CONFERENCE ABSTRACT

iRAD: Real-time health information exchange across the health sector
21st International Conference on Integrated Care, Virtual Conference – May 2021

Alessandro Luongo¹

1: South Western Sydney PHN, Australia

Introduction
Clinician friendly and timely access to shared patient health information (PHI) is a pre-condition for team-based, coordinated and efficient continuity of care. In healthcare, interoperability is the ability to seamlessly exchange information between software such as different electronic medical records (eMR) with minimal effort on behalf of the user. Whilst national efforts grow to improve the secure sharing of PHI within the whole of Australian health care system, clinicians continue to face barriers of timeliness of information exchange, accessibility, usability and a lack of quality content.

Description of practice change implemented
South Western Sydney Primary Health Network (SWSPHN) procured, localised and rolled out iRAD; a point-of-care interoperability software tool that shares consented PHI between participating healthcare sites in real-time.

SWSPHN rolled out iRAD to 30 compatible sites including general practices, after-hours clinics and specialists with compatible Best Practice Clinical or Medical Director software (commonest eMRs in Australian primary care). Training, webinars, on-site education sessions and support desk were available. Local hospitals and EDs were offered access and training to view consented PHI through iRAD.

Aim and theory of change
Improve provider experience and health outcomes for patients who access multiple healthcare services through timely, trustworthy and accurate patient-consented information sharing between healthcare sites by implementing a point-of-care, interoperability software creating a longitudinal record with minimal workflow disruption.

Targeted population and stakeholders
Clinicians, healthcare services and their shared patients within a common locale. Key Stakeholders include Local Health Districts, Primary Health Networks, private healthcare organisations, aged care facilities and patients.

Timeline
2016; Issue identification and solution scoping
2017-18; Vendor Engagement, solution development.
2019; Installation, training and solution testing in live sites. View-only capability developed for hospitals/ED.
2020; Additional 30 sites in catchment onboarded. Hospital project initiated to share hospital eMR data in iRAD.

**Highlights**

Successful technical implementation of an Australian first in real-time interoperable data exchange between primary care sites and PHI availability to other health services. Successful data mapping and localisation of existing software solution to Australian market.

**Sustainability**

The iRAD solution is a costly endeavour for a Not-for-profit organisations such as SWSPHN. As an opt in tool, adoption success is dependent on maintaining highly engaged healthcare professionals and businesses to seek patient consent as early adopters currently fail to realise benefits without sharing from others.

**Transfer-ability**

Data mapping, legal developments and lessons learned can be applied to future projects including HealthOne.

**Conclusions**

Creating a longitudinal record across health services is dependent on highly engaged early adopters to systematic patient consent processes. Sharing information from one significant data source (e.g. hospitals) outward to other services may improve uptake and patient consent.

**Discussions**

Adoption barriers for opt-in models without immediate value-add for clinicians creates challenges while vendors/funding bodies require significant resource investment to encourage adoption. Further consultation with key stakeholders may benefit engagement efforts.

**Lessons learned**

PHI sharing may be best implemented among healthcare services that share/refer patients within a close locale. Providing an immediate value (e.g. hospital data) and implementing consent systems in practices may improve adoption.