Lessons from the models of care experience in New South Wales, Australia

Raj Verma, Director Clinical Program Design and Implementation

NSW Agency for Clinical Innovation
Health Services Funding and Responsibility (AIHW 2013)
NSW Health Services a population of 7.5 million

- Over **120,000** staff
- **235** Public Hospitals
- An annual budget of over **$21 billion**
- Over **2.5 million ED presentations** in NSW each year
- Over **1.6 million hospital admissions** in NSW each year
Our health system

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St Vincent’s Health Network is an affiliated health organisation.

*Service Compact — Instrument of engagement detailing service responsibilities and accountabilities.*
Who we are and what we do

Service Redesign and Evaluation

Implementation Support

Specialist Advice on Healthcare Innovation

Knowledge Sharing

Initiatives including Guidelines & Models of Care

Continuous Capability Building
Our Networks

Our 40 Clinical Networks, Taskforces and Institutes engage more than 6000 healthcare professionals, consumers and researchers.

1,993 people are actively involved in our Committees or Working Groups.

Meetings are attended in person, by teleconference, video conference or by webex.
Our ‘products’

Models of care

Definition

A model of care (MoC) broadly defines the way health services are delivered. It outlines best practice care and services for a person or population group or patient cohort as they progress through the stages of a condition, injury or event. It aims to ensure people get the right care, at the right time, by the right team and in the right place.
Our Approach

- Innovation
- Disinvestment
- Evaluation
- Improving the health of the population
- IHI Triple Aim
- Improving the experience of care
- Controlling cost
- Optimal Use
- Adoption

ACI NSW Agency for Clinical Innovation
Expenditure on Healthcare per capita ($US)

Source: World bank
Models of Care

- What we do and what we have learnt?
Process Flow Chart for developing a Model of Care (MoC)

This document is used to illustrate the process for developing a Model of Care. It encompasses the work owned by the project manager and the functions that the Clinical Redesign and Implementation Team assist with.

**Project Initiation**
- Identify an area of need, build a case for change and obtain sponsorship to proceed with the program of work
  - Issue or opportunity arises:
    - Clinician/ACI Network/Consumer identified innovation
    - Unwarranted clinical variation
    - Priority area (Minister/DG/LHD/CEC)
    - Out of date MoC
- Create the initial high level 'case for change' - quantify the extent of the issue and the cost of continuing business as usual
- Develop and agree project aim, objectives and scope
- Generate Sponsorship
  - ACI executive sponsorship/prioritisation for the program of work
  - Seek direction from LHD clinicians, managers and stakeholders - is this a piece of work they will value?

**Diagnostic**
- Define the problem - understand the root cause to treat the real problem and not just the symptoms.
  - Define the problem using a variety of tools:
    - Consultation such as workshops, interviews and brain storming
    - 'As is' analysis - what does it look like now?
    - Data review including demand analysis, epidemiology and service utilisation.
    - Financial analysis of the cost of continuing business as usual
    - Review literature and analyse any innovation already in this field
- Finalise case for change
- Identification and prioritisation of issues
  - Revisit aims and objectives to ensure project is on track

**Solution Design**
- Develop and select solutions. Create and document the MoC
  - Develop a vision for what services should look like
  - Develop a range of solutions that address the problems defined in the diagnostic
  - Test these solutions widely including economic appraisal and/or piloting to select the most appropriate solution
  - Develop evaluation framework
- Develop and document the MoC
- Seek endorsement of the MoC from appropriate stakeholders
- Plan for disinvestment - what older models or technologies will no longer occur as a result of the new model?

**Implementation**
- Support the health system to execute the changes needed to implement the MoC
  - Define the change clearly
  - Develop business case
- Assist LHDs to conduct a self assessment/gap analysis
- Seek endorsement of the business case/resourcing strategy
  - Generate local executive sponsorship and create a governance structure
  - Build the capability of front line clinicians and managers to change the process/system
- Develop a Communication plan and identify risks to implementation
- Develop reinforcement strategies for LHDs

**Sustainability**
- Optimise use of the MoC, monitor the results and evaluate the impact
  - Ongoing monitoring and local accountability
  - Review the impact of the MoC and adjust practices to optimise use
- Ensure disinvestment occurs
- Final evaluation of economic and clinical outcomes
- Knowledge Management "sharing our lessons"

March 2013
IMPLEMENTATION SUPPORTS

The Implementation Guide has been developed to support the translation of a model into an effective and sustainable new way of working. It aims to guide the reader in a step-wise fashion, through the three phases of Implementation and the various steps involved.

