Deloitte Access Economics

Economic and social value of UnitingCare Queensland

2014

Deloitte.

Contents

Charts

Tables

Figures

Glossary

ABS	Australian Bureau of Statistics
ACHS	Australian Council on Healthcare Standards
ACOSS	Australian Council of Social Service
AIHW	Australian Institute of Health and Welfare
ALOS	Average length of stay
APCN	Asia-Pacific Centre for Neuromodulation
BC	Blue Care
BMT	Bone marrow transplant
CCDEV	Congress on Community Development and Education Services
CDLCI	Continuous duodenal levodopacarbidopa infusion
CGE	Computable General Equilibrium
CPI	Consumer price index
CSAI	Continuous subcutaneous apomorphine infusion
DAE	Deloitte Access Economics
DALY	Disability adjusted life years
DBS	Deep brain stimulation
DOHA	Department of Health and Ageing
DSS	Department of Social Services
EACH	Extended aged care at home
EBITDA	Earnings before interest, tax, depreciation and amortisation
FIS	Family Intervention Services
FTE	Full-time equivalent
GDP	Gross domestic product
GOS	Gross operating surplus
HACC	Home and community care
HCP	Home care packages
HOF	Helping Out Families initiative
ICT	Information and communications technology
IEO	Index of education and occupation

IER	Index of economic resources
IG	Income generation
IO	Input-Output
IRSAD	Index of relative socio-economic advantage and disadvantage
IRSD	Index of relative socio-economic disadvantage
LGA	Local government area
NDRRA	National Disaster Relief and Recovery Arrangements
NFP	Not-for-profit
NGO	Non-government organisation
NHHRC	The National Health and Hospitals Reform Commission
NHMRC	National Health and Medical Research Council
OOHC	Out-of-home care
PC	Productivity Commission
QLD	Queensland
RCAF	Residential aged care facility
RAI	Referral for active intervention services
SEIFA	Socio-economic indexes for areas
SSDARU	Stagpole Street Drug and Alcohol Rehabilitation Unit, Townsville
TGRP	Tourism gross regional product
UCC	UnitingCare Community
UCH	UnitingCare Health
UCQ	UnitingCare Queensland

About UnitingCare Queensland

UnitingCare Queensland (UCQ) is the health and community service provider of the Uniting Church in Queensland. It comprises UnitingCare Community, UnitingCare Health and Blue Care. It supports more than 14,000 people every day of the year and employs approximately 16,000 staff and works with 9,000 volunteers. Its mission is to improve the health and wellbeing of individuals, families and communities as it reaches out to people in need, speaks out for fairness and justice, and cares with compassion, innovation and wisdom.

UnitingCare Queensland is committed to providing person centred care at all times and in all circumstances across its substantial service network. The organisation's range of services is available to all ages and social groups, and offers unique multiple access points to meet individual client, family and community needs.

UnitingCare Queensland provides services in more than 400 locations across Queensland, ranging from Thursday Island in the far north, to just over the Queensland border into northern New South Wales, and out west to Mount Isa, providing services in locations where other providers may not go. Recently, the organisation commenced managing a range of aged care services in the Northern Territory and Western Australia.

UnitingCare Queensland has annual revenue of $1.3 billion and receives funding from the Queensland Government, the Australian Government and is also funded through private health insurance, fee-for-service arrangements, and receives donations from private and corporate donors.

History and structure of UnitingCare Queensland

UnitingCare Queensland originated from modest beginnings of pioneering Presbyterian, Methodist and Congregational churches who reached out to struggling people in their local community. Some of this outreach work commenced in the latter years of the 19th century and early part of the 20th century, but most developed around the end of World War II. The earliest services included dispensing food, clothing, blankets, and medical and health care to people living in poverty.

During the 1970s, the various community services grew rapidly, and in 1977, came together under the one banner of the Uniting Church in Australia, Queensland Synod, when the churches merged.

In 1999, the Uniting Church Assembly Standing Committee approved the name of UnitingCare Australia for the national body, and UnitingCare Queensland was established soon after. Through its service network, UnitingCare Queensland delivers the following services:

Blue Care

Blue Care began as the Blue Nursing Service in 1953 and has grown into one of Australia's leading providers of community health and residential aged care. Blue Care aims to ensure clients' needs are met in a flexible and responsive manner. It provides services to older people, those with a disability, patients discharged from hospital or acting on a referral from their GP, and individuals and carers who are in need of support and education. Blue Care's services support more than 11,000 people every day through:

- generalist and specialist nursing services
- residential aged care services
- allied health services
- personal care, social support and domestic assistance to people in their own homes
- respite care
- seniors' housing
- pastoral care and counselling.

UnitingCare Community

UnitingCare Community (formerly known as Lifeline Community Care Queensland) began as the Queensland Lifeline service (24-hour Crisis Line) in 1964. Since that time, it has grown to incorporate a diverse range of services. Today, its mission is to strengthen the lives of individuals, families and communities through wide-ranging services that deliver improved access, efficiency and outcomes to people who are most vulnerable. Services include:

- Lifeline (suicide prevention, crisis support, shops, and community recovery)
- childcare
- family support
- child protection
- counselling (including financial counselling)
- crisis support
- disability support
- prison ministry.

UnitingCare Health

UnitingCare Health can trace its origins to 1949 when the Methodist Church purchased St Helen's Hospital at South Brisbane. In 1977, the Church moved the hospital to its present location at Auchenflower and renamed it The Wesley Hospital. In the same year, the Uniting Church was formed, and consequently, The Wesley Hospital joined the fold with St Andrew's War Memorial Hospital which had been established in 1958. UnitingCare Health was formed in May 2000, and now incorporates five hospitals, operating approximately 1,000 licensed hospital beds. It is also developing St Stephen's Hospital, Hervey Bay as Australia's first digital hospital. UnitingCare Health provides a comprehensive range of private medical services, and is renowned for its clinical excellence in a number of specialities such as cancer care services. It provides medical services through:

- The Wesley Hospital
- St Andrew's War Memorial Hospital
- St Stephen's Hospital, Maryborough
- St Stephen's Hospital, Hervey Bay
- The Sunshine Coast Private Hospital.

Group Office

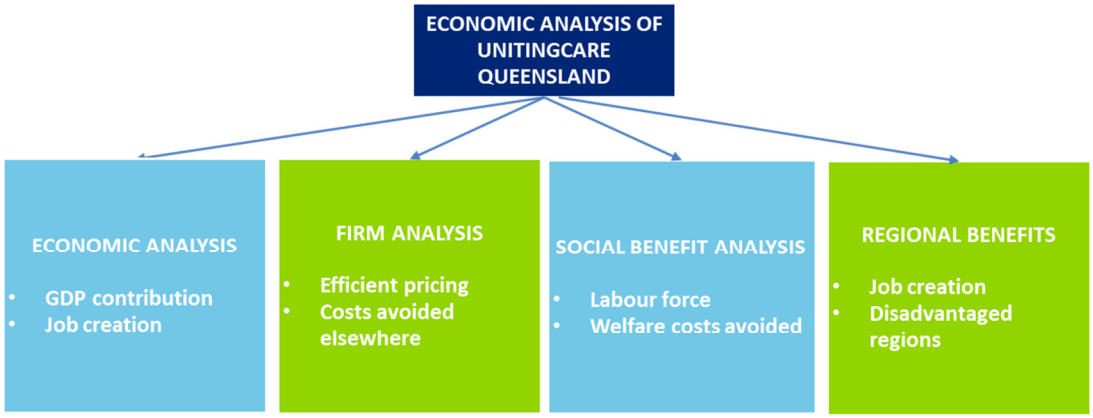
Until 2004, Blue Care, UnitingCare Health, and UnitingCare Community each had their own Board. However, a streamlined structure for clarifying roles and responsibilities and improving governance was established, which saw service group Boards dissolved, and a single, integrated model for decision making and accountability established in the form of one UnitingCare Board. UCQ Group Office provides support to the organisation through coordination of a number of functions, including Strategy, Planning and Performance, Finance, Human Resources, and under shared service arrangements, Group ICT and Procurement. Further, it provides support to the Board, Chief Executive Officer and UCQ Executive Leadership Team to ensure effective governance and alignment with the organisation's broader mission.

Source: UnitingCare Queensland

Executive summary

Deloitte Access Economics (DAE) was commissioned by UnitingCare Queensland (UCQ) to develop a report examining the economic significance and contribution of the organisation to the Australian economy. Beyond traditional economic analysis, which does not fully capture the value generated by the organisation, the report analyses service efficiency, considers the longer-term benefits of its social services, and comments on its regional presence. To do this, the report will primarily use data from the 2012-2013 financial year.

Figure i: Framework for analysis



Economic contribution

UnitingCare Queensland contributed $885 million directly to the Australian economy in 'value added' terms in 2012-2013. Including its indirect contribution, the total was $1.3 billion. The organisation contributed 9,821 full-time equivalent (FTE) jobs in 2012-2013, and including the indirect component, 13,343 FTE jobs to the economy.

There are several ways of interpreting these results:

- The organisation's total economic contribution is almost as high as its annual revenue, with much of this comprising a direct contribution. Like other not-for-profit organisations, much of UCQ's revenue is spent directly on service provision rather than purchasing inputs, with labour a significant input.
- In terms of employment, UnitingCare Queensland is a very significant organisation. In this respect, it is larger than the University of Queensland or the Bank of Queensland, and its employment is similar to national organisations such as St Vincent's Health. Its total contribution to employment is similar to the number of people employed by the general insurance sector in Australia.

The economic contribution of UCQ does not fully capture its value to society. Some services are provided on a free or subsidised basis, and provide positive longer-term benefits to both clients and society in general.

Firm benefits

Economic contribution analysis may underestimate the true value of not-for-profit (NFP) organisations to society. For similar levels of output, an organisation with profit has a higher economic contribution than one without, since profits contribute to gross operating surplus and thus its direct contribution. Therefore, for a given level of revenue, a not-for-profit can potentially have more output if it is efficient.

Analysis shows that UnitingCare Health (UCH) is an efficient provider of services compared with its not-for-profit peers. Using UCH's cost per patient day and the number of bed days per annum, its patient cost per annum is approximately $15 million less than its like peers for an equivalent patient volume. This figure does not take into account the differences between UCH and the Australian Bureau of Statistics (ABS) benchmarks regarding patient acuity or location, and may reflect cost differences.

It is important to consider the level of patient care provided as part of a discussion about efficiency. Compared with the Australian Council on Healthcare Standards (ACHS) benchmarks, data suggests UnitingCare Health is able to deliver improved patient outcomes.

Finally, UCH provides a number of high cost, specialised services, which are not generally offered by the private sector but provide substantial benefit to the patient. Services in deep brain stimulation, bone marrow transplant and palliative care are provided in partnership with a number of research institutions, such as the University of Queensland. In these areas, numerous peer-reviewed publications have quantified the expected benefit of these services, including increased patient survival rates, improved quality of life and reduced treatment costs.

Reduced costs elsewhere in the economy provide another benefit that gross domestic product (GDP) statistics fail to capture. For example, if patients were kept in hospital rather than transitioning to aged care facilities, this would appear as a higher contribution to GDP even though there is no contribution to social value.

An analysis of Blue Care's aged care services shows that in treating clients at a lower cost and preventing earlier entry into the health system, Blue Care reduces health system costs by an estimated $18 million per annum. Blue Care further reduces health system costs by supporting clients to stay living at home, which in turn benefits the individual and community.

Social benefits

An important social benefit of UnitingCare Queensland is that it helps communities and also provides volunteering opportunities. Using a wages-based estimate of value, volunteering across the whole organisation contributes around $29.3 million a year to Queensland.

Blue Care's services reduce the need for people to move into aged care facilities, enabling their independence, adding to their quality of life, and minimising health system costs. This is another important social benefit of UnitingCare Queensland.

Furthermore, Blue Care's community aged care services reduce the proportion of clients who would otherwise need to seek full-time care and accommodation in a residential aged care facility (RACF). An estimated $16 million per year is saved and numerous associated benefits achieved for clients, including increased quality of life while able to remain in their own home. Blue Care also reduces the care burden on family or other carers.

UnitingCare Community (UCC) delivers a range of social services that respond to issues such as domestic violence, suicide, social exclusion, child abuse and financial distress. The non-government sector has traditionally played an important role in addressing many of these social challenges. Because UnitingCare Queensland is driven by mission, has the capacity to coordinate the efforts of volunteers, and is located around the state, it is able to provide a very effective response to these issues. Some of the benefits of UnitingCare Queensland's social services include increased labour force participation, reduced health care costs, lower future social welfare costs, an improved financial situation for individuals, and reduced recidivism.

The social benefits of UnitingCare Community services extend beyond its economic contribution. Research on social problems has been analysed to monetise some of the benefits provided by UnitingCare Community services. Detailed analysis finds that benefits from UCC services are in excess of costs, sometimes by a factor of two to one. Some services do however, have benefits which are difficult to quantify due to their nature.

Regional benefits

UnitingCare Queensland provides a range of benefits to regional Queensland. Particularly, the provision of services in disadvantaged regions has an important equity value that is not captured in many economic indicators.

UnitingCare Queensland's total regional economic contribution in 2012-2013 was $514 million, with 6,883 FTE jobs. This is equivalent to 40% of UCQ's total 'value added' and 52% of the FTE jobs. These are significant statistics, especially when compared with many other organisations headquartered in Brisbane.

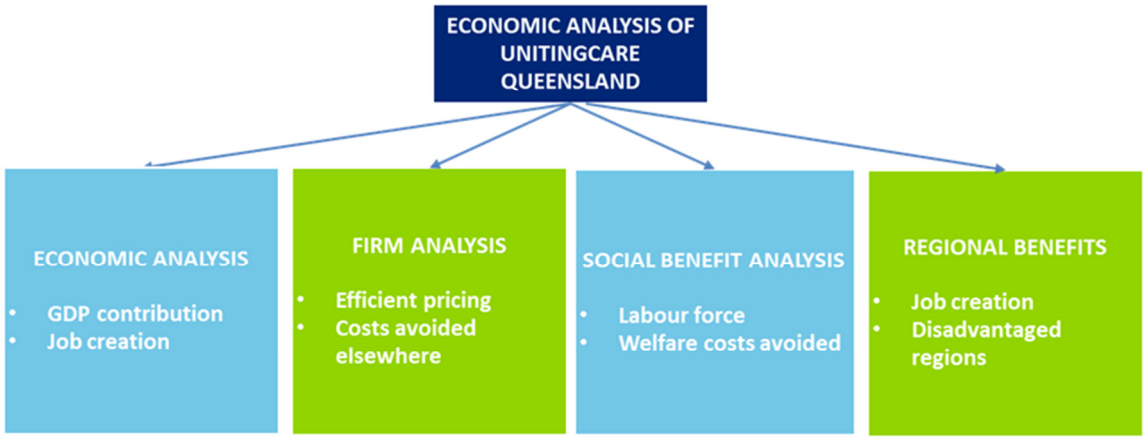
UnitingCare Queensland's presence in disadvantaged areas is particularly valuable, as those areas might not otherwise be served by private providers. 73% of Blue Care's facilities are located in 60% of Queensland's most disadvantaged areas. This stands in contrast to commercial providers, of whom only 43% are in disadvantaged areas. Similarly, UnitingCare Community has a strong regional footprint, with a presence in more than 100 postcodes across the state.

1 Background

1.1 Project approach and objectives

Deloitte Access Economics was commissioned to develop a report examining the economic significance and contribution of UCQ to the Australian economy. In addition, the report examines the broader value of the organisation to the regional and general economy, the benefits the organisation provides to its clients, and the social benefits UCQ contributes beyond the economic.

Figure 1.1 Framework for analysis



The report is based on data provided by UCQ, a range of publicly available data, analysis by Deloitte Access Economics, and consultations with key stakeholders inside UCQ.

1.2 Report structure

The report is organised as follows:

- Chapter 2 calculates the direct and indirect economic contributions of the organisation
- Chapter 3 analyses the or organisational benefits of UCQ
- Chapter 4 examines the social benefits of UCQ's activities
- Chapter 5 analyses the regional benefits of UCQ's activities.

The report is not a business case for any particular project or an evaluation of a service provided by the organisation.

2 Economic contribution of UnitingCare Queensland

The economic contribution of UnitingCare Queensland to the Australian economy is measured in terms of:

- the value added: the contribution to GDP, including wages paid to employees and the gross operating surplus generated (including taxes).
- employment: measured by full-time equivalent (FTE) jobs.

The economic contribution is the sum of the direct and indirect value added by the economic activity undertaken by UCQ.

UCQ's direct value added was $885 million in 2012-2013, and its indirect value added was $1.3 billion.

UCQ contributed 9,821 FTE jobs in 2012-2013. Including the indirect component, UCQ contributed 13,343 FTE jobs to the economy.

2.1 Modelling approach

The value added is a measure of how much economic activity directly happens inside an organisation and how much it generates elsewhere in the economy.

The basis for estimating the economic contribution is the direct value added and employment contributed by capital and labour inputs employed directly by UCQ in the provision of its goods and services. The value added is the most appropriate measure of the economic contribution to GDP. It is the sum of the returns to the primary factors of production – labour and capital – and can be calculated by adding the gross operating surplus[1] and wages paid to employees.

This is then combined with a selection of input-output economic multipliers to determine the indirect or flow-on contribution to the economy. The indirect contribution is a measure of the demand for goods and services produced in other sectors of the economy as a result of the direct economic activity of UCQ. The size of the flow-on activity is determined by the extent of linkages with other sectors of the economy.

[1] Gross operating surplus represents the value of income generated by the entity's direct capital inputs, generally measured as the earnings before interest, tax, depreciation and amortisation (EBITDA).

2.2 Direct economic contribution

The direct economic contribution comprises the value added and the FTE jobs generated by UCQ. Table 2.1 below outlines the direct economic contribution of UCQ in 2012-2013.

Table 2.1 Direct contribution 2012-2013

Wages paid to employees ($ million)	815.57
Gross operating surplus ($ million)	69.06
Direct value added ($ million)	**884.63**
Direct employment (FTE jobs)	**9,821**

Source: UCQ 2013, Deloitte Access Economics.

Gross operating surplus (GOS) is the portion of income derived from production that is earned by the capital factor. It is calculated as a balancing item in the generation of income account of the national accounts.

It differs from profits shown in company accounts for several reasons:

- Total costs are subtracted from gross output to calculate the GOS. GOS is gross output less the cost of intermediate goods and services and less compensation of employees.
- GOS does not make any allowance for depreciation of capital.

In the case of not-for-profit organisations, GOS would mainly reflect the depreciation and amortisation of capital, as well as capital grants received for specific purposes.

2.3 Indirect economic contribution

The expenditure of UCQ has a flow-on impact on other sectors, creating an indirect contribution to the Australian economy. In 2012-2013, the expenditure of UCQ on the goods and services of other organisations amounted to $488.35 million. The basis of the calculation of indirect contribution will be based on the expenses figure.

