Encouraging Best Practice in Residential Aged Care Program: Evaluation Framework Summary

Centre for Health Service Development

UNIVERSITY OF WOLLONGONG

April, 2008
Table of Contents

TABLE OF CONTENTS ................................................................................................................................... 1
LIST OF TABLES ............................................................................................................................................. 1
LIST OF FIGURES ........................................................................................................................................... 1

1 INTRODUCTION.................................................................................................................................. 1

2 EVALUATION STRATEGY ................................................................................................................. 2
2.1 Key success factors .......................................................................................................................... 3

3 ELEMENTS OF THE EVALUATION................................................................................................... 4
3.1 Program delivery ............................................................................................................................. 4
3.2 Program impact ............................................................................................................................... 4
3.3 Sustainability .................................................................................................................................... 4
3.4 Capacity building ............................................................................................................................ 4
3.5 Generalisability ............................................................................................................................... 4
3.6 Dissemination – sharing of knowledge .......................................................................................... 5
3.7 Economic evaluation ....................................................................................................................... 5

4 METHODS ........................................................................................................................................... 6
4.1 Introduction ....................................................................................................................................... 6
4.2 Evaluation questions ....................................................................................................................... 6
4.3 Use of literature ............................................................................................................................... 8
4.4 Sampling .......................................................................................................................................... 9
4.5 Ethics and confidentiality ................................................................................................................ 9

REFERENCES ................................................................................................................................................ 10

List of Tables

Table 1 Evaluation questions ....................................................................................................................... 6

List of Figures

Figure 1 CHSD Evaluation Framework ................................................................................................. 2
1 Introduction

This is a summary of the evaluation framework for the Encouraging Best Practice in Residential Aged Care (EBPRAC) program which has two main components:

- Summative evaluation which seeks to ascertain whether and to what extent the program was implemented as intended and the desired/anticipated results achieved. The purpose is to ensure accountability and value for money with the results of the evaluation informing any future planning decisions, policy and resource allocation. We call this evaluation for judgement (‘how did we do?’).
- Formative evaluation whereby the results of the evaluation inform the ongoing development and improvement of the program. This ‘action research’ approach fits well with the aim of the program to build resilience and capacity within the health system for longer term sustainable change. We call this evaluation for learning (‘how can we learn and get better as we go?’).

Both components seek to achieve the same goal: to help clinicians, managers and policy makers make better informed decisions about how to improve the use of evidence in residential aged care facilities.

The overall objectives for the EBPRAC program seek to achieve practice and evidence-based improvements for people residing in aged care facilities, the staff caring for them, the aged care system and the broader community:

**Improvements for residents**
- Improvements in clinical care

**Improvements for staff**
- Opportunities for aged care clinicians to develop and enhance their knowledge and skills
- Support staff to access and use the best available evidence in everyday practice

**System improvements**
- Clearer industry focus on improvements to clinical care
- Wide dissemination of proven best practice in clinical care
- Develop national clinical or educational resources and evidence summaries that support evidence-based practice in aged care and are able to guide the ongoing development of accreditation standards

**Community impact**
- Build consumer confidence in the aged care facilities involved in EBPRAC

Our evaluation will focus on comparing what was achieved by EBPRAC against the objectives for the program, and seeking to explore any variation by means of the key success factors identified in the literature on implementing and sustaining evidence-based practice. We anticipate that much of the project-level evaluation will compare results before and after the implementation of evidence-based practice.

The evaluation is funded by the Australian Government Department of Health and Ageing under the EBPRAC Program.
2 Evaluation strategy

The evaluation strategy has been designed to allow the evaluation team to form a judgment as to how successfully the EBPRAC program has been implemented, whether the desired results have been achieved and what lessons have been learnt that will lay the ground-work for sustained use of evidence-based practice.

Our evaluation will use existing evidence about the key success factors (KSFs) for implementing evidence-based practice as the initial framework for structuring and directing our qualitative data collection and analysis. Findings from those data will be combined with the findings from quantitative analysis to arrive at an understanding of variations in outcomes between projects. This will inform both the summative and formative aspects of our evaluation.

