



Australian Government
**Department of Communications,
Information Technology and the Arts**

**Information Technology Online (ITOL) Program
Final Report**

Project Title: Wireless Telecare In The Home

(hereafter referred to as “the Project”)

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Funding Amount: \$194,701

Date of Agreement: 1 April 2004

Project expected end date: 12 Jun 2006

Declaration:

I, Stephen Mattes being the project manager of MedCare Systems Pty Limited, hereby certify that, to the best of my knowledge, and after making appropriate inquiries, the information provided in this Report is true and accurate, and all ITOL Funds received were expended for the purpose of the Project and in accordance with the DCITA Funding Agreement.

Signature:

Date:

Part A – Project Activities

The Final Report must detail Project activities conducted over the life of the Project. The Final Report should be a stand-alone document that can be used for information dissemination purposes on the operation, mechanisms and processes employed by the Recipient to achieve the Project's objectives.

Please provide full and comprehensive answers to all questions. Note that there is no page limit to Reports.

Under clause 21.1 of the Agreement the Recipient must notify DCITA of any changes to the Consortium membership and/or Other Contributions **when this occurs**.

1. Goal (as detailed in the Agreement Schedule)

To develop, implement and evaluate a framework for electronic data transfer from the home to the health service providers.

2. Objectives (as detailed in Agreement Schedule)

The Project is based on the following objectives

- A list of recommendations for use of wireless technology, such as Bluetooth, for health monitoring in the home;
- A list of recommendations for use of standards including HL7 and XML for health messaging and storage;
- Development of a physical interface unit for transfer of data from the home to a central server that is accessible by health care workers;
- Development of a data transfer framework;
- Development of a secure patient-based web page where home monitoring data can be viewed;
- Development of procedures for the transfer of information between health care workers from different agencies, particularly in the event of an emergency, such as a fall;
- Implementation of the data transfer framework in the private health care sector with 10 housebound, frail elderly patients;
- Implementation of the data transfer framework in the public health care sector with 10 housebound patients with congestive heart failure;
- A report detailing the evaluation of the performance and utility of the data transfer framework;
- A list of recommendations pertaining to the use of the data transfer framework for home monitoring of patients with chronic health conditions; and
- Publications in local and international conferences and journals.
- A report on the health messaging protocols will be made available on the CHI website.

2.1 Please provide a statement that summarises the extent to which the Project's goal and objectives have been met. If the objectives have not been met, please explain why.

2.1 Summary Statement

All the above goals, except the publication and the web-site report are complete.

The trial of the Bluetooth weight scales was completed according to the initial project plan. The private sector implementation of the triaxial accelerometer (TA) was transferred to a public sector organisation following an abrupt withdrawal of Chubb from the trial.

The subsequent trial of frail elderly patients was prematurely abandoned because the framework was initially unreliable and not well-received by the users. The equipment then went through a significant period of software upgrading and performance testing before being successfully redeployed.

Note however that significant enhancements to the operation of the TA have been implemented that are commercially very significant and greatly enhances its market potential.

The publication and web-site report preparation awaits restarting and completion of the trial of frail elderly patients. This trial has now restarted and data is being collected reliably.

3. Activities and Milestones

3.1 Report on Activities and Milestones

| Activity | Performance Indicator | Milestone (Date) | Revised Milestone Variation 1 (April 2005) | Revised Milestone Variation 2 (September 2005) | Revised Milestones (Mar 2006) |
|---|---|------------------|--|--|-------------------------------|
| a) Research into technologies, protocols and standards. | Creation of document summarising and comparing wireless technologies | 30/01/04 | complete | Completed | - |
| | List of recommendations for use of wireless technology | 06/02/04 | Complete | Completed | - |
| | Creation of document summarising data transfer standards requirements | 30/01/04 | 15/10/04 | Completed | - |
| | List of recommendations for use of data transfer standards | 06/02/04 | 15/10/04 | Completed | - |
| | Development of protocol for use of standards in | 15/02/04 | 15/10/04 | Completed | - |

