

# One of '10 Essential Digital Health ideas for a COVID-19 UK National Response'\*

**Additional 11,250 ICU/CCU patients in NHS and 67,000 in US in the next 3 months**



A large iceberg floats in a blue ocean under a cloudy sky. The visible tip of the iceberg is on the left, while the much larger, submerged portion extends across the bottom half of the image. A semi-transparent blue banner is overlaid on the submerged part of the iceberg.

**Derived from the World's most advanced patient safety system – capable of seeing the 90% of avoidable harm most hospitals cannot detect**

## C2-AI named as one of the '10 Essential Digital Health ideas for a COVID-19 UK National Response'\*

**Up to 70% of patients occupying beds in critical care/ICU (and many more non-ICU beds), have developed avoidable conditions in hospital (AKI and HAP)**

The breakthrough application of a proven technology could immediately free significant bed capacity in hospitals, saving lives and reducing workload (*see [c2-ai.net/covid-19](https://c2-ai.net/covid-19) for short videos*).

The simple approach, derived from the World's most advanced patient safety system, assesses individual patients for their risk of acquiring conditions in hospital that are avoidable (AKI/HAP), and which increase length of stay by up to 8 days on average.

Reducing the incidence of these conditions will free up ICU and inpatient beds for COVID-19 patients both in current capacity and in any new facilities.

Our AI-backed app categorises patients and recommends pre-emptive treatment according to their individual level of risk - reducing occurrence of the conditions and workload, while freeing up critically needed beds.

The capacity released **could create space for an extra 11,000 Covid-19 patients in the NHS and 67,000 Covid-19 patients in the US in the next three months.**

## 7 Facts about the COMPASS app and how it can free capacity

- **Proven results** – Across NHS, Europe and ANZ - with reductions in HAP of 60% and AKI of nearly 100%
- **Not disruptive** – As little as 30 seconds for assessments - producing risk category and instant recommendations tailored to patient
- **Saves clinician time** - Preventing the conditions takes far less time than treating them
- **Fast to deploy** – Available now, 2 minutes to install, 1 minute to learn and 30 seconds to complete an assessment
- **Zero integration or Internet required** – Downloadable app works without Internet. No integration needed and no patient IDs
- **Provides clarity** – delivers an individualized set of recommendations based on the patient's condition
- **Trusted** – Built on C2-AI's award-winning and published approaches, 30 years R&D and 12 years of operation - spanning 11 countries including the UK and US



**A 50% reduction in AKI/HAP would mean extra Covid-19 patients can be treated (next 12 months)**



ENGLAND



UNITED STATES



Total Extra C-19  
Patients

+

152000

440000



Extra C-19 Patients  
- CCU/ICU only

+

045000

172000

# C2-AI has delivered actual hospital improvements greater than the 50% assumption, and that would free significant ICU and non-ICU bed capacity