Based on lessons learnt by CHSD staff from other national evaluations, we propose to use an evaluation framework with three levels to examine the impact and outcomes for consumers (residents, their families and friends), providers and the broader residential aged care sector. Evaluation of the program will focus on six key issues – program delivery, program impact, sustainability, capacity building, generalisability, and dissemination (see Figure 1).

**Figure 1 CHSD Evaluation Framework**

<table>
<thead>
<tr>
<th>Level</th>
<th>Impact on, and outcomes for, consumers (residents, families, carers, friends, communities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct care delivery</td>
<td>Impact on residents, Carer impact</td>
</tr>
<tr>
<td>Governance</td>
<td>Direct care, Information, Professional development</td>
</tr>
<tr>
<td>GP's</td>
<td>Residential care staff, Others</td>
</tr>
<tr>
<td>Sustainability assessment</td>
<td>Capacity building assessment, Generalisability assessment, Dissemination log</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Impact on, and outcomes for, providers (professionals, volunteers, organisations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>Direct care, Information, Professional development</td>
</tr>
<tr>
<td>GP's</td>
<td>Residential care staff, Others</td>
</tr>
<tr>
<td>Sustainability assessment</td>
<td>Capacity building assessment, Generalisability assessment, Dissemination log</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Impact on, and outcomes for, the system (structures and processes, networks, relationships)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>Direct care, Information, Professional development</td>
</tr>
<tr>
<td>System level impacts</td>
<td>External relationships</td>
</tr>
<tr>
<td>Sustainability assessment</td>
<td>Capacity building assessment, Generalisability assessment, Dissemination log</td>
</tr>
</tbody>
</table>

Application of this framework is demonstrated in the section on methods (see Table 1).

The program as a whole is aiming to have an impact at all three levels. Individual projects within the program may be aiming to have an impact at one, two or all three of these levels.

The program evaluation will draw extensively on the aggregate findings of the project evaluations. The program-level evaluation will, in many respects, be a ‘roll-up’ of project achievements, constraints and successes, from the perspective of the evaluation framework. Given the diversity of projects there are no common clinical outcomes that we can identify across all projects, hence improvements in clinical care will be solely identified by the project-level evaluations.

The evaluation of both the program and individual projects will provide detailed information and commentary in relation to incentives and barriers encountered, unintended consequences, what worked well, impact and outcomes, the degree to which the objectives of both the program and the individual projects were met and the extent to which achievements are sustainable.

The primary focus of our evaluation will be at the project level (rather than individual facilities participating in each project), supported by examination of within-project variation (for example,
why the pace of implementation and the results achieved might vary at different facilities within a particular project). We would anticipate that different projects will have, amongst other things, different governance structures and different degrees of leadership involvement and clinician engagement.

2.1 Key success factors

Most of the work in translating research evidence into clinical practice has focused on disseminating and implementing clinical practice guidelines, protocols and care pathways, usually in hospitals. That work has demonstrated that implementation of best practice is far more complicated than simply presenting the evidence and expecting change to occur.

Changing the behaviour of clinicians is possible but this usually requires comprehensive approaches at different levels tailored to specific settings and target groups. An added complexity within residential aged care is the differing skill and educational levels of staff involved in delivering care, ranging from tertiary-educated nurses to personal care assistants and volunteers. Planning to implement best practice needs to take into account the nature of the innovation; characteristics of the staff and residents involved; and the context within which changes are being made.

Any evaluation needs to be evidence-based and research-driven. To this end, we have developed a set of eight key success factors (KSFs) of improvement strategies based on experience with similar evaluations and previous research in areas such as quality improvement (O'Brien, Shortell et al. 1995; Shortell, Bennett et al. 1998), diffusion / dissemination of innovations (Dopson, FitzGerald et al. 2002; Berwick 2003; Greenhalgh, Robert et al. 2004), organisational change to improve healthcare (Gustafson, Sainfort et al. 2003; Grol 2007) and implementation of evidence-based practice and use of clinical guidelines (NHMRC 1998; Grol and Grimshaw 2003; Grol and Wensing 2004).