| Activity | Performance Indicator | Milestone (Date) | Revised Milestone Variation 1 (April 2005) | Revised Milestone Variation 2 (September 2005) | Revised Milestones (Mar 2006) |
|---|---|------------------|--|--|-------------------------------|
| | framework for data transfer and storage | | | | |
| b) Development of data transfer framework | <ul style="list-style-type: none"> Development of physical interface unit for the home Integration of wireless technology with interface unit | 15/04/04 | 10/12/04 | Completed | - |
| | <ul style="list-style-type: none"> Integration of telephone based data transfer to secure server Development of patient based, secure web interface for display of information | 15/05/04 | 10/12/04 | Completed | - |
| | <ul style="list-style-type: none"> Testing of communications between weighing scale and web interface Testing of communications between ambulatory monitor and web interface Testing of prototype system | 15/06/04 | 20/01/05 | completed | - |
| c) Implementation in public sector | Recruitment of patients | 15/06/04 | 01/01/05 | completed | - |
| | Installation of system in patient homes | 15/07/04 | 28/02/05 | Completed | - |
| | Conduct trial: <ul style="list-style-type: none"> Patient training Patient follow-up | 15/09/04 | 30/04/05 | completed | - |
| | Retrieval of systems at completion of study | 15/10/04 | 31/05/05 | completed | - |
| Progress Report due 13/03/2006 | | | | | |
| d) Implementation in private sector | Recruitment of patients | 15/06/04 | 01/01/05 | Completed | - |
| | Installation of system in patient homes | 15/07/04 | 28/02/05 | Completed | - |
| | Conduct trial: <ul style="list-style-type: none"> Patient training Patient follow-up | 15/09/04 | 30/04/05 | Completed | - |
| | Retrieval of systems | 15/10/04 | 31/05/05 | Completed | - |

| Activity | Performance Indicator | Milestone (Date) | Revised Milestone Variation 1 (April 2005) | Revised Milestone Variation 2 (September 2005) | Revised Milestones (Mar 2006) |
|--------------------------------------|--|------------------|--|--|-------------------------------|
| | at completion of study | | | | |
| e) Evaluation of framework | Collection of feedback from health care workers, patients and technical staff | | 30/06/05 | Completed | 12/6/06 |
| | Interim evaluation report completed and disseminated to Consortium Partners and DCITA Officers. | 15/10/04 | 31/07/05 | Completed | 13/3/06 |
| | Final evaluation report and list of recommendations completed and disseminated to Consortium Partners and DCITA Officers. | 15/11/04 | 31/07/05 | Completed | 12/6/06 |
| g) Publications | Preparation of publications will include an internal report published on the CHI and Medicare web sites, and a minimum of two publications in selected international peer review journals. | 15/1/05 | 31/7/05 | 31/12/2005 | 01/05/06 |
| Final report due 12 June 2006 | | | | | |

3.2 Please detail the Project activities over the life of the Project.

3.3 Please explain any difficulties encountered, how they were addressed and their impact on the Project.

Answer to Q3.2

Development phase:

- a list of recommendations for wireless and for use of standards
- a wearable triaxial accelerometer with real time wireless communications to a base station.
- a Bluetooth adaptation to electronic scales to enable wireless transmission of data to a base station.
- communications channel to a secure server
- a secure web-based interface for viewing patient data
- an integration with Chubb-VitalCall emergency response system
- development of a daily “programmed sequence” of moves for the wearable triaxial accelerometer. This was added to the original project specification.

Testing phase:

- extensive lab testing of the wireless data transfer framework
- out-of-lab testing and demonstration of the framework

Implementation phase:

- delivery of tested and packaged system to Chubb-VitalCall
- completion of trial of congestive heart failure patients at ACT Health
- planning ACT Health to conduct trial of frail elderly users once Chubb-VitalCall withdrew
- early completion of trial of frail elderly users at ACT Health
- redeployment following resolution of a number of software and hardware problems. Units are now in place and are collecting data.

Evaluation phase:

- preparation of interim evaluation report
- collection of feedback from health care workers, users and technical staff
- preparation of final evaluation report

Answer to Q3.3

The main difficulties have been due to; contractual negotiations, poor initial project planning, unexpected difficulty of the development, significant delays in obtaining ethics approval, subsequent under budgeting and lack of funds (owing to costs of obtaining multiple clinical trial insurance and other factors), one consortium partners pulling out of the trial phase and lastly unexpected complexity in adding a voice activated programmed sequence of movements to test daily the user's functional health status.

The initial delay was due to lengthy contract negotiations between the consortia. This led to a five-month delay in commencement. Further delay was due to compassionate leave for one staff member, overly ambitious planning, unavoidable technical delays and lengthy delays in an associated trial. Finally, procrastination by Chubb-VitalCall and then their withdrawal also added a further four-month delay to the trial of frail elderly users.