The flow of UCQ's expenditure into other sectors of the economy is represented below. It demonstrates the breadth of the sectors to which UCQ contributes. The multiplier for each sector is applied to calculate the extent of the indirect contribution.

Figure 2.1 UCQ's indirect contribution flow

Source: Deloitte Access Economics.

The indirect contribution relates to the additional contribution that UCQ makes as a consumer of other services and products.

Table 2.2 Indirect economic contribution 2012-2013

Wages paid to employees ($ million)	243.72
Gross operating surplus ($ million)	168.43
Indirect value added	**412.15**
Indirect employment (FTE jobs)	**3,522.2**

Source: UCQ 2013, Deloitte Access Economics.

2.4 Total economic contribution

Table 2.3 outlines the total economic contribution of UCQ (the sum of the direct and indirect contributions).

Table 2.3 Total economic contribution 2012-2013

Wages paid to employees ($ million)	1,059.28
Gross operating surplus ($ million)	237.49
Total value added ($ million)	**1,296.77**
Total employment (FTE jobs)	**13,343**

Source: Deloitte Access Economics.

The economic contribution of UCQ highlights that it is an important organisation. UCQ contributes $1.3 billion to Australian GDP, and supports 13,343 FTE jobs.

2.5 Economic contribution comparison

There are several ways of interpreting these results:

- UCQ's total economic contribution is almost as high as its annual revenue with a substantial direct contribution component. Much of UCQ's revenue is spent on service provision directly, rather than purchasing inputs, with labour comprising a significant input.
- UCQ is a very significant organisation. In employment terms, it is larger than the University of Queensland, the Bank of Queensland or Brisbane City Council. Its employment is similar to national organisations such as St Vincent's Health, Singtel Optus and the free-to-air television broadcasting industry. Its total contribution to employment is similar to the number of people employed in the general insurance sector in Australia.
- UCQ's total economic contribution is similar to the direct economic contribution of Queensland disability service providers and the tourism gross regional product of the

Sunshine Coast[2]. UCQ's total economic contribution is more significant than the University of Southern Queensland, University of Wollongong, and all fitness centres in Australia.

[2] Tourism gross regional product (TGRP) is tourism gross value added plus taxes paid less subsidies received on tourism related products, as these are reflected in prices that visitors actually pay.

3 Firm benefits

3.1 Efficiency discussion

The National Health and Hospitals Reform Commission's (NHHRC) terms of reference (2009) require the development of a long-term health reform plan to improve the performance of the Australian health system. A key component of performance is efficiency. To illustrate the importance of efficiency, the Productivity Commission analysed the literature on health system efficiency. The Commission determined that the efficiency gains could be between 10% and 20% across the total Australian health sector. Furthermore, the Productivity Commission estimated that if a 5% improvement in productivity in the national health system were to be achieved through productivity reforms, it could result in net resource savings of around $3 billion (2005-2006 dollars). This comprises savings of $2 billion for states and territories and nearly $1 billion for the Commonwealth.

In discussing efficiency, a high-level approach has been adopted, and will focus on UnitingCare Health. It is important to note that evidence suggests there is no one right way to assess efficiency across the health care system.

3.1.1 UnitingCare Health - Cost per patient day analysis

Data published by the ABS indicates that, on average, the cost per patient day for all private hospitals is $1,189, whereas the cost per patient day for not-for-profit hospitals is $1,359[3]. The higher cost per patient day for not-for-profit hospitals may relate to the provision of specialist, high cost, patient services which are generally not provided in for-profit hospitals. For UnitingCare Health, examples of specialist services include palliative care and bone marrow transplant at The Wesley Hospital, and deep brain stimulation at St Andrew's War Memorial Hospital.

Table 3.1 Cost per Patient Day Analysis 2012-2013

	$
Benchmark cost per patient day (religious not-for-profit hospitals)	1,359.76
UCQ average cost per patient day	1,314.48
Difference in cost per patient day	45.27
UCQ patient bed days per annum	329,477
Lower patient costs per annum	**14,916,756**

NB. Figures exclude St Stephen's Hospital, Hervey Bay due to its current status as a day hospital.
Source: UCQ, ABS and AIHW.

[3] ABS 4390.0, Private Hospitals, 2009-10. Adjusted to 2012-13 dollars using health inflation rate as detailed in AIHW Health Expenditure Australia 2010-11

Based on actual cost per patient day ($1,314.48), as well as the number of bed days per annum (329,477), UnitingCare Health's patient cost per annum is approximately $15 million less than their not-for-profit counterparts. It is important to acknowledge this figure does not take account of differences between UCH and the Australian Bureau of Statistics (ABS) benchmarks regarding patient acuity or location. Thus the source of the cost reductions are varied and not necessarily due to better cost management and/or efficiencies.

3.1.2 Blue Care – Residential aged care analysis

Blue Care operates 53 residential aged care facilities throughout Queensland, a large portion of which are located in regional areas, potentially resulting in higher operational costs.

A comprehensive study of Australian residential aged care services in 2003 found that if all aged care facilities were to operate as efficiently as the most efficient, increases in efficiency of 17% across the sector might be achieved. If this occurred, providers could care for an additional 23,100 clients. In commenting on this study, the Productivity Commission (2008) noted:

> *"The feasibility of realising these improvements is constrained, at least in the short to medium term, by fixed capital and policy settings which limit the scope for restructuring to secure least cost outcomes. Further, choices made by governments as to the level and quality of service delivered to satisfy equity and social objectives impact on the costs of delivery and often involve a trade-off between cost and outcomes." (Productivity Commission, 2008)*

The Productivity Commission (2008) also identified areas where regulations appeared to constrain capacity of the sector to operate efficiently, including:

- constraints on the supply of aged care services
- the duplication of building certification requirements
- inconsistency in the application of accommodation bonds across service types
- administrative inefficiencies with contract management in community care.

The National Health and Hospitals Reform Commission (2009) found facilities in rural and remote locations have lower average efficiency scores. Accordingly, a broad efficiency analysis of Blue Care may not be appropriate due to the high proportion of regional facilities. Current benchmark data incorporates facilities across all locations and does not consider the higher costs associated with providing regional services. Despite these higher costs, Blue Care's commitment to people in need means it is dedicated to delivering aged care in regions where other providers are not present.

3.2 Quality of care

Given the diversity of funding sources and funder requirements, there are multiple formal quality regimes in place across the UnitingCare Queensland portfolio. These range from accreditation or licensing regimes, to quality management systems certifications and associated assessment approaches, which range from self-assessment through to external

assessment by accredited independent auditors (including announced and unannounced visits for residential aged care facilities). All regimes require ongoing assessment, often on an annual basis. There are also a range of legislative compliance and reporting requirements across the portfolio for critical incidents that may occur, particularly in residential aged care, disability, child safety and health care services.

Each service group manages these assessment and reporting programs centrally, and co-ordinates ongoing internal review and monitoring to ensure improvements are identified and integrated into every day service delivery.

One of UnitingCare Queensland's strategic objectives is to be a leader in person-centred care and service. This approach recognises each person as an individual in the context of their relationships with others, and invites, recognises and respects their views on how their needs are to be met. A Board Quality Committee was established in 2012-2013 to support the organisation in its intent to deliver excellence in person-centred care and to evaluate the quality of care provided by UnitingCare Queensland.

The committee has established a Quality Management Framework to drive improved UCQ service quality and build an organisation-wide view of whether services are making a positive difference in the lives of people who receive them. This provides a structured way to think about the achievement of impacts and outcomes for clients, and makes explicit the need to assess these from a clinical or program perspective, as well as to assess the care experience from a client or patient perspective.

3.2.1 Quality of care for UnitingCare Health

Quality of care refers to aspects of hospital services that affect the process of care and the effectiveness of hospital treatment (Productivity Commission, 2001). Two broad measures are used:

- General outcome indicators
- Process-of-care indicators.

Examples of hospital-wide outcome indicators are unplanned readmission rates, unplanned returns to theatre, and patient falls. These indicators are analysed below.

Table 3.2 Quality of care indicators

	Readmission rate (% of discharges)	Unplanned return to theatre (% of total procedures)	Patient falls (number per 1,000 bed days)
ACHS benchmark	1.07%	0.31%	3.70
UCH	0.33%	0.24%	3.15
Variance	**0.74%**	**0.07%**	**0.55**

NB. UnitingCare Health data is based on the 12-month period May to April 2013

Source: UnitingCare Queensland

To assess quality of care against these indicators, the Australian Council on Healthcare Standard (ACHS) benchmarks have been compared to rates for the five UnitingCare Health hospitals. Results indicate that in providing their hospital services, UnitingCare is able to

deliver improved patient outcomes, including fewer in-hospital injuries, and fewer additional procedures.

Improved patient outcomes are also a partial indicator of hospital efficiency (Productivity Commission, 2009). Generally, lower unplanned returns to theatre and patient falls will lead to lower costs per separation from fewer additional procedures and reduced length of stay.

3.2.2 Quality of care for Blue Care

Blue Care is committed to providing quality care and continuous improvement in all its service settings, including community care and residential aged care. Like other operators in the aged care sector, it is subject to strict accreditation standards, legislative compliance and reporting requirements under the *Aged Care Act 1997.* The current aged care accreditation system focuses on whether processes are in place to mitigate failures of care, and as such, little quantitative benchmarking data exists that can be used to compare Blue Care with other providers.

In considering the overall quality of care provided by Blue Care, it is important to remember that the highly varied and personalised nature of quality care (Productivity Commission, 2011) means it is not possible to assess certain dimensions in this study.

3.2.3 Quality of care for UnitingCare Community

UnitingCare Community's programs and services fall under several quality systems and certification processes, with all of the UCC programs and services presently certified in accordance with funder requirements.

Over the 12-month period to April 2013, UCC completed internal reviews across all of its disability services; several out-of-home care services; as well as residential, and foster and kinship care services.

With the Human Services Quality Framework for Queensland government-funded community services to be introduced from 2014, UCC will face reduced costs in conforming to multiple sets of quality standards. Once it has achieved certification against this framework, UCC will explore the potential for further efficiencies.

3.2.4 Research activities

UnitingCare Queensland is a contributor to the Queensland research community, both through its own work, and through the partnerships it has established with universities and service providers. UnitingCare Queensland's financial and intellectual contribution to research is evident in the support it provides to three reputable research centres:

- The University of Queensland/Blue Care Practice Research Centre is a long-standing initiative which develops evidence to support innovation and development of new services models. It represents an exceptional collaborative partnership for the aged care sector and is supported by $250,000 from Blue Care per annum. Projects with an

emphasis in the areas of dementia care and palliative care feature in the Practice Research Centre.

- Through an annual contribution of $373,201, UnitingCare Health supports the St Andrew's Medical Institute. This Institute works collaboratively with St Andrew's War Memorial Hospital on coronary care and superior coronary interventions research projects.
- UnitingCare Health provides in-kind support in the form of accommodation and services to the Wesley Research Institute. Established in 1994, the Institute is an independent, not-for-profit medical research institute located in The Wesley Hospital. It provides and supports a number of services designed to make improvements to health care practice. These include funding research projects, providing biostatistical support, conducting research education and training, administering clinical trial services, tissue banking, and managing data.
- UnitingCare Health is also a leading contributor to the University of Queensland's Asia-Pacific Centre for Neuromodulation. A contribution of $227,500 per annum assists the Centre's work in becoming a world leader in research to revolutionise the diagnosis and treatment of neurological disease. The Centre has a special emphasis on deep brain stimulation, which helps people suffering from Parkinson's disease, Dystonia, Essential Tremor, Post-stroke disorders, Tourette's syndrome, Epilepsy and intractable pain.

In conjunction with the University of Queensland, UnitingCare Queensland also employs a Chair in Social Policy and Research. Dedicated researchers are also in place across the service groups, with their salaries representing a further contribution to research by UCQ.

Figure 3.1 Case study of deep brain stimulation at St Andrew's War Memorial Hospital

Deep brain stimulation (DBS) is a procedure used in the treatment of Parkinson's disease, Dystonia, Essential Tremor, Post-stroke disorders, Tourette's syndrome, Epilepsy and intractable pain. The procedure involves surgically implanting electrodes in a deep part of the brain. This brain 'pacemaker' sends electrical impulses to a targeted area on each side of the brain to block signals that cause disabling motor symptoms. Although the exact mechanism of action of DBS is unknown, it appears that continuous stimulation of these areas (or regions) blocks the signals that cause the symptoms. As a result, many patients achieve greater control over their body movements, leading to greater quality of life.

In March 2012, The University of Queensland and St Andrew's announced a joint venture to create a new multi-million dollar Asia-Pacific Centre for Neuromodulation (APCN). The $10 million investment seeks to establish Brisbane as a world leader in research to revolutionise the diagnosis and treatment of neurological disease. To achieve this goal, the APCN will integrate research, education and clinical care, and aims to become the data hub for the region, linking to an international research and clinical database on neuromodulation outcomes, technology and procedures.

St Andrew's War Memorial Hospital is one of 16 DBS providers in Australia. According to UCQ, the team at St Andrew's was ranked fifth in the world in the volume of DBS procedures performed in 2012. Furthermore, over the past five years (to 30 June 2013), St Andrew's has admitted 626 DBS patients, with the youngest patient being 13 years old at the time of admission. Due to the limited number of DBS providers, it is not uncommon for patients seeking treatment to travel from as far away as Victoria and South Australia, not to mention from other countries such as New Zealand and Mongolia.

Last year, a study by Ngoga et al (2013) analysed the survival rates in patients with severe Parkinson's disease. The study showed that patients who underwent DBS had significantly longer survival rates and were significantly less likely to be admitted to a residential care home than those managed purely medically. Based on these outcomes, DBS would appear to contribute to a higher quality of life for patients with Parkinson's Disease.

Valldeoriola et al (2013) also considered the costs associated with three treatment options for patients with advanced Parkinson's disease, being DBS, continuous duodenal levodopacarbidopa infusion (CDLCI) and continuous subcutaneous apomorphine infusion (CSAI). The study considered the average total medical cost for patients within the Spanish national healthcare system over a five-year period. The average cumulative five-year cost per patient was lower with DBS ($111,410) vs CSAI ($178,978) and CDLCI ($296,184).[4]

[4] Adjusted by Australian-Euro foreign exchange rate, using the average rate for 2012-2013

Based on the total number of patients treated at St Andrew's, the reduction in medical costs could be between $42 million and $115 million over a five-year period, using DBS as opposed to other treatment methods. It is important to note that this study does not consider other benefits of DBS, such as the patient returning to the workforce, and the reduced family burden, which may lead to higher overall financial benefits. The Asia-Pacific Centre for Neuromodulation is investing in research and development, with the intent to develop innovative products resulting in potential commercialisation. This research has great potential to contribute to the Queensland economy and, when coordinated with industry, the ability to lead to new industry developments.

Source: UCH, Asia-Pacific Centre for Neuromodulation

Figure 3.2 Case study of the Bone Marrow Transplant Unit at The Wesley Hospital

A bone marrow transplant (BMT) is a procedure to replace damaged or destroyed blood-forming bone marrow with healthy bone marrow stem cells. BMT replaces bone marrow that is diseased (eg. leukaemia), defective (eg. aplastic anaemia) or has been destroyed by chemotherapy or radiation therapy in patients with varying types of blood cancer (Leukaemia Foundation, 2013). There are two primary types of transplants, autologous and allogeneic. The former uses the patient's own stem cells, collected in advance and returned to them after they receive high doses of chemotherapy. In an allogeneic transplant, the stem cells are donated from a genetically matched stem cell donor (Leukaemia Foundation, 2013).

The Wesley Hospital operates one of two private BMT units in Australia. Established in 1996, it is a high dependency unit that provides high quality nursing care for acutely ill patients with blood cancers and those undergoing transplantation (The Wesley Hospital, 2013). Over the five years to 30 June 2013, the Wesley BMT unit treated 306 patients, for an equivalent of 3,178 patient bed days. Due to limited availability of BMT units generally, almost 60% of patients were required to travel from outside the Brisbane metropolitan area.

Operating in conjunction with the BMT unit, The Wesley Hospital's oncology unit treated 1,814 patients in 2009. For cancers such as Leukaemia and Lymphoma which may require BMT treatment, The Wesley treats 26% of private patients and 15% of all public/private patients. In the absence of The Wesley's oncology unit, it would appear that other providers would be required to increase their capacity by 34% to cater to oncology patient demand.

While UCH does not directly undertake research in the bone marrow transplant field, all patient survival data is submitted to the Australian Bone Marrow Donor Registry and the overall results are published annually. The data is used to create benchmarks and other statistics which are relied on by other institutions who conduct research in fields relating to BMT.

An article published earlier this year by the Journal of Clinical Oncology analysed the survival rates of recipients of bone marrow transplants. The study analysed 38,000 transplant patients over a 12-year period, and found that survival rates have increased significantly among BMT patients. At one year post-transplant, patients who received an unrelated transplant showed an increased survival rate from 48% to 63%. The increased survival rates were attributed to advances in tissue typing, better supportive care and the collaborative efforts between donor programs and clinical researchers (Hahn et al, 2013).

Source: UnitingCare Health

Figure 3.3 Case study of palliative care at The Wesley Hospital

At The Wesley Hospital in the early 1990s, a group of medical/haematology oncologists established a private day chemotherapy service, while a radiation oncologist established a private radiation service in the adjoining medical centre. These two services were the first privately operated oncology services in Queensland. Since then, they have grown to sixty-five beds across four wards.

A crucial part of these services is the palliative care service. Initiated in 2003 as a separate ward with a dedicated multi-disciplinary team, admission was initially restricted to patients in the last weeks of life. However, as the service developed, the focus shifted away from end-of-life care to reviewing symptoms earlier in the patient's disease trajectory. More recently, the Medical Director has initiated an outpatient clinic that is run from the private chemotherapy clinic using the oncologists' rooms. Patients can now be discharged from hospital and receive follow-up review in the clinic. This allows for continuity of care and ongoing pain management in conjunction with the GP and community services. By June 2010, the palliative care service was receiving 30 referrals per month, with patients from all over Queensland and northern New South Wales benefiting.

The need for this service is highlighted by the limited number of palliative care beds within the greater Brisbane area, particularly for stays greater than 35 days. Palliative Care Queensland estimates there are only 174 specialist, publicly designated, palliative care beds in Queensland (Palliative Care Queensland, 2012). The wider scarcity of such services is because palliative care in the private hospital setting is not adequately funded by private health insurance funds, resulting in private hospitals operating such services at a financial loss. However, The Wesley provides 17 beds and remains one of the few not-for-profit organisations committed to providing palliative care services and specialist physician support.

The team at The Wesley Hospital currently encompasses a medical director, a palliative care specialist, a registrar, a clinical manager, a nurse, a consultant, a pharmacist, a physiotherapist, as well as pastoral care support.

