
Data and Analytics in Healthcare 2023

From Where We Are to Where We Want to Be –
Putting Patient Data at the Centre of Our Care



Current State

- We have a fragmented health system with disparate IT systems and data sources
- Rapid growth in EMRs but no coordinated strategy:
 - Within and between states
 - Primary Care
 - Little or no uptake by Private Hospital providers
- Each admission treated as a single episode of care
- Information silos result in duplication of effort for staff and patients
- Treating specialists have difficulty finding key information due to the plethora of information
- Limited or no access to other provider information
 - Primary care, sub-acute
- Manual interface with referring specialists, bookings, discharge letters, discharge medication

What's wrong with these pictures?



“Technology is wonderful and seductive, but when seen as more real than the person to whom it is applied, it may also suppress curiosity; and such curiosity is essential to active thinking and quality care”

Dr Faith Fitzgerald

EMRs are not the panacea

The Good	The Bad
Greater accuracy	Expensive
Improved patient safety	Data bases 30 years old
Central repository of information	Increased administrative burden
Compliance	De-personalizes patient care
Medico-legal benefits	Tries to satisfy too many functions
Billing Functions	Not designed by clinicians

Cabrini's approach - EMR

- Automated things that improve patient safety
 - Medication management and diagnostics
 - Desktop and remote access
- Little value spending \$150m on an EMR to improve documentation
- Emergence of integration engines that allow you to utilise and customise data
- Focus on the development of patient, staff and medical portals