Regarding the private trial, the project was on schedule until late December 2004. However, two of our staff members took six weeks annual leave. We did not originally provide for this in the timeline. The program director granted one staff member leave on compassionate grounds due, to severe life threatening illness in the family.

We did attempt to avoid delays introduced by this annual leave. In December, we rushed the final layout of the main circuit board and sent it off for manufacture in late December. Unfortunately, the manufacturer closed for the Christmas and New Year break before commencing our job.

Thus, we did not receive the completed circuit boards until mid-February. The original revised timeline predicated on getting the circuit board layout correct first time.

Although the system had been operational, the circuit board did not pass a set of acceptance and performance tests, as there was significantly reduced wireless signal power in the packaged system. Some of the problems, we now realise, were to be expected; and some precipitated by rushing the final layout in December.

Debugging and redesign eventually required eight weeks with additional input from a more experienced RF engineer. We also consulted an expert in radio frequency design.

Ongoing bugs required another several months of debugging and rework.

UNSW had more than spent the original development and was heavily in debt to this project. Thus, the resources were somewhat limited and in the last half of 2005, the pace of development slowed.

ACT Health finally commenced the congestive heart failure trial on 19/12/2005 and completed on 13/02/2006. This progress report includes the congestive heart failure trial report.

Chubb had some delays due to rolling out another trial on behalf of UNSW. However, they continued to stall and finally decided to withdraw from the trial of frail elderly users. During this time, MedCare made many attempts to move the project forward. Chubb withdrew despite signing on to the project in early 2004 and having close involvement in the development phase from October 2004 and writing a letter of endorsement as late as July 2005 and continued involvement up until Jan 2006. The first MedCare heard of the possibility of Chubb withdrawing was when they received formal notice by letter on 16 Feb 2006.

MedCare arranged for Canberra Hospital / ACT Heath to conduct the trial of the triax technology in the frail elderly. The trial commenced on 10/04/2006. Problems became evident almost immediately. These were due to excessive false positives, lack of a formalised call-centre capability that was meant to be Chubb's responsibility and the late decision to introduce a novel and potentially clinically very important voice activated "programmed sequence".

Specific details of the problems were: the unit would activate an emergency call inappropriately, for example when one user went to the telephone line would not disconnect and the timing of the sequence was random, causing some users to be woken from sleep. On 12/04/2006 ACT Health decided to temporarily halt the trial (with six units in the field). The developers made a further development and testing effort to try and improve the reliability of the "programmed sequence". The trial recommenced on 26/04/2006. By 01/05/2006 two of six active participants withdrew, one unit had a broken belt clip, two units were mal-functioning and one user was un-contactable. Of the remaining four (of ten initial units), three had permanently flat batteries and one was broken. With the high density batteries selected, if the battery discharged past a certain level, recharging became impossible in the field and the units had to be returned to UNSW. Excessive discharging took place because leakage

current monitors installed in the subjects' home would trip and turn off the charging power supply.

At this point the trial was temporarily abandoned and the units returned. The developers undertook further detailed in-house testing. They identified a number of additional software and hardware problems, which required significant additional effort to resolve. Ultimately they were able to produce systems that included the "programmed sequence" and were able to pass rigorous in-house performance and reliability testing.

These units were subsequently redeployed and will continue collecting data until sufficient data is collected for joint publication with Prof. Marc Budge from the Canberra Hospital.

3.4 Please detail any changes to the activities, performance indicators and milestones detailed in the Funding Agreement? Please describe how they affected the Project.

3.4 Discuss any variations to the Project

1. Delayed milestone dates, the answer to Q3.3 gives reasons for the project delay.
2. The project had an aborted change of scope. The original plan was changed to save on development time and complexity. We thought we would not be able to supply a blue-tooth enabled plug-pack in time. The alternative plan relied on us "piggy-backing" the ITOL objective onto the CHF trial. However the CHF trial has not happened. And there is more time for plug-pack development because the triax part has been delayed.
3. Trial of frail and elderly users was transferred to the public sector. At the last minute, Chubb, our private sector consortium partner withdrew from the trial. They cited "undue burden on our elderly customers". Thus project was further delayed because ACT Health then had to obtain clearance from their HREC. They also had to allocate staff members.
4. A "programmed sequence" was added to the trial of frail and elderly people. This was an important additional feature that greatly increased the market potential of the device. However this complex new feature increased the project risk, and initially resulted in an early termination of the trial. Additional work was carried out to overcome these problems and the units were subsequently redeployed and are now collecting data reliably.