- Implementation Guide

The guide is accompanied by a number of resources and tools to assist the implementation process:

- A3 Implementation cheat sheet (PDF 178KB)
- Implementation Project Management Plan template (DOC 91KB)
- Implementation Time Line template (XLS 28KB)
- Implementation Status Reporting template (DOC 57KB)
- Implementation Communication Plan template (DOC 39KB)
- Guide on How to Process Map (PDF 334KB)
- Root Cause Analysis tool – 5 whys (XLS 58KB)
- Implementation Risk and Issues template (XLS 45KB)
- Implementation TOR template (DOC 167KB)
- Implementation Agenda template (DOC 165KB)
- Implementation Minutes template (DOC 167KB)
- Implementation Poster Presentation template (PPT 104KB)
- Memo template (DOC 165KB)

- Understanding the use of Health Economics: An ACI Framework
- Process Flow Chart for developing a Model of Care (MoC)
- Understanding the process to develop a Model of Care: An ACI Framework
Spread – local implementation once Model of Care is developed and tested

### Clinical Innovation Program models

**CHEAT SHEET FOR IMPLEMENTATION**

<table>
<thead>
<tr>
<th>PHASE</th>
<th>PURPOSE</th>
<th>STEPS</th>
<th>TOOLS</th>
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</table>
| **PROJECT IMPLEMENTATION**   | Planning and initiation                                   | 1. Complete the Project Implementation Plan which includes the following activities:  
   a. Develop executive sponsorship and governance systems for the implementation project  
   b. Establish a project team to drive the implementation of the Model  
   c. Define the aim, objectives and scope of the implementation project  
   2. Start to build your case for change and key messages  
   3. Develop a Risks and Issues Log  
   4. Identify all stakeholders and determine the level of involvement required by stakeholders  
   5. Develop a project and communication plan to all key stakeholders  
   6. Develop an Evaluation Plan  
   7. Use the Project Implementation Status Reporting Tool to communicate progress. | Project Management Plan  
   Gantt Chart Template  
   Communication Plan  
   Self-Assessment Tool  
   Risk and Issues Template  
   Minimum Data Set  
   Project Implementation Status Reporting Tool  
   Process Mapping  
   The 5 Whys RCA Tool  
   Template agenda  
   Template for minutes  
   Template Terms of Reference  
   Patient/Carer Satisfaction  
   Template for memos |
| **ASSESS**                   | To understand the current situation (as it is), issues and gaps against the Model | 1. Identify issues or gaps using the self-assessment tool and rate using the traffic light system  
   2. Commence qualitative and quantitative system measures measurements to collect information on the current situation (as is) and that have been identified in the evaluation plan or minimum data set. | Project Management Plan  
   Gantt Chart Template  
   Communication Plan  
   Self-Assessment Tool  
   Risk and Issues Template  
   Minimum Data Set  
   Project Implementation Status Reporting Tool  
   Process Mapping  
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   Template for minutes  
   Template Terms of Reference  
   Patient/Carer Satisfaction  
   Template for memos |
| **OPERATIONALISE**          | To change practice                                        | 1. Outline the steps for implementing the ‘quick wins’ and ‘longer term’ solutions.  
   2. Define roles and responsibilities for implementing each solution.  
   3. Define implementation monitoring and evaluation measurements/processes.  
   4. Establish support and feedback loops.  
   5. Communicate your plan; based on plan developed in project initiation phase.  
   6. Conduct a re-assessment of current practice to compare with the baseline assessment data at 6 months and 12 months  
   7. Establish an ongoing loop for reviewing and revising solutions implemented  
   8. Communicate success and outcomes. | Project Management Plan  
   Gantt Chart Template  
   Communication Plan  
   Self-Assessment Tool  
   Risk and Issues Template  
   Minimum Data Set  
   Project Implementation Status Reporting Tool  
   Process Mapping  
   The 5 Whys RCA Tool  
   Template agenda  
   Template for minutes  
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   Patient/Carer Satisfaction  
   Template for memos |

12 MONTHS

- To evaluate the outcomes of the implementation using the evaluation plan monitor progress to assess sustainability.
5. ROLE OF HEALTH ECONOMICS IN THE ACI MOC DEVELOPMENT

PROJECT INITIATION
Identify an area of need, build a case for change and obtain sponsorship to proceed with the program of work.

