

PATIENT SAFETY MOVEMENT

First, Do No Harm. ZERO by 2030

Saving lives saves money & how innovation can help



If you focus on **costs**,
quality goes down.

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costs go down.

– Toyota leadership

Low quality in healthcare has a significant impact on patients and costs

40%

Adverse Drug Events (ADE)*

40% of patients experience ADE costing on average over \$3000 and increase the LoS by 3.1 days in U.S community hospitals.

30%

Adverse Surgical Events**

30% of adverse events are related to a surgical or procedural event. Surgical defects in the U.S are estimated to cost \$12.9B per year.

15%

Patient Care Events***

15% of adverse events are carer sensitive events (incl fall & ulcers events). These increase LOS by 0.48-days and increase costs by \$700 per event.

12%

Healthcare associated infections****

12% of patient experience a Healthcare associated infections. The estimated cost to treat these events in the US ranges from \$ 28.4 billion to \$ 45 billion per year.



Early detection of patient deterioration Customer spotlight

Saratoga Hospital, Saratoga Springs NY

Saratoga Hospital recognized the importance of automating early warning scores (EWS) and the transfer of vital signs into the electronic medical record for a quicker response to patient deterioration.

Solution Implemented

Philips early deterioration detection solution: spot-check patient monitors with IntelliVue GuardianSoftware for deterioration management, along with professional services to facilitate full clinical adoption and change management.

Reduced length of stay and costs post-implementation

17%

reduction in
**TOTAL HOSPITAL
length of stay**

\$2,897

reduction in
**average TOTAL HOSPITAL
costs per case**

1 day

reduction in
**GENERAL CARE
length of stay**

\$977

reduction in
**average spend in
GENERAL CARE**

Reference: <https://pubmed.ncbi.nlm.nih.gov/34905953/>



ICU – high cost and many patient safety challenges

Alarm Fatigue

Delirium

Acute Kidney Injury

Post ICU syndrome

Ventilator-associated pneumonia



Poor health
outcomes



Increased
cost of care

ICU - Patient Safety Deep Dive



Acute Kidney Injury (AKI)

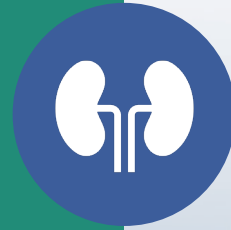
Spectrum of clinical presentations from mild-severe kidney injury that may result in permanent and complete loss of renal function.

A common complication that affects as many as one in five hospitalized patients and more than 50% of patients admitted to the ICU.

Reactive model



Potential impact on patients, healthcare costs and society



AKI burden*

AKI affects as many as 1 in 5 hospitalized patients and up to **1 in 2** patients admitted to intensive care.



Patient outcomes**

In-hospital mortality for patients with AKI is estimated to be 20-25% and as high as **50%** for ICU patients requiring dialysis**.



Long term health impact**

For those that survive, long term risks include CKD, ESRD and Cardiovascular events. 1 in 4 survivors of AKI requiring dialysis reported a health related QOL equal to or worse than death.



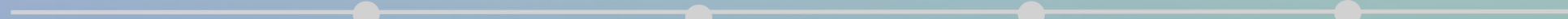
Hospital, system and societal costs***

At least **\$5 billion** in hospital costs are related to AKI in the US. The true costs are likely much higher especially when factoring flow on health and societal impacts.

How might innovation prevent Acute Kidney Injury?



Preventative model



High Quality
Monitoring



Connected
timely
information



Predictive
algorithms



Optimized
Therapy

Addressing complications is not only great for patients but can also reduce costs



Preventable complications*

Comparing Medicare patients with and without a subset of potentially preventable postoperative complications after major noncardiac surgery.

Provider costs:



With complications
\$39,357



Without complications
\$16,158

Cost savings =

\$23,199
per patient

*Reference: Data on file, Philips Healthcare

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Innovation will help save many lives and on top make healthcare more affordable



Peter Ziese
Chief Medical Officer, Philips