4. Consortium Partners

The Project consortium is an important element of Projects funded under the ITOL Program.

4.1 Did the membership of the consortium change during the Project? Describe any changes to the consortium during the Project and the impact of the changes.

Answer to Q4.1

The membership did not change. One partner, Chubb, withdrew from the trial phase. Chubb's withdrawal has been discussed at length in earlier communication, and would appear to have been motivated by legal advice from in-house counsel that superimposing the additional ITOL trial on an existing service contract for the Vitalcall pendant would somehow put CHUBB at legal risk. This explanation was never seen as convincing to the consortium partners.

The consequence of this withdrawal have been significant and include the following;

1. The cost of the unbudgeted trial insurance (approximately \$28,000) to MedCare was a wasted expenditure as trial insurance was not required in the public sector trial.
2. Significant additional costs in funding the Canberra Hospital trial
3. Loss of the 24x7 call centre capability which would have been provided by Chubb as part of their in-kind contribution

5. Acknowledgment and Public Statements

- 5.1 How have you acknowledged the assistance of the ITOL Program in your promotion of the Project and on the Project's website as required in clause 11 of the Funding Agreement? Please provide a description of these activities and provide copies of documents produced.

Answer to Q5.1

MedCare is extremely grateful for ITOL's tolerance and patience throughout what has been a very complex and difficult project. MedCare has acknowledged support through the ITOL grant programme during a variety of events and presentations such as:

- presentations at bizNet Club through the Australian Technology Park innovations;
- PowerPoint presentations by Prof Branko Celler and Prof Nigel Lovell at medical and engineering conferences;
- discussions with alliance partners including the ITOL collaborators and international alliance partners;
- highlighted as a news items on our new web site <http://www.medcaresystems.com.au>.
- Reference in a successful \$1.7 million Commercial Ready Grant recently awarded by Ausindustry to MedCare

Apart from the above, MedCare Systems has actively promoted our relationship with the government that includes the ITOL grant funds along with other grant funds obtained over the years.

6. Overview

- 6.1 DCITA uses ITOL-funded Projects as examples of the development of collaborative business-to-business e-commerce in Australia. Please include in

this section an overview that addresses the following issues that can be used as public information on your project:

- 6.2 demonstrate how the proposed solution/product/process is innovative and has met a strategic need;
- 6.3 efficiencies/productivity/profitability and cost savings;
- 6.4 Demonstrate how ITOL Funding provided benefits to your industry and the other Consortium members;
- 6.5 Explain how this solution will be taken up by other businesses/the industry section; and
- 6.6 Explain the Consortium's plan to sustain the Project in the longer term and expand industry/member take-up.

6.1 Insert Overview of the Project

Health is an \$80 billion dollar industry with an enormous direct and indirect economic impact. Costs in this industry are growing at an average of 8-9% pa and productivity improvements need to be made if its share of GDP is not to exceed 10%. The project has improved industry awareness and adoption of electronic B2B solutions by providing the health care providers with quality patient monitoring information, automatically retrieved from the home environment, in a useable and accessible format that is compatible with other electronic patient information that complies with the standards for electronic health information.

As soon as the central server receives information it is available to all relevant health workers, regardless of the agency for which they work. This speeds the transfer of information between health staff, and facilitates discussion of the shared information, as it is viewed by all parties at the same time.

The ITOL funding has enabled the consortium members to build skills and understanding of wireless telecare in the home. This has already lead to a number of important product refinements.

Two consortium partners: MedCare Systems and UNSW have already developed the next generation of triaxial accelerometer. This uses BlueTooth technology and off-the-shelf packaging and a simpler recharging system. They already have plans to trial this new equipment. This will integrate with the existing weight scale system to provide a basis for the unified home "portal".

This Bluetooth Home portal will support a number of MedCare products, including weight scales, BP monitor, Triaxial fall monitor, alarm button, and ultimately ecg and spirometry capability. These developments are now well underway and there is no doubt that ITOL made a major contribution to MedCare's ability to now produce a new range of products for single disease conditions and at home monitoring of the frail elderly.

The voice activated controlled sequence has also generated enormous interest amongst possible distributors such as Chubb and Doctor's Safety line in Adelaide. This development has great potential to provide a new way of delivering reminders on medications and daily living activities (bathing, eating etc) to dementia patients.

