platform to improve medication administration. In 2012, Elim Park began implementing HealthMEDX Vision, a single LTPAC technology platform that guides caregivers through quick and efficient electronic medication and treatment administration while minimizing the risk of errors associated with paper charts.

In 2014, Elim Park extended their solution with a mobile platform, HealthMEDX iCare, allowing physicians to easily access patient information from any location and enhance communication with the nursing team.

### **Implementation Approach**

Elim Park leadership began by including a cross-section of clinical staff right from the start – from selection through designing and planning – to get staff onboard with the transition from paper to electronic records.

CNAs, nursing staff and other potential users of the solution were all invited to participate in the selection process, and reviewed the pros and cons for different solutions. While there were numerous single-purpose solutions, Elim Park quickly realized the best solution for their needs was a comprehensive single solution that addressed functionality required across the diverse service settings within their care community. The ability to customize the solution to match their long history of resident care emerged rapidly as a top criterion.

## Creating an Environment for Success

With the end-goal of automating the order entry through medication administration process, Elim Park first implemented HealthMEDX Vision in 2012 and then extended functionality and engaging physicians with HealthMEDX iCare, a mobile platform, in 2014.

This approach of garnering support and expertise of Elim Park's staff first allowed the development of foundational skills before moving onto more complex solutions. This allowed everyone to gain confidence and skills required to be successful in changing how they performed their day-to-day activities.

For the Vision project team, implementing Vision before iCare allowed a review of best practices and lessons learned to encourage staff buy-in and improve implementation processes as the functionality and workflow changes became increasingly more complex when physicians came online.

## **Engaging the Team**

From selection to go-live through to ongoing support, Elim Park proactively engaged staff across all disciplines. This approach served two goals:

- It allowed Elim Park leadership to gain input from across the facility, ensuring they were considering the impact and needs from every possible angle within the organization.
- Since end-users of the system were proactively involved in problem-solving and design of the solution, the staff felt ownership of the project and had a vested interest in the success of the go-live.

# **Preparing for CPOE**

Implementing Computerized Physician Order Entry (CPOE) is as much of a process and workflow change as it is a technology implementation, requiring care to determine how to transform paper charts and order sets seamlessly to an electronic form.

Elim Park incorporated this workflow and design process with training. Therapists from the Rehabilitation department attended CPOE and care plan training, to facilitate autonomous use of Vision in their practice. Every nurse participated in four hours of training and four hours of practice time. The practice time included back-loading existing paper records and orders into the system, thus allowing staff to not only have real order entry experience, but also help make decisions about order sets.

### Communicating the Vision

To keep people engaged and generate excitement, Elim Park created a fun, creative theme, playing off the name of the solution—Vision.

The theme, "The Future's So Bright, You Gotta Wear Shades," was based on a song from the early 80s. The team created a project logo of a bright yellow sun wearing black sunglasses. This logo was used in posters and marketing material, such as screen savers. On go-live day, the project team all wore yellow and handed out sunglasses as a prop.

# Introducing iCare

HealthMEDX iCare, a user-friendly mobile application for physicians, was the latest component implemented at Elim Park, supporting physician clinical decision-making with 24/7 access to patient data and the ability to communicate with care team members from any location.

In the months leading up to the iCare go-live, training sessions were regularly incorporated into medical staff meetings, and quarterly communications updating physicians on the progress and benefits of the HealthMEDX Vision solution built ongoing interest. Following go-live, many physicians had iCare loaded on their devices.

At-the-elbow one-on-one training support was delivered to physicians the first time they used the solution. Nurses were trained to provide ongoing support, answer questions and encourage physicians to use the solution.

#### **Outcomes**

**Labor savings.** An estimated savings of \$10,000 annually in reduced labor for managing paper medical records, as well as \$30,000 - \$50,000 annually for nursing time previously spent editing, tracking and interpreting handwriting for paper orders.

Reduction in nursing overtime. In combination with other technology implementation (online scheduling software in Oct. 2013) the nursing department has experienced a 35% reduction in department overtime since implementing EMAR/CPOE in 2013. They attribute this in part to the efficiencies realized through electronic order entry, medication administration, documentation accessibility and reduction in manual processes associated with month to month documentation.

**Improved medication administration.** An improved medication delivery timeliness with better tools to assist with the management of the medication pass.

**Reduced care variability.** Standardized order sets allowed for the implementation of community-wide best practices and protocols.

**Medication error reduction.** After a brief stabilization period when going live, long term measures show an average of a 50 percent decrease in medication errors after one year, in comparison to the pre-implementation error rate.

**Enhanced communications.** Immediate access to current patient data and the ability to sign off on interim orders and review resident charts allowed physicians and clinical staff to improve communications.

**Enhanced Quality Improvement Efforts.** Data and reporting tools allowed the analysis of medication records and the ability to trend and target quality improvement efforts.

**Improved Survey Readiness.** Ability to become survey-ready in less time at reduced cost by automatically eliminating incomplete or inaccurate documentation.

**Increased Time at the Bedside.** By reducing the time required for administering, tracking and managing medications and treatments, the nursing and ancillary staff could spend more time on resident care instead of administrative duties.

# **Challenges and Pitfalls to Avoid**

Jumping in without taking benchmark measures. It's important to include quantitative measures as part of the planning process. Otherwise you end up knowing that the improvements were real, without having the appropriate data to back it up.

Varying technology skills among the staff. Staff has varying comfort levels and skill sets with use of technology that need to be addressed as part of preparation for go live.

**Establish a feedback mechanism.** During go live, it's critical to have a mechanism for immediate feedback and a process to rapidly take corrective action when issues are identified.

Paper and electronic workflows are different. Unexpected challenges may arise when trying to convert from paper to electronic versions of workflow. Staff have developed strong preferences and tools to be successful with paper, and often, the electronic solution can take them away – for example, the use of Post-It Notes and pre-printed order sheets. Additionally, some content, such as "Start Times" may not be as critical in the paper world as it is in the electronic world.

#### Lessons Learned/Advice to Share with Others

# Education is critical for success

Start educating early and continue throughout and beyond go-live with education and ongoing communications. Have the proper administrative support in place so that nursing attendance in educational programs is mandatory.

Elim Park holds monthly in-services that all nursing staff must attend or watch on video. A customized resource notebook was also developed in-house with hand-outs and guides to help answer any questions.

#### Create order sets

Developing order sets are invaluable to the success of a CPOE implementation. This was accomplished by taking the vast First Databank (FDB) database, simplifying it and delivering its care quality standards and protocols from within the solution. It is easy for staff to get overwhelmed with all the requirements. By carefully constructing orders sets, Elim Park has embedded quality assurance, creating alerts and attaching critical care protocols to follow with particular medications.

# Develop a cross-functional team

Healthcare workflow doesn't operate in silos and neither should an IT project team. Elim Park's project team is comprised of representatives from all functional areas of the organization so that hand-offs, transitions and processes that cross departmental functions can work more effectively together. The team has developed into a true support system to discuss what's happening with Vision, why and brainstorm the best approach for success.

# **LeadingAge Center for Aging Services Technologies:**

The LeadingAge Center for Aging Services Technologies (CAST) is focused on accelerating the development, evaluation and adoption of emerging technologies that will transform the aging experience. As an international coalition of more than 400 technology companies, aging-services organizations, businesses, research universities and government representatives, CAST works under the auspices of LeadingAge, an association of 6,000 not-for-profit organizations dedicated to expanding the world of possibilities for aging. For more information, please visit LeadingAge.org/CAST