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Addressing the quadruple aims by focusing on the Workforce

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Existing Trends

- Clinicians don't start 'one' job
- Facilities and terms have different requirements
- Logistically, a big problem!

- Junior Doctors in Australia alone:

Costs $7000 * 5 * \$2000 = \$70,000,000$ per year



Recent Trends – 2020 onwards

- Up to 20% of clinicians have left the workforce
- Casualisation of the workforce
- **Increasing workforce burnout**
- Medical & Nursing Students 'working up'
- Patient safety issue!



Broader (economic) Problem

- Healthcare spending now at 10% GDP in Australia
- Productivity growth in Healthcare = 0% from 2000 – 2018
- Health is only sector of economy not to experience productivity increases from IT!



Digital Health as a cause?

Confusing UI design increases clinical risk

A number of clinicians and respondents argued that poor user interface design makes interactions with FirstNet unnecessarily time consuming, and as a result ED staff spent more time doing data entry than caring for patients, thereby decreasing productivity and increasing clinical risk. The following usability issues were identified by interviewees as potential causes of increased clinical risk:

Several ED Directors and other ED staff reported a reduction in ED efficiency as a result of the introduction of FirstNet, with one ED Director providing evidence of an approximately 20% reduction in triage performance for categories 2,3 and 4 patients following the introduction of FirstNet.



The clinician as a data entry clerk

- Clinicians are spending less time with patients
- Related to increased administrative burden
- Decreased time with patients correlated with [1]:
 - Decreased patient satisfaction
 - Worse patient outcomes
 - Inappropriate prescribing
- Increased administrative burden correlated with increased cognitive load [2]
- Increases fatigue and risk of clinician errors

[1] Dugdale, David C, Ronald Epstein, and Steven Z Pantilat. "Time and the Patient-Physician Relationship." *Journal of General Internal Medicine* 14.Suppl 1 (1999): S34-S40.

[2] Heather E. Douglas, Magdalena Z. Raban, Scott R. Walter, Johanna I. Westbrook, 'Improving our understanding of multi-tasking in healthcare: Drawing together the cognitive psychology and healthcare literature', *Applied Ergonomics* Vol 59, Part A, March 2017, pp 45-55



The Quadruple aims

- Enhance patient experience
- Improve population health
- Reduce costs
- Improve clinician experience



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Localised, offline-first platform



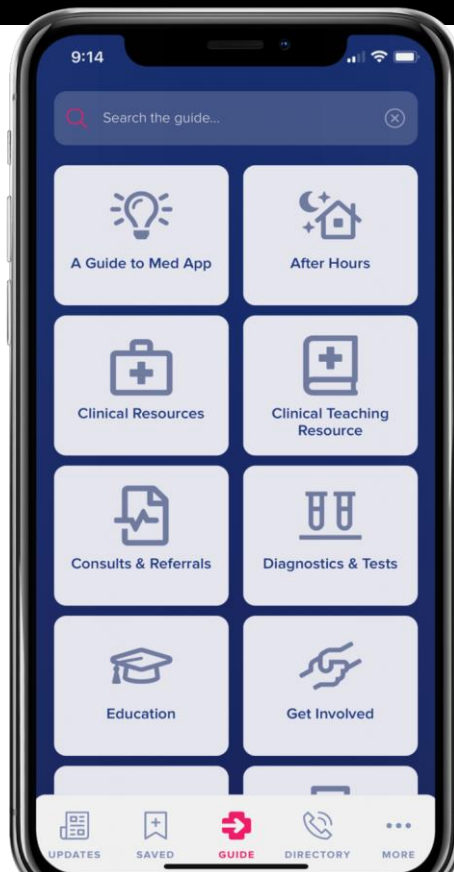
Wellbeing content



Role-based content & communication



Access clinical and educational resources



Modular, extensible platform



Event scheduling, attendance tracking & evaluations



2-way communication



QR code links to specific content



Safety & Quality

Orientation

Education &
CPD Events

Quality
Improvement

Content &
Engagement

Wellbeing

Impact & Benefits



Saves 5 min in productive clinical time
for every 1 min in app



Streamlines administrative reporting
and supports compliance



Deliver significant financial
and productivity savings



It all starts with Orientation

Improve
Orientation

Improve Engagement

Improve Retention

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South Eastern Sydney LHD
Sydney Children's Hospital Network
Central Coast LHD
Far Western NSW LHD
Hunter New England LHD
Murrumbidgee LHD
Northern NSW LHD
Western NSW LHD
Illawarra-Shoalhaven LHD
North Shore Private Hospital (Ramsay)

Western Australia

Perth Children's Hospital



Queensland

Metro North HHS
Central Queensland HHS
Darling Downs HHS
North West QLD HHS
Central West QLD HHS
Greenslopes Private Hospital (Ramsay)

Victoria

Northern Health
Royal Children's Hospital
Alfred Health

Northern Territory

Alice Springs Emergency



Government of South Australia

SA Health

Royal Adelaide Hospital
Queen Elizabeth Hospital



Chelsea Westminster Trust



MANATŪ HAUORA

Capital & Coast DHB
Hutt Valley DHB
Mid Central DHB
Bay of Plenty DHB



Numbers

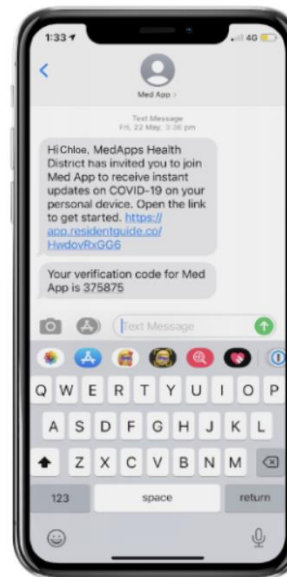
- 80 Hospitals
- 8,000 MAU
- 3,000,000 page views annually