This new development, together with our superior and now well tested signal processing algorithms for automated falls prevention and detection will make the MedCare TA an important and potentially very successful export product. We also expect that sufficient data will be collected to permit the publication of a high quality paper in an international journal.

Part B – Financial Acquittal

Projects are required to acquit Funds payments in the Final Report.

Please account for Funding using the following template and linking cost items to the original budget for the Project. The “Total Amount Spent” is the total amount of ITOL funding spent on the project.

7.1 Report on Expenditure (Insert Amounts)

Please Note: Where amounts have been committed, but not yet expended against Project activities, these should be also included. For example, a service or good has been provided but the account has not yet been received. Only expenditures or commitments made between the Agreement commencement and the provision of this Final Report should be included.

The Recipient should note the requirement for an independently audited statement of receipts and expenditure in respect of ITOL Funds. Provision for the cost of the audited statement should be also included in the following table.

7.2 Report on Expenditure (Insert amounts)

| Cost items (detailed breakdown) | Proposed ITOL budget as specified in Schedule (\$) | Total ITOL monies spent in the FINAL reporting period (\$) |
|--|--|--|
| Research into technologies, protocols and standards | | |
| Salaries: employment of two senior engineers plus one specialist in health communication standards at UNSW Level 8 step 5 (\$64,325 plus 28% on-costs) | 5,833 | 5,833 |
| Project Management | 1,900 | 1,900 |
| Development of data transfer framework | | |
| Salaries: employment of three senior engineers (one hardware, one software, and one firmware and interfacing engineer) plus one specialist in health communication standards at UNSW Level 8 step 5 (\$64,325 plus 28% on-costs). Employment of one technician/engineer at UNSW Level 7 step 3 (\$53,805 plus 28% on-costs) | 43,454 | 43,545 |
| Project Management Fees | 4,750 | 4,750 |
| Implementation in public sector | | |
| Salaries: employment of one senior technical support engineer for 10% of the time and one specialist in health communication standards at UNSW Level 8 step 5 (\$64,325 p.a. plus 28% on-costs). Employment of one technician/engineer at UNSW Level 7 step 3 for 7 days to install systems in homes (\$53,805 p.a. plus 28% on-costs). Employment of one registered nurse to supervise the field study (\$54685 p.a. plus 28% on-costs). Cost of half day onsite training for 12 staff. | 43,881 | 43,881 |
| Project Management Fees | 4,750 | 4,750 |
| Equipment (13 ambulatory monitors, 13 interface | 13,000 | 13,000 |

| | | |
|--|----------------|----------------|
| units, in-kind: dedicated system for intelligent monitoring linked to operations station) | | |
| Other (including meeting room hire, associated meals, travel and accommodation should be specified). Delivery of interface units to VitalCall Office. Travel expenses for 1 person to travel to VitalCall Office to conduct training. Travel to install and recall plugpack units for field study. Telephone expenses. Printing of training manuals. Other expenses incurred in integrating the new data transfer system into the existing VitalCall Monitoring system | 70 | 70 |
| Progress report expenditure | 117,638 | 117,638 |
| Implementation in private sector | | |
| Salaries: employment of one senior technical support engineer for 10% of the time and one specialist in health communication standards at UNSW Level 8 step 5 (\$64,325 p.a. plus 28% on-costs). Employment of one technician/engineer at UNSW Level 7 step 3 for 7 days to install systems in homes (\$53,805 p.a. plus 28% on-costs). Employment of one registered nurse to supervise the field study (\$54685 p.a. plus 28% on-costs). Clinician support during the field study, valued at \$5000. Cost of half day onsite training for 12 staff. | 43,883 | 43,883 |
| Project Management Fees | 4,750 | 4,750 |
| Equipment (13 ambulatory monitors, 13 interface units) | 13,000 | 13,000 |
| Other (including meeting room hire, associated meals, travel and accommodation should be specified). Delivery of interface units to VitalCall Office. Travel expenses for 1 person to travel to Canberra to conduct training. Travel to install and recall plugpack units for field study. Telephone expenses. Printing of training manuals. | 90 | 90 |
| E. Evaluation of framework | | |
| Salaries: employment of one research scientist and one specialist in health communication standards at UNSW Level 8 step 5 (\$64,325 p.a. plus 28% on-costs). Employment of one research assistant to conduct interviews and focus groups at UNSW Level 5 Step 1 (\$39,605 p.a. plus 28% on-costs) | 8,750 | |
| Project management fees | 1,900 | |
| Other | 440 | |
| Publication | | |
| Project Management Fees | 950 | |
| Communication strategy | 800 | |
| Other expenses | 2,500 | |
| Final reporting period total expenditure | | 179,361 |
| TOTAL ITOL GRANT | 194,701 | |

- 7.3 Please discuss any significant changes in the use of Funds from that expected in the Project budget, relating to either the amount used for any cost item or timing of payments for elements of the Project.