Data obtained from The Wesley Hospital (below) shows that in the year 2012-2013, there were 243 episodes of palliative care, which is down from 268 the year before:

Year	Episodes	Bed days	ALOS
2011-2012	268	3,098	11.56
2012-2013	243	2,431	10.00

Data submitted to the Palliative Care Outcomes Collaboration, an agency of the Commonwealth Department of Health, reveals that in the six-month period between July and December 2012, The Wesley unit had 159 patients (194 episodes or 6.8% of Queensland) representing 6.7% of all palliative care patients in Queensland (2,387).

Source: UnitingCare Health

3.3 Aged care and health system cost savings

Another benefit of aged and community care services is that they provide care to clients who are otherwise unable to live independently. If patients who have received medical treatment are not able to return home, they may otherwise need to remain in hospital for several months. This results in higher health system costs.

A 2011 National Centre for Social and Economic Modelling report *Length of Hospital Stay by Older Australians: Bed-blocking or Not?* found some evidence of increased costs of longer hospital stays but said more investigation was required.

Another report suggested that, in 2006, there were more than 2,300 older people in public hospitals that should be in aged care (State Governments, 2007). More recently, the West Australian Health Minister said there are 70 to 80 people waiting for an aged care bed at any one time. On a per capita basis, and assuming a similar problem across the country, this suggests the national figure could be 700 at any one time (Cann, 2012).

A 2007 Productivity Commission report estimates the differential between daily hospital and aged care bed costs is approximately $1,000 (Productivity Commission, 2007). Blue Care, like similar organisations, reduces health system costs by accepting permanent aged care clients. It receives between 1,500 and 2,000 permanent admissions a year, with 1,774 accepted in the 2012-2013 financial year. According to the Australian Institute of Health and Welfare (cited in the Australian and New Zealand Society for Geriatric Medicine -no date) 57% of admissions to permanent residential aged care were transfers from hospital. Assuming this statistic holds for Blue Care, it suggests Blue Care receives approximately 1,000 admissions from hospitals a year.

It is difficult to estimate how much earlier those patients were able to leave hospital because of the existence of Blue Care. There are many reasons why people are delayed in entering the aged care system, including assessment processes, funding constraints and the acute care needs of patients (Productivity Commission, 2011). It is not appropriate to assume they would all simply be added to a waiting list. One way of estimating the impact of Blue Care is to look at the additional length of stay in hospital between people returning to an existing position in a residential aged care facility after hospital, and those who do not hold such a position. According to a previous estimate, the difference in those lengths of stay is six days against 24 days. Using these figures, it suggests an annual benefit through reduced health costs of approximately $18 million a year.

Table 3.3 Calculation of benefits

Blue Care admissions	1,774
Proportion of admissions from hospitals	57%
Difference in bed costs per day	$1,000
Difference in length of stay in days	18
Annual avoided costs	**$18,201,240**

Sources: UCQ 2013, ANZSGM, Productivity Commission, AIHW, Deloitte Access Economics.

4 Social benefits

UnitingCare Queensland's activities are of wider benefit than just to the health and wellbeing of individual clients. They also include other stakeholders such as relatives, communities, businesses and governments. In this chapter, we analyse the key services provided by UCQ and offer estimates of the value of these broader economic and social benefits.

4.1 Benefits of volunteering

Volunteering is a very important part of the contribution to the Australian economy of non-government organisations, charities and not-for-profit organisations. Volunteers form a significant proportion of the labour force of many of these organisations, and therefore, the output of their labour is a major benefit. However, the benefits of volunteering also extend to the individual, who often gains 'process benefits' (Ironmonger, 2008) through increased satisfaction from their volunteering work.

4.1.1 UnitingCare Queensland volunteer benefits

The range of volunteer activity undertaken at UnitingCare Queensland includes, but is not limited to retail, community recovery, crisis support, community visitors and administration. From 2012-2013, 9,000 volunteers dedicated a total of 1,260,973 hours across UCQ service groups. This is represented in Table 4.1 below.

Table 4.1 UCQ volunteer activity 2012-2013

	Volunteers	Volunteer hours	Value
UnitingCare Community	6,099	657,000	$15.8 million
UnitingCare Health	625	85,000	$2.0 million
Blue Care	2,287	475,696	$11.4 million
UnitingCare Queensland	9,011	1,217,696	$29.3 million

Source: UnitingCare Queensland

4.1.2 Output benefits

Output benefits are those which can be transferred from the giver to the receiver. One way to measure output benefit is to price it by measuring the amount of time spent on volunteering and then use an equivalent market wage for each of the activities undertaken. This wage should reflect the volunteer's opportunity cost of volunteering and, therefore, the value of their output.

Ironmonger (2008) and the ABS (2009) estimate the output benefits of volunteers using this method. From their research, the ABS provided the following statistics on volunteering in Australia:

- In 2006-2007, the value of imputed volunteer services was $14.598 billion.

- More than 4.5 million Australians over the age of 18 volunteered for not-for-profit (NFP) Institutions in 2006-2007.
- Culture and recreation NFPs had the most volunteers (1.7 million), followed by social service NFPs (1.1 million).
- 623 million hours were volunteered to NFPs in 2006-2007, equating to 317,200 full-time equivalent jobs.
- Culture and recreation NFPs gained the most hours of volunteer time (232 million hours), followed by social services NFPs (163 million hours).

Meanwhile, Ironmonger's (2008) study for the then Queensland Department of Communities found that:

- The value of volunteering to organisations in 2006 was $4.5 billion, with 165 million hours volunteered to organisations, another 258 million hours informally volunteered, and 80 million hours spent on travelling.
- Volunteers provided a volume of work equivalent to 195,000 jobs in 1992, rising to 299,000 in 2006.
- Volunteering was worth $13.4 billion in 2006 in Queensland.
- In 2004, 65% of the annual value of volunteering was contributed to organisations with a public orientation.
- In 2004, community organisations benefited by $1.2 billion from volunteering. Education, training and youth development organisations benefited by $1.1 billion, and health and welfare organisations by another $1.0 billion. It was estimated the cost of replacing volunteering across all Queensland's publicly oriented service providers was $3.8 billion.
- The largest type of volunteer organisation providing privately oriented services was sports and recreation organisations, with $707 million of volunteering hours in 2004. Approximately $527 million of volunteering hours were completed for religious groups.

4.1.3 Input/Process benefits

In addition to the above output benefits, volunteers derive benefits from enjoying the work they do. These benefits may result in other positive externalities, such as increased wellbeing, improved skills, and a better sense of community and obligation. Another possible benefit is greater inclusiveness, which in turn may result in higher productivity, tax revenue, reduced social security payment and health sector payments.

These process benefits are highlighted by a Volunteering Australia (2010) study of volunteers which found respondents had:

- an increased sense of belonging to their community
- improved opportunities to make a difference to the organisation's work, and to learn and develop by using their skills
- opportunities to acquire an accreditation/qualification for 26% of volunteers as a result of training received
- pathways or assistance to paid employment for 33% of volunteers
- opportunities to learn for 80% of volunteers through their role

- skills useful for current or future paid employment for 18% of respondents
- greater feelings of social inclusion, with 83% of volunteers saying their work as a volunteer had increased their sense of belonging to their community. Volunteerism was found to help reduce feelings of personal isolation, offer people skills, social contacts, support a greater sense of self-worth, and challenge the stereotypes we have about different social groups
- derived significant positive benefits, including a greater sense of self-fulfilment, improved personal motivation to make a difference, and augmented professional skills in areas such as counselling and psychology (for volunteers working in crisis support).

UnitingCare Community considers these benefits explain volunteers' ongoing commitment to the service.

Measuring process benefits of volunteerism is somewhat challenging, as many of these benefits are idiosyncratic. According to Ironmonger (2008), "the statistical methods so far devised for valuation have not come up with an objective method of valuing process benefits. The best that can be done is a subjective method of asking individuals to evaluate the pleasure/displeasure obtained from an activity on a scale…".

We also note that in UCC's experience, in some cases, former or current clients become volunteers in other parts of the organisation. This demonstrates that beyond service provision, UCQ can provide a virtuous circle of participation that contributes to overall community wellbeing.

4.2 Social benefits of Blue Care

Blue Care provides a range of positive social impacts for the community through its provision of aged and community care services. These are outlined in Table 4.2 below.

Table 4.2 Benefits of Blue Care services

Service	Individual benefits	Community benefits	Government benefits
Community services, including nursing, allied health, personal care and home support, and programs such as palliative care, memory support and hospital in the home	• Improved health and wellbeing • Maintained independence • Restoration after illness and disease • Reduced burden of disease and premature death • Longer stay at home • Increased safety • Decreased adverse events • Improved end of life • Decreased social isolation • Improved sense of self • Client physical outcomes • Improved labour force participation • Improved emotional welfare • Decreased carer burden	• Increased health and wellbeing • Increased social inclusion • Decreased burden of disease • Less reliance on secondary and tertiary-level services, including reduced hospital admissions • Reduced harm and treatment costs for the community • Reduced second generational costs	• Reduced health system costs • Savings in social benefits • Development of aged care sector
Respite and carer support services	• Paid and unpaid work • Meaningful activity • Reduced harm and premature death • Improved labour force participation • Improved emotional wellbeing and reduction of harm • Generational benefit through improved carer skills • Improved quality of life and general wellbeing	• Reduced harm and treatment costs for the community • Production benefits • Increased social inclusion	• Reduced health system costs • Savings in social benefits • Development of sector

Residential services	• Reduced harm and premature death • Improved labour force participation • Improved emotional welfare • Improved emotional wellbeing and reduction of harm • Generational benefit through improved carer skills • Improved quality of life and general wellbeing	• Less reliance on secondary and tertiary-level services, including reduced hospital admissions • Reduced harm and treatment costs for the community. • Reduced second generational costs	• Reduced health system costs • Savings in social benefits
Retirement living services	• Individual housing solutions • Improved emotional welfare • Improved quality of life and general wellbeing	• Reduced harm and treatment costs for the community • Reduced second generational costs	• Reduced social housing costs • Savings in social benefits
Disability support	• Improved labour force participation • Improved emotional wellbeing and reduction of harm • Maintained independence	• Production benefits • Improved quality of life • Increased health and wellbeing	• Tax revenue
Indigenous services, including drug and alcohol support services	• Improved health and wellbeing • Maintained independence • Restoration after illness and disease • Reduced burden of disease • Decreased social isolation • Improved sense of self • Client physical outcomes • Second generational benefits • Improved labour force participation • Improved emotional welfare • Decreased carer burden	• Increased health and wellbeing • Improved quality of life • Increased social inclusion • Decreased burden of disease • Less reliance on secondary and tertiary-level services, including reduced hospital admissions • Reduced harm and treatment costs for the community • Reduced second generational costs	• Increased tax revenue • Reduced health system costs • Savings in social benefits • Changes in community attitudes

Source: Blue Care

4.2.1 Keeping people out of residential aged care facilities

Blue Care's community aged care services have a positive social impact on the community. By providing services to clients in the community, the number of clients who would have to seek full-time care and accommodation in a residential aged care facility (RACF) is reduced. This provides a valued quality of life for clients who prefer to remain in their own home and also reduces the burden on carers.

To calculate the social impact of Blue Care's community aged care services, it is necessary to calculate the number of clients who are able to remain in the community. In 2012-2013, Blue Care supported 419 people receiving Extended Aged Care at Home (EACH), equivalent to the new Level 4 packages. These clients are considered to have low function and require high levels of care to remain in the community. Further, it can be estimated (from 2013 internal data) that Blue Care provides comprehensive support of 10 hours per week or more (inclusive of centre-based respite, and home and community care). Five hundred and two clients aged over 65 years who are presently funded under the Home and Community Care (HACC) program, and a further 238 clients aged under 65 years receiving support through Queensland Community Care funding. These people cannot access funded packages through EACH Level 4 or Disability Services. Therefore, it is estimated Blue Care provides community services to at least 1,159 clients who would otherwise require placement in a RACF to receive a similar level of care.

Based on the 2010 estimate by Stewart Brown Business Solutions (2010), the funding provided for one residential aged care bed was $152.72 per day. Allowing for consumer price index increases from 2011-2013, the 2013 price of a single RAC bed would be $163.96 per day. According to the Commonwealth Department of Health's Home Care Packages Program Guidelines, the Level 4 Home Care Packages (HCP) cost an estimated $45,500 per year or $124.66 per day. This is a cost saving to the health system $39.30 per day per client who remains in their own home. The continued delivery of Blue Care's community care service amounts to a total cost saving of $16 million per year.

Table 4.3 Aged care in the home benefits

Cost	
Clients who would need RACF without community care (no.)	1,159
Home care packages cost ($ per day)	$124.66
RAC funding per day (CPI adjusted)	$163.96
Reduced cost (per person per day)	$39.30
Total annual benefit	**$16 million**

Source: Blue Care and Deloitte Access Economics

In addition to supporting people with complex and high support needs, Blue Care provides community services through more than two million visits per year to an average of 13,000 community clients per day. These visits aim to support those clients while maintaining their independence, health and wellbeing at home.

Figure 4.1 Case study of Blue Care Indigenous services

Due to its extensive regional presence, Blue Care is well placed to work with Indigenous people and service providers to develop innovative policy and service options. A Blue Care Indigenous care strategy was formulated in 2005 with a focus on "practical responses to dispossession and resulting disenfranchisement of Indigenous people". A key element of this strategy was increasing Indigenous employment, so that more Indigenous people would feel comfortable accessing Blue Care services. Therefore Blue Care has a target of 80% Indigenous employment in services that directly relate to Indigenous people. Since 2006-2007, there has been an overall increase of 164 Indigenous clients accessing Blue Care's services.

More recently, Blue Care has introduced a new cluster of services, called 'Indigenous services'. These services were part of Congress Community Development and Education Services (CCDEU) and joined Blue Care on 10 December 2012. Since the transfer, Blue Care has been allocated $7,502,907 for the provision of care and services to Indigenous clients residing in its residential facilities and accessing community services. A number of aged care, and drug and alcohol services from CCDEU have also been transferred to Blue Care.

'Indigenous services' is now the tenth Blue Care cluster, and provides essential services to local Indigenous communities in north Queensland. These services include:

Blue Care Shalom Elders Village, Townsville

The Village offers permanent nursing home and hostel-style accommodation, and short-term respite care. Shalom Elders Village has 28 equipped single rooms with large ensuites, and is surrounded by maintained gardens and open spaces.

Blue Care Stagpole Street Drug and Alcohol Rehabilitation Unit, Townsville

The Stagpole Street Drug and Alcohol Rehabilitation Unit (SSDARU) is a residential rehabilitation service catering to the unique needs of Aboriginal and Torres Strait Islander people who are suffering from the negative impacts of substance abuse. It has been delivering these services since May 1998 and approximately 95% of the client base is Indigenous. The Unit has a staff of 24, with 80% identifying as Indigenous.

Blue Care Hollingsworth Elders Village, Cairns

The Hollingsworth Elders Village predominantly caters to aged and disabled Aboriginal and Islander people, many of whom are from Cape York and surrounding communities. It is a residential care facility with a license to operate 42 beds. It currently employs 60 staff, of whom 90% are Indigenous.

Blue Care Star of the Sea Elders Village, Thursday Island

Star of the Sea services Thursday and Thorn Islands. Its facilities ensure elders are placed in an appropriate level of care for their needs. The high care area has 19 beds with a nurses' station for increased monitoring. The lower hostel area has 19 individual ensuite rooms for more independent residents. Sixty staff work in the Village, with 95% identifying as Indigenous.

Blue Care Cape York Family Centre, Cooktown - *Currently under development*

This facility, located 30 kilometres from Cooktown on a large, natural rural property of more than 500 acres, will be a 45-bed wilderness lodge. In a picturesque setting, it will comprise 10 self-contained houses, a community centre, and cool water feature. The Cape York Family Centre model will draw on the Cape York reforms by instituting effective mainstream interventions within culturally acceptable practices. The family interventions will not be delivered separately, but rather as a direct and integrated part of a family's daily domestic activities in their house, and during their vocational and community activities in the surrounding area away from the Centre. Individual and group therapy activities will also be delivered in a more targeted and tailored way to men, women, young people and children.

Source: Blue Care

4.2.2 Benefits of respite

In 2011, Blue Care provided (through various Commonwealth and Queensland Government funded programs) more than 1.2 million hours of in and out-of-home respite care to 10,458 clients and their carers. The aim of these respite services is to ensure:

> *"that carers can confidently leave their loved ones to go and enjoy a much deserved break, reassured that the person they care for is being well looked after." (Blue Care, 2011)*

Services can be either in the client's home, in their community, at Blue Care centre-based respite facilities or in their residential aged care facilities. In-home respite focuses on lifestyle activities, assistance with light household duties, personal care, shopping and meal preparation, as well as support in social activities. Through centre-based respite, clients attend day programs that may include excursions, outdoor or indoor activities, or holiday programs.

4.2.2.1 Cost of respite care

In 2012, Blue Care received more than $42 million to provide respite care to clients for the nominal fee of $15 per day. Blue Care estimates the total societal cost of respite care to its group of clients as approximately $54 million per year.

4.2.2.2 Other benefits

Respite means carers have more work opportunities. A report by Deloitte Access Economics (2010) estimated that of full-time carers, 60% would not be working even if able, but that the remaining 40% would work and are prevented from doing so because of their carer's duties. A recent Deloitte Access Economics report identified the value of wages foregone by carers is $25.48 per hour based on a 38-hour work week. Given that more than 50% of Blue Care clients who access respite do so for at least two days per week, the social value of respite time for carers is significant.

Providing support for carers through respite services may result in reductions in carer depression, improvements in carer physical health, and delays in residential aged care admissions. The Productivity Commission emphasised that:

> *"Having access to respite services, particularly emergency respite, is an important factor in the decision of many carers to continue in this role." (Productivity Commission, 2013)*

According to Blue Care, more than half of their 10,000 plus clients accessing respite services would have no alternative but to transition to residential aged care in the absence of a carer (eg. due to ill health). Even if residential aged care places were available, the cost to the Australian health system would be substantial, given an average cost of $164 per client per day. Therefore, there is a large social value in providing respite services which support carers to keep their loved ones living in the community.

4.3 Retail and income generation activities

UnitingCare Community conducts a number of retail and income generation activities. These activities provide a range of new and second-hand products to communities at affordable prices, and generate discretionary income for Lifeline Crisis Services, including the Crisis Support Line. In 2012-2013, retail activities generated $5.46 million extra income, derived from $42.34 million in revenue, through the collection, sorting, distribution and sale of recycled and purchased product at the 130 Lifeline shops and 12 warehouse distribution centres in Queensland and northern NSW.

