QAIHC

Queensland Aboriginal and Islander Health Council

Final Report

QAIHC's Health Information Function and Recommendations for QAIHC's Health Information Strategic Plan 2014/2015

Contents

Submitted by Robert Starling PhD
October-November 2014

The initial draft of this Report was submitted as a Confidential Document to the Board of Directors of QAIHC for their meeting held on 8th October 2014 through the CEO, Matthew Cooke. This document is the Final Report.

Executive Summary

There is an urgent requirement to re-align QAIHC's health information investments in personnel, products and services towards practical support to Members AICCHSs and RAICCHOs for their sustainability and growth as service providers in increasingly contestable and competitive 'markets'.

QAIHC's health information investments are not integrated into a system of targeted support and assistance to Member AICCHSs and RAICCHOs to practically apply evidence-based analysis to the contemporary opportunities and risks presented by competitive funding through the Indigenous Advancement Strategy, Primary Health Networks and CheckUP's 2015/2016 Service Plan for medical specialists and allied health professionals.

Data is being collected and a series of ad hoc reports is being generated without a coherent statement of strategy and outputs to provide a context for these reports. This Report undertook to develop an integrated, comprehensive Table documenting health information Core Functions, Strategies, Products and Services, and Outputs.

This Table now provides QAIHC's Board, Senior Management Team, RAICCHOs and AICCHSs with an integrated, transparent and comprehensive document for them to review, amend and endorse as the foundation for a member-driven Health Information Strategic Plan.

Action Plans for 2013-2014 and 2014-2015 were not sighted. This is a significant deficiency because the very first of the eight key performance indicators which QAIHC must account through its own Action Plan and template reports to the Commonwealth Department of Health are included under Support to member organisations to make better use of data to improve service planning and delivery. The QAIHC Action Plan for 2014/2015 was finalised with inputs from this Report.

The thrust of this Report is that the traditional inward-looking focus on a separate Data Management Unit should be replaced by a focus on a Health Information Function that contributes to the member-driven strategic directions approved by the QAIHC Board of Directors and which is aligned to QAIHC's annual Action Plan.

A member customer service culture should permeate the way that staff who are engaged in data analysis and information reporting perform their tasks, with much more attention devoted to building the capacity of AICCHSs and RAICCHOs. Capacity building is necessary to position RAICCHOs and AICCHSs to define and use standardised reports for the growth of their own services and business, and to generate customised CQI metrics and reports relevant to their own situations.

Position Descriptions for Data Management Unit employees and contractors sourced from QAIHC's personnel files were up to four years old, showed overlap in duties and did not align well with the current Products and Services nor with the recommendations for QAIHC's Health Information Strategic Plan. A thorough and substantial restructuring is required, which the QAIHC CEO should lead.

QAIHC has adopted the Practice Health Atlas (PHA) methodology developed and licensed from Health First of Adelaide, and investments were made in training personnel to develop PHAs in-house based on data from AICCHSs and the Australian Bureau of Statistics. Unfortunately, some of these personnel were employed in full-time positions in other work units so this expenditure was wasted. None of the line workers who received training have actually completed producing a Practice Health Atlas in 2014.

QAIHC Secretariat staff and contractors engaged in data analysis and information reporting under the Health Information Function should not be scattered throughout Queensland. This dispersal works against integrating data analysis and information reporting into QAIHC's management structures and systems.

QAIHC should consider and incorporate these changes into a Health Information Strategic Plan, which should be reviewed and updated annually, with deliverables incorporated into the annual QAIHC Action Plan.

Foreword

Aboriginal and Islander Community Controlled Health Services (AICCHSs) and their regional organisations (RAICCHOs) in Queensland will this financial year begin to feel the effects emanating from the major reforms to primary health care initiated by the Australian Government.

The effects will be direct and indirect.

The direct effects will include:

- Establishment of seven regional Primary Health Networks (PHNs) to replace Medicare Locals, assisted by Clinical Councils and Community Advisory Committees, entrusted with responsibility for implementing a system of purchasing primary health care delivery from providers through open, public and contestable tenders.
- A policy shift to funding for health outcomes.
- A requirement to provide evidence to justify capability, need, and performance.
- An insistence on value for money.
- Competition with a wider range of alternative providers for non-core funding to expand Services into new locations and to expand the scope of existing primary health care services in current locations.

The indirect effects will include:

- Efficiency improvements to service delivery models of care to maximise benefits to patients throughout their 'journey' through the primary health care system.
- Better integration with private providers and hospitals.
- Increased efforts to show how clinical coordinated care and health education/population health interventions actually reduce the number of avoidable hospital admissions and incidences of re-admission.

The evidence-base requirement to enable AICCHSs and RAICCHOs to be sustained and to grow in this new environment is critically important. As the state-wide peak body for AICCHSs and RAICCHOs, QAIHC – meaning the Board of Directors, myself as Chief Executive Officer, and the managers and staff in the Secretariat – have a responsibility to align the focus and capability of our "health information function" to assist our Member organisations through a coherent Health Information Strategic Plan.

This Report and its recommendations for a QAIHC Health Information Strategic Plan provide the foundations for us to meet that responsibility.

Matthew Cooke
Chief Executive Officer

November 2014

about the author

Over the last 15 years, Dr Robert Starling has among other things:

- Designed and developed the Secure Aboriginal Medical Information System (SAMSIS) with eight Affiliates – AHMRC of NSW, QAIHC, VACCHO, AHCSA, AMSANT, TAC, Winnunga and AHCWA - and engaged with 92 AICCHS across Australia.
- Conducted or contributed to ICT reviews/ strategies for QAIHC and the following Member Organisations - Apunipima, Wuchopperen, Gurriny Yealamucka, Mamu, Bidgerdii, Carbal, Kambu; and also with two other state-wide peak organizations in Queensland – QATSICPP and QISMC.
- Designed and installed a satellite internet system for eHealth and video-health for four very remote communities – now extended to 14 further remote community clinics in WA and SA with KAMSC, KWHA and AHCSA.
- Convened the Remote Outback Satellite Infrastructure Enablement (ROSIE) Project for eHealth.
- Was the Chief Information Officer for the Kimberley Pilbara Medicare Local (50/50 Partnership between AICCHS and mainstream private practices) 2012-2014.
- Consulted to the United Nations Environmental Program (UNEP) Nairobi Headquarters, Geneva, Cambridge, Abu Dhabi and Oslo.

Dr Starling is a team member of the Open Geospatial Consortium, International Standards Body and was a Technical Committee Member Standards Australia (Modeling and Simulation).

