Increasing efficiency of delivery of care to patients at home

Safety Labs' Ivory remote care solution helps hospitals, home health care agencies and senior living facilities deliver comprehensive care remotely improving patient outcomes, patient satisfaction, lowering re-admissions.

**IVORY – Innovative Remote Care Platform**

- **Why Ivory?** A platform which is easy to use, provides comprehensive health care services and is cost effective is required.
- **What is Ivory?** Ivory consists of 3 major components: a preconfigured Kit which includes an IOT (Internet of Thing) and health sensors; a cloud server containing a FHIR EMR and a web interface to the cloud server to interface with and manage Ivory.
- **How does Ivory Work?** Anchor the IOT connects to the TV making TV and remote as an interface to the patient. Patients use TV to interact with friends, obtain health information, play games and participate in RPM and virtual visits.

**Patient Education**

- **Why?** A patient engaged in care of her own health is a healthier patient.
- **What?** A patient engagement platform enables care providers to engage patients in activities which assists in improving their health and includes participation in opportunities to exercise, participate in social activities and events.
- **How?** Safety Labs provides a cost-effective way to engage patient with notifications providing them information benefiting their health, or reminders to participate in exercise or other educational events.
- **Benefits?** Engages patient improving patient health and satisfaction.

**Patient’s Health Monitoring**

- **Why?** Regular and on time monitoring of patient health and condition is an important part of preventative care. It is not possible or cost effective for patient to visit their physicians for regular checkups.
- **What?** Two important parts of Patient Health Monitoring are RPM i.e. monitoring of patient vitals and Virtual visits which enable physician to remotely perform a check up.
- **How?** Safety Labs’ Anchor enables patients to easily collect vitals following easy to follow instructions on the TV. The vital collection can be either ad-hoc (as and when patient feels like) or practitioner driven procedures. Once the vitals are collected, they are stored in the FHIR EMR for practitioner to review. A practitioner if requires reviewing the patient can perform a Virtual visit to check with the patient on a regular basis.
- **Benefits?** Includes eliminating avoidable re-admissions, increased efficiency of care and enabling right care at the right time.
Patient Engagement

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- **Benefits?** – Engages patient improving patient health and satisfaction.

Medical Adherence

- **Why?** Medication Non-Adherence is costly. A lack of adherence causes nearly 125,000 deaths in US alone. In US non-adherence costs 10 percent of hospitalizations and costs the healthcare system between $100–$289 billion a year (source Annals of Internal Medicine). The consequences of medication non-adherence are not only poor clinical outcomes but also unnecessary health care costs.
- **What?** Safety labs’ medication adherence platform is an end-to-end medication prescription, medication reminder, medication administration, reporting and alerting system. The system provides easy to follow information to patients on their TV enabling patients to self manage. System provides knowledge around the medicine reducing medication errors, easing complex regiments into easy to follow instructions, providing instruction in the native language of the patient.
- **How?** The care provider uses our back-end system to add, remove and or pause medication. Along with medication is added the dosage which includes the administration schedule. The system uses FDAOpen and other sources to pull relevant information registered for the medication including information related to reason for use, instructions for use and medication’s side affects. The user is prompted through their TV to take the medication. The FHIR EMR is updated when a user takes the medication or if the user does not take the medication along with the reason for non-adherence. If the user does not take the medication, alert is generated.
- **Benefits?** Improved medication adherence reduces medication related errors and enables providers to corelate medication administration with patient’s health conditions.

Patient Wellness and Experience

- **Why?** Patient wellness and experience is directly related to patient’s health. The increased ability of patients to be socially connected to friends and loved ones and to easily interface with healthcare professionals is a significant benefit to care and quality of life.
- **What?** Safety Labs’ Family Album, Contacts, Weather and Games keeps the patient occupied and engaged and socially connected with family and
friends and hence keeps them happy. Simply staying connected and occupied contributes to keeping a resident/client occupied and happy.

- **How?** Family members can upload family pictures and videos through their smart phones. Family members can have a video chat with their loved one. Patients can play any of ever-increasing board games. Today 12 games which includes Memory, Connect4, Snake, Tic-Tac-Toe, Whack-a-mole are available to play and keep patient’s occupied.

- **Benefits?** Engaged and happy patient improves their health.

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**Patient’s Right Care at the Right Time**

- **Why?** Right care at the right times enables patient health decline to be caught early converting a possible ER visit into a regular check up.

- **What?** Continuous care at home is not only cost prohibitive to the general patient care population, but it is also often not necessary. Safety Labs’ system enables practitioners to engage patient to collect desired results and then analyze them on a regular basis without the need nurse visits. **How?** Practitioners schedule the collection of vitals necessary for their patients. The vitals collection schedule is saved in the FHIR EMR. Safety Labs’ system then on scheduled vital collection times prompts and instructs the patient through the health wellness check up and vital collection process. The wellness and vital collection results are analyzed through Early warning Indexes such as Rothman’s Index and NEWS2. In case the condition deteriorates requiring immediate attention care staff is alerted.

- **Benefits?** Providing right care at the right time, enables organizations to deliver a higher quality of care without having to invest heavily in additional staff. By helping providers detect subtle health declines in patients faster and easily, the odds of life-threatening medical errors, particularly during hand-offs and shift changes, are reduced. It also helps avoid unnecessary and costly hospital readmissions and help healthcare facility staff make smarter decisions regarding patient transfers and discharges.

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**Improving Operational Efficiency**

- **Why?** Comprehensive care of a patient is time consuming. With patient to care givers ratio heavily tipping towards patient’s side, improved operational efficiency is required to keep or even improve the level of care without increasing need for additional resources.

- **What?** Safety Labs’ system provides operational efficiency at multiple levels including by providing patient education, patient notification and reminders, medication reminders, nurse call/medical alert button, scheduled vital collection etc.

- **How?** Safety Labs’ IOT (Internet of Thing) connects to a patient’s TV and becomes a platform for delivery of relevant and useful information, timely reminders, remote vital collection and patient engagement.

- **Benefits?** Provides improved care without additional staff or other additional resources.