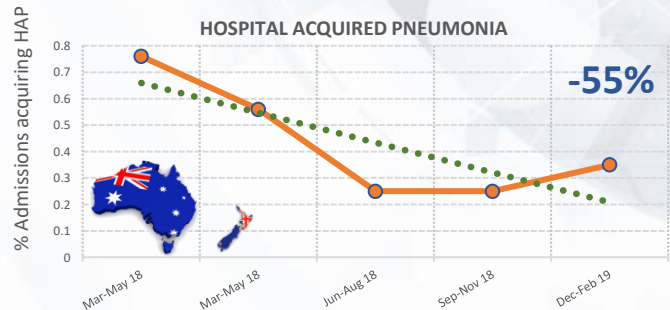
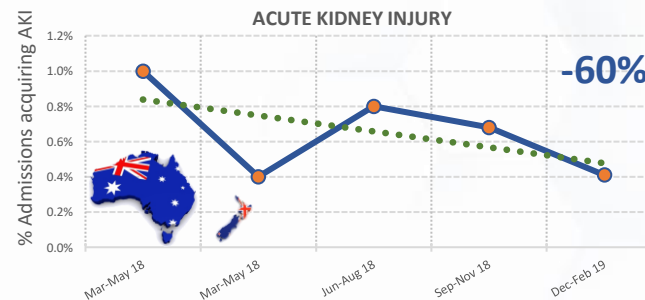
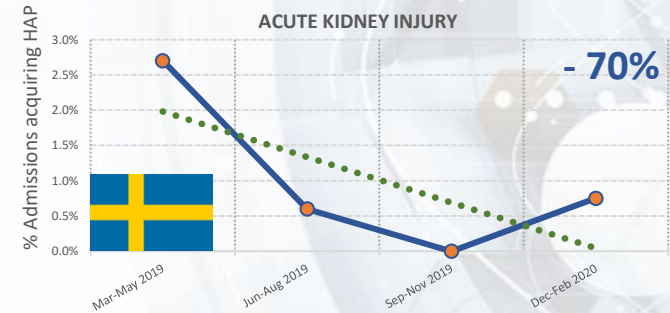
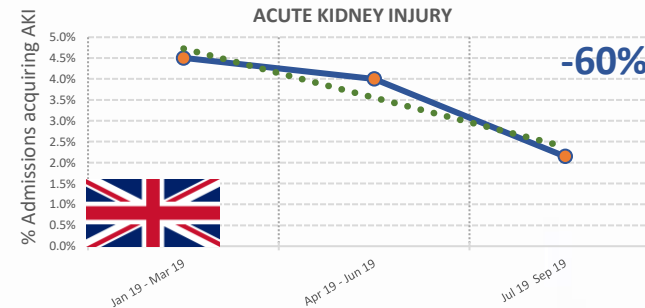
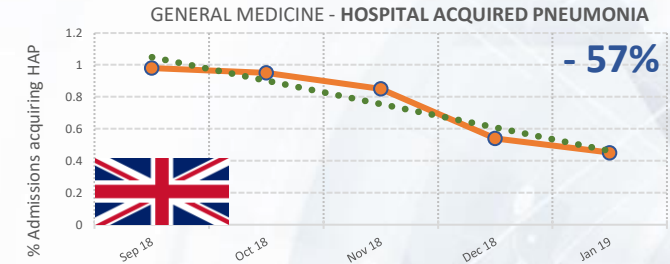
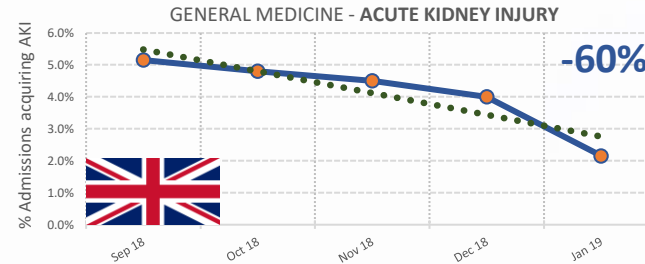
## RESULTS IN UK HOSPITALS (NHS)

Reduction of Acute Kidney Injury\*

90% +

Reduction of Hospital Acquired Pneumonia

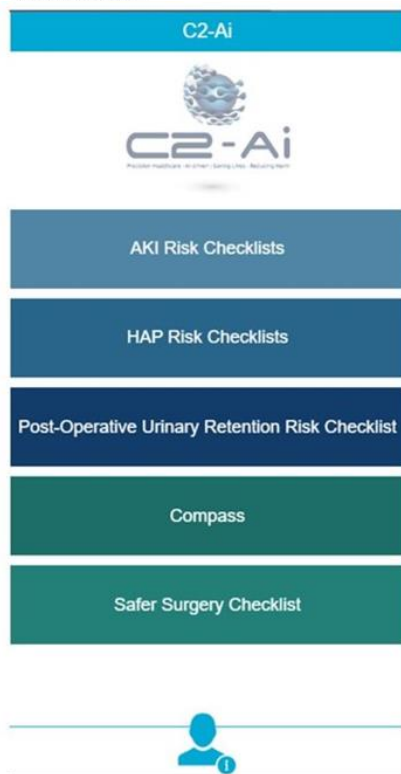
60%





## An intuitive app providing clarity immediately at the point of care

Main Screen



Example: AKI Orthopaedic Surgery Input

The 'AKI RISK CHECKLIST' for Orthopaedic Surgery includes a section for 'ORTHOPAEDIC SURGERY' and a list of risk factors to be ticked if applicable. The risk factors are: Diabetes mellitus and/or complications, OH Hip, Age > 60 years old, Chronic renal failure, Heart failure, Dementia, Chest fractures, and Pelvic fractures. Each risk factor has a corresponding radio button.