Specifications

The engagement document detailed the following scope of services:

The Report should:

1) Describe clearly the current QAIHC Health Information products and services, and their underpinning information technology software and hardware;

2) Analyse and recommend Health Information products, services and value-for-money information technology hardware and software for QAIHC into 2015/2016;

3) Recommend a staffing profile (job titles, duties, indicative remuneration, required qualifications and/or experience) that QAIHC would need for implementation of these recommendations.

The Review commenced with an on-site review and analysis at QAIHC - 55 Russell Street, South Brisbane - on Thursday and Friday, 2nd and 3rd October 2014. The first stage concluded with an initial Report provided on 6th October 2014 for presentation by the CEO at the QAIHC Board Meeting scheduled for 8th October 2014. The Board accepted this initial Report and directed that a Health Information Strategic Plan be developed.

The focus for this second stage was a formal Joint Programming Meeting between the Chief Executive Officers, managers and staff of QAIHC and its two close Partners, CheckUP and the IDEAS Project, the purpose of which was to identify agreed priorities for 2014/2015 that could be incorporated into QAIHC's Health Information Strategic Plan.

The third stage was work planning of the operational tasks and outputs for implementing the Health Information Strategic Plan in 2014/2015.

Methodology

For Stage #1:

An initial videoconference was held on 2nd October 2014 between the CEO, Matthew Cooke, consultants Chris O'Connell and Craig Flegeltaub who were in Gladstone with key personnel in the QAIHC's Secretariat in Brisbane, namely: Dion Tatow, Manager of the Business Innovation & Service Development business unit, Dr Aaron Hollins, Tammy de Zilva and consultant Dr Robert Starling. The videoconference was followed, during 2nd October, by Dr Starling holding further discussions with Dr Hollins, Tammy de Zilva, Amy Dellit, and on 3rd October with Trish White, Kristin Sarra, Alexi Shekov, Roderick Wright and Lauren Trask and a telephone discussion with one User - Kym Brodie, Practice Manager at Nhulundu Health Service in Gladstone. A phone call was also made to Alvin Yuen of ISATechnologies, to follow-up the compatibility of MMEx with the Pen Computing Clinical Audit Tool that is used to extract information from Electronic Medical Record Systems at the AICCHSs.

A number of documents was provided by QAIHC Secretariat and officers; other information and reports were gathered from the QAIHC website. The manager responsible for the Data Management Unit, Dr Katie Panaretto, was overseas on holiday and was not available. The initial Report was prepared as both a written format and a complementary PowerPoint presentation presented to and discussed with the QAIHC Board of Directors.

The Board expressed its appreciation that the CEO had brought to its attention these previously unknown and undiscussed matters in relation to Health Information at QAIHC. The Board instructed the CEO to develop a Strategic Plan for Health Information to be considered by the Board.

For Stage #2:

The QAIHC CEO convened a structured Joint Programming Meeting over 27th October and half day 28th October 2014, which defined the focus for immediate actions to deliver information to support AICCHSs and RAICCHOs in up and coming applications for funding, and to assist in their positioning for negotiations with bidders for Primary Health Network contracts.

The agenda encompassed presentations from CheckUP and the IDEAS Project, and included a presentation from Extensia on the Ophthalmic shared electronic health record being piloted in three QAIHC Member AICCHSs and a demonstration of the Telehealth video infrastructure with the participation of Gidgee Healing in Mt Isa. The agreed focus for 2014/2015 was on orienting QAIHC's personnel and other resources to assisting Member AICCHSs and RAICCHOs with analytical reports to enable them to make evidence-based submissions for:

(i) CheckUP funding for medical specialists and allied health professional services in the 2015/2016 Service Plan, data for which was required in November 2014 through to February 2015; and

(ii) Primary Health Networks, which are scheduled to be operating by 1 July 2015 and would therefore need to be calling for funding application from March 2015.

A comprehensive Report of the Joint Programming Meeting was circulated to participants.

For Stage #3:

Dr Starling met with QAIHC managers and staff collectively and individually over 5th and 6th November 2014 to clarify the key activities and outputs for the 2014/2015 Health Information Strategic Plan.

Consideration of risks

Before proceeding to document the outcomes from Stage #1, Stage #2 and Stage #3, two risks ought to be noted.

Risk 1: Changes to competition for Primary and related Health Care Funding.

Primary Health Care is being restructured by the Commonwealth Government through Primary Health Networks (PHNs) but the extent of change is evolving and unclear. For example, it seems that AICCHSs may continue to receive 'core' funding directly through Service Agreements with the Commonwealth Department of Health for between the next one to four years, whilst simultaneously PHNs will be able to fund service delivery outside this 'core'.

It is suggested that the imperative for AICCHSs and RAICCHOs is to acquire and demonstrate quality data as well as analytical and presentation skills.

The importance of these capabilities will increase in the near future as the competition for AICCHSs and RAICCHOs will be from outside organisations including potentially national and multinational corporations such as health insurance companies as well as consortia of Health and Hospital Services or consortia led by franchised private General Practices. The Indigenous Advancement Strategy Round 2014 is a further indication that funding from the Australian Government will be based on open competition/ tender from any provider organisation, including for-profits, with data and data analysis essential to validate the evidence base for funding applications. All tendering organisations will be presenting evidence of their capabilities and performance/ achievement data in order to gain competitive advantage.

Conclusion: The use of Evidence Base(s) to generate compelling reports and funding applications will be increasingly important for QAIHC, RAICCHOs and AICCHSs to communicate and/or prove their competitive advantage.

Risk 2: Vulnerability of Commonwealth Funded organisations and programs to changes in funding at short notice.

Commonwealth Government policies and actions towards funding external and independent health information services are themselves a risk. Long-established funding reporting requirements can be changed without warning, for example, the withdrawal of the OCHREStreams reporting requirement and closing the Improvement Foundation Portal in October 2013 and its re-instatement within three months. A consequence of the temporary withdrawal of funding from the Improvement Foundation and closure of the Portal meant that AICCHSs, RAICCHOs and QAIHC could no longer access or download data that had been lodged with, and was make available through, the Improvement Foundation Portal.

Conclusion: The risk in this case is that reliance on Government funded external data warehouse providers is dependent upon continuation of funding to the external provider. A mitigation to the risk would be to have included in a contract with the data warehouse provider a requirement for a copy of data owned and provided by an organisation that is held in the data warehouse, to be returned to the owner organisation in an agreed format one month in advance of the date on which the organisation's data would no longer be accessible.

Components of the health information function

The interviews, discussions and analyses completed during Stage #1 were sufficient to spell out the six components of QAIHC's Health Information Function:

1. Inform and be guided by the QAIHC Board and Management
2. Establish and maintain Stakeholder Relationships
3. Establish and maintain enabling Technology Infrastructure
4. Develop Health Information Evidence Base
5. Encourage and support RAICCHOs and AICCHSs and their Capacity Building
6. Undertake Development Activities to advance the other 5 functions.