Table 4.4 Lifeline distribution centre activities

Activity	Amount collected
Clothing	
Wearable	1,844 tonnes
Export	3,472 tonnes
Rag	1,475 tonnes
Clothing (total)	**7,372 tonnes***
Furniture pick up	**27,561**
Collection bins under management	**949**
Waste disposal vehicles	**53**

Source: UnitingCare Community
*Including all clothing

Products are available across 44,655 square metres of retail space stretching from Mossman, north of Cairns, west to Mount Isa and south as far as Tweed Heads. Of the $35.36 million generated from retail, 50% is recycled clothing and accessories, 15.8% is recycled manchester and homewares, 15.6% is recycled collectibles, electrical, toys and leisure products, 12.1% is recycled furniture and 6.5% is purchased new product.

This income was augmented by community supported events such as Lifeline Bookfest ($2.16 million), clothing export programs to Dubai and Papua New Guinea ($2.6 million) and industrial wiper (cut rag) sales to industrial customers ($1.57 million). Through these initiatives, the income generation area achieves an 85% recycling rate of donated products.

These retail services also have an environmental benefit. A 2010 study by the Danish Technological University indicated that each kilogram of donated clothing saves four kilograms of carbon dioxide used during production of new textile equivalents. On this basis, through its recycling operations, UnitingCare Community is currently reducing the Queensland 'carbon footprint' by some 29,748 kg of carbon dioxide per annum.

4.4 Social benefit of UnitingCare Community

4.4.1 UnitingCare Community activities

UnitingCare Community (UCC) delivers programs and services to support vulnerable and disadvantaged people, and communities in crisis.

UCC receives funding from the Queensland Government, the Australian Government, and private and corporate donors. The organisation has approximately 2,726 staff and 6,100 volunteers who support people across the state, from Far North Queensland, down to the Tweed Valley border and inland to Mount Isa.

UnitingCare Community's key services include:

- disability services
- crisis support, including suicide prevention
- child protection
- family support and financial counselling.

Child protection and family support services are related, and span a continuum of early intervention, intervention and continuing care. The aim of this service is to improve family functioning, reduce risk and improve outcomes for children and young people. UnitingCare Community also provides out-of-home care in instances where children can no longer live safely at home.

Disability is the largest UCC service, and includes in-home support, supported accommodation, respite, specialist foster care, community linking and engagement, building life skills, vacation care and employment services. As a service, it primarily supports those who have either a severe or profound core activity limitation.

UnitingCare Community (UCC) provides a variety of services across Queensland to support those in crisis due to grief, loss, depression or critical distress.

UCC provides a Lifeline Crisis Support Service as part of the national Lifeline network and runs 10 Lifeline Centres across Queensland. The national network received 151,000 calls in 2012-2013 of which Queensland handled approximately 22%. This service can also act as a key entry point for many clients. This telephone counselling hotline focuses on the emotional, psychological and social wellbeing of callers who contact the service.

UCC is also a provider of the Lifeline Online Chat Service which offers short-term crisis support to people who need assistance to deal with current issues that are overwhelming their capacity to cope and which may be threatening their safety. Additionally the organisation delivers The Stand-By Response Service, a suicide bereavement response team which provides a 24-hour community crisis response to families, friends and associates who have been bereaved through suicide.

Other services provided by UCC include childcare, prison ministry, and social inclusion services, such as the Seniors Enquiry Line, Elder Abuse Prevention Unit and Grandparents Program.

UnitingCare Community services offer a range of benefits. These are summarised in Table 4.5 below. The benefits of the services are calculated as cost saves and/or contribution towards the benefits as suggested by the literature. The economic analysis undertaken in this report focuses on child protection and disability. It should also be noted some services provided by UCC are difficult to quantify because the benefits are largely intangible.

Table 4.5 Benefits of UnitingCare Community services

Service	Individual benefits	Community benefits	Government benefits
Domestic violence	• Reduced harm and premature death • Improved health • Second generational benefits • Improved labour force participation • Improved emotional welfare	• Reduced harm and treatment costs for the community • Reduced second generational costs • Consumption benefits • Production benefits	• Increased tax revenue • Reduced health system costs • Savings in social benefits
Crisis support (Including suicide prevention)	• Reduced harm and premature death • Improved labour force participation	• Reduced harm and treatment costs for the community • Production benefits	• Reduced health system costs
Financial counselling	• Better management of finances • Improved quality of life and general wellbeing	• Better flow of capital due to improved savings behaviour • Job creation	• Increased tax revenue • Savings in social benefits
Social inclusion	• Improved labour force participation • Improved emotional welfare • Reduced burden of health problems • Reduced harm for elders who are abused	• Productivity gains	• Savings in social benefits • Increased tax revenue • Reduced health system costs
Family support	• Reduced harm • Improved health of families • Second generational benefits (children) • Reduced harm for elders who are abused	• Production benefits • Reduced harm • Reduced costs for individuals and treatment costs for the community	• Reduced health system costs • Tax revenue
Child care	• Production benefits from parents able to work • Improved development and behaviour in children	• Production benefits • Consumption benefits • Reduced intergenerational costs	• Tax revenue

Child protection	• Productivity gain • Improved emotional wellbeing and reduced harm • Generational benefit through improved parenting skills	• Reduced crime • Production benefits • Reduced intergenerational costs	• Reduced health costs • Reduced educational assistance • Reduced expenditure on care and protection
Disability support	• Improved labour force participation • Improved emotional wellbeing and reduction of harm • Maintained independence	• Production benefits • Improved quality of life • Increased health and wellbeing	• Tax revenue

Source: UnitingCare Queensland

4.4.2 Cost and benefit of services

Limitations must be acknowledged in making calculations to assess the costs and benefits of these services. Firstly, the services must be considered separately as their costs will differ. The costs of these services are highlighted in the table below. Secondly, while it is obvious that many of these services have significant social benefits, there are two challenges in quantifying these:

- the paucity of available research which defines the benefits and quantifies them
- the difficulty in determining the appropriate relationship between the output of UCC's services and that suggested by the literature.

For this reason, this section of the report will focus on disability and child protection services, as outlined in the table below

Table 4.6 Selected service type costs

Service	Outputs used for benefits calculation
Disability support	**$53.39 million** of which $38.41m were wages
Child protection	**$46.18 million** of which $29.38m were wages

Source: UCQ and DAE calculations

In many cases, a number of assumptions were required to quantify the benefits. The first and foremost was the services that were offered by UCC resulted in similar benefits suggested by the literature. In some cases, a range of effectiveness was presented to provide a flavour of the range of benefits that could be realised. Disability support and child protection are specifically examined and benefits calculated.

4.4.2.1 Disability Services

Defining disability is problematic as it can take many forms. Disability can constitute either a profound, severe or moderate core activity limitation and/or mental illness. Similarly, the support needs required by those with a disability may be quite varied and can range from assistance with communication, mobility and self-care.

In 2009, it was generally estimated that four million Australians had some form of disability. In terms of working age Australians, it was estimated that nearly 2.2 million or 15% had a disability (DAE, 2011). The Australian Bureau of Statistics estimates that approximately 1.3 million Australians had either a severe or profound core activity limitation (ABS, 2009).

In Queensland, the Department of Communities, Child Safety and Disability Services estimated that there are approximately 180,000 people with a profound or severe disability aged 0-64 years (Department of Communities, 2010).The same report also estimates the number of people in Queensland who are potential clients for disability services to be:

- 154,000 in disability services
- 520,000 in home and community care
- 1,113,000 in community mental health.

Approximately half of those with a disability either live or nearly live in poverty. This is more than double the rate of poverty in the general population (OECD, 2009).

While 83% of the general population participates in the labour market, it is estimated that only 30% to 55% of people with a disability do. Limited capacity to work, lack of employment options, and fixed income support means that two-thirds will earn less than $320 per week (OECD, 2009). Primary carers for those people with a disability are likely to be in the poorest two-fifths of all households, and 55% receive income support as their main source of cash income (OECD, 2010).

Cost of disability

The cost of disability in Australia is high. With regard to direct service provision, Australian governments spent $6.9 billion on disability support in 2011-2012, representing 37% funding growth in real terms since 2006. Disability-related income support and allowances cost the Australian Government $20.4 billion in 2011-2012 (Productivity Commission, 2013).

Current ways of supporting people with a disability have cost implications for other services, including health, housing and justice. There is an identified gap in effective screening and diversion mechanisms that can more effectively assist people with a disability, particularly those with a mental disability. For example, an estimated 30,000 people in Australian prisons each cost an average of $100,000 per annum. If better disability support reduced levels of incarceration by only 10%, it would save about $300 million per annum (National Disability Services, 2013). The health of people with disability is poorer than their non-disabled peers, including conditions related to obesity, mental health, oral health and diabetes. Housing challenges include the need for home modifications, lack of accessibility, affordability and support options (National Disability Services, 2013).

While the cost of disability is important, the cost implications for carers is equally so. Informal care occurs when an individual has assumed responsibility for another's physical, emotional or developmental wellbeing. It is community-based and generally unpaid, however, Australian Government assistance is available to carers who meet eligibility requirements under the carer's pension.

A report by Deloitte Access Economics in 2010 estimated there were 2.9 million carers in Australia who provided some 1.32 billion hours of care each year. The value of this informal care exceeded $40 billion. The cost of this care is $4.8 billion in carer income support. The corresponding reduction in workforce participation represents a productivity loss of $6.5 billion and foregone tax revenues of $1.29 billion ($1.76 billion if efficiency costs incurred are included). Indirect health system costs resulting from caring responsibilities are also significant, with 72.4% of carers reporting some form of physical or emotional effect from providing care, particularly sleep disorders.

UnitingCare Community disability services

UnitingCare Queensland provides services to people with disability in both UnitingCare Community and Blue Care. This section of the report focuses on UnitingCare Community, where a broad range of services are provided, including:

- supported accommodation
- in-home support
- respite services, specialist foster care, community linking and engagement, building life skills, vacation care
- employment services.

UCC's services primarily support those who have either a severe or profound core activity limitation. In 2012-2013, UCC disability staff provided 1,663,347 hours to directly support 725 people. According to UCC, the service delivery attributed costs of disability services for 2012-2013 was $53.39 million, of which $38.41 million were wages (2013). While organisational costs form part of the remaining expenses, there are service development and quality improvement activity costs which are not included in these totals.

Preparatory work is being undertaken by UCC to transition to the National Disability Insurance Scheme. The scheme places an emphasis on consumer choice and creates a market for disability services. In essence, this means the way services are delivered will move to a consumer-directed model where the consumer will be able to choose their provider and services. The scheme will roll out in Queensland from July 2016.

In-home accommodation support, supported accommodation and lifestyle/life skills support services

According to UCC:

> *"This service provides support to people with disabilities to live in their own home or in residential accommodation such as hostels and boarding houses. The primary focus of this work is to assist residents to develop and maintain skills, make community connections and to gain access to appropriate health care services. This service is focused on hostels and boarding houses in the northern suburbs of Brisbane and the bayside suburbs around Sandgate. The Lifestyle and Life Skills service support client access and engagement with community life using a range of flexible models of support." (UCC, 2013)*

Between April 2012 and March 2013, in-home accommodation support was provided to a total of 117 clients, with 221,843 hours of service, in a range of group living arrangements. Supported accommodation services in various settings were provided to a total of 160 clients, through 1,277,330 hours of service. Meanwhile, life skills development activities in the April 2012 to March 2013 period supported 295 clients, with 104,097 hours of service.

Respite services

The purpose of respite services is to:

> *"provide support that enhances the ability of the family and/or carer to continue in their role of primary care provider and to sustain the total family unit." (UCC, 2013)*

This service is provided within South East Queensland. From April 2012 to March 2013, a total of 71 clients received 27,136 hours of respite, on holidays, with host families, or through a range of flexible respite plans.

Employment service

UnitingCare Community's disability employment service is funded by the Commonwealth Department of Employment to:

> *"assist people with a disability to gain and maintain employment. Those using this service are largely a separate group, with less limiting disabilities to those using the above named UCC disability services." (UCC, 2013)*

From July 2012 to June 2013, the Toowoomba service accepted 116 new referrals, and placed 110 clients in a range of jobs. A number of these placements included referrals to the service prior to July 2012. Job placements include short-term and ongoing positions.

Analysis of benefits

In 2011, Deloitte Access Economics undertook a study for the Australian Network on disability, examining the economic benefits of increasing employment for people with disability. It was found that:

- closing the gap between labour market participation rates and unemployment rates for people with and without disabilities by one-third would result in a cumulative $43 billion increase in Australia's GDP over the next decade in real dollar terms. This is accompanied by increasing labour participation by 363,000 workers.
- GDP will be around 0.85% higher over the longer term if the gap is closed. This is equivalent to an increase in GDP of $12 billion in 2011 terms.
- closing the gap between labour market participation rates and unemployment rates for people with and without disability by one-third implies an increase in the participation rate for people with disabilities from 54% to 64%, and a reduction in the unemployment rate from 7.8% to 6.9%. Many nations, including New Zealand and a number of the Nordic countries, have already achieved or surpassed these benchmarks.

UCC's services aim to maximise a client's quality of life and community participation. A small proportion of these clients will take up employment or seek employment through labour market participation. The programs that would increase labour force participation are life skills support services, in-home accommodation support, and employment services. These programs helped 522 people over a 12-month period. If UCC services increase the labour force participation rate as estimated in the DAE 2011 report, this would be worth approximately $62 million.

Another way to quantify the potential benefits is to look at the cost if there was no respite care, which could result in reduced informal care. Respite care is a service provided to support carers and their families. Without that support, the cost of service provision to those with a disability would be significantly higher for government, as carers would not be

able to sustain the level of care and commitment required over the long term. In 2010, DAE estimated a replacement value of care for 2.9 million people to be around $40 billion. This implies the value of care to be around $13,793 per person. In addition, the report estimated that informal carers provided 1.32 billion hours of care or $30.30 per hour. This implies that UCC respite services provided $822,220 replacement value of care.

This suggests that with costs of around $53 million a year and potential benefits of around $63 million, the benefits of UCC's services exceed the cost of provision.

4.4.2.2 Child protection

UnitingCare Community provides a wide variety of services that support vulnerable Queensland children, young people and families.

UnitingCare Community, like many NGOs, plays a key role in Queensland's child protection system that is overseen by the Department of Communities, Child Safety and Disability Services and governed by the *Child Protection Act 1999*. The size and scope of child protection in Queensland has expanded significantly in the last decade as evidenced by the number of children in out-of-home care, at risk families receiving support and interventions, and increased budget allocation.

Between 2001-2002 and 2011-2012, the number of child protection intakes by Child Safety Services, as recorded in screening, investigation and assessments for statutory intervention, increased from 33,697 to 114,503 (Department of Communities, Child Safety and Disability Services, 2012). The number of children in out-of-home care has increased from 3,257 in 2002 to 7,999 in 2012. Children are in care for longer periods, with 38% staying for one year or more in 2001-2002 compared to 64% in 2011-2012 (Productivity Commission, 2012, 2013). The Queensland budget for child protection services has more than tripled, from $182.3 million in 2003-2004 to $773 million in 2012-2013.

While policy and funding responsibility for child protection primarily rests with State governments, the Australian Government plays an important prevention and early intervention role, largely through its significant footprint in universal services such as early childhood and general practice, and through family support programs.

Cost of child abuse

The 2013 Queensland Child Protection Commission of Inquiry confirmed the economic and social analysis already undertaken regarding the costs of child abuse.

International evidence of the effects of child abuse on the wider community can be found in a report by Courtney, Terao and Bost (2004). The report surveyed children in foster care about to turn 18. It found two-thirds of the boys and half of the girls had a history of offending, and compared with the national average, the sample group was three times more likely to have mental health needs, and four times more likely to have been treated for a sexually transmitted disease. The Queensland Child Protection Inquiry also showed that children who had experienced out-of-home care were more likely to have poor education and attainment, poor employment prospects, increased risks of early parenthood, increased health risks, and an increased risk of homelessness (Queensland Child Protection Commission of Inquiry, 2013).

There have been a number of attempts to quantify the cost of child abuse and neglect in Australia. A report by the Australian Childhood Foundation and Child Abuse Prevention Research estimated the flow-on lifetime costs for Australian children reportedly abused for the first time in 2007 was approximately $6 billion, with an additional $7.7 billion due to the burden of disease (DAE, 2008).

A study by Deloitte Access Economics (2008) quantified a $3.97 billion annual cost of child abuse to the Australian economy in 2007. The lifetime cost of child abuse and neglect was found to be $6.71 billion. These figures were based on estimates of between 130,327 children and 490,000 children abused for the first time in 2007. An estimated 240 deaths were attributable to child abuse for the year, including 114 males and 126 females, of which 27 deaths were children aged 0 to 14 years. Most deaths were from suicide and self-inflicted injuries (53%), alcohol abuse (12%), and anxiety and depression (4%). The data also shows that in 2006, 449 children and young people aged 0 to 19 were victims of murder, attempted murder, kidnapping or abduction.

While difficult to quantify, it is evident the cost of child abuse and neglect is considerable.

UnitingCare Community child protection and family services

UnitingCare Community provides a wide range of child protection services. Early intervention services target vulnerable families or children and young people at risk of abuse and neglect. Intervention services work with families to address identified child protection concerns to build their capacity to care safely for their children. Continuing care is required for children who have experienced or are at high risk of abuse or neglect, and are unable to live safely at home.

UnitingCare Community provides a range of counselling and crisis support services, and is funded by State and Federal governments to deliver child protection services, including family support, family reunification or mediation during separation and divorce, and out-of-home care for children.

For the 2012-2013 financial year, UnitingCare Community incurred costs of $46.18 million, providing a wide range of services to support vulnerable Queensland children, young people and families.

Early intervention

UnitingCare Community's federally funded Communities for Children services in the northern Gold Coast area aims to improve outcomes for vulnerable families by improving parenting skills and building stronger and more sustainable communities and families.

A national evaluation of the Communities for Children program, conducted by the Australian Institute of Family Studies, revealed the initiative had "some success in improving outcomes among the most vulnerable children and families in relation to children's early receptive vocabulary and verbal ability, parental joblessness rates and mothers' involvement in community activities." (Australian Institute for Family Studies, 2010). In particular, it found:

- fewer children were living in a jobless household
- parents reported less hostile or harsh parenting practices

- parents felt more effective in their roles as parents.

Intervention

In 2012-2013, UnitingCare Community's three referral for active intervention (RAI) services in South East Queensland worked with 730 referrals. These services engage with vulnerable children, young people and their families who have high and complex needs and who are at risk of requiring statutory child protection. The impact of the services is far greater than statistics show because each referral is counted individually but often supports multiple members of the family.

The 2010 Queensland Government Helping Out Families' (HOF) initiative is designed to provide appropriate support to children, young people and families who have been referred to the Department of Communities, Child Safety and Disability Services, but do not require ongoing statutory involvement. Child Safety Services voluntarily refers clients to the Family Support Alliance, where they are assessed and referred to Intensive Family Support services for case management and support.

