

CONFERENCE ABSTRACT

The development story of creating a whole of system cloud-based platform for supporting quality improvement for integrated care

4th World Congress on Integrated Care, Wellington, NZ, 23-25 Nov 2016

Peter Carswell

Synergia, New Zealand

Introduction: Integrated care needs is access to good data to support quality improvement. There are significant challenges in creating a system to support this – particularly if it involves accessing and linking data from multiple organisations. This paper describes an approach taken by a consortium of agencies across Auckland (New Zealand) that has the aim of taking a regional approach to planning for after-hours health services. An early challenge identified was the need for data that identified patient flows and outcomes across the continuum of care – from telephone triage service to emergency department attendance.

The practice change implemented: A cloud-based platform was developed that contains a quality improvement dashboard - informed by the Institute of Medicine's quality framework and the Triple Aim dimensions. In doing so we developed a process for organisations being able to upload their data into a secure server, and for data from multiple organisations to be linked.

Aim and theory of the change: The aim of this change is to support cross-organisational learning, quality improvement, and improve patient flow across the after hours system in the Auckland region. In doing so we have been influenced by organisational learning theory and innovation diffusion theory. These frameworks identify ready access to relevant information as a key enabler to the process of change.

The targeted population and stakeholders: All members of the ARAHN consortium have access to the platform. This includes relevant clinicians and managers from telephone triage service, St John, Auckland wide PHOs, and the three District Health Boards.

Timeline: This approach has been developed over the last 24 months. Initially we worked with clinicians and managers to develop the measures. We then developed the cloud-based platform. Finally, we worked through a process with the Auckland Metro Data Governance group to come up with a solution in which data could be uploaded, linked, and analyzed in a way that met the NZ Governments ICT standards for data security.

Highlights (innovation, Impact and outcomes): The key innovation here is the development of a cross organisation quality improvement platform. This sort of infrastructure is key for improving the quality of integrated care initiatives that cross multiple organisations.

Sustainability: The process of data uploading is automated directly off the servers of the partner organisations. This means the initiative is highly sustainable. The resource requirements to support it

Carswell; The development story of creating a whole of system cloud-based platform for supporting quality improvement for integrated care

are minimal and the structure of the existing network means there is mechanism to regularly interrogate the data for areas of improvement.

Transferability: The process developed in the creation of a cross-organisational cloud-based quality improvement platform is not context dependent. Therefore, it is highly transferable to other health care initiatives where the focus is on service integration for improving efficient and effective patient care.

Conclusions and lessons learned: Improving initiatives for integrated care requires a mechanism to link data from partner organisations. For this to be successful it needs to be secure, and present results that are relevant and meaningful to the multiple partners. This takes considerable attention to the perspectives/interests of the different stakeholders.

Keywords: quality improvement; data platform; network