The Initial Report developed a Table which:

a) Listed all six of these Components;

b) Specified Strategies that QAIHC appeared to be following for each component, or identified Strategies that QAIHC should be following;

c) Identified the Products and the Services which QAIHC seemed to be delivering, or ought to be delivering, for each of the Strategies; and

d) Spelled out the Outputs for every indicated Product and Service.

Populating the Table required inferring a number of Strategies, Products and Services, and Outputs because no explicit document had been developed along these lines. Accordingly, this is the first time that QAIHC's Board and Senior Management has had such an integrated and comprehensive document available to them to review, amend and endorse as the foundation for an annual Health Information Strategic Plan.

The Table should be periodically updated to reflect the Board's strategic directions and the annual Action Plan.

CORE HEALTH INFORMATION FUNCTIONS	STRATEGIES	PRODUCTS OR SERVICES	OUTPUTS
QAIHC BOARD AND MANAGEMENT	QAIHC Health Information Strategy	Implementation Plans and Management Reports	Health Information Strategy document Ethics - e.g. Privacy, Ownership, Consents Health Information Governance Arrangements 3- Year Business Plan - capital, workforce, targets Health Information Annual Action Plan Health Information Quarterly Reports to QAIHC Board

CORE HEALTH INFORMATION FUNCTIONS	STRATEGIES	PRODUCTS OR SERVICES	OUTPUTS
STAKEHOLDER RELATIONSHIPS	Acknowledging the Health Information Requirements of AICCHSs and RAICCHOs Acknowledging the Health Information Requirements of other QAIHC Business Units Acknowledging the information needs and accepting advice from the Sector's Clinicians Positioning QAIHC as well as RAICCHOs and AICCHSs as acknowledged value-adding contributors to national and state health information collections and analyses Representation of the Health Information Needs and Requirements of QAIHC, RAICCHOs and AICCHSs	Service Level Agreements Ongoing and ad hoc reports Two-way communications with a properly constituted and viable Lead Clinicians Group Sustainable operational engagements with Commonwealth Department of Health and Queensland Health	Consent agreements for access to and use of data Agreement for content and presentation of information products Terms of Reference (existing); subject matter expert members including RAICCHO nominees; twice-yearly videoconference meetings; reports to the QAIHC SMT Inclusion of funding for workforce and projects for health Information in QAIHC's Service Agreements
	(i) Regional funding bodies - HHS and PHNS (and Medicare Locals until they cease to function)	Support for (a) Regional Plans and Service Priorities including service gaps, underservicing and accessibility and (b) Funding Applications	Demographic and epidemiological data analyses, graphics and maps
	(ii) Special Interest groups potentially including - HISA, RACGP, GPQ, PHMO network	Participation in conferences/forums; and Potential for joint research applications and projects as recommended and agreed by the QAIHC Board	Professional conference presentations and articles in professional Journals
	Partnerships	Various forms of documented engagement with: GPQ-AIPHCE Health First (PHA) eCollaborative (PCEHR/SEHR)	Action Plan to spell out what the partnership is focusing on for each Party; Brief to QAIHC Board as appropriate

CORE HEALTH INFORMATION FUNCTIONS	STRATEGIES	PRODUCTS OR SERVICES	OUTPUTS
STAKEHOLDER RELATIONSHIPS *Continued*	Technology Collaboration	CtG Collaborative (now ACE) IDEAS (telehealth) Improvement Foundation	Clarity about QAIHC's current and future engagement re QAIHC Indicators and Data repository
		PEN computing (PENCAT)	Clarity about QAIHC's current and future engagement re QAIHC Indicators and Data repository
	Project collaborations 2014/2015 include	AIHW NACCHO Univ. South Australia Queensland Health Medicare Locals National Health Services Directory and Health Planning tools PCHRIS, PHIDU	Action Plan to spell out what the collaboration is focusing on for each Party
TECHNOLOGY INFRASTRUCTURE	Architecture for structuring Health information	Chosen strategies for the collection, storage, analysis, access, display and reporting of all data - this includes role and use of the Internet and international standards for quality and security	Baseline Report to QAIHC Board, ensuring alignment with existing QAIHC standards and protocols e.g. for security
	Design and structures for data holdings, data models	Structure for storing and managing the data received from AICCHSs and RAICCHOs	A document that defines QAIHC's "Data Repository"
	Enabling software tools	This includes selecting the most cost-effective and functional tools e.g. PenCat and data base and mapping tools	Reports and Maps; User Interfaces - this includes for example Tables, Graphics and "Dashboards"
	Integration with QAIHC ICT security and management environment	Agreed approach between the Health Information function and QAIHC's ICT Specialists	High-level technical documentation with QAIHC's ICT Unit

CORE HEALTH INFORMATION FUNCTIONS	STRATEGIES	PRODUCTS OR SERVICES	OUTPUTS
TECHNOLOGY INFRASTRUCTURE *Continued*	Software development for customisation	Loading data into the Health Information Data Repository	Documented data loading and validation processes
		Data analysis for generating Standard as well as ad hoc/ customised reports, including flow-charts	Documented processes and procedures
		Data visualisation	Documented Style Guides for presentation of reports
	Internet (web) access for users	QAIHC Gateway/ Portal (projected, not yet operational)	Documented single point of access for data and reports for AICCHSs and RAICCHOs, and QAIHC
EVIDENCE BASE	A Data Repository at QAIHC	QAIHC Indicators	AICCHSs' Benchmark Report - comparative analysis of AICCHS internal data produced twice a year
			Regional-level, AICCHSs but de-identified report published one per year ("External Report")
		Data to enable the creation of AICCHS individual Practice Health Atlases under licence from HealthFirst in Adelaide	AICCHS-specific Practice Health Atlas
		OCHRE streams data (projected for 2014-2015) – includes OSR and nKPIs this is separate from QAIHC Indicators and is lodged by AICCHSs with the Improvement Foundation.	
		Digital base map for either AICCHSs or RAICCHOs on which to overlay selected demographic, infrastructure and health information data	Included in Practice Health Atlases; can be included in Funding Applications and Regional Plans for AICCHSs and RAICCHOs
		Ad hoc maps to support planning and funding applications	Map graphics for reports e.g. client drive times for access to AICCHSs

