## **Mobile Health Technology**

Is it the way of the future?



Queensland Health I Metro South Hospital and Health Service I Bayside Chronic Disease



## Change

 Healthcare is rapidly changing, innovation is a necessity.



- How can we support people with chronic conditions at home and in our communities and increase access to services such as cardiac rehabilitation?
- How can we assist patients to achieve their goals and optimise health outcomes?

#### Mobile Technology Enabled Rehabilitation - MoTER



- MoTER provides an innovative way for patients to undertake and monitor their rehabilitation from their home or work setting, while getting support from clinicians via an online portal.
- It doesn't replace cardiac rehabilitation (CR). It fills a gap in services, providing structure and support.

## Mobile Health and Funding

- September 2014
- December 2015 Quality Incentive Payment (QIP) funding commenced to increase access to CR services
- A business case was developed
- Research proposal was submitted



## Project roll-out

- Project Staff recruited- Project Officer, Clinical Nurse, Physio
- Project officer role:
  - Contract negotiations and sign off
  - Monitor QIP targets
  - Train staff
  - Development of a database and dashboard to provide a CR scorecard and collect the necessary data for the research
- Clinical Nurse / Physio role:
  - Clinical support for services to assist with the increase in access and workload while sustainable options are evaluated

## Implementation Considerations

- Contract negotiations
- Clear communication
- Adequate time
- Accountability
- Know what you want- patient/service outcomes, education, layout, functionalities, reports
- Resource development
- Stakeholders
- Target audience / demographics
- Consumer feedback

### MoTER in Metro South (MS)

 All patients referred to a MS community CR service have the option to access MoTER. These patients:



- are provided with access to the MoTER mobile application using their smartphone
- carry their phone throughout the day to allow for data capture
- will record and self-monitor key aspects of their health: e.g. weight, blood pressure, exercise, diet, symptoms, etc
- patients who choose to participate in MoTER home based CR service will have their data monitored by a CR professional and the appropriate education and intervention provided remotely, patients receive x1 phone call/week for 6wks
- all patients can continue to use the MoTER app as a self-management tool for maintenance and long-term risk factor management

## **Opportunity**

'Do we always see the opportunity embedded in the problem'
Benefits I Gaps I Road Blocks

- Benefits:
  - Portal
  - Blue tooth equipment
  - Improves access
  - Provides outcome reports/ printable PDF
  - Patient self-registration
  - Long-term self management
  - Record clinical information (e.g. symptoms, blood pressure) for cardiologist/GPs

Opportunity comes to the one who is already prepared.



## Gaps

#### Gaps:

- Medication adherence
- Diet
- Diabetes monitoring
- Use of existing technology to link with the app
- Up to date education
- Keeping up with rapidly changing technology
- Social networking
- English speaking patients only



#### Road Blocks

#### Road blocks:

- Patients- access to technology (smartphone & internet), not knowing their passwords (itunes), don't have a google account, phones not updated with recent firmware, literacy level
- Staff- competing demands (QIP, research, statewide database),
   change in practice & thinking, change fatigue, time
- Level of technology understanding
- Engineering bugs
- Bluetooth equipment viability
- Cost



## Mobile Health Technology- is there a place for it?

- "The current CR model must undergo significant infrastructure changes focusing on increasing patient convenience through alternative delivery models."
- "... the integration of digital and mobile technologies are key to transforming the current paradigm toward a more patient-centered program to increase CR enrolment, participation, and completion."



#### Future?



- Integration with electronic medical records
- Triage/risk stratification of clients into flexible models of service delivery e.g. Mobile Health Technology
- Integrate with other technology e.g. Garmin watches, heart rate monitors
- Cross-organisational collaboration e.g. Heart Foundation, GPs
- Robust cost effectiveness research

#### **Patient Stories**

We need change to be designed with our patients in order to deliver solutions and achieve a better patient experience of care (including quality and satisfaction).

We need to consider: 'Redesign inside out to remain relevant'.



#### Thank You

 Metro South Cardiac Rehabilitation services who are currently undertaking the research into flexible models of service delivery which includes trialling Mobile Health Technology (MoTER)



# WHERE IS THE APP THAT BRINGS ME COFFEE