# **INFO**23

8 - 12 JULY 2023 | SYDNEY, AUSTRALIA



**@KateQuirke4** 

Virtual Care – technology & frameworks to support new models of care

Kate Quirke

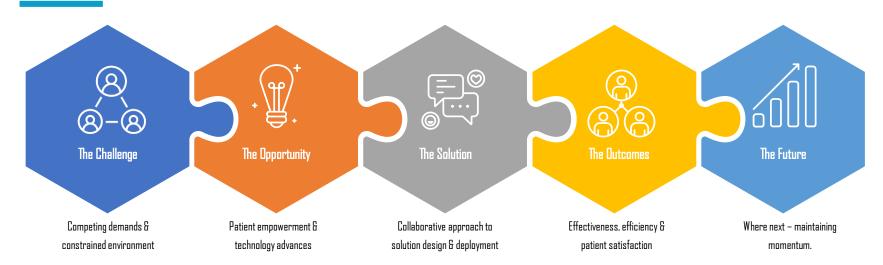
Group Managing Director | CEO *Alcidion* 



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# Agenda







### Supporting new models of care

- Setting the scene:
  - Telehealth accelerated during pandemic & creates opportunities to further improvement across healthcare system
  - Powerful new medical device technology is available & evolving patient & provider perspectives
  - Adoption of digital capabilities is critical to lower barriers to clinical transformation



### The Challenge

Increased need & expectation from patient population for timely & quality services

Demand

Funding

Resources

Constrained resource availability across all areas e.g. people, equipment, care locations

Funding remains same & models don't reflect care delivery





### The Opportunity

- Apply modern technology to extend the reach of hospital-based care teams & avoid / minimise hospital stays
  - ✓ Candidate identification
  - ✓ Real-time interoperability
  - √ Tailored clinical information
  - ✓ Remote patient monitoring



### Case Study: RPA Virtual

- Sydney Local Health District recognised need to expand resources to meet demand
- Determined that technology could be driver rather than "bricks & mortar" approach
- Identified Alcidion's Miya Precision as platform to support virtual care & remote patient monitoring







### The Solution

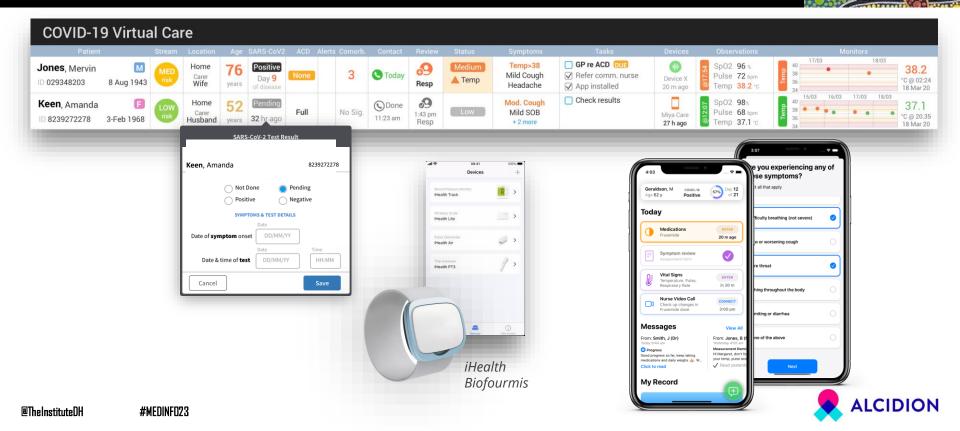
- FHIR event platform & FHIR based interoperability Miya Precision
- Real-time, extensible, graphical UI highlighting tailored information to patient cohort
- Unified experience across all care settings:
  - "Round the clock" support
  - Measurable data to aid decision making
  - Smarter & safer care outcome





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### **Example Patient Cohorts**