CORE HEALTH INFORMATION FUNCTIONS	STRATEGIES	PRODUCTS OR SERVICES	OUTPUTS
EVIDENCE BASE *Continued*	Acknowledge External Repositories and determine QAIHC's potential collaboration/ utilisation. The main external repository being used by QAIHC, RAICCHOs and AICCHSs is the Improvement Foundation's Portal	QAIHC Indicators are stored on the Improvement Foundation's Portal	
		nKPIs are stored on the Improvement Foundation's Portal	
		MBS Item number utilisation (aggregated to each Practice) - stored on the Improvement Foundation's Portal	Uptake reports including self-generated MBS income
		OSR data - stored on the Improvement Foundation's Portal	Reference data for mandatory reporting
		ABS Census data available on a number of portals.	Health-related sub-sets of the Census data
SUPPORT AND CAPACITY BUILDING - RAICHHOS AICCHSS	Support with mandatory and compliance reports	Site visits to AICCHSs and a Help Desk function in QAIHC	Reports lodged on time and to the required specifications
		AICCHSs data management	AICCHS Manual for improved data management practices
		New user induction in data quality for AICCHSs	Chapters for AICCHS Manual
		Information on available clinical technologies	Advice on electronic patient record systems
		User help to AICCHSs for Improvement Foundation Portal use	Help Desk responses
		Data quality	Documented methods for auditing data quality in AICCHSs using PenCat
	Training/ Capacity building	Use of data extraction tools	Training Manual

CORE HEALTH INFORMATION FUNCTIONS	STRATEGIES	PRODUCTS OR SERVICES	OUTPUTS
SUPPORT AND CAPACITY BUILDING - RAICHHOS AICCHSS *Continued*		Data management	Training Manual
		Reporting tools	Training Manual
		qiConnect Portal use	Training Manual
		Understanding data holdings	Workshop
		Data analysis and creating reports	Workshop
		Interpretation of data analysis	Workshop
		Identification of information gaps/ requirements	Recommending data sources to fill gaps
		Use of clinical information systems	Query: This should be provided by the vendors of the systems
	Customised Services	Requested reports from AICCHSs; RAICCHOs; QAIHC business units; QAIHC Board; QHealth; Commonwealth Department of Health	Advice in preparation of customised reports
		Sourcing appropriate data	Providing actual data or advice as to appropriate data links
	CQI Initiatives for access, performance and impact targets	Support for defining the targets that AICCHSs and RAICCHOs want to use in relation to their service delivery and business plans	Defined performance measures

CORE HEALTH INFORMATION FUNCTIONS	STRATEGIES	PRODUCTS OR SERVICES	OUTPUTS
SUPPORT AND CAPACITY BUILDING - RAICHHOS AICCHSS *Continued*		Clinical Quality Improvement programs involving member AICCHSs including the following items from the 2012-2013 Action Plan: a. Aboriginal and Islander Community Controlled Clinical Excellence (ACE) – evolution of CtG Collaborative b. Torpedo project c. OCHREStreams project d. Shared Health Record (e-Collaborative) e. Accreditation	Updated 2014-2015 Action Plan RACGP/AGPAL and/or ISO or CQI
DEVELOPMENT ACTIVITIES	Enhancement of Indicators aligned to needs of AICCHSs and RAICCHOs		Potentially new QAIHC Indicators Potentially refined QAIHC indicators
	Document changes in AICCHSs' services over time	Trend and pattern analysis	Trend/time series analysis for QAIHC strategic development directions from AICCHSs and RAICCHOs
	Resource gaps analyses	Contributing to the needs assessments of PHNs and HHSs	Justification for demands from AICCHSs, RAICCHOs, QAIHC
	Strengthening the competitive capability of AICCHSs and RAICCHOs	Assessing emerging technologies and their applications within AICCHSs and RAICCHOs	Advice on availability, suitability and cost - e.g. use of GIS

Analysis of Products, Services and Technology

The Initial Report produced during Stage #1 and further analysis in Stages #2 and #3 found that:

1. Outputs for the Board and QAIHC Senior Management Team could not be located - this includes current documents such as a QAIHC Health Information Strategy linked to the Strategic Plan and the QAIHC annual Action Plan, or Health Information Quarterly Reports to the QAIHC Board.

2. An Action Plan for 2012-2013 was provided. Action Plans for 2013-2014 and 2014-2015 were not sighted. This is a significant deficiency because the very first of the eight key performance indicators which QAIHC must account through its own Action Plan and template reports to the Commonwealth Department of Health is: Support to member organisations to make better use of data to improve service planning and delivery. The QAIHC Action Plan for 2014/2015 was finalised based on the inputs from this Report.

3. Currently, AICCHSs or their Clinics that use MMEx as their Electronic Medical Records system are not included in the AICCHSs that provide data to the QAIHC Data Repository. However, the Review was advised that AICCHSs using MMEx will have access to PenCat as of November 2014. Subsequent follow-up with MMEx in Stage #2 and Stage #3 confirmed this was happening. This would hopefully remove any technological reason for non-inclusion. There is evidence that relationships between the Data Management Unit and some significant Sector stakeholders are poor and this is a matter for the QAIHC CEO to address.

4. Only 11 AICCHSs have Practice Health Atlases produced in 2014.

5. The QAIHC Data Repository does not have an on-line (internet accessible) data lodgement process for AICCHSs.

6. QAIHC generates the following checklist of reports:

- Practice Health Atlases – the PenCat Tool is used to extract baseline data from the PIRS of each AICCHS, that is then loaded into the PHA analytical templates licensed from Health First in Adelaide. Pen Computing, now owned by Macquarie Health, is the owner of the PenCat Tool.

- QAIHC Indicators – the PenCat Tool is required to extract this data.

- OCHREStreams: Component (1) = OSR Reports – data is provided by applying the PenCat Tool to each AICCHSs' PIRS (electronic patient information and recall system, such as Best Practice, Communicare) and electronically lodging the data as either spreadsheets or in xml to the Improvement Foundation.

- OCHREStreams: Component (2) = National Key Performance Indicators (nKPIs) - data is provided by applying the PenCat Tool to each AICCHSs' PIRS and electronically lodging the data as either spreadsheets or in xml to the Improvement Foundation. The Improvement Foundation provides the nKPI analysis for each AICCHS. Each AICCHS is able to access its own analysis via qiConnect in the Improvement Foundation's Portal

- Local Service Profile Reports – this is a 2-page product which only accesses QAIHC Indicators and client population information accessed by the PenCat Tool.

- Regional Profile Reports – region-wide aggregations of demographic, hospitalisation and socio-economic data as at present. Five Regional Reports have been created to date. Unfortunately the Data Management Unit has not enhanced these Reports by including regional de-identified aggregations of PHA data, though this could and should have been negotiated with Health First. This will be a priority under QIHC's Health Information Strategic Plan.

- Benchmark Reports – Snapshots of Performance at February and September each year, using the QAIHC Indicators. As a result of this Review, QAIHC's Information Strategic Plan will make sure that snapshots are taken from now on three times a year – February, June and September. QAIHC has not in the past included nKPI analyses

in its Benchmark Reports – only QAIHC's own Indicators.