UnitingCare Community's Helping Out Families service has operated in Logan since October 2010 and is the largest of the three services being trialled in South East Queensland. Like the RAI service, it aims to divert children and families from statutory child protection, and provides intensive family support to families with high and complex needs.

The Queensland Child Protection Inquiry (2013) incorporated an independent review of HOF by Nguyen and Fegal, which:

> *"estimated [the] mean costs for implementing Helping Out Families per family per year would be $540 for referral and from $7,839 to $14,513 for intensive family support services, including better access to domestic and family violence services and home health visiting services. The mean costs per case of abuse avoided, a child subject to substantiation or a child in out-of-home care, in the Helping Out Families initiative was estimated to be between $33,341 and almost $295,000." (Queensland Child Protection Commission of Inquiry, 2013)*

In the same report, it was noted the rates of children subject to a substantiation reduced 18.9%, from a mean of 8.1 per 1,000 children to 6.5 per 1,000 children over the three years of HOF intervention. By comparison, in non-HOF sites in South East Queensland, the mean annual rate of children subject to a substantiation increased by 1.3% between 2007-2008 and 2009-2010, up from 4.6 per 1,000 to 4.7 per 1,000. In the same period, there was an increase of 5.9% for the remainder of Queensland.

Through State government funding, UnitingCare Community established the first Family Intervention Service in Queensland, and now operates approximately 10 services across the state. These services work with families where there is an identified need for statutory intervention from Child Safety Services. The Family Intervention Service provides intensive support for at-risk families to help them care for their children and prevent the need for out-of-home care. It also assists children to return from out-of-home care, albeit with statutory orders.

Figure 4.2 Case study of Helping Out Families

The family consisted of a separated mother and eight children, including a 10-year-old child with a disability. Domestic violence was a persistent feature, with the father removing the children without permission, and also stalking the family. Excessive alcohol and prescription medication abuse was evident. The eldest boy displayed sexual behaviour as a result of being sexually abused by his father. This same child also involved his brother in criminal activities. The mother had no immediate family or friends, and the main source of income was Centrelink benefits.

When HOF became involved with the family, the children were sleeping on mattresses on the floor, and transport was a major problem. However, basic needs such as food and clothing were supplied. The child with a disability had a number of problems that were not being met, and specialist services were limited. On the positive side, the children were all in school, although behaviour problems and inadequate supervision of the children at home were reported.

During the mother's involvement with HOF, she was diagnosed with cancer, and the child with the disability required surgical procedures and post-hospital care.

Case planning centred on safety planning and protective behaviour work, issues relating to the mother's and children's health, addressing the practical needs of the child with a disability, and a referral to the local domestic violence service for therapeutic and legal support. HOF workers supported the mother in safe travel of the child to and from hospital appointments, and liaised with the hospital to ensure the mother was able to carry out in-home rehabilitation activities. Specific needs relating to bedding, wheelchairs, physiotherapy equipment and an appropriate transport vehicle were addressed through sourcing a combination of government funding, HOF brokerage and in-home budgeting with the mother.

By the time the HOF intervention was complete, the family was well connected to community supports.

Source: UnitingCare Community

Continuing care

In relation to out-of-home care, UCC is a provider of services for children and young people who cannot live safely with their families. UCC provides three foster and kinship care services, three specialist foster care services, multiple placement support services and packages, 17 residential care services, two therapeutic residential care services and a specialist disability foster care service where approximately 350 staff are currently employed, of whom approximately 12% are Aboriginal or Torres Strait Islander.

In 2012-2013, UCC supported approximately 898 out-of-home care clients, including 490 children and young people through Foster and Kinship Care services. Approximately 25% - 30% of the out-of-home care client population are of Aboriginal or Torres Strait Islander decent. During this time, a total of 1,680 clients were part of activities that placed children in out-of-home care residential services, or foster and kinship care services (with relatives), providing ongoing support where care is provided to a child through a variety of arrangements other than with their parents.

Analysis of benefits

In 2012-2013, UnitingCare Community spent $46.18 million supporting children and families, of which $3.47 million was for Helping Out Families. To calculate the benefits of child protection, this report first calculates the number of cases avoided based on Nguyen and Segal's (2013) evaluation of HOF. Given the number of cases avoided, the report uses the DAE (2008) report to calculate the value of UnitingCare Community's services. That report calculates the cost of child abuse to the Australian economy.

To calculate the scale of UnitingCare Community's effort, we note that Nguyen and Segal (2013) find the mean cost of cases avoided is $21,924 per person for the intensive family support and family support alliances services. Assuming UCC has similar cost effectiveness to other providers, and given it spent $3.47 million, this implies its provision of services resulted in 158 fewer child abuse substantiations.

DAE (2008) estimated the cost of child abuse to the Australian economy was approximately $6.71 billion to the Australian economy for 130,000 cases, or a cost of $51,620 per case. This figure includes a range of costs, including the cost of government protection and care, productivity losses, health and education costs, increased crime, and is calculated as a lifetime cost. If the 158 fewer child abuse substantiations avoid these costs, this implies the benefits of UCC provision of HOF to be around $8.18 million a year. We note there will also be benefits or avoided costs for other clients in the program. A summary of our calculations is presented below in Table 4.7.

Table 4.7 UnitingCare Community child protection program benefits

UCC cost of HOF ($)	**3,472,528**
Mean cost of case avoided ($)	21,924
Implied cases avoided (No.)	158
Costs of child abuse ($ billion)	6,712
Population affected (No.)	130,027
Cost per affected child ($)	51,620
Benefits of HOF ($)	**8,176,066**

Sources: UCC, Carmody (2013), DAE 2011, DAE calculations

Comparable evaluations have not been performed on other child protection programs run by UnitingCare Community, but it is likely similar benefits would accrue.

4.4.2.3 Financial counselling

Financial counselling is potentially a low cost, high impact service, which can help alleviate financial stress for individuals and families at an early stage before it manifests into more acute and costly problems. Financial counselling can include financial literacy and budgeting, advocacy with creditors, examination of legal remedies where appropriate, and referral to services to deal with related problems.

Following the 2010-2011 natural disasters experienced across Queensland, UnitingCare Community received one year funding renewable over a two year period. The funding was for $2 million annually under National Disaster Relief and Recovery Arrangements (NDRRA) to assist people affected either directly or indirectly by the disasters. This funding ceased at the expiry of the two year period being 30th June 2013.

In 2012-2013 the UCC Financial Counselling program continued to operate across Queensland with both federal and state government funding, which was at times also supplemented by UnitingCare Community. These services consisted of:

- financial first-aid hotline, a free, state-wide triage service available to the public which can give practical immediate advice.
- face-to-face counselling in 15 locations, with outreach in a further 10 communities. This comprises individual counselling where analysis of the financial situation is conducted and a strategy developed to assist the person out of crisis.
- financial literacy education. UCC conducts workshops in financial literacy and facilitates the development of skills to secure a client's financial wellbeing.

For 2012-13 UnitingCare Community supported more than 28,000 Queenslanders through its financial counselling services. More than 14,000 clients attended either face-to-face counselling or financial literacy workshops. A further 14,000 clients contacted the Financial First Aid Helpline.

Over this time period natural disasters had a delayed and widespread impact through job loss, a reduction in working hours, relationship breakdown and not having enough savings and or income to meet basic day to day living expenses. The level of financial hardship experienced in Queensland was reflected in the clients presenting to UCC services.

The effectiveness of financial counselling was detailed in an October 2012 report by the Salvation Army and Swinburne University of Technology which surveyed 225 people who had received financial counselling and revealed that the counselling:

- improved the security of accommodation (51%)
- helped to avoid bankruptcy (53%)
- resolved financial difficulties (63%)
- improved physical (43%) and mental health (63%)
- helped to avoid or curtail legal action (73%)
- improved relationships with their children (46%).

4.4.3 Conclusion

The social benefits of UnitingCare Community services extend beyond its economic contribution. In all cases where detailed work was undertaken, we find benefits in excess of costs.

Figure 4.3 Case study of spiritual and pastoral services

As part of the work of the Uniting Church, the provision of spiritual and pastoral care to clients is an essential element of the organisation's mission. All three service groups provide this care in their respective capacities.

The 12 UnitingCare Health Chaplains, of whom nine are full time, offer grief and loss training, ethics training, worship services, personal rituals and sacraments, bereavement counselling, funerals and memorial services. In addition, baptisms and weddings are also conducted. In 2013, Chaplains visited 13,185 patients, met with 4511 families and friends of patients, and had pastoral conversations with 1,311 staff. Also, Chaplains have attended 307 Code Blue emergency calls to support staff and families during distressing circumstances. Amidst other duties, The Wesley Chaplain works in the Palliative Care Service seeing every patient and their family at some point in their journey (although not necessarily at every admission), and particularly aims to be available at end of life. Each month, in the Palliative Care Service, the Chaplain makes approximately 100 visits to patients, 120 to families and 120 to staff.

Blue Care Chaplains provide for the pastoral care needs not only of the clients, but also their families and Blue Care staff. There are currently 50 Blue Care Chaplains, of which 23 are full time.

Like Blue Care, the Chaplains at UnitingCare Community help staff and volunteers live out the UCQ Shared Values in their work. The two full-time Chaplains offer pastoral care and spiritual support to staff, volunteers, and in some cases, clients. Examples illustrating their value include situations where support is provided on the death of a client, or assistance given to Return to Work Coordinators in supporting a staff member returning from injury.

Under the auspices of UnitingCare Community, the Prison Ministry Chaplains provide a state-wide service, and through a dedicated team of individuals, deliver a vital service to people in prison and their families. In 2012-2013, they visited correctional centres across Queensland on 1,659 occasions and spent 7,087 hours ministering to inmates and families.

Source: UnitingCare Queensland

5 Regional benefits

UnitingCare Queensland plays an important role in regional Queensland. It is a significant source of economic activity and provides jobs to thousands of Queenslanders. UCQ provides services in areas where private sector provision may not be possible due to economic viability of services (Webb, 2006). Overall, we find that UCQ has a substantial regional footprint, with a strong presence in many disadvantaged areas. This has a value beyond that implied by a purely economic calculation.

5.1 Regional economic contribution

UnitingCare Queensland is an organisation that has evolved from individual services. Originally, Lifeline centres were established in communities where their services were needed. Only subsequently were they thought of as one organisation, and more recently as UnitingCare Community, part of the broader UnitingCare Queensland organisation. Likewise, Blue Care facilities have been established in response to community need. These developments are in contrast to many business firms that are often established by individuals or groups in Brisbane or other metropolitan locations and then branch out into other areas.

Table 5.1 outlines the direct regional economic contribution of UCQ. UCQ employs 4,282 FTE jobs outside of Brisbane, representing approximately 44% of Blue Care's direct employment. Moreover, in terms of direct value added, regional areas make up approximately 42% of UCQ's direct value added.

Table 5.1 Direct regional economic contribution 2012-2013

	Regional	Hervey Bay/Fraser Coast
Wages paid to employees ($ million)	349.78	33.91
Gross operating surplus ($ million)	22.95	4.21
Direct value added ($ million)	**372.76**	**38.13**
Direct employment (FTE jobs)	**4,281.60**	**765.93**

Source: Deloitte Access Economics.

Hervey Bay/Fraser Coast, located in central Queensland, is an important region for UCQ, with all three service groups represented. Approximately 766 staff are employed, contributing almost $39 million of UCQ's direct total value added. In addition to the direct contribution, there is also an indirect component, as each of these groups spend money in the region. In addition to UCQ's direct value added of $372.76 million, the organisation contributes an additional $141.56 million indirectly, employing an addition 2,601 FTE jobs. Further details of the indirect contribution are presented in Table 5.2.

Table 5.2 Indirect regional economic contribution 2012-2013

	Regional	Hervey Bay/Fraser Coast
Wages paid to employees ($ million)	113.19	41.26
Gross operating surplus ($ million)	28.37	10.34
Indirect value added ($ million)	**141.56**	**51.60**
Indirect employment (FTE jobs)	**2,601**	**948.24**

Source: Deloitte Access Economics.

In the Hervey Bay/Fraser coast region, UCQ contributes $51.6 million indirectly, employing an additional 948.24 FTE jobs.

The total regional economic contribution is presented in Table 5.3.

Table 5.3 Total regional economic contribution 2012-2013

	Regional	% of total	Hervey Bay/Fraser Coast
Wages paid to employees ($ million)	462.96m	44%	75.17m
Gross operating surplus ($ million)	51.32m	22%	14.55m
Total value added ($ million)	**514.28m**	**40%**	**89.73m**
Total employment (FTE jobs)	**6,883**	**52%**	**1,714**

Source: Deloitte Access Economics.

The above figures suggest the total regional economic contribution is $514 million, and employment of 6,883 FTE jobs. This represents approximately 40% of total value added. Furthermore, approximately 52% of UCQ's workforce is in regional areas. This data suggests a significant proportion of UCQ's activities are in regional areas and that it is a major contributor to the regional sector.

Figure 5.1 Case study of the Hervey Bay Area

The Hervey Bay area is located approximately 290 kilometres north of Brisbane. Incorporating the Bundaberg and Fraser Coast Local Government Areas (LGA), the population estimate (as at 30 June 2012) was 191,711, covering an area of 13,565.8 square kilometres.

The Queensland Government recently published a paper detailing various health indicators for residents in the area. In comparison to state averages, the Hervey Bay area has a higher proportion of residents who are overweight or obese, are daily smokers, and generally rate themselves as having a lower quality of life (Department of Health, 2012).

Further to this, the socio-economic background of residents in the Hervey Bay area has been considered using the Socio-Economic Indexes for Areas (SEIFA) index. The SEIFA scores suggest that residents in the Hervey Bay region are among the most disadvantaged in the country. Specifically, the Bundaberg LGA scored 917, which ranks the area as the 27th most disadvantaged in the state, and in the bottom 19% of Australia. Similarly, the Fraser Coast LGA scored 908, ranking it the 21st most disadvantaged in the state, and in the bottom 15% of Australia (ABS, 2011). Given the low socio-economic status of the region, as a not-for-profit organisation, UCQ would appear to play a valuable role in providing a range of services, including hospitals, aged care, respite care and social service.

UnitingCare Community

In the Hervey Bay area, UCC provides the following services:

- Domestic and family violence prevention and support
- Family support
- Youth support.

The services provided seek to improve the health and wellbeing of people within the community. More than 1,000 clients used UCC's services throughout the wider region. This level of activity demonstrates the reliance on UCC's services and its contribution to the community.

Blue Care

Blue Care's contribution to the Hervey Bay area is demonstrated by its market share of aged care facilities. In the Hervey Bay area, approximately 35% of the aged care facilities are operated by Blue Care. This compares with UCQ's state-wide aged care share of government funded places of approximately 16% (Department of Health and Ageing, 2013). In addition, the future demand of these services is unlikely to subside when considering the median age of residents in the area. With respect to the Bundaberg LGA, the median age was 42.8 years as at 30 June 2011 (up from 41.2 as at 30 June 2006). The Fraser Coast LGA median age was 44.6 years as at 30 June 2011 (up from 43.3 as at 30 June 2006). These compare to the Queensland median age of 36.6 years as at 30 June 2011 (up from 36.0 as at 30 June 2006). (Queensland Treasury and Trade, 2013)

UnitingCare Health

UnitingCare Health operates two hospitals in the Hervey Bay region – St Stephen's Hospital Maryborough and St Stephen's Hospital Hervey Bay. Operating for more than 60 years, St Stephen's Hospital Maryborough provides a wide range of services, including oncology, chemotherapy, gynaecology, general surgery, urology, orthopaedics, ear, nose and throat surgery, ophthalmology, dental surgery and general medicine. This compares with St Stephen's Hospital Hervey Bay, which operates as an extension to Maryborough, however, offers fewer services in a day hospital format. Future plans for Stephen's Hospital Hervey Bay include an $87.5m expansion to a 96-bed fully integrated digital hospital (UCQ, 2013). The project will demonstrate how technology can transform the healthcare experience for patients and clinicians, as well as generate efficiencies, improve safety and clinical outcomes, and create higher levels of patient and clinical satisfaction. Also, with its proximity to the public hospital, there are opportunities for collaboration. This expansion is part of UnitingCare Health's commitment to develop quality, not-for-profit, health services in the region.

The vital role played by UCH in the Hervey Bay area is demonstrated by patient treatment volumes. For the month of August 2013, the local public hospitals treated 196 elective patients (Queensland Health, 2013a). Based on calculations, St Stephen's Hervey Bay and Maryborough treat an average of 517 elective patients per month. Furthermore, of the patients treated by St Stephen's Hervey Bay and Maryborough for the year 2012-2013, 314 were transferred from public hospitals. In the absence of UCH in the Hervey Bay area, it would appear local public hospitals would need to increase their capacity to meet patient demand.

Source: UnitingCare Queensland

5.2 Serving disadvantaged communities

As this report illustrates, UCQ has a significant footprint across Queensland, notably, in disadvantaged areas. This is important because, in many cases, it is the only organisation providing this service, and private providers may be unwilling to provide these services due to a lack of profitability. Thus, the value of these services extends beyond the suggested economic contribution, as they are often vital to the community.

This section will examine the provision of aged care services in these regions, as well as the geographic footprint of these community services, to highlight the important work undertaken.

5.2.1 Aged care services across Queensland

UnitingCare Queensland provides the majority of its residential aged care services through Blue Care. Blue Care cares for more than 13,000 people every day. An important benefit of these services is that they are offered in areas of disadvantage. 73% of Blue Care's facilities are located in 60% of Queensland's most disadvantaged locations. A similar analysis on private providers suggests private providers are more concentrated in advantaged areas, with only 43% operating in disadvantaged areas.

5.2.1.1 Description of services

Blue Care provides three types of aged care services:

- Community care
- Residential care
- Seniors' housing.

Community care provides support within the home and in the community to assist older people to remain independent for as long as possible. Community care services may include:

- respite care
- allied health services
- nursing services
- disability services
- pastoral care and counselling
- palliative care
- domestic assistance
- personal care.

The following services are also available through government-subsidised services if the patient is eligible:

- Home and Community Care (HACC) service – for those requiring basic domestic assistance or personal care
- In-home care packages − tailored government-subsidised care packages to suit people requiring a higher level of in-home care.

Residential aged care provides a range of accommodation options for people requiring a high or low level of care:

- High-care residential facilities (formerly known as 'nursing homes') provide 24-hour nursing care. Older people who are no longer able to move around or care for themselves, or people who have a severe dementia-type illness or behavioural problems usually require high-level care.
- Low-care residential facilities (formerly known as 'hostels') are for older people who can walk or move around on their own, but need some help with day-to-day chores and personal care.
- Many Blue Care residential facilities provide planned or emergency respite, which involves short or medium-term stays for older people whose primary caregiver may need 'time-out' from their caring role, or for people who may need additional care to recover from illness before returning to the community.

Seniors' housing offers accommodation close to amenities and services. This housing focuses on supporting residents to live as independently as possible, with fully self-contained, refurbished one and two-bedroom units. Eligible residents may also access Blue Care's community care services.