The KSFs represent a potential model or set of principles that might be adopted by those wishing to improve evidence-based practice in residential aged care, with the model to be tested and refined over the course of the evaluation. This may result in the addition, deletion or adaptation of some of the KSFs as the evaluation unfolds. The eight KSFs are:

- Receptive context for change
- Model for change / implementation (including the role of specific change agents or facilitators)
- Adequate resources
- Staff with the necessary skills
- Stakeholder engagement, participation and commitment
- The nature of the change in practice, including local adaptation, local interpretation of evidence and ‘fit’ with current practice
- Systems in place to support the use of evidence e.g. monitoring, feedback and reminder systems
- Demonstrable benefits of the change

A receptive context for change includes factors such as leadership (including informal leaders), the existing relationships between staff, a climate that is conducive to new ideas and the presence of a recognised need for change.
3 Elements of the evaluation

3.1 Program delivery

Program delivery (implementation) includes what was done and how it was done, including the change model itself. Through our own interviews with key stakeholders and review of project documentation we will examine the KSFs impacting on program implementation and unpack the underlying logic of each project.

In describing the implementation of evidence-based practice it is important to define both the limits of the intervention but also the key elements ‘inside’ the boundary of the intervention. Together with the quantitative results from the evaluation, this assists those who want to decide whether they should implement something similar.

3.2 Program impact

The impact of the program can be viewed as occurring at three levels - consumers (residents, families, carers, friends, communities); providers (professionals, volunteers, organisations) and the system (structures and processes, networks, relationships). We anticipate that improvements in clinical care for residents will be identified at the project level and it will not be possible to aggregate any such improvements across projects.

3.3 Sustainability

The various definitions of sustainability coalesce around two main ideas - sustainability of the direct improvements made as part of a program, and the sustainability of the techniques and approaches learnt as part of the program as well as any indirect benefits. Importantly, changes in work routines, patterns of behaviour, and mindsets are crucial for sustaining improvements after the end of any formal change program. Evaluation of sustainability is closely aligned with the issue of capacity building (e.g. increased capability and skills, increased resources) and any changes in structures and systems that ‘anchor’ or embed changes and facilitate sustainability. We propose to assess sustainability by using a tool developed and validated within the UK National Health Service (Maher, Gustafson et al. 2006).

3.4 Capacity building

Within the context of the EBPRAC program, specifically the objectives of the program, capacity building has three main components:

- Improving staff skills
- Developing resources such as clinical guidelines, resources and other materials to support evidence-based practice.
- Other activities to improve clinical capacity e.g. purchase of equipment.

We will collect data on the extent to which the program has built capacity in these three areas.

3.5 Generalisability

One of the keys to the use of evidence-based practice will be transforming data and information into knowledge that can be applied in different local contexts. We will examine this issue in two ways:

- Collecting data about the degree of local adaptation required to implement evidence-based practice.
- Seeking the opinion of those involved in projects and working in facilities about the extent to which the lessons they have learnt may be applied elsewhere.
3.6 **Dissemination – sharing of knowledge**

Our experience with similar evaluations suggests that a successful outcome for the program is heavily dependent on the extent to which the lessons learnt from individual projects are disseminated throughout the residential aged care system. The issue of dissemination (who else learnt about the projects?) is closely linked to the issue of generalisability (are the lessons useful for someone else?). We will also seek to go beyond the issues of generalisability and dissemination to identify the extent to which the lessons learnt have actually been implemented elsewhere. Many people may have heard about a successful project and those involved in that successful project may think the results are generalisable, but uptake elsewhere may still not occur. This will include examination of the formal and informal mechanisms and processes for disseminating improvements:

- Planned dissemination including formal knowledge management activities e.g. use of list server, through the planned national workshops and presentations at conferences.
- Unplanned dissemination such as that which might occur as part of informal networks and communities of practice within and between projects or RACFs.