- External Report – created annually from de-identified data summarising the primary health care contributions made by all those AICCHSs and RAICCHOs that contribute data to the QAIHC Data Repository. External Reports are published on the QAIHC website. Three External Reports have been created with the latest being published in April 2014. These External Reports could be seen to complement three national performance reports:

a) National Aboriginal and Torres Strait Islander Health Performance Framework Reports;

b) Reports created by the National Health Performance Review Authority where there is national coverage broken down into the 61 Medicare Local areas; and

c) Reports from the Australian Institute of Health and Welfare and the Australian Bureau of Statistics.

6. There was no 'connect' between QAIHC's strategic focus on the potentially existential threats to AICCHSs and RAICCHOs arising from the increasing contestability for funding and the roll-out of Primary Health Networks on the one hand, and the knowledge, behaviours and work plans of the Data management Unit on the other hand. The concerns and preoccupations of the CEO and the Board were not being reflected in the task deployment of the Data Management Unit.

7. Nor was there obvious evidence that the Data Management Unit saw itself as a 'service' to Member AICCHSs and RAICCHOs. Lengthy delays in AICCHSs providing essential data were treated bureaucratically – this was a problem of "the Services" – not responsively – coming up with customised, customer relations solutions to acquire the data on time and in full.

8. When the Review commenced, the three operating staff in the Data Management Unit staff were all part-time:

- a part-time Registrar funded by the Royal Australian College of Physicians, whose contract expires on 24th December 2014, based in Mareeba in the Atherton Tablelands.

- a part-time contractor SAS programmer/data analyst. A key task was to enhance the QAIHC Data Repository by creating a new data base in the SAS statistical analysis software, to be used by NACCHO - with QAIHC and other Affiliates having authorised access to OSR and nKPI data. For some reason unknown, QAIHC has met the development costs at its own expense at the time this Report was written. In order for the OSR and nKPI data to be made available to be loaded into the SAS data base, the Improvement Foundation, custodian of the AICCHSs' OSR and nKPI data, was tasked with developing an Extract Tool, which has not been completed. The Extract Tool was intended to create a down-loadable copy of the cleansed OSR and nKPI data to be available via qi Connect in the Improvement Foundation's Portal. Once loaded into the SAS data base, the plan seems to be that a number of reports specific to the needs of AICCHSs and RAICHHOs would be created. But the structure and focus of these Reports had not been designed. QAIHC has since terminated this project.

- a Health Information Project Officer position based in Brisbane.

9. Currently emphasis, with the resources available, is being placed on services related to:

- assisting AICCHSs requesting support for data extraction for reporting purposes and interpreting the results of reports relating to the QAIHC Indicators;

- the quality and consistency for data being loaded into the QAIHC Data Repository; and

- generating custom reports.

10. The information supplied on the composition of the advisory Lead Clinicians Group did not inspire confidence about the connectivity of the Data Management Unit to Member RAICCHOs and AICCHSs. Amongst the names of "lead clinicians" were several with no clinical qualifications or job roles, including office administration staff.

11. There was no evidence of strategic engagement with the three critical suppliers – Pen Computing, Health First or the Improvement Foundation. On the contrary, there appeared to be no 'account executive' system in place and no 'hot line' to CEOs.

Recommendations for QAIHC's Health Information Strategic Plan

QAIHC's Health Information Strategic Plan for 2014/2015 needs to make a start to achieve two initial outcomes:

(i) Consolidating and simplifying the plethora of scattered Reports; and

(ii) Providing much more targeted and direct assistance to AICCHOs and AICCHSs in how best to use the Reports as an evidence base for sustaining their businesses and expanding their service delivery.

The aim should be to do this whilst helping Member RAICCHOs and AICCHSs with their competitive applications for CheckUP and Primary Health Network funding rounds and in their positioning in relation to those bidding to become and/or are successful in becoming Primary Health Networks.

The considerations that should provide a consistent framework for QAIHC's Health Information Strategic Plan are set out below:

1. The business sustainability and service growth objectives of Member AICCHSs and RAICCHOs should be the principal driver of the Health Information Strategic Plan, suitably informed by QAIHC's environmental scan of current and emerging government policies and technology developments.

2. The rapidly changing dynamics of funding for Primary Health Care will result in a funding being allocated on an increasingly competitive basis between private, public, NGO and community-based providers.

3. Timely, accurate and complete data will be an increasingly important form of competitive advantage providing proof of service delivery and capabilities for QAIHC, RAICCHOS and AICCHS.

4. QAIHC will need to plan not just for the stabilisation and maintenance of the Health Information Function but for its expansion to fund such critical infrastructure of data and information services for QAIHC, RAICCHOSs and AICCHSs.

5. The Health Information Function needs to re-focus on the current requirements for:

(i) information outputs for AICCHSs, RAICCHOs and QAIHC business operations;

(ii) their capacity building;

(iii) their applications and reporting for funding; and

(iv) communications with funding bodies, their own Boards of Directors and with their communities.

Strategically, an expanded Practice Health Atlas (E-PHA) should form the backbone of every AICCHSs evidence base. This Report recommends that the E-PHA should combine:

(1) The current contents of a Practice Health Atlas.

(2) An Appendix with the QAIHC Indicators

(3) A "Dashboard Report" similar to those pioneered by the Institute for Urban Indigenous Health

(4) Colour-coded Maps showing the geographic distribution of clients and comparisons with Aboriginal and Torres Strait Islander resident population distribution. An additional map input would be to show the journey-time distances of clients to reach the Clinic (s) of the AICCHS as an indication of service accessibility for patients.

1. QAIHC Indicators

QAIHC Indicators - along with the National and Northern Territory KPIs - are statistics that summarise data about the health measures of a population that can be measured in a consistent way over time. Measurements over time are used to identify trends. Analyses can be undertaken to assess the impact of various interventions e.g. treatment programs.

The benefit proposition from QAIHC to AICCHSs and to RAICCHOs relating to the production of Indicator Reports three times a year, accompanied by business and service planning analyses at local and regional levels, should be presented in the following terms:

QAIHC Indicators assist RAICCHOs and AICCHSs:

(i) To make use of the data and the analyses as an evidence-based input to rationalise or add new service delivery locations.

(ii) To make use of the data and the analyses as an evidence-based input to respond to the demand for specific health and related services at specific locations.

(iii) To make use of the data and the analyses as an evidence-based input to identify their own performance and set targets for Continuous Quality Improvement (CQI) programs.

(iv) To make use of the data and the analyses aggregated from a number of AICCHSs to compare performance and to share learnings and best practices ('benchmarking').

(v) To make use of the data and the analyses aggregated from individual AICCHS for regional comparisons and analysis for planning purposes and clinical governance CQI purposes.

The following schematic summarises the sequence of processes in place in relation to the QAIHC Indicators.

