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# Health Informatics: Key Considerations from the National Health IT Plan

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**Abstract**

This poster explores the future of Health Informatics with particular reference to multi-disciplinary research programme development at one institution.

**Keywords**

Health Informatics

**Introduction**

National Health IT Plan for New Zealand (2010) indicates Health Sector Priorities: Ministerial Six Health Targets, National Services and Regional Services, Better, Sooner, More Convenient Initiative, Shared Services Opportunities. The Ministerial Six Health Targets are: Shorter stays in Emergency Departments, Improved access to elective surgery, Shorter waits for cancer treatment, Better help for smokers to quit and Increased immunisation.

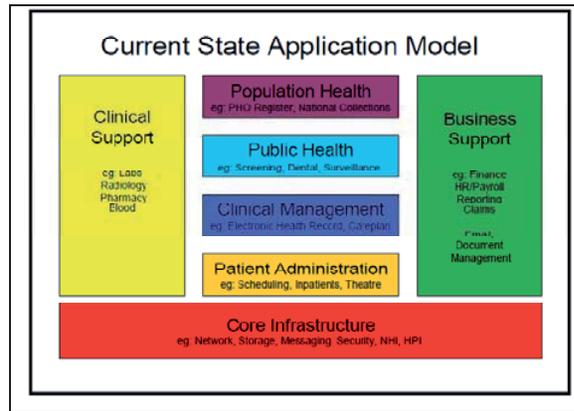
"The Plan" describes the five year transition of IT for an integrated model of Shared Care, Primary-Community and Secondary-Tertiary role players meeting the criteria. Work streams for moving forward are Quality Information for Primary Health Care, Safe Medications Management, Clinical Support, Continuum of Care and Patient Administration, with Population Health, Business Support and Safe Sharing Foundations in support.

**Information Systems views**

There are seven broad areas of similar functionality for the 90 applications/systems in use – see figure 1.

Integrated healthcare is achieved by having a clinical data repository central to Primary-Community, Secondary-tertiary and Shared Care activities. The information model for systems has five levels: Infrastructure, Business Support

Applications, Clinical Applications, Information and Clinical & Business Model.



**Figure 1: Types of application systems in Health sector**

High level design of a Shared Care Record includes a Clinical Data Repository at Regional level but with a National view. This will be used for Summary Health Records and Care Plan Decision Support. Provision is also made for Personal Health Records, Secondary care, Long Term Conditions and Other e-Event areas.

There are only a few design objectives to consider during migrate of IT from the current state to required future:

- Population health and shared care functions will be delivered as national systems
- Clinical support, clinical management and patient administration functions will be delivered regionally
- Business support functions will be delivered as one or two instances nationally
- Infrastructure will be delivered as a mix of national, regional and local components all working according to the same technical and operational standards

Knowledge management will be delivered via consistent approach to websites for the sector encompassing clinical innovation, clinical pathways and health information sources. It is not clear whether this framework also provides for ACC and private health practitioners.

### Summary and conclusion

IT of the national Health sector is in transitional development for five years. Ministry of Health (MoH) and District Health Boards (DHBs) are using specific terminology and frameworks, namely Fit with Priorities & Targets, Work Streams, Design Objectives, Shared Care Record, Information Model and details of specific system(s). Engagement with MoH and DHBs re IT systems, would gain from using same frameworks and clearly identifying fit of new development with the existing frameworks.

### Conclusion

For collaborative research by IT and Health researchers, we identified two research programmes and from above plan identified the most important implications:

- (a) Health Informatics (Various aspects of data sharing): Accommodate developments regarding Shared Care Records and Quality Information work stream.
- (b) Health Solutions (Stand-alone and distributed use): Mostly fits outside framework but must clarify for each solution if/where links to others systems are required (eg. If solution relates to ACC).

While technological developments have been central to developing IT solutions, we believe in a focus on *informatics*. Therefore, projects utilizing IT for rapid and appropriate access to knowledge for evidence-based decision-making. This requires various disciplines to work together as a team.

### References

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