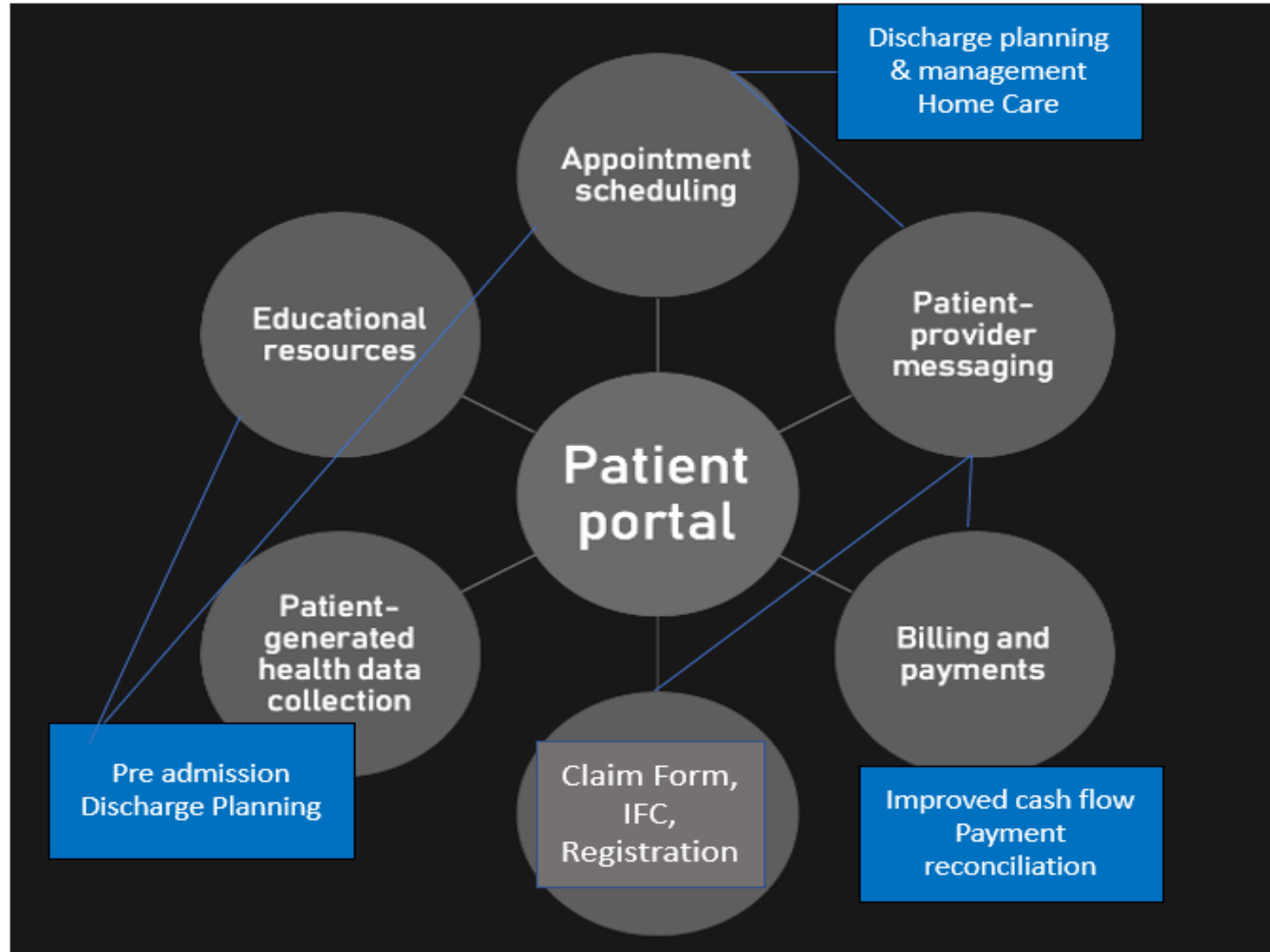
Patient Portal – genesis for change

- Cabrini has ~ 90,000 admissions per year
- Reliance on fragmented and manual capture of patient and pre-admission information
 - Multiple ports of entry
 - All with different processes
 - Combination phone, FAX, hard copy information
 - Need to better capture information and reduce duplication

Patient Portal

- Electronic patient registration process:
 - ✓ Single point of capture
 - ✓ Reduces duplication and rework
- Patient benefits:
 - ✓ Customised patient questionnaire assists with discharge planning
 - ✓ Enables pre-admission instructions to be sent
 - ✓ Post hospital appointments to be booked
 - ✓ Ability to integrate other applications
 - ✓ Continues patient engagement beyond first encounter – PREMs, PROMs, Education, Research, wellness
- Financial benefits:
 - ✓ Earlier insurance status checks and informed financial consent
 - ✓ Audit trail validation of unique encounter with the patient
 - ✓ Streamlines payment process e.g. out of pocket costs paid prior to admission

Patient Portal – connected efficiencies



Data Analytics

- Important at a system level
- Requires relevant stakeholders to collaborate and adapt their systems
- Investment in human capital as well as technology
- Benefits enormous:
 - Earlier diagnosis and treatment
 - Disease prevention
 - Precision medicine
- Ethical and legal issues to consider