- 35% Australian Junior Doctors orientated annually
- \$50 million in cost savings since initiation

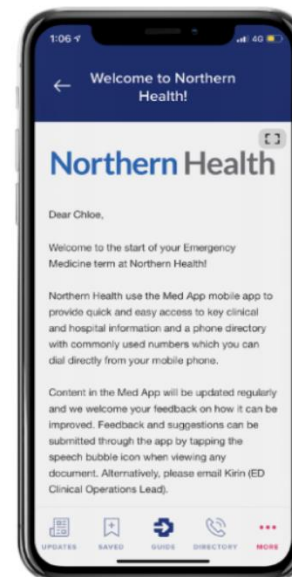


How?

- Streamline orientation
- Track attendance
- Manage assessments
- Run Quality Improvement Projects



Med App SMS invite



Mailout message



Audit & Accredit

- Detailed Metrics
- Interoperable



Track effectiveness

See who viewed and or signed your message



Download Report

Provide proof of orientation and QI projects for accreditation or auditing purposes

The screenshot shows a web application interface for managing hospital orientation letters. The main content area displays a letter titled 'Hospital orientation letter' with a 'Last Updated' date of 2-2-2022. Below the letter title, there are buttons for 'Viewed' and 'Signed', both set to 'All'. A pagination control shows 'Showing 0-20 of 468' items, with page numbers 1, 2, 3, and 24. A 'DOWNLOAD CSV' button is highlighted with a red circle and a callout box. Below the letter details is a table with columns for 'USER', 'SENT', 'VIEWED', 'SIGNED', 'VIEW', and 'REMEMBER'. The table lists several users and their corresponding dates for each action.

USER	SENT	VIEWED	SIGNED	VIEW	REMEMBER
Deenage, Stephanie	08/06/2021	08/06/2021	—		Send Reminder
Saif, Anas	11/06/2021	11/06/2021	—		Send Reminder
South, Mike	11/06/2021	11/06/2021	11/06/2021		—
Ordoval, Caroline	16/06/2021	16/06/2021	16/06/2021		—
Lin, Lixin	22/06/2021	22/06/2021	22/06/2021		—
Morrell, Kate	05/07/2021	24/07/2021	24/07/2021		—
Pharmaworana, Russa	29/07/2021	29/07/2021	29/07/2021		—
Castro, Rob	29/07/2021	29/07/2021	29/07/2021		—



Wellbeing

- Stanford WellMD Model
- Run Organisational Pulse Checks
- Partnership with Beamtree (Wellbeing Index)

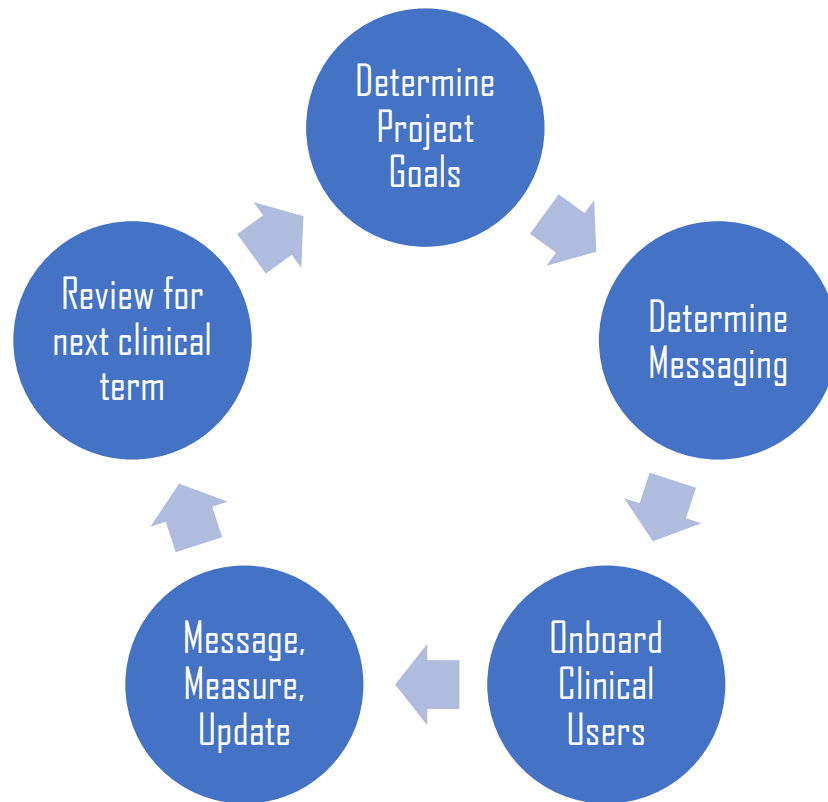




Quality Improvement

- Dashboard Driven QI
- High engagement
- Low ongoing overheads
- Repeat & Refine

- Streamlined PDSA Cycles





Results

- RBWH Change Management Project
 - 13% Reduction in IV Metronidazole prescribing, sustained
- SESLHD Falls Reduction
 - Up to 50% reduction in falls
 - \$250,000 saved over Jan-Mar 2023



Want a more efficient Hospital?

- Contact us

<https://med.app>

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