

# Today's Tech for Tomorrow's Hospitals

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# Agenda

**1.**

**About Alcidion**

**2.**

**What has  
changed?**

**3.**

**What makes  
a difference?**

**4.**

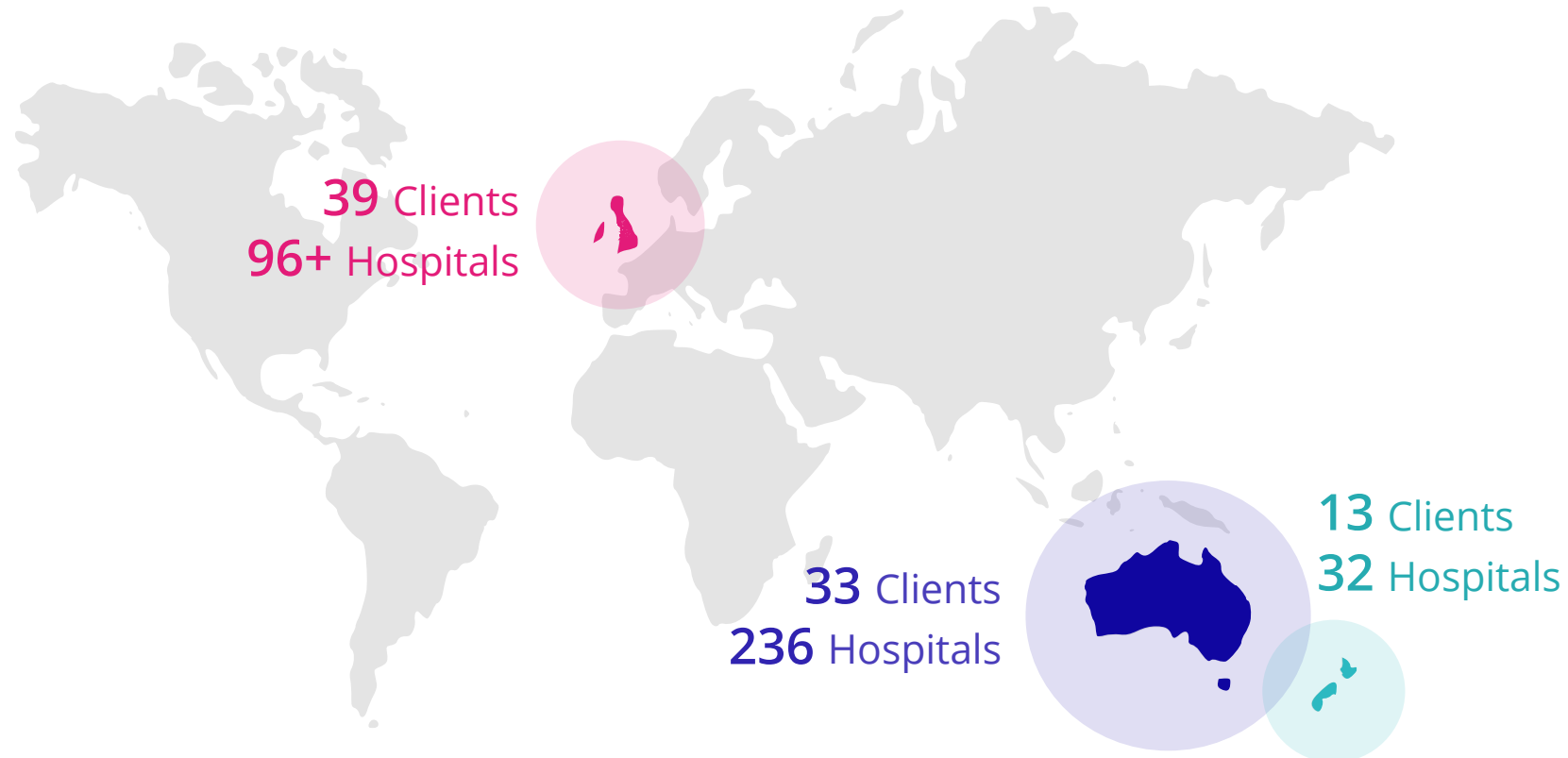
**Where can  
innovation  
take us?**

**5.**

**What's next?**

# About Alcidion

- ASX listed health informatics company
- Exclusive focus on healthcare technology
- 100 clinical system implementations
- 75+ complex system integrations
- 15+ years' experience
- Leading edge, open standards platform & clinical application provider