Blue Care helps meet the health needs of regional areas by its involvement in the following programs:

- Provision of a preventative health initiative program, focussing on increased activity and improved nutritional choices for the Maranoa and Balonne communities
- Stanford chronic disease self-management programs in Roma, Warwick and Goondiwindi
- Emerald community and respite Care with Emerald Hospital
- The transition of the Cloncurry Multi-Purpose Centre to become a rural primary health service, providing support and education for the local community (UCQ, 2011).

5.2.1.2 Location of services

Blue Care serves a large number of geographic locations in Queensland. In fact, based on staff numbers and expenses, the majority of its activities occur outside Brisbane. See Table 5.4 for a more comprehensive breakdown of staff number and expenses by region.

Table 5.4 Staff numbers and expenses by region

Area	In/Out of Brisbane	No. of staff	% of total staff	Expense	% of total expenses
Central Support	In	224	2.60%	$52,040,382	10.32%
Metro North	In	1,236	14.37%	$61,909,183	12.27%
Metro South	In	1,425	16.57%	$76,782,957	15.22%
West Moreton	Out	555	6.45%	$36,871,450	7.31%
Sunshine Coast	Out	993	11.54%	$47,896,922	9.49%
South Coast	Out	970	11.28%	$56,239,004	11.15%
Central QLD	Out	676	7.86%	$36,513,384	7.24%
Fraser Coast	Out	727	8.45%	$37,504,360	7.43%
North QLD	Out	982	11.42%	$56,833,288	11.27%
South West	Out	814	9.46%	$41,867,451	8.30%
In Brisbane	**In**	**2,885**	**33.54%**	**$190,732,522**	**37.81%**
Out of Brisbane	**Out**	**5,717**	**66.46%**	**$313,725,859**	**62.19%**

Source: UnitingCare Queensland

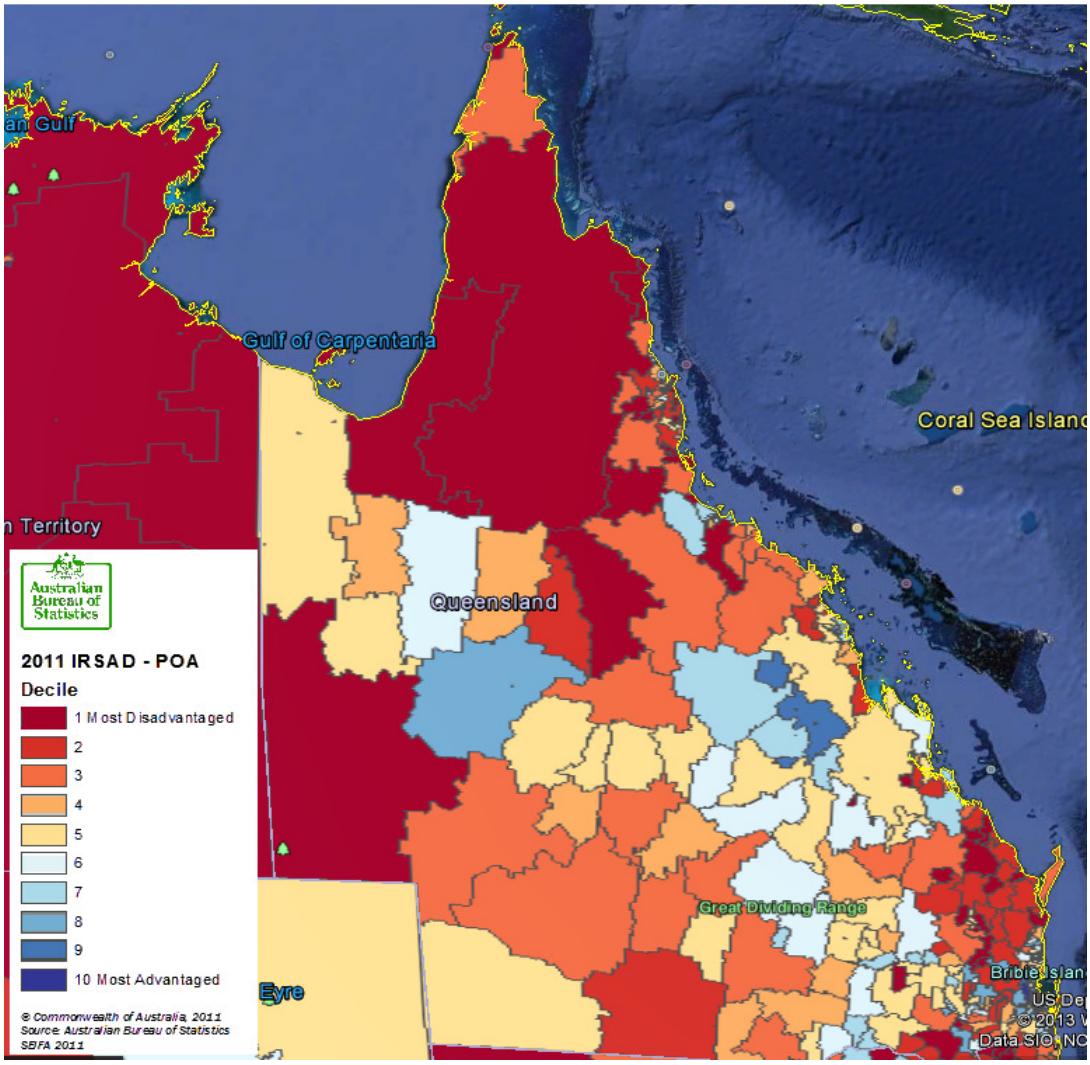
Another source of social benefit is the location of Blue Care's facilities. If these facilities are located in socially disadvantaged areas, this could exemplify the benefits Blue Care produces, as other organisations may not be willing to establish in these locations. Thus, one interesting question is whether Blue Care is more likely to serve populations that are more disadvantaged relative to other organisations.

One way to examine this question is to ascertain the location in which Blue Care is present by Socio-Economic Indexes for Areas (SEIFA) indices and compare this to other types of organisations. SEIFA is a product developed by the ABS that ranks areas in Australia according to relative socio-economic advantage and disadvantage. The four indexes are based on information from the five-yearly Census. SEIFA consists of:

- Index of Relative Socio-Economic Disadvantage (IRSD)
- Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD)
- Index of Education and Occupation (IEO)
- Index of Economic Resources (IER).

IRSAD implements a one to ten scale for measuring how advantaged or disadvantaged a region is, where one represents the region with the most social-economic disadvantage and ten is the region with the most advantage. A map of Queensland based on the Index of Relative Socio-Economic Advantage and Disadvantage is provided below.

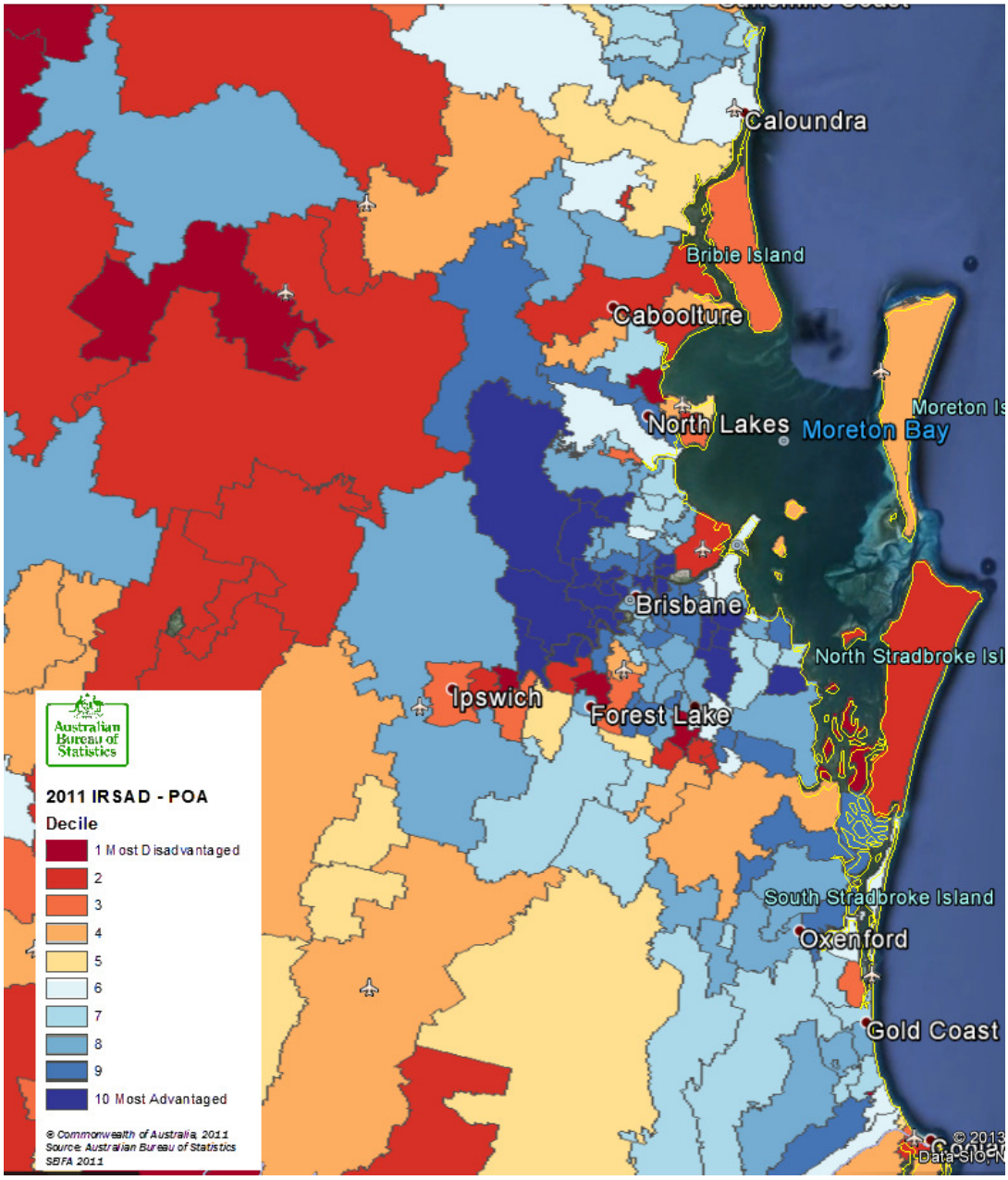
Figure 5.2 Queensland by IRSAD



Source: ABS

For the map above, the majority of rural Queensland has an IRSAD of five and below. In the map below, it is immediately apparent the majority of socio-economically advantaged areas fall in the South East corner of Queensland, especially in Brisbane (see Figure 5.3). This implies many of Blue Care's facilities are likely to be in socio-economically disadvantaged areas.

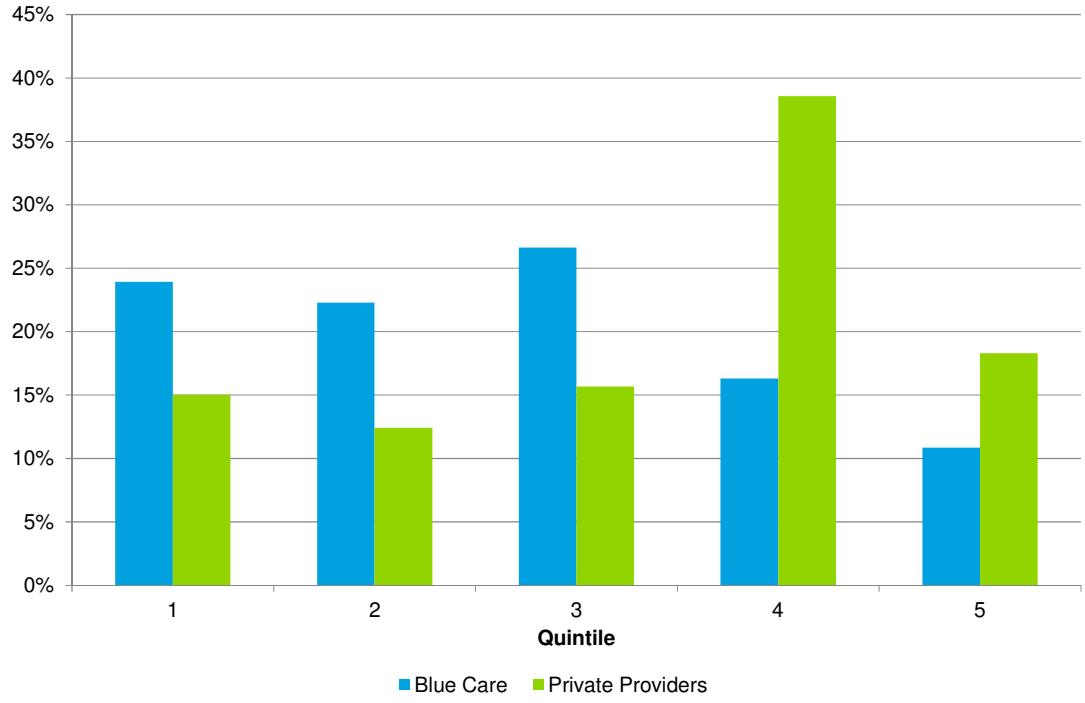
Figure 5.3 South East Queensland by IRSAD



Source: ABS

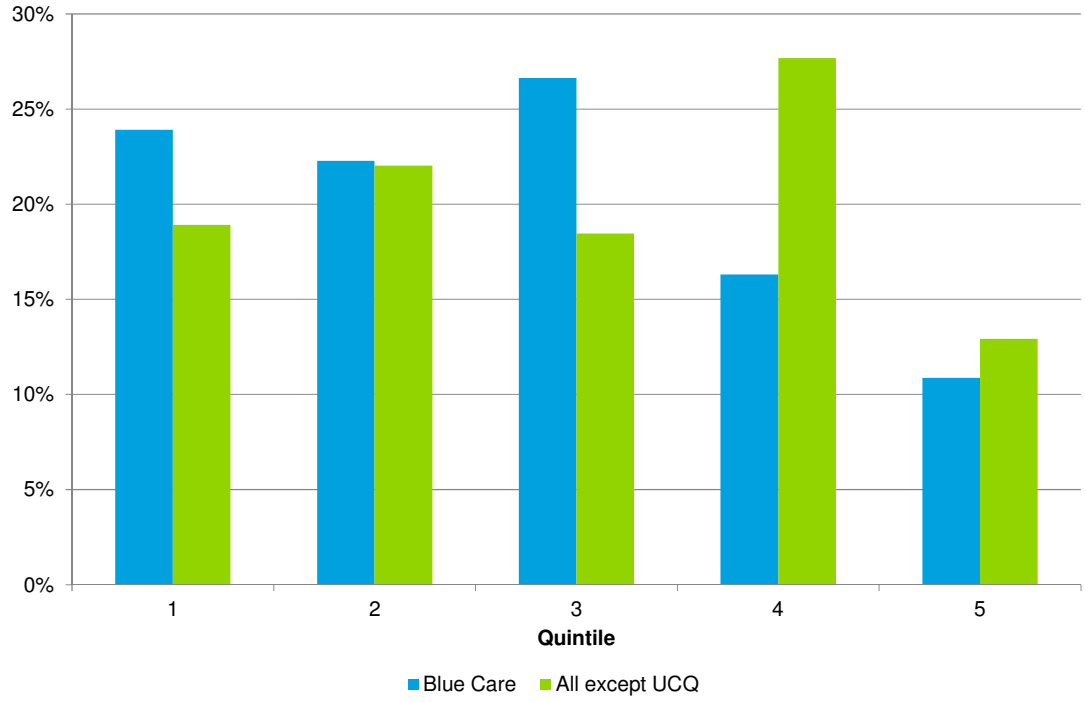
For clarity, each of these categories is aggregated into quintiles to provide a more holistic picture of where Blue Care is located. Thus, the sum of decile one and two is quintile one, deciles three and four is quintile two etc. Chart 5.1 and Chart 5.2 summarise the findings for UCQ, private providers and other providers (excluding UCQ).

Chart 5.1 Proportion of facilities by SEIFA for Blue Care and private providers



Source: DAE

Chart 5.2 Proportion of location of facilities by SEIFA for Blue Care and other providers



Source: DAE

The charts above reinforce conjecture that Blue Care tends to serve areas more socio-economically disadvantaged relative to other providers, especially private providers.

This is another social benefit of UCQ given the range of alternative providers is limited. Private providers are less likely to serve these locations as the profitability of these regions is very low. In some cases, Blue Care is the sole provider of these services in the region (eg. in Mareeba and Emerald). Thus, the benefit here for those using the facility is quality aged care services, which may not have been available if Blue Care was not present.

Figure 5.4 Case study of Mareeba and Emerald aged care facilities

Blue Care Avalon aged care facility

The Avalon aged care facility is currently the only provider of residential aged care in Emerald and the surrounding area. It provides the full set of residential aged care services in the region (ie. low-care, high-care and respite facilities).

There are 58 beds, of which:
- 23 are low-care beds
- 23 are high-care beds
- 1 is a respite bed.

Currently, 54 staff ensure the needs of clients/patients are met.

Blue Care Mareeba Garden Settlement aged care facility

The Mareeba Garden Settlement aged care facility is currently the only provider of residential aged care in Mareeba and the surrounding area. It provides the full set of residential aged care services in the region (ie. low-care, high-care and respite facilities).

There are 62 beds, of which:
- 12 are low-care beds
- 45 are high-care beds
- 1 is a respite bed
- 4 are for new admissions.

The facility provides:
- palliative care
- physiotherapy
- podiatry
- pastoral care
- residential dementia management/care
- personal care
- stomal therapy
- general nursing care
- wound management
- Aboriginal, Torres Strait Islander services.