Example: AKI General Medicine Output

The 'AKI RISK CHECKLIST' for General Medicine shows the results of the assessment. It includes a section for 'General Medicine' and displays the following information: Risk level: Medium, Risk Percentage: 15.7 %, and Advice: 1. Monitor observations regularly (1-4 hourly), 2. Commence strict fluid balance chart (1-4 hourly), 3. Monitor urea, creatinine and electrolytes immediately and then daily, 4. Weigh patient and calculate required urine output for the patient (0.5ml/kg/hour), 5. Consider catheterisation.

Complete assessment in as little as 30 seconds

See videos on the approach and app at [c2-ai.net/covid-19](https://c2-ai.net/covid-19)

## C2-Ai has a unique perspective on hospital improvement

011

Client countries

120

m patient records

046

Source countries

012

Years development

030

Years research

300

Source hospitals



DATA CONTRIBUTOR

LIVE SITE



## Global references for what we do...

"... presents data in a way that is easy to understand and interpret. It has been immensely useful for me both personally in my appraisal and in my role as a Clinical Director. It helps me to pick up early warning of problems with intelligence that can be believed and acted upon"

**Jeremy Cundall,**  
Executive Medical Director - Consultant Colorectal  
and General Surgeon, CDDFT

"C2-Ai have the most robust software approach to comparing safety and quality across hospitals, systems and physicians that I have ever seen. The algorithms are backed up by years of published international research. I believe their approach could be most useful as a solution for providers across any network".

**James Bonnette, MD (USA)**  
Executive Vice President, the Advisory Board

"...has allowed real time review of data, which has raised awareness and led to change in both clinical practice and hospital culture. I think it will become an essential part of the appraisal and governance structures of secondary care."

**David Williams, Consultant Surgeon**  
Northern Devon Hospital Trust, UK

"...tells you exactly what and where the problem is, and even which patients are involved. Then you can do something about it."

**Dr. Aresh Anwar, Medical Director**  
Royal Perth Hospital, Australia

"... is 100% better than any solution available to us at the moment. It has turned out to be a very useful tool in analysing and understanding our case-mix and where our complications are occurring."

**Per Svedmark MD, PhD, Senior Consultant, Stockholm**  
Spine Centre, Sweden

"CRAB® is generating trusted data which we can use to flag up areas of concern. From there we are able to take action in a much more sophisticated way than we have in the past."

**Dr. Timothy Ho, Medical Director**  
Frimley Health NHS Foundation Trust, UK

"It took 2 years and a very costly investigation to deal with a competence issue in our organisation some time ago. We set C2-Ai the blind challenge of seeing if they could have found the problem in our historical data. They did so in 20 minutes. Needless to say; we have invested in the system"

**Dr. Michael Roberts**  
Chief Medical Officer, Northland District Health Board,  
New Zealand

"Accurate benchmarking of outcomes was a real challenge [...] however our work with [C2-Ai] has provided invaluable quality assurance. The risk adjusted reporting has provided confidence that our outcomes are better than comparable organisations and the level of detail enables us to focus on improvements in specific areas. It was particularly useful during our regulatory inspection and follow up meetings with the CQC to show how this strengthens our clinical governance..."

**Dr Jenny Davidson, Director of Governance, King**  
Edward VII's Hospital.



"We are thrilled to receive this award, which reflects a great deal of hard work and support from within and [...] the support of C2-Ai who enabled us to benchmark our Trust's Acute Kidney Injury rates against national levels - and then measure the significant impact of our AKI Programme, which coincided with a significant and sustained fall in AKI rates our Trust, especially across surgical wards".

**Dr Jonathan Murray, Renal Consultant at South Tees**  
Hospitals NHS Foundation Trust, UK



Email **[info@c2-ai.com](mailto:info@c2-ai.com)** to discuss immediate deployment, creation of significant capacity and saving lives

See more at **[c2-ai.com](https://c2-ai.com)**

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