Recommendations:

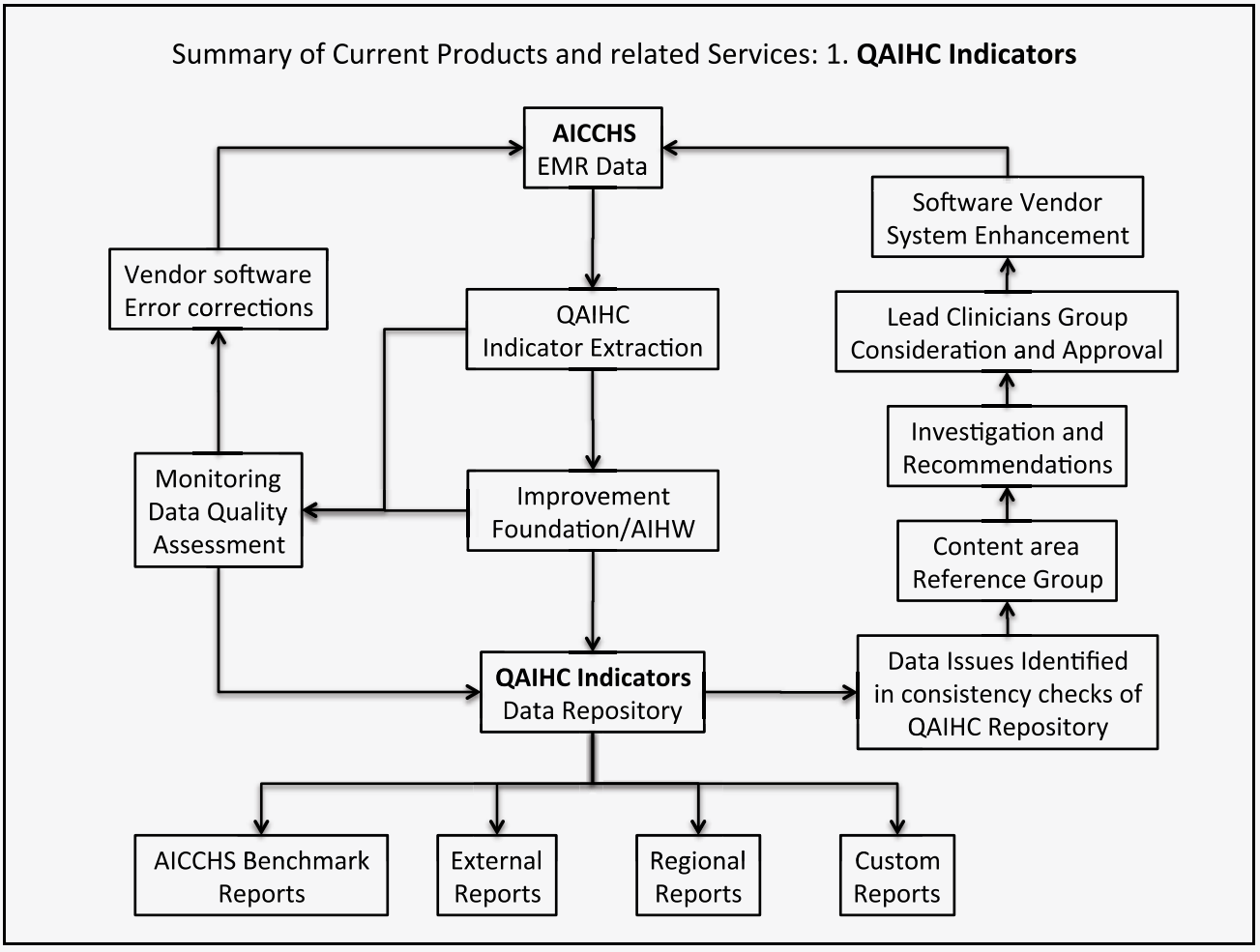
1) To firm-up the 2014-2015 and 2015-2016 Health Information Strategic Plan, representatives from the principal Users – QAIHC Business Units, RAICCHOs and AICCHSs – should be convened in a Facilitated Round Table or Workshop to define how they wish to use the QAIHC Indicators and nKPIs, at their respective levels of geographic coverage, for their own business sustainability and client servicing needs.

2) These user definitions from RAICCHOs and AICCHSs will be used:

(a) To clarify the practical assistance and support that AIHC's health Information personnel can provide to RAICCHOs and AICCHSs in applying the evidence base; and

(b) Set priorities over the next 2 years for refinements of existing or development of new Key Performance and Clinical Indicators.

(QAIHC may wish to consider the inclusion/use of KPIs developed in other jurisdictions to reduce the extent of fragmentation of KPIs across jurisdictions. QAIHC would be able to determine the extent to which it wanted to collaborate with NACCHO or with other Affiliates).



2. Practice Health Atlas (PHA)

QAIHC has adopted the PHA methodology developed and licensed by HealthFirst of Adelaide, and invested in training for personnel to develop the Atlases in-house based on data from AICCHSs and the Australian Bureau of Statistics. Unfortunately, some of these personnel were employed in full-time positions in other work units so this expenditure was wasted. None of the line workers who received training have actually completed a Practice Health Atlas in 2014.

A Practice Health Atlas has two sections:

a) Epidemiology and Mapping and

b) Business and Clinical Modelling.

PHAs are a valued means of presenting summary information about the health landscape of an AICCHS's client-base and alignment with patient engagement and delivery of services.

The benefit proposition from QAIHC to AICCHSs and to RAICCHOs relating to the production of Practice Health Atlases, accompanied by business and service planning analyses at local and regional levels, should be presented in the following terms:

Practice Health Atlases assist RAICCHOs and AICCHSs:

(i) To communicate the service delivery work being undertaken by an AICCHS to its Board of Directors, community and funding bodies.

(ii) To provide evidence for assessing service delivery.

