PROMPT-Care eHealth system to support patient-centred care: The long road to transition to business as usual

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Our motivator for change: Cancer service challenges

- Growing population of cancer survivors => specialist cancer follow-up not sustainable
- Much of cancer follow-up is unnecessary, anxiety-provoking, non-uniform
- Specialists not necessarily best placed to manage some long-term toxicities, which may not be oncology-specific

Need to rethink models of follow-up care

PRO systems can help tailor shared care:
  self-management | +/- specialist | +/- GP
Initial project aim: Proof of concept

1. Identify or build an eHealth system that facilitates:
   a) ePRO data capture (including remote data inputs)
   b) data linkage and retrieval (via EMR), to support clinical decisions and patient self-management, based on decision-support algorithms
   c) data retrieval for evaluation and innovative research

2. Test the feasibility and acceptability of the system

Funding: Cancer Institute NSW
Partners: SWSLHD, ISLHD
Phase 1: Proof of concept (2013+)

Phase 1

- Development
- Testing acceptability & feasibility
- 2 cancer centres (35 pts, 5 onc staff)
PROMPT-Care, first Australian fully integrated eHealth platform using systematically collected PROs to inform cancer survivors’ real-time clinical care and self-management.
PROs => EMR in real-time, care pathways to standardise care

Symptoms
Distress
Unmet need

Patient online self-management

NO clinical breach
Maintaining wellbeing resources

FIRST clinical breach
Tier 1 resources

SECOND clinical breach
Tier 2 and talking to your GP resources

Timely clinical care

Clinical alert
Email sent to cancer care centre

Daily Report detailing most recent assessment
Longitudinal Report detailing all assessments
Reports generated in OIS

Shared follow up care

Treatment Summary and Survivorship Care Plan available to view in OIS
Sent to patient and GP
Phase 2: Test implementation

Phase 1
- Development
- Pilot testing

Phase 2
- Modifications
- Implementation in 4 cancer centres (2 LHDs)
- Impact on ED presentations, health service use
Modifications from Phase 1 pilot testing:

- Clearer survey instructions – in reference to CANCER
- More pragmatic approach:
  - Survey link sent via email more acceptable than tablets in clinic (include MRN #)
  - Trigger for reviewing PROMPT-Care report - clinical alert emailed to care coordinators [adapted model of care]
- Engaging GPs: Treatment Summary/Care Plan developed with GP input, auto-populated from EMR
Phase 2 status – wrap up

• Informed care for 439 patients across 4 cancer centres
• 2,995+ assessments completed to date (200,000+ data items)
• Multi-dimensional outcomes (health system, patient, clinician level) (n=352 intervention, 1408 control):
  ✓ ED presentations (primary outcome), chemotherapy adherence, referral to health services
  ✓ Impact on resource utilisation (specialist, allied health, GPs)
  ✓ System uptake (patients, cancer team)
  ✓ Usability & acceptability (patients, cancer team, GPs)
Phase 3: BAU, closing the gaps

Phase 1
- Development
- Pilot testing

Phase 2
- Implementation
- Impact

Phase 3
- BAU - “Business as usual”
- All SWSLHD cancer centres
- “Excluded” populations
Considerations as we progress to BAU
Which PROs?

• Balancing patient burden vs comprehensive assessment
  BUT let’s not assume burden
  ✓ 100% of patients (n=35) time to complete assessments “about right” (average 15 minutes, range 2-69 minutes)
  ✓ 96% - online assessment “easier/ same as” paper-pencil assessments
  ✓ Some patients completed 20+ assessments

• Deciding on assessment frequency – data will inform BAU
  ✓ Patients on-treatment vs in follow-up
  ✓ Different tumour groups
Who are we missing?

- Approximately 1/3 pts screened were ineligible for PROMPT-Care
  - Non-English speaking: 50% of ineligible Liverpool pts
  - Computer access/literacy: 10% of ineligible Liverpool pts
  - Literacy - ???
- Is an App part of the answer?
  - Overcomes the language barrier – patient selects preferred language
  - Overcomes poor literacy barrier - voice-prompt/recognition capabilities
What’s the right model of care?

- PROMPT-Care reports mostly reviewed by nursing staff
- 43% of clinical alerts had 1+ recorded action
  - Does it matter who actions, as long as someone does?
  - Are there too many alerts? Rethink thresholds, available capacity, balance b/w false positives vs false negatives?
  - Improve report accessibility – push not pull?
  - Ongoing training - for whom, when? Registrar turnover, patients?
Engaging GPs in shared care?

- Ongoing CISCO project – Prof Eng-Siew Koh – WATCH THIS SPACE
Sustainability after research funding ends?

Planned transition to BAU – consultation with relevant departments (admin, nursing, allied health, oncology, IT etc)

- System redesign: RATHER THAN “How can we possibly do more?”, ASK “What can we do differently?”
- What human resources are needed at front/back end?
- Which components of PROMPT-Care are essential to keep?
- Ongoing IT support – competing priorities
Thank you

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