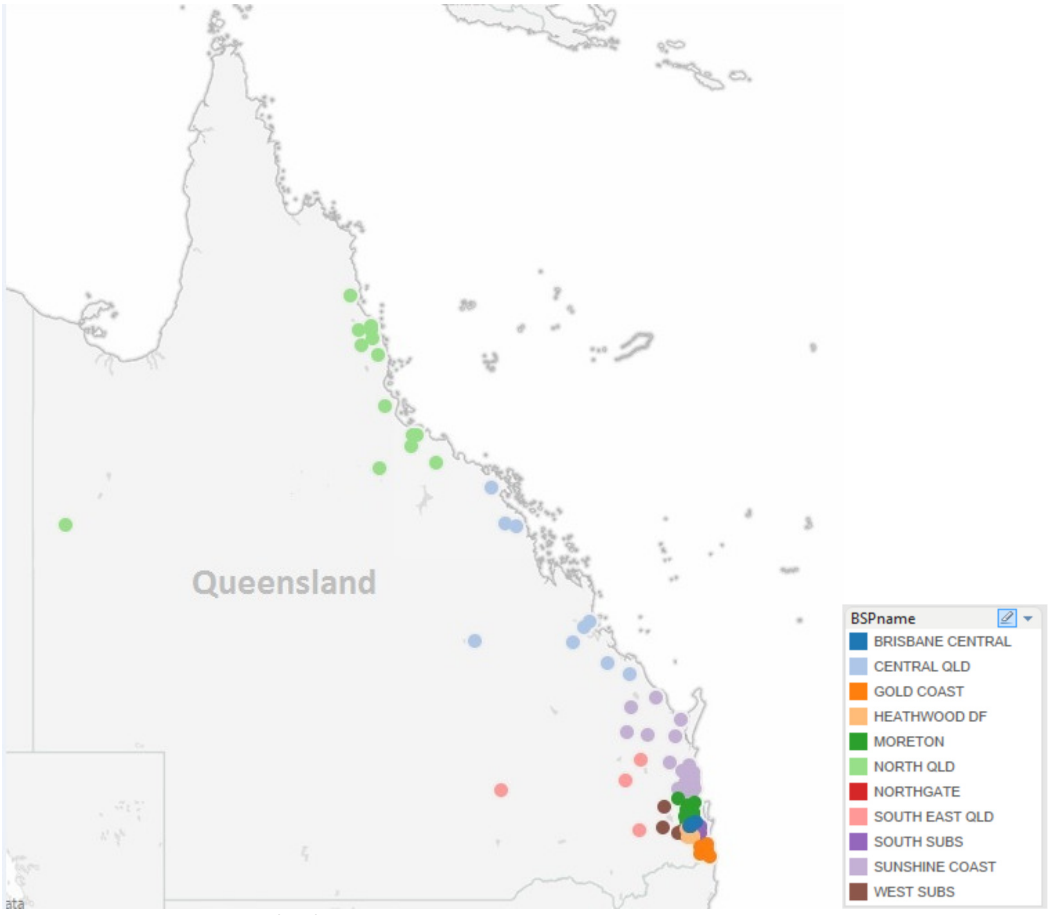
Currently, 43 care staff, supported by 22 support staff, meet the needs of clients/patients.

Source: Blue Care

5.2.2 UnitingCare Community

UCC also has a significant regional footprint, with 300 sites covering 115 postcodes across the state. As shown by Figure 5.5, this presence includes many coastal locations and some inland areas. Seventy of the 115 postcodes are in the Brisbane area and 45 are in regional areas. Part of the explanation for its expansive footprint is the history of the organisation as a community-based service provider, often growing out of parish-level presence.

Figure 5.5 Geographic footprint of UCC in Queensland



Source: UnitingCare Queensland

Conclusions

This report demonstrates the significant value of UnitingCare Queensland. As expected of an organisation with more than $1 billion in revenue a year, and approximately 16,000 employees, it makes a substantial contribution to the Queensland and Australian economy, creating jobs throughout the state.

In terms of regional impacts, UnitingCare Queensland has a significant presence beyond South East Queensland and directly contributes $372 million to Queensland's regional economy, with an additional $141 million indirectly. The most telling example of the organisation's contribution to regional Queensland is the fact that 73% of Blue Care facilities are located in 60% of Queensland's most disadvantaged locations. In contrast, only 43% of for-profit providers are concentrated in similar areas.

This economic analysis highlights the wide range of UnitingCare Queensland's health, aged care and social services, which are available to all ages and social groups. The organisation offers unique multiple access points to meet individual client, family and community needs. The report confirms that both UnitingCare Health and Blue Care are efficient in the services provided. Importantly, reduced downstream health costs were identified due to aged care services provided by Blue Care.

Volunteers at UnitingCare Queensland deliver significant value, both in terms of productivity and social capital. It is estimated the 9,000 volunteers, who contributed 1.2 million hours during the 2012-2013 period, represented $29 million value to the organisation. The benefits from volunteering include greater wellbeing, greater satisfaction, increased skills and improved social networks.

Given the demographic trends, demand and known policy directions, there are growth opportunities available to UnitingCare Queensland. Trends indicate increased outsourcing to the non-government sector, with a focus on efficiency and performance, and increased consumer choice and control in some areas, notably aged care and disability. This increasingly market-oriented environment means providers such as UnitingCare Queensland will need to continue delivering quality services and also offer competitive pricing. Technology can be a powerful enabler of efficiencies and is essential to contemporary service delivery in the 21st century.

UnitingCare Queensland is a large and diverse organisation dealing in complex areas of service delivery. Unsurprisingly, while undertaking this study there were challenges in sourcing data. There are opportunities for the organisation to improve the quality, reliability and consistency of data, particularly regarding service activity and client profiles. While it is recognised there are costs involved in improving these administrative systems, a better understanding of the market environment will be an advantage in the future.

References

ACOSS, (2009), "Submission to the Productivity Commission Study into the Contribution of the Not-for-Profit Sector," Accessed June 21, 2013. <http://acoss.org.au/images/uploads/ACOSS_submission_-_PC_Study_into_the_Contribution_of_the_Not_for_Profit_Sector.pdf>

Armstrong, K., (2010), "Developing a Framework for Health Service Integration in Queensland," Accessed June 21, 2013. <http://www.gpqld.com.au/content/Document/2%20Our%20Network/BRIEF%20Health%20Service%20Integration%20November%202010.pdf>.

Arts Victoria, (2011), "The economic, social and cultural contribution of venue-based live music in Victoria", Accessed June 21, 2013. <http://www.arts.vic.gov.au/files/daa5d6b2-a7e8-4868-9918-9f3901349614/DAE_live_music_report_Exec_Summary.pdf>.

Australian and New Zealand Society for Geriatric Medicine – no date. Position Statement No 18, Older persons in acute hospitals awaiting transfer to a residential aged care facility. <http://www.anzsgm.org/documents/PS18finalV3olderpersonsinacutehospitalsawaitingtransfer.pdf>

Australian Bureau of Statistics, (2013), "Australian National Accounts: National Income, Expenditure and Product, March 2013", Accessed June 21, 2013. <http://www.abs.gov.au/ausstats/abs@.nsf/mf/5206.0>

Australian Bureau of Statistics, (2013a), "Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011", Accessed June 21, 2013. <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2033.0.55.001main+features100002011>

Australian Bureau of Statistics, (2013b), "Disability and Work March Quarter 2012", Accessed June 21, 2013. <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features40March+Quarter+2012>

Australian Bureau of Statistics, (2013c), "Selected Living Cost Indexes, Australia 2013", Accessed June 21, 2013. <http://www.abs.gov.au/ausstats/abs@.nsf/mf/6467.0>

Australian Bureau of Statistics, (2012), "Prisoners in Australia 2012", Accessed June 21, 2013. <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4517.02012?OpenDocument>

Australian Bureau of Statistics, (2012a), "Private Hospitals, Australia 2011-12", Accessed June 21, 2013. <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4390.0>

Australian Bureau of Statistics, (2012b), "Year Book Australia, 2012", Accessed June 21, 2013. <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1301.0~2012~Main%20Features~Births~51>

Australian Bureau of Statistics, (2011), "Catalogue 2033.0.55.001 - Socio-economic Indexes for Areas (SEIFA) Data Cube only".

Australian Bureau of Statistics, (2009), "Survey of Disability", Accessed July 8, 2012. <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features40March+Quarter+2012>

Australian Bureau of Statistics, (2009a), "Australian National Accounts: Non-Profit Institutions Satellite Account", Accessed July 8, 2012. <http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/661F486077ACD72BCA2576340019C6C8/$File/52560_2006-07.pdf>

Australian Bureau of Statistics, (2009b), "Child Care", Accessed June 21, 2013. <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4102.0Jun%202010?OpenDocument>

Australian Bureau of Statistics, (2008), "Australian Social Trends, 2008", Accessed June 21, 2013. <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Chapter4102008>

Australian Government, (2013), "The Facts?", Accessed June 21, 2013. <http://www.problemgambling.gov.au/facts/>

Australian Government, (2013a), "What is social inclusion?", Accessed June 21, 2013. <http://www.socialinclusion.gov.au/about/what-social-inclusion>

Australian Institute of Family Studies, (2013), "The economic costs of child abuse and neglect", Accessed June 21, 2013. <http://www.aifs.gov.au/cfca/pubs/factsheets/a142118/index.html>

Australian Institute of Health and Welfare, (2013), "Definition of Disability", Accessed June 21, 2013. <http://www.aihw.gov.au/definition-of-disability/>

Australian Institute for Family Studies, (2010), "The national evaluation of the Communities for Children initiative," Accessed June 21, 2013. <http://www.aifs.gov.au/institute/pubs/fm2010/fm84/fm84d.html>

Australian Institute of Health and Welfare, (2008), "Movement from hospital to residential aged care", Accessed June 21, 2013. <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=6442454757>

Brown, L., Abello, A. and Thurecht, A., (2011), "Cann, L., (2012), "Length of hospital stay by older Australians: Bed-block or not?", Accessed August 4, 2012. <http://www.natsem.canberra.edu.au/storage/WP8%20Final.pdf>

Cann, L., (2012), "Funding shortfall blamed for lack of aged care beds", Accessed August 4, 2012.
<http://www.perthnow.com.au/news/western-australia/funding-shortfall-blamed-for-lack-of-aged-care-beds/story-e6frg153-1226443042551>

Comondore, V., (2009), "Quality of Care in for-profit and not-for-profit nursing homes: systematic review and meta-analysis," *British Medical Journal,* Vol. 339, pp 1-15.

Commonwealth Bank of Australia, (2010), "Improving Financial Literacy", Accessed June 21, 2013.
<http://www.commbank.com.au/about-us/download-printed-forms/2010commbankfoundation-improving-financial-literacy.pdf>

Commonwealth Bank of Australia, (2004), "Improving financial literacy in Australia: benefits for the individual and the nation", Accessed June 21, 2013.
<https://www.commbank.com.au/about-us/download-printed-forms/FinancialLiteracy_KeyFindingst2004.pdf>

Courtney, M., Terao, S., and Bost, N., (2004), "Midwest evaluation of the adult functioning of former foster youth: conditions of youth preparing to leave state care", Chapin Hall Center for Children at the University of Chicago, Chicago.

De Leo, D., Buono, M.D., and Dwyer, J., (2002), "Suicide among the elderly: the long-term impact of a telephone support and assessment intervention in northern Italy", *The British journal of Psychiatry*, vol. 181, pp. 226-229.
<http://bjp.rcpsych.org/content/181/3/226.full.pdf+html>

Deloitte Access Economics, (2012), "Increasing participation among older workers: The grey army advances", Accessed June 21, 2013.
<http://www.humanrights.gov.au/sites/default/files/document/publication/deloitte-mature-age-participation-research.doc.>

Deloitte Access Economics, (2012a), "An economic analysis for Aboriginal and Torres Strait Islander offenders – Prison vs residential treatment", Accessed June 21, 2013.
<http://www.deloitte.com/assets/Dcom-Australia/Local%20Assets/Documents/Services/Corporate%20Finance/Access%20Economics/Deloitte_Prison_vs_Residential_Treatment.pdf>

Deloitte Access Economics, (2011), "Returns on NHMRC funded research and development", Accessed June 21, 2013.
<http://www.asmr.org.au/NHMRCReturns.pdf>

Deloitte Access Economics, (2011a), "The economic benefits of increasing employment for people with disability", Accessed June 21, 2013.
<http://www.and.org.au/data/Conference/DAE_Report_8May.pdf>

Deloitte Access Economics, (2010), "The economic value of informal care in 2010", Accessed June 21, 2013.
<http://www.carersaustralia.com.au/storage/Economic-Value-Informal-Care-Oct-2010.pdf>

Deloitte Access Economics, (2008), "The Cost of Child Abuse in Australia", Accessed June 21, 2013.
<http://www.childhood.org.au/~/media/Files/Research/Research%20Cost%20of%20Child%20Abuse%20in%20Australia%202009.ashx>

Deloitte Access Economics, (2004), "The Cost of Domestic Violence to the Australian Economy", Accessed June 21, 2013.
<http://www.fahcsia.gov.au/our-responsibilities/women/publications-articles/reducing-violence/the-cost-of-domestic-violence-to-the-australian-economy>

Department of Communities, (2012), "Child Safety and Disability Services 2012, Our performance", Accessed June 21, 2013.
<http://www.communities.qld.gov.au/resources/corporate/annual-reports/2012-13/annual-report.pdf>

Department of Communities, (2010), "Trends in social and economic determinants of health and wellbeing in Queensland", Accessed June 21, 2013.
<http://www.chiefscientist.qld.gov.au/research-and-development/assets/rd-forum-community-wellbeing-doc-paper.pdf>

Department of Health and Ageing, (2013), "Aged Care Providers as at 30 June 2012", Accessed 31 July 2013.
<http://www.health.gov.au/internet/main/publishing.nsf/Content/ageing-rescare-servlist-download.htm>

Department of Health and Ageing, (2010), "National Mental Health Report 2010", Accessed June 21, 2013.
<http://www.health.gov.au/internet/main/publishing.nsf/Content/8C20A89EAC527C40CA2577EE000F6E01/$File/report10v3.pdf>

Department of Health, (2012), "Self reported health status 2011-12 – Wide Bay Hospital and Health Service and Medicare Local."

Ferrant, L., Olsen, S.i. and Wangel, A., (2010), "Environmental benefits from reusing clothes", *International Journal of Life Cycle Assessment,* Vol. 15, pp. 726-736. Accessed June 21, 2013.
<http://gaiamovement.org/files/2011%20Env%20benefits%20of%20used%20clothes.pdf>

Fitness Australia, (2008), "Let's get physical: The Economic Contribution of Fitness Centres in Australia", Accessed June 21, 2013.
<http://www.scribd.com/doc/128979692/Deloitte-Access-Economics-The-Economic-Contribution-of-Fitness-Centres-in-Australia-2012>

Felitti V. and Spitz, A., (1998), "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults", *American Journal of Preventative Medicine*, vol. 14, No. 4, pp. 245-258.

Goldman Sachs JBWere, (2009), "Australia's Hidden Resource: The economic case for increasing female participation", Accessed June 21, 2013. <http://www.voced.edu.au/content/ngv51944>

Hahn, T., McCarthy, P., et al., (2013), "Significant Improvement in survival after allogeneic hematopoietic cell transplant during a period of significantly increased use, older recipient age, and use of unrelated donors", *Journal of Clinical Oncology,* Vol. 31, No. 19, pp. 2437-2449.

Heckman, J., (2011), "The economics of inequality – The value of early childhood education", Accessed June 21, 2013. <http://www.aft.org/pdfs/americaneducator/spring2011/Heckman.pdf>

Heckman, J., Moon, S., Pinto, R., Savelyev, P. and Yavitz, A., (2010), "The rate of return to the HighScope Perry Preschool program", *Journal of Public Economics,* Vol. 94, No. 1-2, pp. 114-128.

Humphreys, J. and Wakerman, J., (2010), "Primary health care in rural and remote Australia: Achieving equity of access and outcomes through national reform", Accessed June 21, 2013. <http://www.health.gov.au/internet/nhhrc/publishing.nsf/content/16f7a93d8f578db4ca2574d7001830e9/$file/primary%20health%20care%20in%20rural%20and%20remote%20australia%20-%20achieving%20equity%20of%20access%20and%20outcomes%20through%20national%20reform%20(j%20humph.pdf>

Ironmonger, D., (2008), "The economic value of volunteering in Queensland", Accessed July 8, 2013. <http://www.communities.qld.gov.au/resources/communityservices/volunteering/documents/economic-value-of-volunteering.pdf>

Jackson, L., (2009), "The cost of elder abuse in Queensland: Who pays and how much", Accessed July 8, 2013. <http://www.eapu.com.au/Portals/0/Cost%20of%20EA%20in%20Qld%20-%20EAPU%20June%2009.pdf>

Johnson, B., (2012), "Can a faith-based prism reduce recidivism?", Accessed June 21, 2013. <http://www.baylorisr.org/wp-content/uploads/Johnson_Jan2012-CT-3.pdf>

Kinner, S., (2006), "The post-release experience of prisoners in Queensland", Accessed June 21, 2013. <http://www.aic.gov.au/documents/2/5/4/%7B25483C2E-ECFE-406D-AFC7-D234774A2B58%7Dtandi325.pdf>

Koning, P., Noailly, J. and Visser, S., (2007), "Do not-for-profits make a difference in social services? A survey study", *De Economist*, Vol. 155, pp. 251-270.

Leukaemia Foundation, (2013), "Stem cell transplants", Accessed June 21, 2013. <http://www.leukaemia.org.au/web/aboutdiseases/transplants_index.php>

Lifeline, (2013), "Statistics on Suicide in Australia".

<http://www.lifeline.org.au/About-Lifeline/Media-Centre/Suicide-Statistics-in-Australia/Suicide-Statistics>

Lifeline, (2010), "Suicide and suicide prevention in Australia: Breaking the silence", Accessed June 21, 2013. <http://www.lifeline.org.au/ArticleDocuments/250/Breaking%20the%20Silence_Secured.pdf.aspx>

Mangan, J. and Stephen, K., (2007), "Social exclusion in Queensland: Measurement, cost and policy options", Accessed June 21, 2013. <www.employment.qld.gov.au/pdf/eii/mangan_report_eii_final.pdf>

McGrail, K., McGregor, M., Cohen, M., Tate, R., and Ronald, L., (2007), "For-profit versus not-for-profit delivery of long-term care," *Canadian Medical Association Journal*, Vol. 176, No. 1, pp. 57-58.

Moore, T., (2013), "Jobs to go under Brisbane City Council budget" Accessed June 21, 2013. <http://www.brisbanetimes.com.au/queensland/jobs-to-go-under-brisbane-city-council-budget-20130612-2o4ad.html>

Murphy, C.M., Musser P.H. and Maton, K.I., (1998), "Coordinated community intervention for domestic abusers: Intervention system involvement and criminal recidivism", *Journal of Family Violence,* Vol. 13, No.3, pp. 263-284.