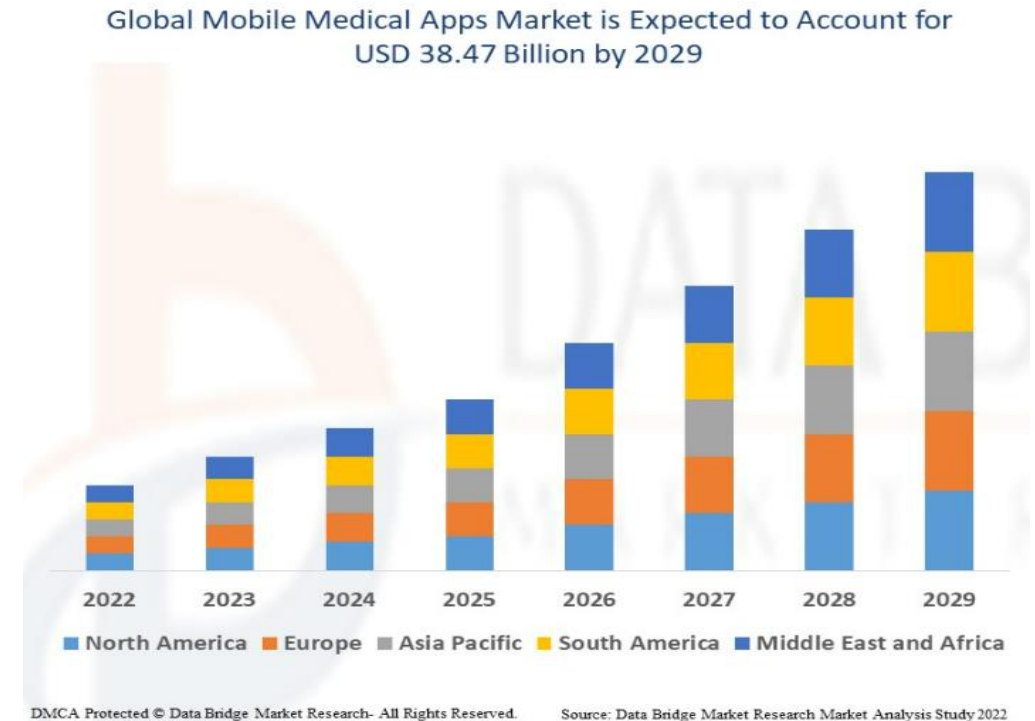
Cabrini's approach - Data Analytics

- Participation in national registries
- Colorectal registry developed by Cabrini – now used nationally
- Provision of clinical outcome data by craft group and clinician
 - Devil always in the detail
 - Don't go on a fishing expedition



Mobile Technology

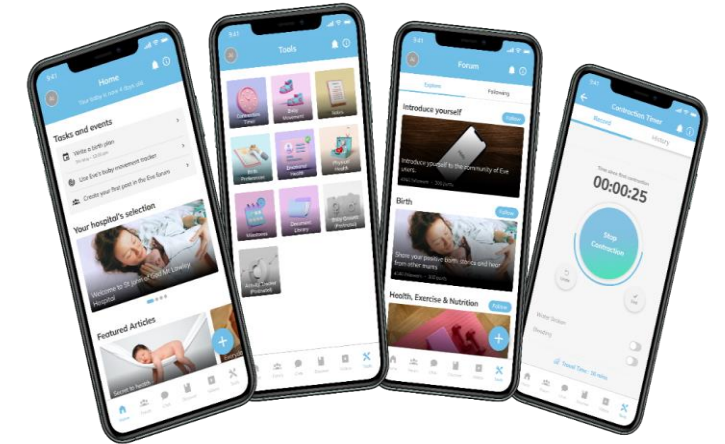
- Rapidly growing market accelerated by COVID
- Benefits include:
 - Education and information
 - Communication patient and health professional
 - Increased awareness and self monitoring
 - Social support
 - Potential reduction in healthcare costs



Mobile Technology

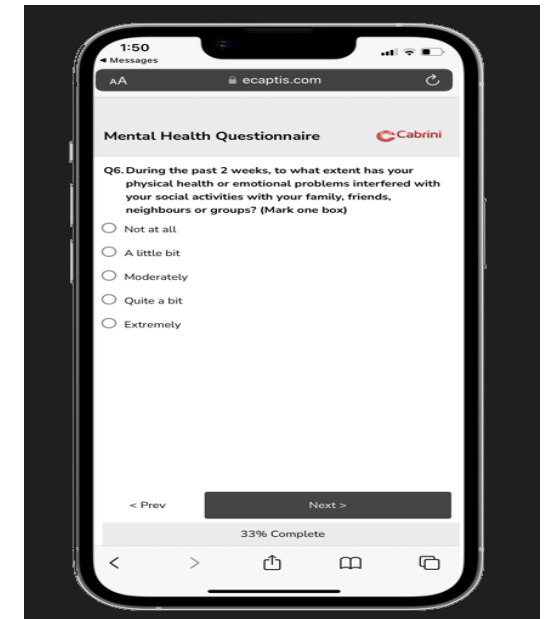
Eve:

- Pregnancy app to enhance the pregnancy and postnatal experience
- Private forum discussions, direct messages to midwives, educational information and tools
- Data fed back to midwives via the Eve web portal
- Available to 20,000 Australian women in both public and private settings



eCaptis:

- Remote patient monitoring platform to capture (PROMs) & (PREMs)
- Patient clicks a secure hyperlink in an SMS and answers assigned questionnaires
- Measures used to increase engagement, improve quality of life and treatment of symptoms
 - Cancer, Orthopaedics, Cardiac Rehab, Preadmission Assessment, Mental Health



Home Monitoring

- Rapid growth of care in the home during COVID
- Clearly identify the problem you are trying to solve
 - Heart failure = patient weight
 - Respiratory failure = respiratory rate
- You don't want NASA in the home



What will our Future State look like for Cabrini?

- A fully integrated care and connected system
 - Transparency of all health interactions – hospital admissions, specialist care, primary care, community care
- Incremental strategy over the next 5 years
 - Clinician led
 - Aligned with strategic priorities
 - Reliance on inter-operable solutions
 - Customisation to meet patient and clinician needs