

## **The DAELIBS Objective:**

### **Reducing Community Care Service Waiting Lists with Client Focused Outcomes**

### **Electronic Service Attendance Records Have a Role to Play**



Since 1988, Ian Bruce the principle of DAELIBS Keeping Track of Business, has been researching the business management processes associated with the provision of community care services. A question to answer is, how is the cost of a unit of service in community care management best applied? .

In the early days of 'selling' the benefits of care-at-home in the community; one of the special benefits proffered by the government of the day was it would be cheaper than providing assistance with daily living and nursing care for a person living in a residential care facility. Is that really the case?

Unquestionably, there is a higher social benefit. Being supported to remain living in one's own home is very much more desirable than having to sell up and move into a communal living environment. Stay at home till we die is the preference for the majority of people. However, to achieve this objective there is a price to pay.

For some folk with high levels of frailty and other disabilities that limit their ability to manage their self care, supported residential care services are absolutely essential. In balance there needs to be residential and community personal support and nursing care services available.

In 1993, Ian developed a dedicated interest the business process management and associated cost economics of the mechanics of delivering care-at-home in the community. He believes there is still much to discover in this area.

Ian claims "the practical service dynamics to provide personal assistance for daily living and nursing care for one hundred people in a residential care facility and to deliver the same support, for the same one hundred people, spread over an urban 10km or rural 100km radius are significantly different".

The components of the act of the personal care service are the same. There is a service recipient, a service provider and the actual action of the service itself, whatever that might be. The time required for the provision of that action of service, whilst affected by the nature and level of disability of the service recipient, will vary only slightly between different situations. It is important to note that the unique component of every act of service, regardless of its social or medical nature, is that it is a time expended related event. Therefore there is time cost association with it.

Whilst it is acknowledged that in a residential care facility there is the capital cost to establish and maintain the buildings and plant; the actual time related process cost of delivering the units of care for 100 service recipients is less than for 100 persons in the care-at-home in the community model.

Based on the premise, that in the residential care facility the service provider walks between service recipients and in the community care model the service provider needs to drive between service recipients the ‘travel’ time component between service recipients adds to the cost of care. The travel time between recipients has other vehicle associated costs that cannot be overlooked.

Based on 6 client contacts per day by 10 workers over 365 days consider these two comparative travel estimates.

The DAELIBS travel calculator can be used to estimate the comparative cost of travel in different Zones in a community care service. In many services it is an unknown cost factor between service roster plans.

### Residential Care Setting

Zone 1			
KMs per minute of travel	0	Average travel minutes between clients	
Average Speed		Paid Non-Vehicle travel time	3
Average travel minutes between clients	0	Total Travel Minutes per client per day	3.00
Average Kms travelled per client per day		Client contacts per worker per day	6.00
Client contacts per worker per day	6	Total travel minutes per Staff per day	18.00
Total Kms travelled per Worker per day		Total staff delivering services per day	10.00
Total staff delivering services per day	10	Total Service Travel Hours:Mins per day	03:00
Total Service Kms travelled per day		Wage Per Hour Including On Costs	\$20.00
Travel rate cents per Km		Total Travel time cost per staff / day	\$60.00
Total service travel cost per day	\$0.00	Road Tolls & Parking costs per day	\$0.00
Service days per year	365	Service days per year	365
<b>Annual Kms Travel Costs</b>	<b>\$0.00</b>	<b>Annual Time, Toll &amp; Parking Costs</b>	<b>\$21,900.00</b>
<b>Total Annual Cost of Travel Distance, Time, Toll &amp; Parking</b>			<b>\$21,900.00</b>

The residential care model has no vehicle travel allowance component and little accumulated down-time between service recipient contacts. Whilst there is a ‘travel’ component of time between acts of service, when compared with community care for the same 6 service recipients and 10 service providers, the cost is minimal.

It is a known factor in community care that some hidden costs of the travel between service recipients are carried by the individual service providers. Costs like parking a vehicle, or worse parking fines, in densely populated suburbs.

In a contract work environment some individual service providers are only paid for the time spent with the service recipient. Therefore the time lag between actual acts of service provision is a direct cost born by the individual service provider. How much that is remains unknown. Electronic service data can identify it.