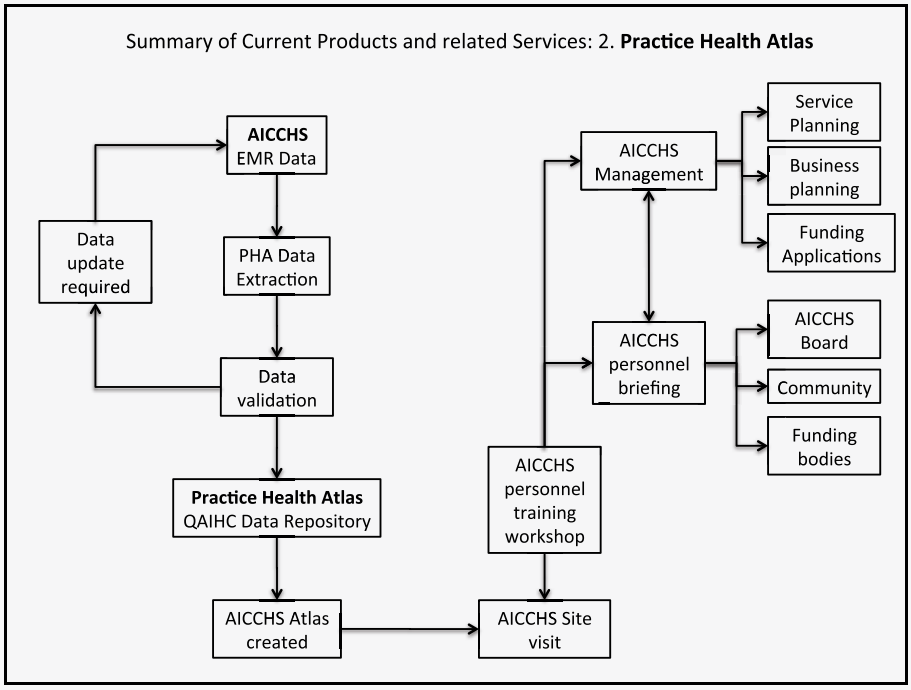
(iii) To provide evidence for planning new services and new service locations.

(iv) To engage constructively with partners and external stakeholders – such as Primary Health Networks, private service providers, Health & Hospital Services – in Needs Assessments where their service 'footprints' coincide or overlap with the AICCHSs's geographic areas of coverage.

(v) To identify changes to business and clinical models that would increase self-generated income, based on analysis of patient health profiles and uptake of Medicare Item numbers.

PHAs have been developed for 11 AICCHS in 2014. PHA Executive Summaries are meant to be produced annually with updated patient numbers, chronic disease status and MBS Item numbers billed. A systematic update cycle with the opportunity to add further content has yet to be set in place. There does not appear to be a program schedule for updating each AICCHS's PHA.

The following schematic summarises the sequence of processes in place in relation to the generation and use of the Practice Health Atlases.



Recommendations:

1. Key personnel in the Clinics and business management areas of each AICCHS should be inducted in understanding the component tables, maps and interpretations of their Practice Health Atlas, as quickly as possible. This should be a top priority for capacity building of AICCHSs and RAICCHOs.

2. A mechanism should be created with the cooperation of Health First for selected sections of the Practice Health Atlas to be created by the CEO, Business and Practice Managers and Senior Clinician in each AICCHS, on demand

3. The Improvement Foundation Portal

Data lodgements from AICCHS to the Improvement Foundation are of three types:

(i) mandatory reporting for Commonwealth Department of Health for OCHREStreams, including for OSR and National KPIs.

(ii) statistical information for CQI through the AICCHSs Clinical Excellence (ACE) Program -formerly the Close the Gap Collaborative Program including QAIHC Indicators.

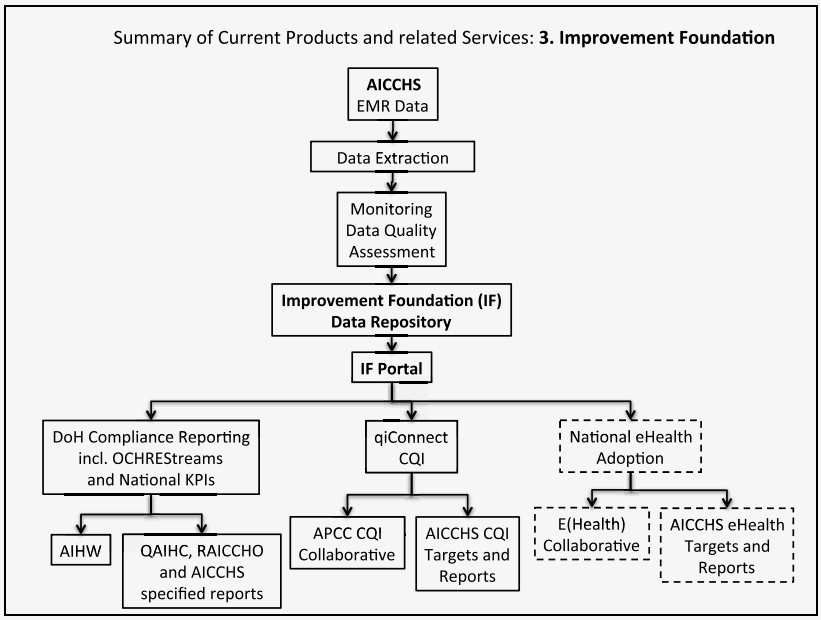
(iii) AICCHS can upload data sets that they have defined for inclusion in reporting, however, this facility does not appear to have been taken up at this point in time.

Each AICCHS has access to the Improvement Foundation Portal over the Internet. The Portal provides the mechanism by which data lodgements are made and reports created.

The Portal appears to include a wide range of functions and reporting options. QAIHC's Data Management Unit has been assisting AICCHSs in data lodgement and assists in the generation of standard and custom reports.

The flexibility of the functionality of the Portal which includes qiConnect for CQI activities, means that training and documentation are required in order to make full use of the Portal's potential services. Documentation and training materials for the Improvement Foundation Portal used by QAIHC with the AICCHSs were not sighted.

The following schematic summarises the sequence of processes in place in relation to interactions with the Improvement Foundation Data Repository.



Recommendations:

1) The collaboration between the Improvement Foundation and QAIHC should be expanded to determine, document and train appropriate RAICCHO and AICCHS personnel in:

   i. use of the Portal facilities available now;

   ii. defining and loading AICCHS-specific data into the Portal to assist in meeting some local requirements; and

   iii. seeking agreement between RAICCHOs and AICCHS as to specific data items that would have value to a number of AICCHSs so that procedures could be developed once and used repeatedly.

2) When the strategic directions and information products of QAIHC, RAICCHO and AICCHS are better defined, determine whether generating these products would be more cost-effectively and sustainably developed and maintained:

   (i) as adjuncts to the Information Foundation's Portal;

   (ii) or as part of the QAIHC Repository;

   (iii) Or developed in one of the two systems and then shared with the other.

Preferably this should be finalised no later than March 2015 in time for inclusion in the QAIHC 2015/2016 Health Information Strategic Plan and QAIHC Action Plan.