# Challenges We Seek to Address

Patient Safety

Clinical Productivity

Patient Flow & Logistics

Virtual/New Models

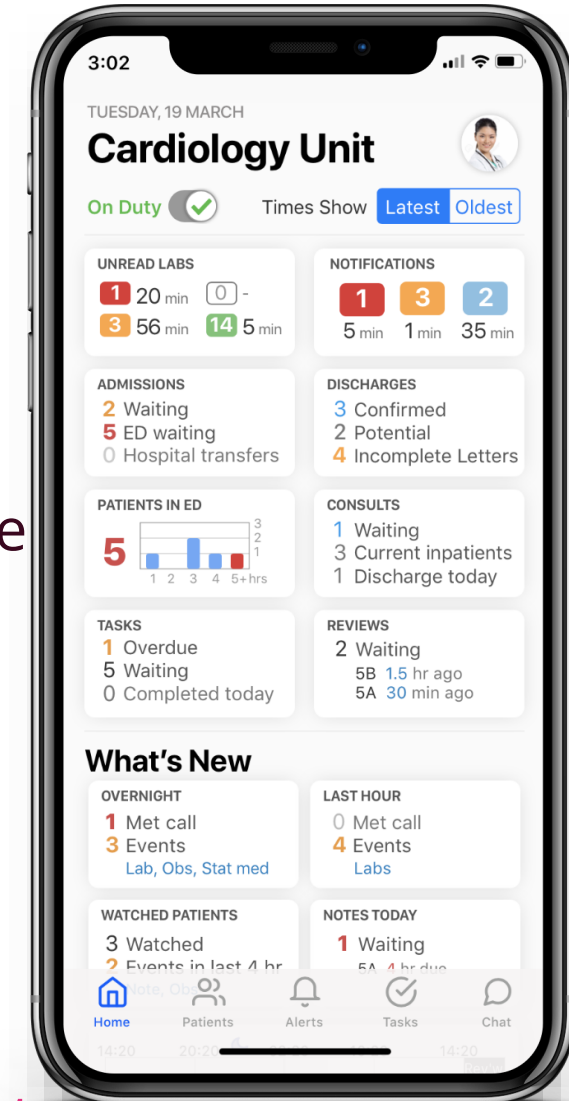
Practice Variation

Consumer Driven Care

## Designed for Modern Healthcare

- Highly interoperable, built on open standards
- Designed to be an active participant in health care, not just a passive data store
  - Pathway Automation
  - Real-time CDS
- Adapts to different specialties and care settings
- Mobility for workflow integration
- A platform for safe innovation

**“Making the right thing to do, the easiest thing to do”**



# What has changed in recent years?



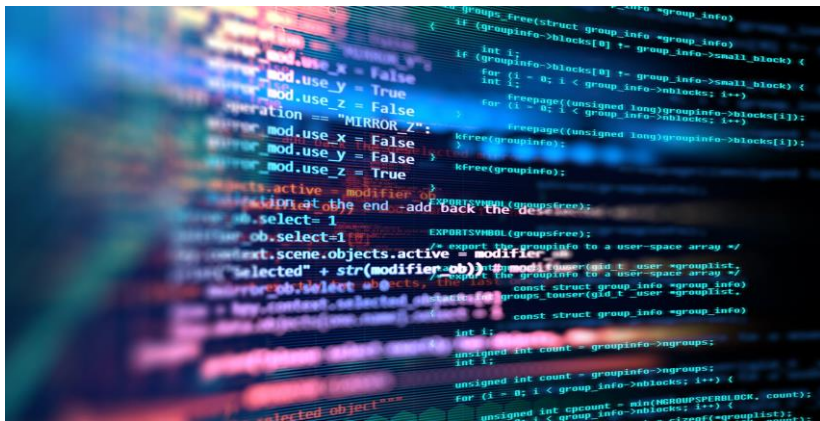
*An overhaul of the electronic health record is overdue. It must go beyond fixing the user interface or improving interoperability. It must address the fundamental problems exposed by the pandemic. The overhaul must also support the ability of providers to adopt the new value-based-care business model of health care — one that rewards providers for outcomes rather than the volume of services and that shifts their focus from reactive sick care to the proactive management of health.*