3.7 **Economic evaluation**

The economic component of the program evaluation will address the issue of the technical efficiency of the EBPRAC program - the extent to which inputs have been minimised for a given level of outputs or outputs maximised for a given level of inputs.
4 Methods

4.1 Introduction

Understanding the impact of introducing evidence-based practice will rely on a combination of qualitative and quantitative data. One issue in understanding the impact of EBPRAC relates to the level of evidence. This can either be at the level of ‘beyond reasonable doubt’ typically used in scientific research or the level of ‘on the balance of probabilities’ typically used by policy makers and decision makers. We will frame our interpretation of the data, both quantitative and qualitative, according to the latter.

4.2 Evaluation questions

Not all questions can be made explicit at the beginning of the evaluation. Some questions will emerge over the course of the evaluation as data is collected and analysed. However, clear, well-articulated, questions form the basis of designing the evaluation. Some questions may need to be modified as the evaluation progresses, usually due to the lack of appropriate means to collect the required data. Some questions arise, either directly or indirectly, from the evaluation framework and others address a specific issue for the program. Links between the evaluation questions, the data to be used to answer those questions and the sources of that data are detailed in Table 1.

Table 1 Evaluation questions

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Evaluation questions</th>
<th>Indicators / data items</th>
<th>Data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DELIVERY</td>
<td>Key success factors</td>
<td>Project progress reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer opinions</td>
<td>Site visits Stakeholder interviews</td>
</tr>
<tr>
<td></td>
<td>IMPACT</td>
<td>Standard criteria defined by projects</td>
<td>Project evaluations</td>
</tr>
<tr>
<td></td>
<td>IMPACT</td>
<td>Baseline and post-implemention data from consumers</td>
<td>Project evaluations Stakeholder interviews</td>
</tr>
<tr>
<td></td>
<td>IMPACT</td>
<td>Clinical data</td>
<td>Project progress reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer opinions</td>
<td>Project evaluations Stakeholder interviews</td>
</tr>
<tr>
<td></td>
<td>DELIVERY</td>
<td>Key success factors</td>
<td>Project progress reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provider opinions</td>
<td>Stakeholder interviews</td>
</tr>
<tr>
<td></td>
<td>DELIVERY</td>
<td>Baseline data from providers</td>
<td>Project progress reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Documentation of pre-implementation work</td>
<td>Project evaluations Stakeholder interviews</td>
</tr>
</tbody>
</table>

Level 1: Processes, impacts and outcomes for consumers (residents, families, carers, friends, communities)

Level 2: Processes, impacts and outcomes for providers (professionals, volunteers, organisations)
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Evaluation questions</th>
<th>Indicators / data items</th>
<th>Data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>2c IMPACT</td>
<td>Have the knowledge and skills of clinicians improved following implementation?</td>
<td>Baseline and post-implementation data from providers</td>
<td>Project evaluations, Project progress reports, Stakeholder interviews</td>
</tr>
<tr>
<td>Increased use of evidence in everyday practice</td>
<td>2d IMPACT</td>
<td>How is evidence used in everyday practice? Has this changed since implementation?</td>
<td>Baseline and post-implementation data from providers, Generalisability data</td>
</tr>
<tr>
<td>2e CAPACITY BUILDING</td>
<td>Have staff been supported in accessing and using evidence-based practice?</td>
<td>Key success factors</td>
<td>Progress reports, Project evaluations, Stakeholder interviews</td>
</tr>
<tr>
<td>2f CAPACITY BUILDING</td>
<td>What capacity has been built as a result of the program?</td>
<td>Capacity building data</td>
<td>National workshops, Progress reports, Project evaluations, Stakeholder interviews, Capacity building tool</td>
</tr>
<tr>
<td>2g SUSTAINABILITY</td>
<td>Are improvements sustainable?</td>
<td>Sustainability data</td>
<td>Sustainability tool</td>
</tr>
<tr>
<td>Documentation of any unintended consequences</td>
<td>2h IMPACT</td>
<td>Are there any unintended consequences for providers arising from the program?</td>
<td>Process data, Provider opinions</td>
</tr>
</tbody>
</table>