The health economics team will work with the project manager to define the patient cohort for the model of care and will provide advice based on service utilisation analysis on the scope of the problem to inform the case for change.

This would include analysis of current and projected:
- service utilisation and costs
- patient demand
- patient benefit.

DIAGNOSTIC
Define the problem – understand the root cause to treat the real problem and not just the symptoms.

The health economics team will undertake analysis to prepare the Base Case which will identify the service utilisation, patient outcomes, cost implications and other relevant impacts of continuing Business as Usual.

This will assist in the development of the case for change by highlighting the implications (quantitative and qualitative) of continuing Business as Usual.

SOLUTION DESIGN
Develop and select solutions. Create and document the MoC.

The health economics team will work with the project manager to identify the key outcomes of proposed alternative courses of action as part of the solution design process.

Economic analysis will be used to then compare the Base Case with the proposed alternative interventions to identify the preferred solution design.

Economics can provide information on which solution can achieve the greatest patient benefit for the cost of providing the service.

IMPLEMENTATION
Support the health system to execute the changes needed to implement the MoC.

The health economics team can prepare key documents to support implementation including:
- Economic Appraisal
- Resourcing Strategy
- Business Proposal.

The team can advise on implementation issues such as quantifying potential increases in service capacity; quantifying potential avoidable future costs; identifying the need for additional seeding or recurrent funding; and identifying areas of potential savings where services may be discontinued and resources redirected.

SUSTAINABILITY
Optimise use of the MOC, monitor the results and evaluate the impact.

Health economic measures will be included in the key performance indicators for evaluation to determine the level of effectiveness and efficiency achieved across the system as a result of implementation.
3.2 The evaluation cycle

The following figure illustrates the evaluation cycle for ACI. A brief overview of each step is provided below.

Figure 1: ACI evaluation cycle

1. Establish evaluation team
   - Scope, analysis of previous evaluations and results

2. Planning
   - Roles and responsibilities, terms of reference, communication plan, project plan

3. Program logic
   - Engage key stakeholders, problem definition, outcomes identification, logic matrix

4. Evaluation design
   - Questions, define evaluation type (formative, impact, etc), deliverables

5. Data plan
   - Indicators and measures, instruments, data sources

6. Implementation
   - Develop and test instruments, data collection, analysis

7. Communicating results
   - Reporting, dissemination of results to all participants, publish

8. Incorporating findings
   - Redesign, expansion, discontinue
Evaluation Program Logic

**Inputs**
- Change processes
  - Problem definition
    - Target area of need
  - Rationale
    - Unwarranted clinical variation
    - Adverse outcomes
    - Prevalence
    - Regulation
    - Research
    - Best practice

**Outputs**
- Service delivery
  - Develop models of care
  - Coordinate services
  - Deliver services
    - Improved patient outcomes
    - Improved health system efficiency

**Evaluation**
- Formative
- Summative

**Rationale**
- Identify and prioritise needs
- Levels of utilisation, cost and variation
- Program logic and indicators
- Evaluation methods
- Business case
- Consultation
- Develop model of care
- Implementation plan and location
- Protocols for delivery
- Data collection systems
- Human Resources
- Communications plan
- Recruit patients
- Education
- Facilitate access and transition
- Care continuity
- Knowledge sharing
- Monitor progress
- Quality improvement
- Patient assessment
- Deliver interventions
- Deliver lifestyle services
- Link with other service providers

**Short term**
- Improved risk identification and awareness
- Reduced time to intervention
- Increased access
- Increased patient care outcomes

**Medium term**
- Increased capacity
- Improved service coordination
- Improved data, utilisation, costs and patient utility

**Long term**
- Per capita cost
- Experience of care
Accelerating Implementation Methodology (AIM)

http://www.imaworldwide.com/about-ima
Success

Implementation Success Defined:

- On Time
- On Budget
- Technical Objectives Met
- Business Objectives Met
- Human Objectives Met

Installation does not equal Implementation

Installation

Implementation
Implementation Success Model

Implementation Climate
Organisational Stress
History of Implementation

Organisational Readiness
Sponsor Capacity
Target Readiness
Cultural Fit
Agent Capacity

Organisational Values and Sponsorship

EXPRESSED
- Emails
- Newsletters
- Vision statements
- Presentations

1x

MODELLED
- Decision making
- Prioritisation
- Resource allocation

2x

REINFORCED
- Recognition
- Promotion
- Rewards
- Penalties

3x

Low Stress
Successful History → fewer resources and time to create readiness

High Stress
Unsuccessful History → more resources and time to create readiness

Implementation is a ferociously resource-consuming activity.
Capability support for implementation

Overview of capability model to support ‘Intensive Care Service Model- NSW Level 4 Adult’ Program
2015/2016 - 1st round of pilots

Sponsor training (n=3 per site)
- Sponsorship Series (delivered by Don. H in Nov.)

