MKM Сервіс Service

rinicare smart healthcare

The latest ICTs to improve healthcare

Rinicare

Ivan Shvaichenko

Odessa 2019

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Objective

Rinicare is a highly innovative business leveraging its existing expertise in secure wireless communications, computer vision, artificial intelligence (AI) and IoT to address the growing pressures on healthcare systems worldwide.

Value proposition

Secure wireless comms

Proprietary data

Computer vision

Medical AI

STABILITY

Health economics of in-patient falls

- Falls represent significant cost to trusts and the wider healthcare system, with total costs to the NHS from falls among older people alone estimated at approximately **£2 billion**

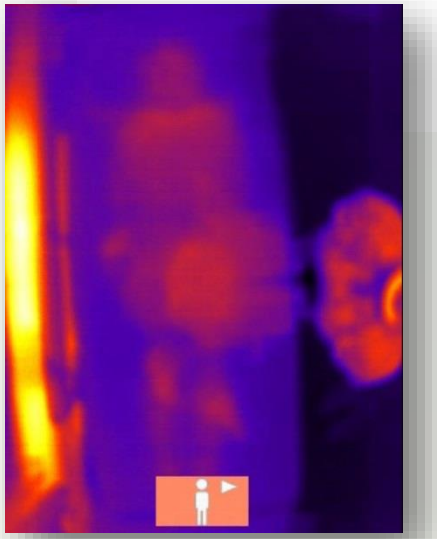
- The average cost of an in-patient fall is **£2,600** across all patient groups
- An in-patient fall resulting in **moderate to severe harm** to a **patient over the age of 65** results, on average, in an **increased length of stay (LoS)** of **23 days** with a daily cost of £303 = **£6,969.**

- Additional costs of treatment and surgery add an additional **£4,753** for a total of **£11,722 per fall.**

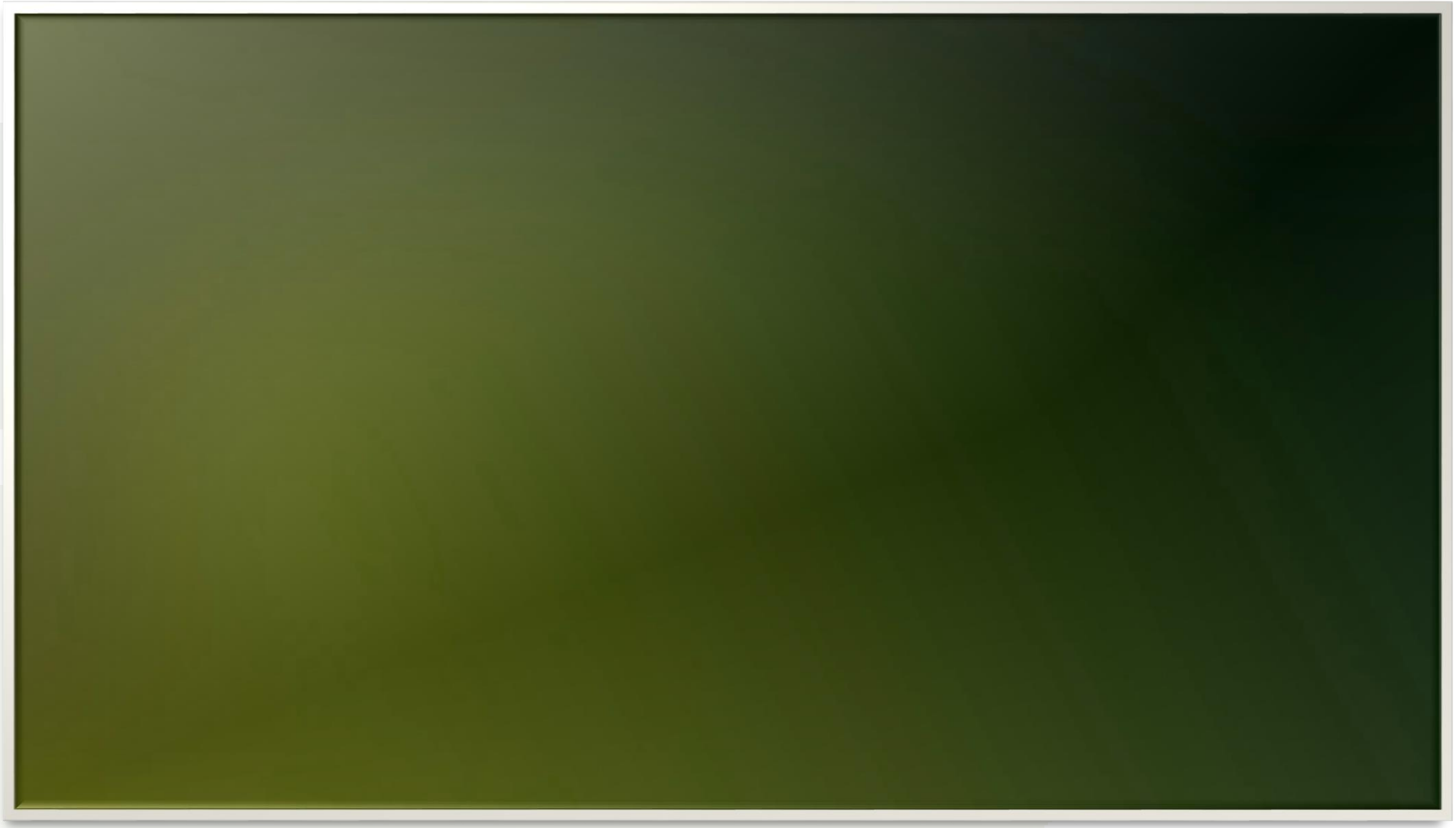
Source: NHS Improvement "The incidence and costs of inpatient falls in hospitals" (July 2017)