**Level 3: Processes, impacts and outcomes for the system (structures and processes, networks, relationships)**

| 3a DELIVERY | What linkages have developed between individual projects and across the Program? | Documentation, Partnership building data | National workshops, Project progress reports, Stakeholder interviews, Dissemination log |
| 3b DELIVERY | Have any improvement networks or communities of practice developed? | Documentation | National workshops, Progress reports, Stakeholder interviews |
| Knowledge of the economic costs and benefits arising from the implementation of evidence-based practice | 3c IMPACT AND SUSTAINABILITY | What incentives can be identified for sustained use of evidence-based practice? | System benefits of implementation, Sustainability and | Progress reports, Project evaluations, Literature, Sustainability and |
### Objectives Evaluation questions Indicators / data items Data sources

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Evaluation questions</th>
<th>Indicators / data items</th>
<th>Data sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>capacity building data</td>
<td>capacity building tool</td>
</tr>
<tr>
<td>3d</td>
<td>IMPACT AND SUSTAINABILITY</td>
<td>System costs of implementation, Sustainability and capacity building data</td>
<td>Progress reports, Project evaluations, Literature, Sustainability and capacity building tool</td>
</tr>
<tr>
<td></td>
<td>What barriers to the sustained use of evidence-based practice can be identified?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of national clinical guides, resources and evidence summaries that support aged care accreditation standards</td>
<td>3e</td>
<td>SUSTAINABILITY</td>
<td>Sustainability data, Key success factors</td>
</tr>
<tr>
<td></td>
<td>What needs to be done to make improvements sustainable?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3f</td>
<td>CAPACITY BUILDING</td>
<td>Capacity building data</td>
<td>Capacity building tool</td>
</tr>
<tr>
<td></td>
<td>Are improvements in capacity required to support use of evidence?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3g</td>
<td>GENERALISABILITY</td>
<td>Generalisability data</td>
<td>Generalisability tool, Project progress reports, Project evaluations, Stakeholder interviews</td>
</tr>
<tr>
<td></td>
<td>Do the results of the evaluation indicate a preferred model for implementing evidence-based practice in RAC?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissemination of proven best practice in clinical care</td>
<td>3h</td>
<td>GENERALISABILITY</td>
<td>Stakeholder opinions, Sustainability, capacity building and generalisability data</td>
</tr>
<tr>
<td></td>
<td>Is the residential aged care sector receptive to the use of evidence?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3i</td>
<td>DISSEMINATION</td>
<td>Documentation</td>
<td>Progress reports, Project evaluations, Stakeholder interviews</td>
</tr>
<tr>
<td></td>
<td>Have national clinical guidelines and other resources been developed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3j</td>
<td>DISSEMINATION</td>
<td>Dissemination data</td>
<td>Dissemination log</td>
</tr>
<tr>
<td></td>
<td>Have improvements in clinical care been widely disseminated?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.3 Use of literature

The available literature that might usefully inform the program evaluation is large, ranging from very specific work focusing on one aspect of the program through to the literature on issues such as change management, quality improvement and diffusion of innovations. Rather than undertaking specific literature reviews we will incorporate evidence from the literature throughout the evaluation. For example, in preparing this document we have already reviewed literature that will inform the evaluation framework and in doing so have identified many useful references.

We will identify and review all published material on the use of evidence in residential aged care in Australia to inform our analysis and findings. For example, work on implementing evidence in residential aged care in this country has recently been published regarding use of restraints (Knox 2007), falls reduction and stroke prevention (Crotty, Whitehead et al. 2004), oral health (Georg 2006; Rivett 2006), hydration (Keller 2006) and constipation (Grieve 2006).
4.4 Sampling

A broad program such as EBPRAC does not lend itself to examining what happens in all facilities for all projects – there is simply too much material. However, the numbers are insufficient to warrant random sampling. Hence, in cases where we require a more in-depth view of a particular aspect of the program we propose a purposive approach to sampling. Sampling is particularly relevant for the qualitative data collection and analytical component of the evaluation. Purposive sampling seeks to focus on cases that will produce the most information.

4.5 Ethics and confidentiality

All primary data collection by the evaluation team will be retained by the evaluation team in de-identified form in accordance with standard ethics committee requirements.
References