### Acute Diverticulitis Home Monitoring



### COPD Home Monitoring

Patient Details 🔨	Miya Care	Stream	ACD	Care Protocols	Patient Tasks	Review Tasks	Review	Meetings	Risks	Comorb.	Symptoms	Location	Observations	SpO2	
Bird, Lacey NHI 7422618	<b>F</b> 19y	A	Full Resuscitation	Exercise, REHA	6 Overdue 0/12 Completed	6min Exercise Test     Chest XRay	9 days	Today	MED	1	Mod SOB	н	BP Sp02 96 % Temp 10 Resp 23 /min HR 77 /min pain	85 20 Apr 23	40 12 33 <b>35</b>
Burton, Xander NHI 2451876	M 32y	С	Full Resuscitation	Exercise	1 Overdue 0/2 Completed	Spirometry Retest	Tomorrow	No calls today	LOW	No Sig.	Wheezing	н	BP SpO2 98% Temp *C Resp 27 /min HR 95 /min pain	100 12/04 15/04 19/04 98 90 90 90 90 90 90 90 90 90 90 90 90 90 9	25 12

### Diabetes Home Management

Loc.	Patient Details 🔨	Note MiyaCare	Tasks	Type	Referrals	Medications	Comorb.	Symptoms	Re	cent Labs		Care Protocols	Detected Issue	Meetings	Patient Tasks	Follow-up	BGL
2	Anthony, Lyra NHI 9608771	68y	Review BP (abnormal) Review Medications	Type 1	OPHT 38.9 d	Insulin	1	Blurred Vis	HBA1C LDL Creati	6.7 25 0.9	mg/dL mg/dL	Diet, DM,	10% increase in HBA1C	Today	2 Overdue 0/4 Completed	52 days	10 12/04 15/04 19/04 7.9 mmol/L @ 09:30 20 Apr 23
7	Byrd, Benson NHI 9977666	M 55y	<ul><li>Review Medications</li></ul>	Type 1	PHAR 38.9 d	Insulin	No Sig.	Headache	HBA1C LDL Creati	6.6 19 0.7	% mg/dL mg/dL	Diet, DM,		Today	1 Overdue 1/4 Completed	10 days	10 12/04 15/04 19/04 6.9 mmol/L @ 09:30 20 Apr 23



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# **Virtual Care Home Monitoring**

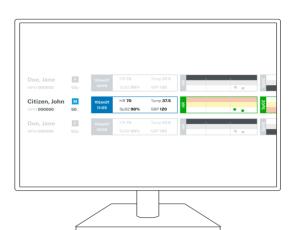




















### **Benefits**

- Tailored lists based on patient cohorts
  - Created via configuration rather than development
  - "Speed to value"
- Real-time information
  - Patient & clinical engagement
  - Remote patient monitoring & device integration
- Consolidated with digital patient record not standalone



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## Virtual care pathways





### The Outcomes - Patients

- Patients directly engage with their care team & actively participate in their health
  - Access not impeded by location, socio-economic status or language
  - High-risk patients can recover at home with dedicated care plans to manage their recovery
  - Hospital stay is minimised or avoided





### The Outcomes - Clinicians

- Clinicians improve communication & heightened awareness through visibility of patient journey
- Real-time understanding of patient status
- Clinical Decision Support applied to highlight key criteria along with automation of common tasks





### The Outcomes - Organisation

- Resource use optimised to rapidly target new patient cohorts & funding models
- Care delivery template utilised to rollout care to new cohorts for eligibility screening, equipment dispatch & remote management
- $\bullet$  Consolidated monitoring command centre provides a tracking  $\boldsymbol{\delta}$  management of patient remotely





### The Outcomes

- RPA Virtual Clinical Trial
  - Clinical trials of home monitoring are rare & largely untested
  - Remote clinical trial (65 respiratory inpatients) gave the all-clear for use of Miya Care & iHealth devices for remote monitoring of BP, SPO2 & Temperature
  - Variance in readings with iHealth pulse oximeter was comparable to hospital devices (despite some issues raised re unreliability with cold fingers or movement)
  - User satisfaction using Miya Care with iHealth devices was found to be acceptable (SUS 78% for 8 patients)

Lessons for remote monitoring from COVID-19 RPA Virtual 29 November 2022





### The Future

- COVID created "kick start" but we need to maintain momentum & extend model to other disease cohorts
- Technology is proven & accessible
- Model will save significant demand on scarce resources & money
- Patient satisfaction & experience improved through hospital avoidance







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Thank you . . . .

Kate Quirke Group Managing Director | CEO Alcidion