SAFE

System to Avoid Fall Events (SAFE) combines a thermal imaging (TI) optic sensor and bespoke algorithms on an embedded PC (EPC) into a Smart Surveillance Unit (SSU) to detect and predict patient position



SAFE video




RINICARE SAFE PHASE 1
IN-HOSPITAL TESTS
MAY 9TH TO MAY 26TH, 2016

SAFE key-benefits

- Potential to significantly reduce costs and outcomes
  - Prediction of position allows intervention to stop fall
  - Non-identifiable patient information
  - Non-intrusive and acceptable to patients
  - Minimal staff training required
  - Easy to install

PRIME/STABILITY opportunity

- The annual cost of serious complications is estimated at more than **$100 billion globally**.
- Estimated global market value for healthcare predictive analytics 2016: **US$24.6 billion.**
- CAGR (Compound annual growth rate) between **27% and 29%** between 2015 and 2022.
- The EU market for predictive healthcare analytics is expected to grow from US$670.5 million (£518.4M) in 2014 to more than **US$2,100 million (£1,625M) by 2020** at a CAGR of 25.7%.

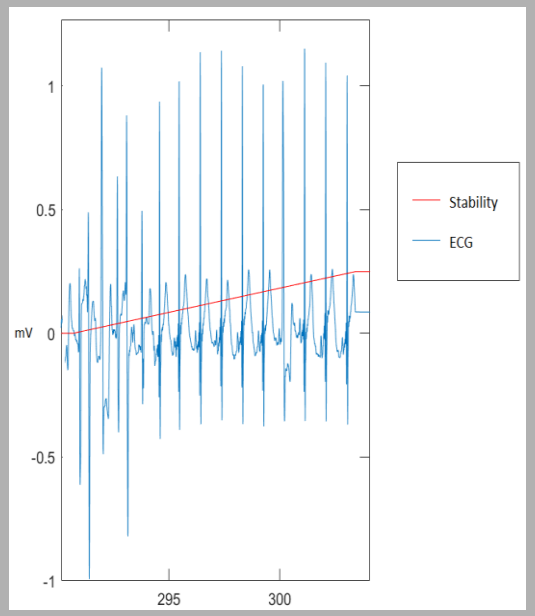
Prime Video

PRIME key-benefits

- Ability to assess patients remotely in key treatment scenarios leading to potentially better outcomes
  - Wireless sensor suite
  - Continuous monitoring increases available data
  - Remote assessment of patient possible
  - Sensor agnostic
  - Enabling platform for STABILITY and EWS
  - Generates unique data

STABILITY - Analysis of physiological data in real time to assess safety

Stability graphical output



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Numerical output

Clinical Input

Follow-up of patients

Review of results by medical staff

Start Here

Define data to collect and analysis (Predictive and outcome variables)

Data collection

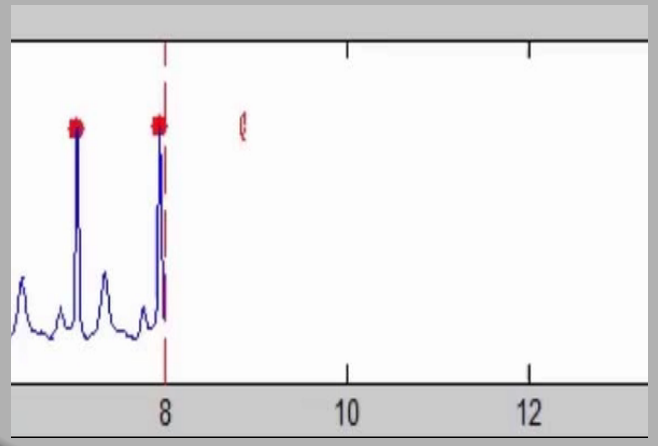
Databases

Live Data

- PRIME
- Innovian

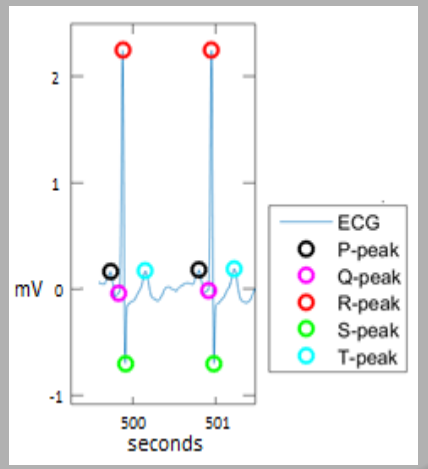
Stability algorithm

Predict future characteristics



Identify key patient characteristics

The algorithm learns the patient's normal health physiology



STABILITY benefits

- Potential to predict deterioration allowing earlier intervention and potential improvements in clinical outcome and costs of care
- Implement EWS, AF detection, then predictive analytics
  - All observed patient data analysed
  - Incorporates expert knowledge and clinical judgement
  - Patient specific predictions
  - Subtle trends in data identified and predicted
  - Facilitate early identification of patient deterioration
  - Reduce the impact of complications
  - Guide management decisions and resource planning

Features and advantages comparison

- Proactive
- Integrates into existing care pathways
- Full offer of physiological signs, patient position and predictive algorithms
- Rich unique proprietary data sets
- Significant secure communications expertise
- Integrated product offer

Competitors

- Reactive
- Require company/specific devices
- Limited offer of measures
- Early stage development/not for sale

Thank you for your attention

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smart healthcare