It's Time for a New Kind of Electronic Health Record by John Glaser  
Harvard Business Review, June 12, 2020

# What really makes a positive impact?

- Patient focus & engagement
  - Wellness rather than illness – improved long term outcomes
  - Respect for patient / consumer preferences
- Access to & use of real-time data
  - Influence care delivery & resource management
  - Improve efficiency & effectiveness
  - Adoption of open standards and principles
- World is becoming “smart”
  - Adoption of “smart” technologies
  - All the acronyms e.g. AI, ML, NLP, CDS
- Alignment with stakeholder requirements first - then outputs
  - Solution supports workflow
  - Business & operational outputs derived

# And more recently . . .





# Where can innovation take us?





# Example: HAC Mitigation Opportunities

- Hypoglycaemia (HAC13) is leading HAC amongst patients with diabetes
- Evidence: DM with HbA1c >8% at higher risk for hypoglycaemia

## Current Approach

- Train doctors to compulsory test for diabetic patients on admission
- Train “diabetic champion” nurses to identify high risk patients on ward
- Nurses warn medical practitioners in high risk situations (fasting, emesis, illness, etc.)

## Real Time CDS Approach

- Detect high risk events in real time
  - Fasting, nausea, surgery, sepsis, etc.
- Identify high risk patients, notify teams, visible as alert on dashboards, EMR
- Automate referral to diabetic nurse and/or endocrinologist
- Detect for high risk situations, check for fluids, regular BSLs

# Example: Virtual Care @ Sydney Local Health District

- About Sydney LHD
  - Located in centre & inner west of Sydney
  - 16k staff responsible for health & wellbeing of ~740k people
  - Six hospitals (inc. Royal Prince Alfred) & community services
- Virtual care strategy
  - Need to expand capacity to meet demand recognised
  - Virtual care model initiated prior to COVID
  - During COVID Miya Precision used to support 1,000s of patients remotely, both with COVID & other health care requirements
  - Post height of pandemic extending scope to address other disease cohorts:
    - Respiratory
    - Acute Diverticulitis
    - Diabetes ...



COVID-19 Virtual Care																
Patient	Stream	Location	Age	SARS-CoV-2	ACD	Alerts	Comorb	Contact	Review	Status	Symptoms	Tasks	Devices	Observations	Monitors	
Jones, Mervin ID: 029348203 8 Aug 1943	M	Home Care: Wife	76 years	Positive Day 9 of Onset	None	3	Today	Resp	Medication	Temp >38	Temp >38 Mid Cough Headache	GP re ACD Prefer comm nurse App installed	Device X 29m ago	SpO2: 96 % Pulse: 72 bpm Temp: 38.2 °C	11:00 18 Mar 20	38.2 °C @ 4:24 18 Mar 20
Keen, Amanda ID: 823927278 3 Feb 1968	P	Home Care: Husband	52 years	Unknown 32 hr ago	Full	No Sig	Done 11:22 am	1:42 pm Resp	Low	Med. Cough	Mild SOB	Check results	Mini Care 27 h ago	SpO2: 98 % Pulse: 68 bpm Temp: 37.1 °C	15:03 16:03 17:03 18:03 18 Mar 20	37.1 °C @ 20:35 18 Mar 20

SARS-CoV-2 Test Result

Keen, Amanda  
ID: 823927278

TEST STATUS

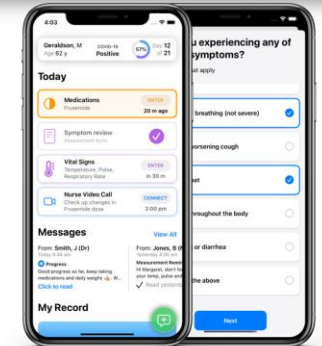
Not Done  Pending  Negative

SYMPTOMS & TEST RESULTS

Date of symptom onset: DD/M/YYYY

Date & time of test: DD/M/YYYY

Cancel Save



# So, what's next?



Address all stakeholder expectations & ambitions

Evolve with new models of care – virtual care & remote monitoring

Collaborative low-code design & agile approach, using innovative technology

Continuous improvement – don't stop at “go-live”



*Thank you . . .*

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