CONFERENCE ABSTRACT

eHealth and Integrated Primary Health Care Centres

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Background: Integrated primary health care (PHC) relies on connectivity and seamless information-sharing across primary, secondary, acute, aged and social care. eHealth tools can promote a better patient journey and avoid duplication of care processes such as pathology and imaging or unplanned attendances at emergency departments and hospitalisations.

Conceptual framework: This encompasses integration, Informatics Capability Maturity (ICM), multidisciplinary teamwork and data quality within the Australian National PHC Strategic Framework. Integration includes system, information and people elements that promote or support a team and shared care culture. The ICM reflects how an organisation collects, manages and shares information in the health neighbourhood, manages information communication technologies (ICT), data quality management and governance, and uses health "business intelligence" to achieve multidisciplinary integrated care.

Aim: Assess the relationships between the ICM, systems and services integration and use eHealth tools by Integrated Primary Health Care Centres (IPHCCs).

Setting: Seven IPHCCs in metropolitan and rural settings in 3 Australian states: an enhanced private general practice, four GP SuperClinics, a "HealthOne" private-public partnership and a Community Health Centre (CHC). These IPHCCs demonstrated a range of funding sources, ownership, organisational structures and leadership.

Methods: Mixed methods case study. Data collected through document review, interviews with staff, non-participant observation of the IPHCC, data quality assessment of pseudonymised data from the EHR, and self-assessment of the ICM. A purposeful sample of patients were interviewed.

Findings: The IPHCCs were at varying levels of ICM, using clinical and managerial eHealth tools with varying effectiveness for different ends;

The lack of a common terminology and universal secure messaging system and limited "clinical coding" were significant barriers to data collection, integration and sharing;

Various "work-arounds" were used by clinicians and managers to communicate and share information to compensate for the lack of technical, data and software integration;

Patient engagement with eHealth tools, including the PCEHR, was minimal; and

Improvement requires strong clinical leadership to ensure standards for data, metadata and secure messaging; a common terminology; integrated electronic decision support tools; accountable data quality management and information governance.

Key lessons: Successful use of eHeath tools for system and service integration requires a skilled clinical informatics workforce; technical, semantic and software standards; adequate privacy and security; and clinical leadership to implement and monitor them to successful adoption.

Conclusion & recommendations:

1. A multidisciplinary clinical informatics profession to bridge the divide between health, management and computer science in health care policy development and implementation with a patient-centred approach.

2. A common terminology across all health services, education and research sectors.

3. Secure messaging (building on and supported by the National Health Service Directory)

4. Integrated EHR data, metadata and applications to optimise EHR use.

5. Education of and culture change in the health professions to value good documentation, data quality management and information governance.

Agencies to act on these recommendations include: Commonwealth and State Departments of Health, Education and Technology; Australian Commission for eHealth (replacing NEHTA); software industry; PHNs; LHDs/LHNs; Health professional bodies; and Higher education institutions.