## Community Care Setting

<b>Zone 2</b>			
KMs per minute of travel	.8	Average travel minutes between clients	10.00
Average Speed	48.00	Paid Non-Vehicle travel time	5
Average travel minutes between clients	10	Total Travel Minutes per client per day	15.00
Average Kms travelled per client per day	8.00	Client contacts per worker per day	6.00
Client contacts per worker per day	6	Total travel minutes per Staff per day	90.00
Total Kms travelled per Worker per day	48.00	Total staff delivering services per day	10.00
Total staff delivering services per day	10	Total Service Travel Hours:Mins per day	02:30
Total Service Kms travelled per day	480.00	Wage Per Hour Including On Costs	\$20.00
Travel rate cents per Km	.635	Total Travel time cost per staff / day	\$300.00
Total service travel cost per day	\$304.80	Road Tolls & Parking costs per day	\$5.00
Service days per year	365	Service days per year	365
<b>Annual Kms Travel Costs</b>	<b>\$111,252.00</b>	<b>Annual Time, Toll &amp; Parking Costs</b>	<b>\$111,325.00</b>
<b>Total Annual Cost of Travel Distance, Time, Toll &amp; Parking</b>			<b>\$222,577.00</b>

The Data Analysis Electronically Logged Information Based System (DAELIBS) has been developed by Ian over the past 10 years as way of managing the cost, and providing a quality assurance record of delivering care-at-home in the community services.

The underlying recording and reporting principles of DAELIBS are simple. Every service recipient has an electronic signature (e-signature). The e-signature documents home and centred based delivered acts of service reception.

Every service provider has an electronic service attendance log book – a DAELIBS data Logger. Every service centre can have an electronic attendance time register.

When the service recipient arrives to deliver a service they read the e-signature of the service recipient into their DAELIBS data Logger. This records the start time of the service contact. When they finish the service contact the e-signature is again recorded. This establishes both the time taken for the service delivery and a quality control measure that it was delivered within the prescribed care plan schedule.

When the service provider leaves that service contact they can, with a travel signature, record the time they commence and finish travel between the past and next service recipient. Using a pre-set aggregated formula of kilometres or miles per minute of travel, this data can be converted to account the travel time and distance.

The electronic records from the DAELIBS data Logger provide the raw information for individual payroll, travel allowances, and any service recipient invoices.

On a macro scale the electronic data can provide invaluable across the board accounting information that will assist to identify unit costs at; both the local service agency level and potentially the wider community care funding departments.

Some community care service agencies have been using DAELIBS for over five years. See some reference stories in the Connecting Time News Letters.

Have a play with the **Contract Service Economics** game and see just how dynamically the efficient management of time resources impacts the fine balance between income and expenditure. The more complex the service maze the more important it is to the service planning right.

DAELIBS is a tool to assist in the careful management of the finite resources available to care for people who are the most vulnerable in our society, the frail aged, younger people with a disability and those who are their carers.

In the first site where DAELIBS was used, through efficiency gains, the manager reported they were able to move, 212 people of waiting lists into service.

If you are some one who has a desire to achieve an outcome like that contact Ian at [ianb@daelibs.com.au](mailto:ianb@daelibs.com.au) and start exploring your options.

You are invited to pass the connecting community care site reference on.

If you wish to contribute to the discussion please feel free to email your thoughts.

### ***An individual community service provider day may look like this:***

Identify lost service recipient contact time and any hidden costs.

06:45 Leave home first contact 10 minutes away. – Time and travel not paid.  
07:00 Arrive first service recipient  
08:00 Complete the first care plan schedule  
08:05 Leave after cordialities and drive to the next service recipient  
08:15 Arrive second service recipient  
08:45 complete second care plan schedule  
08:50 Leave after cordialities and drive to the next service recipient  
09:00 Arrive third service recipient  
10:10 complete third care plan schedule 10 minutes late  
10:20 Cannot find car park in high rise area, take a risk parking  
10:30 Arrive fourth service recipient just on time  
12:00 Complete fourth care plan schedule  
12:05 Return to car, vehicle has \$70 parking fine  
12:10 Drive home for lunch and break before evening shift. Last contact 20 mins from home – Time and travel not paid.  
16:00 Leave home first contact 30 minutes away - Time and travel not paid.  
16:30 Arrive fifth service recipient  
17:50 complete fourth care plan 90 min schedule  
18:00 Leave after cordialities and drive 20 mins + 10 min walk to the next service recipient  
18:30 Arrive sixth service recipient  
20:10 Complication - complete sixth care plan 90 min schedule  
20:15 Leave after cordialities and drive 25 mins home. – Time and travel not paid.