**Plan**
- Upfront AIM
- Roadshow Series

**Do**
- Coordinates materials; work with Aged Health, Implementation Team, and sites

**Study**
- Roadtest materials within ACI and conduct training

**Act**
- Evaluate; develop additional training materials

**PDSA Cycle Structure**

- Development of bespoke training materials and curriculum based on mapping to INCITE model standards and outcomes

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<th>Nov</th>
<th>Dec</th>
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**Support**
- Access to NSW Coaching Panel Support for project leads/team at high risk
- Support from Redesign Leaders, and Executive CLP Graduates (for mentoring purposes in some rural areas)
- Development of an ongoing Community of Practice to support professional and organisational networking

**Enablers**
- Access to GEM online learning platform for all Sponsors and project leads/teams
- Use of Basecamp (or similar online sharing platform) to host COP and manage cross LHD projects

**Tailored training for project leads/team (n=3 per site)**
- 6 day Training Program for Project Leads/Teams – focussed on project mgmt., human factors of change, developing networks, specific ICU clinical education and diagnostic tools
- Continued as required 'Just in Time Training' - Webinar series and face to face training (site visits and roadshows) including topics such as Project Management, Implementation science (informed by status of project rollout and needs assessment)
The impact of leadership coaching in an Australian healthcare setting

Anthony M. Grant and Ingrid Studholme
School of Psychology, University of Sydney, Sydney, Australia

Raj Verma, Lea Kirkwood and Bronwyn Paton
New South Wales Agency for Clinical Innovation, Chatswood, Australia, and
Sean O’Connor
School of Psychology, University of Sydney, Sydney, Australia

Abstract

Purpose – There is limited empirical literature on the effectiveness of leadership coaching in healthcare settings. The purpose of this paper is to explore the efficacy of leadership coaching for individuals implementing strategic change in the Australian public health system.

Design/methodology/approach – Using a within-subjects (pre-post) design, participants (n = 31) undertook six one-hour coaching sessions. Coaching was conducted by professional leadership coaches. Both quantitative and qualitative data were collected.

Findings – Participation was associated with significant improvements in goal attainment, solution-focused thinking, leadership self-efficacy, perspective-taking capacity, self-insight and resilience, and ambiguity tolerance. There were significant reductions in stress and anxiety. The benefits of coaching transferred from the workplace to the home. Many participants reported being able to use insights gained
Research into how we work – ‘implementation science’

Comparing the three initiatives

The hip fracture, delirium and dementia, and acute stroke care projects can be compared on a number of dimensions, including their focus and goals, site readiness and staff preparedness, broader context and overall level of implementation complexity (see Table 6.1).

<table>
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<tr>
<th></th>
<th>HIPS</th>
<th>CHOPS</th>
<th>QASC</th>
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<tbody>
<tr>
<td></td>
<td>(hip fracture care)</td>
<td>(delirium and dementia care)</td>
<td>(acute stroke care)</td>
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<tr>
<td><strong>Focus</strong></td>
<td>Standards for orthogeriatric, allied health and, and nursing collaboration</td>
<td>Key principles for preventing and managing delirium in everyday practice</td>
<td>‘Fever-sugar-swallow’ protocols</td>
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<td><strong>Actual goal</strong></td>
<td>Multidisciplinary professionalism ensuring continuity of hip fracture care</td>
<td>Sensitivity to patients’ cognitive impairment to enhance their care experience</td>
<td>Staff adherence</td>
</tr>
<tr>
<td><strong>Variability in site readiness and staff preparedness</strong></td>
<td>High</td>
<td>High</td>
<td>High</td>
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<tr>
<td><strong>Broader context</strong></td>
<td>✔ ✔</td>
<td>✔</td>
<td>✔ ✔ ✔</td>
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<tr>
<td></td>
<td>Moderately favourable</td>
<td>Somewhat favourable</td>
<td>Highly favourable</td>
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<tr>
<td></td>
<td>(CEC, BHI hip fracture evidence, external support)</td>
<td>(dispersed activities and resources)</td>
<td>(stroke pathway; stroke collaborative)</td>
</tr>
<tr>
<td><strong>Complexity</strong></td>
<td>High</td>
<td>Extreme</td>
<td>Moderate</td>
</tr>
<tr>
<td>Recommendations pertaining to the assessment of site readiness and staff preparedness</td>
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<td>-------------------------------------------------------------------------------------</td>
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<tr>
<td>1.1 That a tool and method be created allowing an in-depth site assessment and an in-depth site project staff-preparedness assessment to take place before initiatives commence, enabling site and ACI staff to identify local challenges and opportunities</td>
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<tr>
<td>1.2 That site-assessment tools and methods account for historical and recent service upheavals and interpersonal events, as well as clinical-organisational and patient cohort specifics, such that these are known when initiatives commence</td>
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<td>1.3 That preparedness tools and methods for site project staff account for staff experience with systems change projects, specifically data gathering and analysis, stakeholder engagement, solution design, solution assessment and solution implementation, such that these are known when initiatives commence</td>
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<td>1.4 That ACI commit to sites with lower levels of site project readiness with targeted pre-project and during-project assistance</td>
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<td>1.5 That ACI provide targeted pre-project training to site and project staff with lower levels of project experience.</td>
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## Recommendations pertaining to Implementation project design