National Disability Services (NDS), (2013), "Why the NDIS makes economic sense", Accessed June 28, 2013. <http://www.nds.org.au/asset/view_document/979322185>

National Disability Services (NDS), (2011), "The economic benefits of disability employment", Accessed June 28, 2013. <http://www.nds.org.au/asset/view_document/979320399>

National Disability Services Queensland, (2011), "The economic contribution to Queensland from disability service providers", Accessed June 28, 2013. <http://ndsqldprojects.net/wp-content/uploads/2011/08/economic-contribution-report.pdf>

National Health and Hospitals Reforms Commission, (2009), "The Australian health care system: The potential for efficiency gains, June 2009", Accessed June 21, 2013. <http://www.health.gov.au/internet/nhhrc/publishing.nsf/content/a5665b8b9eab34b2ca2575cb00184fb9/$file/potential%20efficiency%20gains%20-%20nhhrc%20background%20paper.pdf>

Ngoga, D., Mitchell, R., Kausar, J., et al., (2013), "Deep brain stimulation improves survival in severe Parkinson's disease", *Journal of Neurology Neurosurgery and Psychiatry,*doi: 10.1136/jnnp-2012-304715

NCOSS, (2009), "NCOSS submission to the NSW Health NGO program review", Accessed June 21, 2013. <http://www.ncoss.org.au/resources/091105-NCOSS-Submission-to-the-NSW-Health-NGO-Program-Review.pdf>

OECD, (2010), "Sickness, disability and work: Breaking the barriers", Accessed June 28, 2013. <http://ec.europa.eu/health/mental_health/eu_compass/reports_studies/disability_synthesis_2010_en.pdf>

OECD, (2009), "Sickness, disability and work: Keeping on track in the economic downturn", Accessed June 28, 2013. <http://www.oecd.org/els/emp/42699911.pdf>

Pham, T.D., Dwyer, L., and Spurr, R., (2010), "Regional economic contribution of tourism destinations in Queensland", Accessed July 24, 2013. <http://www.tq.com.au/fms/tq_corporate/research%20%28NEW%29/Economic%20and%20Forecasts%20Data/Queensland%20Regional%20TSA%20Published%20Figures%202003-04,%202006-07%20and%202007-08.PDF>

Productivity Commission, (2013), "Steering Committee for the Review of Government Service Provisions 2013, Report on government services 2013".

Productivity Commission, (2013A), "Report on Government Services: Chapter 14 Services for people with disability". <http://www.pc.gov.au/gsp/rogs/2012>

Productivity Commission, (2012), "Steering Committee for the Review of Government Service Provision 2012, Report on government services 2012, Canberra, Table 15A.74.

Productivity Commission, (2011), "Caring for older Australians", Accessed June 28, 2013. <http://www.pc.gov.au/__data/assets/pdf_file/0017/110906/14-aged-care-chapter10.pdf>

Productivity Commission, (2010), "Productivity Commission inquiry report on gambling", Accessed June 21, 2013. <http://www.pc.gov.au/projects/inquiry/gambling-2009>

Productivity Commission, (2009), "Public and private hospitals", Accessed June 21, 2013. <http://www.pc.gov.au/projects/study/hospitals/report>

Productivity Commission, (2007), "Report on the operation of the Aged Care Act 1997", 1 July 2006 to 30 June 2007.

Productivity Commission, (2001), "Techniques for measuring efficiency in health services", Accessed June 21, 2013. <http://pc.gov.au/__data/assets/pdf_file/0018/60471/tmeihs.pdf>

Queensland Child Protection Commission of Inquiry, (2013), "Taking responsibility: A roadmap for Queensland child protection", Accessed June 24, 2013. <http://www.childprotectioninquiry.qld.gov.au/__data/assets/pdf_file/0017/202625/QCPCI-FINAL-REPORT-web-version.pdf>

Queensland Health, (2013), "Hervey Bay Hospital, June 2013." Accessed August 1, 2013. <http://www.health.qld.gov.au/hospitalperformance/es-main.aspx?hospital=69>

Queensland Health, (2013a), August 2013. Accessed September 14, 2013. <http://www.health.qld.gov.au/hospitalperformance/es-main.aspx?hospital=69>

Queensland Health, (2012), "Self-reported health status 2011-12 – Wide Bay Hospital and Health Service and Medicare Local." Accessed June 24, 2013. <http://www.health.qld.gov.au/epidemiology/documents/srhs-2012-widebay.pdf>

Queensland Health, (2000), "Health service integration in Queensland", Accessed June 24, 2013. <http://www.health.qld.gov.au/hssb/hou/intpolicy.pdf>

Queensland Treasury and Trade, (2013), "Queensland regional profiles." Accessed July 29, 2013. <http://statistics.oesr.qld.gov.au/qld-regional-profiles?>

Reserve Bank of Australia, (2008), "The importance of financial literacy", Accessed June 21, 2013. <http://www.rba.gov.au/speeches/2008/sp-ag-250808.html>

Reynolds, A. et al., (2011), "Age 26 cost–benefit analysis of the child-parent center early education program", *Child Development,* Vol. 82, No. 1, pp. 379-404.

Sane Australia, (2013), "Facts and figures about mental illness in Australia", Accessed June 21, 2013. <http://www.sane.org/information/factsheets-podcasts/204-facts-and-figures>

State Governments, 2007, "Caring for our health?: A report by state and territory health ministers".

Stewart Brown, (2012), "Aged care financial performance survey - December 2012", Accessed June 21, 2013. <http://www.stewartbrown.com.au/asset/cms/Financial_Benchmarking_Reports/ACFPS_Report_Dec_2012_-_Executive_Summary.pdf>

Stuart Brown Business Solutions, (2010), Aged Care Financial Performance Survey, Year ended 30 June 2010.

The Wesley Hospital, (2012) "Bone Marrow Transplant", Accessed June 21, 2013. <http://www.wesley.com.au/2012-01-27-06-43-34/2012-02-01-03-15-13/66-clinical-services/335-bone-marrow-transplant-unit>

The SECOB project research group, (2013), "Socio-economic costs of bereavement in Scotland", Accessed June 21, 2013. <http://www.griefhub.org.uk/cms/files/secob_main_study_report.pdf>

Traill, S. and Wohl, J., (2004), "The economic impact of the child care industry in North Carolina", Accessed June 21, 2013. <http://www.policyarchive.org/handle/10207/bitstreams/5681.pdf>

UnitingCare Community, (2013), "About Us", Accessed July 24, 2013.

<http://www.uccommunity.org.au/about-us>

UnitingCare Community, (2013a), "Financial counselling evaluation report 2013", Accessed July 24, 2013. <http://www.uccommunity.org.au/files/2013.06.27%20Financial%20Counselling%20Report.pdf>

UnitingCare Community, (2013b), "A profile of UnitingCare Community volunteers".

UnitingCare Community, (2012), "Facts about domestic and family violence", Accessed June 24, 2013. <http://www.uccommunity.org.au/domestic-and-family-violence/facts-about-domestic-and-family-violence>

UnitingCare Community, (2012a), "Satisfaction of lifeline crisis supporters - Findings from a two-phase research project", Accessed June 24, 2013. <http://www.ucareqld.com.au/index.php?option=com_docman&task=doc_download&gid=204>

UnitingCare Queensland, (2013), "Australia's first digital hospital to showcase the future of healthcare." Accessed August 5, 2013. <http://www.ucareqld.com.au/index.php?option=com_content&task=view&id=152&Itemid=20>

UnitingCare Queensland, (2012), "The social research we do." Accessed June 24, 2013. <http://www.ucareqld.com.au/index.php?option=com_content&task=view&id=97&Itemid=71>

UnitingCare Queensland, (2012a), "Year in Review 2012 Annual Report", Accessed June 24, 2013. <http://www.ucareqld.com.au/index.php?option=com_docman&task=doc_download&gid=225>

UnitingCare Queensland, (2011), "UnitingCare Queensland Annual Report 2010-2011", Accessed June 24, 2013. <http://www.ucareqld.com.au/index.php?option=com_docman&task=doc_download&gid=147>

UnitingCare Queensland, (2011a), "Community recovery in Central Queensland: An Evaluation", Accessed June 21, 2013. <http://www.ucareqld.com.au/index.php?option=com_docman&task=doc_download&gid=212.>

UnitingCare Queensland, (2011b), "Financial literacy", Accessed June 24, 2013. <http://www.ucareqld.com.au/index.php?option=com_docman&task=doc_download&gid=123>

UnitingCare Queensland,(2011c), "Resourcing regional and remote funding." Accessed June 21, 2013. <http://www.ucareqld.com.au/index.php?option=com_content&task=view&id=43&Itemid=31>

University of Queensland, (2013), "$10 million Asia-Pacific Centre set to make Brisbane a world leader in brain research" Accessed June 21, 2013. <http://www.uq.edu.au/news/?article=24517>

University of Queensland, (2012), "Queensland specialists perform 500th deep brain stimulation surgery" Accessed June 21, 2013. <http://www.uq.edu.au/news/?article=25100>

University of Western Sydney, (2012), "Economic contribution of the University of Western Sydney", Accessed June 21, 2013. <http://www.uws.edu.au/__data/assets/pdf_file/0005/415292/Deloitte_Economic_contribution_of_UWS_Feb_12.pdf>

University of Wollongong, (2012), "Leading locally, competing globally: Measuring the University of Wollongong's contribution to economic and social prosperity", Accessed June 21, 2013. <http://impact.uow.edu.au/content/groups/public/@web/@gsb/documents/doc/uow145792.pdf>

Valldeoriola et al., (2013), "Cost analysis of the treatment for patients with advance Parkinson's disease: SCOPE Study", *Journal of Medical Economics,* Vol. 16, No. 2, pp. 191-201.

Volunteering Australia, (2011), "Pathways to social inclusion through volunteering", Accessed July 7, 2013. <http://www.volunteeringaustralia.org/files/SKCJEYJ03S/Final_version_Pathways_to_Social_Inclusion_through_Volunteering_Paper.pdf>

Volunteering Australia, (2011), "Realising the economic potential of senior Australians. Enabling opportunity", Accessed July 8, 2013. <http://www.volunteeringaustralia.org/files/PTZBGKUGXL/Ec_pot.pdf>

Webb, V., (2006), "Non-profit organisations, multiple partnerships and collaborative governance: A regional approach to servicing rural communities." Accessed June 21, 2013. <http://www.firststepsplanning.com.au/pdfs/collabgoverndissert.pdf>

While, D., Bickley, H., Roscoe, A., Windfuhr, K., Rahman, S., Shaw, J., et al., (2012), "Implementation of mental health service recommendations in England and Wales and suicide rates, 1997-2006: A cross-sectional and before-and-after observational study." *The Lancet,* Vol. 379, No. 9820, pp. 1,005-1,012.

World Health Organization, (2013), "Suicide". <http://www.who.int/topics/suicide/en/>

World Health Organization, (2013a), "Mental Health". <http://www.who.int/topics/mental_health/>

World Health Organisation, (2008), "Integrated health services what and why?", Accessed July 24, 2013. <http://www.who.int/healthsystems/service_delivery_techbrief1.pdf>

Appendix A: Economic contribution methodology

The economic contribution study outlined above has quantified measures such as value added, output and employment associated with UCQ. The economic contribution is a measure of the value of production by that use to the Australian economy.

Value added

Value added is the most appropriate measure of an industry's/company's economic contribution to gross domestic product (GDP) at the national level, or gross state product (GSP) at the state level.

The value added of each industry in the value chain can be added without the risk of double counting across industries caused by including the value added by other industries earlier in the production chain. The value added in the supply chain is driven by the costs used in producing goods and services. These costs are intermediate inputs used in businesses.

Measuring the economic contribution

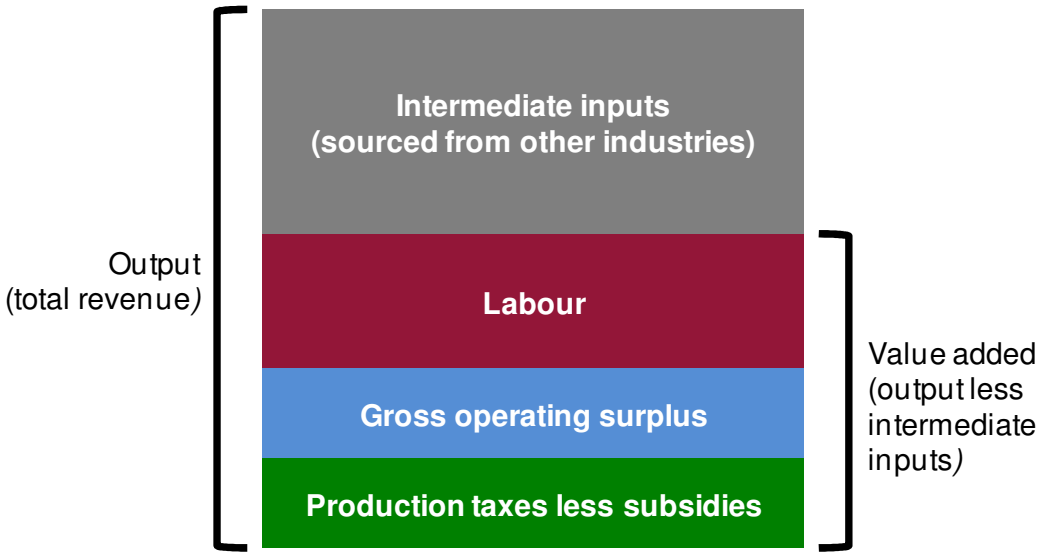
There are several commonly used measures of economic activity, each of which describes a different aspect of an industry's economic contribution:

- Value added measures the value of output (ie. goods and services) generated by the entity's factors of production (ie. labour and capital) as measured in the income to those factors of production. The sum of value added across all entities in the economy equals gross domestic product. Given the relationship to GDP, the value added measure can be thought of as the increased contribution to welfare.
- Value added is the sum of:
    - Gross operating surplus (GOS): GOS represents the value of income generated by the entity's direct capital inputs, generally measured as the earnings before interest, tax, depreciation and amortisation (EBITDA).
    - Tax on production less subsidy provided for production: This generally includes company taxes and taxes on employment. Note: given the returns to capital before tax (EBITDA) are calculated, company tax is not included, or this would double count that tax.
    - Labour income is a subcomponent of value added. It represents the value of output generated by the entity's direct labour inputs, as measured by the income to labour.
- Gross output measures the total value of the goods and services supplied by the entity. This is a broader measure than value added because it is an addition to the value added generated by the entity. It also includes the value of intermediate inputs used by the entity that flow from value added generated by other entities.

- Employment is a fundamentally different measure of activity to those above. It measures the number of workers who are employed. The Input-Output tables, as provided by the ABS, allow for the employment intensity to be measured by industry.

Figure A.1 shows the accounting framework used to evaluate economic activity, along with the components that make up gross output. Gross output is the sum of value added and the value of intermediate inputs. Value added can be calculated directly by summing the payments to the primary factors of production, labour (ie. salaries) and capital (ie. gross operating surplus (GOS), or profit), as well as production taxes less subsidies. The value of intermediate inputs can also be calculated directly by summing expenses related to non-primary factor inputs.

Figure A.1 Economic activity accounting framework



Source: Deloitte Access Economics.

Direct and indirect contributions

The direct economic contribution is a representation of the flow from labour and capital in the economic entity directly transacting with the consumer. For example, in the case of tourism activity, suppose a traveller purchases a meal at a restaurant. The direct economic contribution is the value added generated in the restaurant sector.

The indirect contribution is a measure of the demand for goods and services produced in other sectors as a result of demand generated by the direct consumer. Estimation of the indirect economic contribution is undertaken in an input-output (IO) framework, using Australian Bureau of Statistics input-output tables, which report the inputs and outputs of specific sectors of the economy. Continuing the example above, an indirect economic contribution is generated when the restaurant buys supplies from wholesalers.

The total economic contribution to the economy is the sum of the direct and indirect economic contributions.

Limitations of economic contribution studies

While describing the geographic origin of production inputs may be a guide to the linkages one sector has with the local economy, it should be recognised that these are the type of normal industry linkages that characterise all economic activities.

Unless there is significant unused capacity in the economy (such as unemployed labour), there is only a weak relationship between a firm's economic contribution as measured by value added (or other static aggregates) and the welfare or living standard of the community. Indeed, the use of labour and capital, by demand created from the industry, comes at an opportunity cost as it may reduce the amount of resources available to spend on other economic activities.

This is not to say that the economic contribution, including employment, is not important. As stated by the Productivity Commission in the context of Australia's gambling industries:[5]

> *Value added, trade and job creation arguments need to be considered in the context of the economy as a whole… income from trade uses real resources, which could have been employed to generate benefits elsewhere. These arguments do not mean that jobs, trade and activity are unimportant in an economy. To the contrary, they are critical to people's wellbeing. However, any particular industry's contribution to these benefits is much smaller than might at first be thought, because substitute industries could produce similar, though not equal gains.*

In a fundamental sense, economic contribution studies are simply historical accounting exercises. No 'what-if', or counterfactual inferences – such as 'what would happen to living standards if the firm disappeared?' – should be drawn from them.

The analysis, as discussed in the report, relies on a national input-output table modelling framework, and there are some limitations to this modelling framework. The analysis assumes that goods and services provided to the sector are produced by factors of production that are located completely within the state or region defined and that income flows do not leak to other states.

The IO framework and the derivation of the multipliers also assume that the relevant economic activity takes place within an unconstrained environment. That is, an increase in economic activity in one area of the economy does not increase prices and subsequently crowd out economic activity in another area of the economy. As a result, the modelled total and indirect contribution can be regarded as an upper-bound estimate of the contribution made by the supply of intermediate inputs.

Similarly, the IO framework does not account for further flow-on benefits as captured in a more dynamic modelling environment, like the computable general equilibrium (CGE) model.

[5] Productivity Commission (1999), *Australia's Gambling Industries*, Report No. 10, AusInfo, Canberra, (page 4.19).

Input-output analysis

Input-output tables are required to account for the intermediate flows between sectors. These tables measure the direct economic activity of every sector in the economy at the national level. Importantly, these tables allow intermediate inputs to be further broken down by source. These detailed intermediate flows can be used to derive the total change in economic activity associated with a given direct change in activity for a given sector.

The input-output matrix used for Australia is derived from the Australian Bureau of Statistics 2007-08 Input-Output Tables. The industry classification used for input-output tables is based on ANZSIC, with 111 sectors in the modelling framework.

Limitation of our work

General use restriction

This report is prepared solely for the internal use of UnitingCare Queensland. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose of analysing the economic and social value of UnitingCare Queensland. You should not refer to or use our name or the advice for any other purpose.

Contact us

Deloitte Access Economics
ACN: 149 633 116

Grosvenor Place
Level 9
225 George Street
Sydney NSW 2000
PO Box N250
Sydney NSW Australia

Tel: +61 2 9322 7000
Fax: +61 2 9322 7001

www.deloitteaccesseconomics.com.au

Deloitte Access Economics is Australia's pre-eminent economics advisory practice and a member of Deloitte's global economics group. The Directors and staff of Access Economics joined Deloitte in early 2011.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/au/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

Deloitte provides audit, tax, consulting, and financial advisory services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 150 countries, Deloitte brings world-class capabilities and deep local expertise to help clients succeed wherever they operate. Deloitte's approximately 200,000 professionals are committed to becoming the standard of excellence.

About Deloitte Australia

In Australia, the member firm is the Australian partnership of Deloitte Touche Tohmatsu. As one of Australia's leading professional services firms. Deloitte Touche Tohmatsu and its affiliates provide audit, tax, consulting, and financial advisory services through approximately 6,000 people across the country. Focused on the creation of value and growth, and known as an employer of choice for innovative human resources programs, we are dedicated to helping our clients and our people excel. For more information, please visit our web site at www.deloitte.com.au.