4.QAIHC Health Information Repository

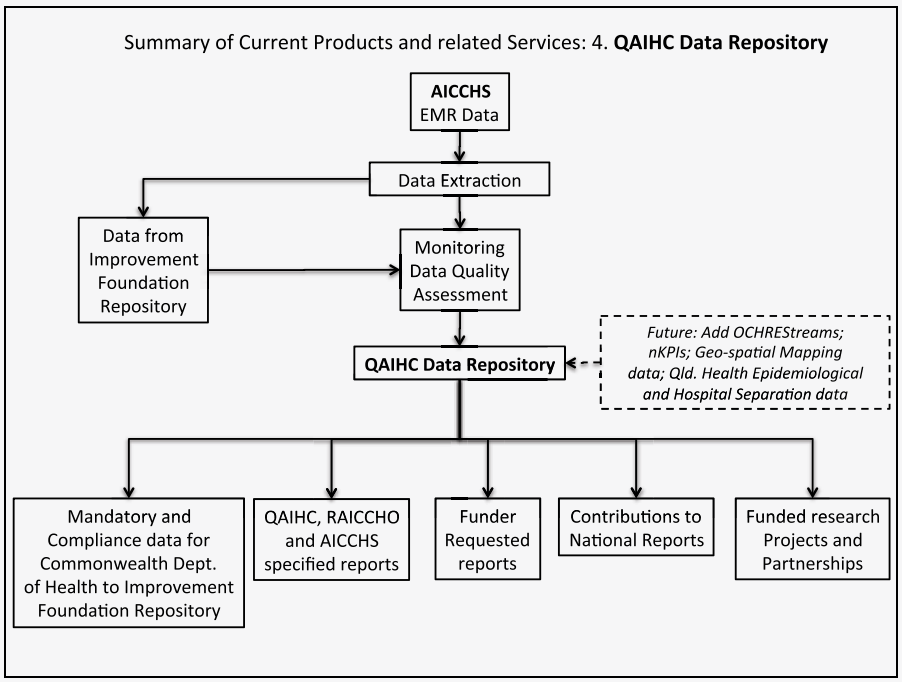
The QAIHC Health Information Repository is an electronic 'warehouse' which receives and stores data from AICCHSs or from the Improvement Foundation that is manipulated by the Health Information workforce into analyses of QAIHC Indicators and Practice Health Atlases.

The data can also be used to produce report for QAIHC business units or for local AICCHSs' reports or RAICCHOs' reports if the Health Information personnel agree and have the time and resources to do so.

The electronic data in the Repository can be extracted and loaded into another database using different software to produce geo-spatial maps. Currently, the Health Information Function uses MapInfo for this purpose.

The Data Management Unit appeared to be interested in duplicating the OCHREStreams and nKPI data sets; and appeared to be interested in obtaining epidemiological data from Queensland Health and on hospital separations.

The following schematic summarises the sequence of processes in place in relation to the QAIHC Data Repository.



Recommendations

1. Set up a technical group to establish a "Configuration Management" process – that is, how the Health Information system is put together - whose job is to review proposed changes to any of the technology components – i.e. software, hardware, communications - and provide formal QAIHC approval to proceed with making the changes.

2. If not already available, a specification of the data base structure for the Repository – i.e the data storage and management tools – should be documented in conjunction with QAIHC's ICT Unit.

3. User requirements and a design should be undertaken for Internet access to the QAIHC Data Repository for Users in AICCHSs and in RAICCHOs to lodge and analyse data and create their own reports and maps.

4. If not already in progress, in consultation with the Users:

4.1. Prepare standard processes for data extraction, transformation, validation and loading from AICCHS electronic medical records systems to the QAIHC Data Repository and from the Data Repository to the AICCHS electronic medical records systems;

4.2. Provide a series (a "menu") of information products - e.g. tables, graphics and maps - for inclusion in presentations and/or reports that can be selected by the Users in AICCHSs and in RAICCHOs;

4.3. Provide access to a series of tools including statistical analysis, mapping and for display for "advanced" Users in AICCHSs and in RAICCHOs;

4.4. Create online User documentation and training materials for the (a), (b) and (c) above;

4.5. Establish workshop(s) to review new functionality as it becomes available, to check for usability and the match to requirements in AICCHSs and in RAICCHOs.

5. Provide a formal process for assessment of suggestions received from AICCHSs and RAICCHOSs in relation to data types and functionality; this would have a broader remit than the current Lead Clinicians Group.

6. Develop a costed plan to fund investment in the software tools and applications required to enable the Data Repository to be managed and grown in a systematic fashion and be an accessible resource for QAIHC, RAICCHOS and AICCHS rather than having to be patched together with ad hoc developments to meet short term needs.

5. Workforce Profile

Position Descriptions for Data Management Unit employees and contractors sourced from QAIHC's personnel files were up to four years old, showed overlap in duties and did not align well with the current Products and Services nor with the recommendations for QIHC's Health Information Strategic Plan. A thorough and substantial restructuring is required, which the QAIHC CEO should lead.

The current workforce, its compositions and its deployment to tasks is inadequate to meet the current suite of Products and Services that are or have been promoted to the AICCHSs and RAICCHOs.

Realistically, other Health Information Function positions must be funded from the core grant from the Commonwealth Department of Health and from the grant from Queensland Health.

The staffing profile recommended below is based on these calculations.

Recommendations:

1. Designate a General Manager who will provide authoritative and continuous leadership at the Senior Management Team level for the QAIHC Health Information Strategic Plan and its implementation work plan.
2. Align position descriptions with their duties to the Products and Services for QAIHC's Health Information Strategic Plan. This restructuring should proceed immediately.
3. Designate one FTE Coordinator who will be supervised by the General Manager with responsibilities for driving the execution of deliverables in the work plan as well as personally undertaking implementation of components of the work plan. In effect, the Coordinator becomes a full-time team leader of the work unit, all of whose personnel need to be based in the QAIHC Secretariat.
4. Recruit to fill three FTE Data Report Officers, by combining funding from the Commonwealth Department of Health and from Queensland Health. The scope of the duties for these three positions should be generic, comprising a full suite of products and services under the Health Information Strategic Plan, thereby allowing QAIHC to appoint individuals to be accountable for executing specific sets of deliverables appropriate to the skills sets of each individual employee/contractor.

6. Research Activities

QAIHC's Constitution does not include in its "Objects" any reference to research and neither the Australian nor Queensland Governments provide funding to QAIHC for research.

This ought not preclude QAIHC from joining in consortia with universities or with other organisations as a participant in research activities, especially if the research is of a practical, applied nature that uses the evidence base from the Aboriginal and Islander Community Controlled Health Sector:

- to improve the design and implementation of publicly-funded primary health care programs;
- to improve public health policy at Commonwealth and State levels;
- to improve integration with private providers; or
- to guide and inform new entrants into our Sector, such as the foreshadowed entry of giant, private insurance corporations.

It logically follows that QAIHC, with prior approval of the Board, would be looking to external funding for research projects to provide the additional personnel to undertake data analyses for such projects, rather than divert the Data Reports Officers away from their duties.

The owners of the Sector's data are the individual AICCHSs, so any research projects would require the consent of the AICCHSs if it is proposed to try to access and utilise their data.