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<tr>
<td>2.1</td>
<td>That ACI analyse proposed initiatives in terms of their focus and purpose (adherence? co-design? learning?), depth of intended impact (environmental adjustments? process redesign? behavioural change?), resourcing (staffing, money, time), projected sustainability and overall complexity</td>
</tr>
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<td>2.2</td>
<td>That ACI projects harness as many existing resources, current initiatives and parallel developments as possible, to capitalise on the congruence between them and new ACI projects, and thereby enhance such projects’ chance of success</td>
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<tr>
<td>2.3</td>
<td>That ACI staff develop tools and strategies for negotiating complex and challenging interpersonal professional relationships and situations arising during projects</td>
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<tr>
<td>2.4</td>
<td>That ACI staff develop tools and strategies for negotiating and renegotiating appropriate levels of project resource investment</td>
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<tr>
<td>2.5</td>
<td>That ACI staff take into account the need for potentially lengthy ethics approval and site-specific authorisation processes.</td>
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</table>
### Recommendations pertaining to the implementation of systems transformation

| 3.1 | That ACI develop, and make available to participating sites, an overview map of, and flow chart for, the use of its project implementation resources and evaluation capability. |
| 3.2 | That ACI projects rely as much as possible on local (Australian) research to provide evidence in support of project aims. |
| 3.3 | That ACI acknowledge in its implementation approach that its linear approach to project planning and management will be flexible in practice. |
| 3.4 | That ACI staff articulate and keep updating goals about what is expected to be achievable (for example, environmental adjustments) and what may be more difficult to achieve (for example, behavioural change). |
| 3.5 | That the logic of converting specific diagnostic findings into solutions be articulated and clarified, and that proposed solutions be mapped against a hierarchy of potential solution interventions. |
| 3.6 | That ACI staff make explicit as part of their implementation approach that initiatives involve sites in ‘horizontal’ (cross-site) learning and sharing. |
| 3.7 | That ACI staff arrange ACI-internal time-outs to discuss progress and changes brought about by complex circumstances, particularly those that affect goals, processes and timelines. |
| 3.8 | That site project staff be encouraged to identify commonalities among service-level initiatives through which to create leverage for the project. |
### Accounting for projects' progress and achievements

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<td>4</td>
<td><strong>4.1</strong> That ACI’s accounts of projects reflect the complexity of the implementation process, including its unanticipated (positive) outcomes and unintended (less positive) consequences, and its potentially unacknowledged contextual (enabling and constraining) conditions.</td>
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<td><strong>4.2</strong> That ACI-funded projects be required to detail how projects unfold, such that the full complexity of practice improvement and systems change is revealed.</td>
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NEXT: Outcomes focus – ICHOM
(International Consortium for Health Outcome Measurement)
PROM as a clinical intervention

Patient-reported symptom monitoring vs Usual care:

Log-rank test: $P = .03$

<table>
<thead>
<tr>
<th>Years From Enrollment</th>
<th>Patient-reported symptom monitoring</th>
<th>Usual care</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>441</td>
<td>325</td>
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<tr>
<td>1</td>
<td>331</td>
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