Answer to Q7.3

The project had an aborted change of scope (detailed in the answer to Q3.4) The cost was about one month programming the UNSW HL7 interface. This was then discontinued because it was clear the CHF trial was not progressing. There was no other expenditure.

The trial of frail and elderly people was moved from Chubb to ACT Health. This required additional staff costs and costs for ethics committee clearance. It also required UNSW to pay for one staff member on one occasion to travel to Canberra three times and stay for a period of two weeks. On another occasion two staff members travelled and remained in Canberra for a period of five days to ensure that the deployment would progress satisfactorily and to resolve any problems that may arise.

Please also note that all available ITOL funds were transferred to UNSW to fund R&D, manufacturing and testing of trial technologies and methodologies as per the requirements of the application. These funds were transferred to a University account RMO2427. Because this account was in deficit for a substantial period of time because of late payment following lengthy delays, it was blocked by the University accounts staff. As a consequence other Biomedical Systems Laboratory accounts were used to cover ongoing expenditure. When funds began to flow once again, this account was unblocked. However reversing charges made against other accounts will take a significant amount of time. A fully audited account both of MedCare and of the UNSW operating accounts will be made available within three months of completion of this project.

Since the University accounts are in deficit, amounts reported as spent in the table above have all been matched or exceeded.

8. Other Contributions

- 8.1 The role and contributions of consortium partners are vital to the success of this Project. Please discuss the roles and contributions made by the Consortium Partners to the Project.

Answer to Q8.1

MedCare Systems: provided project management, consortia co-ordination and preparation of progress and final reports. MedCare was also obliged to pay for clinical trial insurance for the trial to be initially carried out on Chubb patients.

UNSW: performed all the R&D design and development and trial support, trial design and original ethics committee approval for the trial of frail and elderly users.

ACT Health: ran both the congestive cardiac failure and frail and elderly user. They obtained ethics approval for both trials and support of the change of scope to HL7.

Chubb: provided development and logistical support. Chubb adapted their existing call centre network to handle a specific protocol for the frail and elderly user trial.

They provided a consulting expert in providing commercial services to frail and elderly people.

8.2 Please report on the financial and in-kind contributions made by Consortium Partners.

Answer Q8.2 in the table below

| Consortium Partner | Proposed Budget As in Schedule (Cash) | Proposed Budget As in Schedule (In-kind) | Amount Spent in Reporting Period (cash) | Amount Spent in Reporting Period (in-kind) | Amount spent in final reporting period (cash/ inkind) |
|-------------------------------|---------------------------------------|--|---|--|---|
| MedCare Systems Pty. Ltd | \$310,002 | \$1,168 | \$240,106 ¹ | \$1,752 ² | \$70,275 |
| University of New South Wales | \$12,839 | | \$11,752 ³ | \$19,000 | \$13,800 |
| Chubb Security Pty. Ltd. | - | \$82,722 | | \$52,722 ⁵ | - |
| ACT Health | - | \$29,390 | \$4,141 ⁴ | | \$45,000 |
| Sub-totals | \$322,841 | \$113,280 | \$255,999 | \$73,474 | \$129,075 |

8.3 Discuss the impact of any significant changes in the consortium, Other Contributions or the use of Funds from that expected in the Project proposal.

Answer to Q8.3

There were no significant changes in the consortium membership. However Chubb withdrew participation in the trial of frail and elderly users. The role was taken up by ACT Health, another consortium member.

9. Audited Statement Required

9.1 In accordance with the Funding Agreement, the Recipient must provide to DCITA within 3 months of the end of the Funding Period, or within 3 months of the Funds being expended in full, whichever is the sooner, an audited statement of receipts and expenditure in respect of the Funds as specified in sub-item 4.5 of the Schedule.

9.2 Within 3 months of the end of the Funding Period or within 3 months of the Funds being expended in full, whichever is the sooner, the Recipient must also

¹ \$58,000 (inc GST) transferred in June to fund ITOL R&D at UNSW to + trial insurance @ \$28,000 + JL @ 10% for 1.5 yrs (\$19,200) + SJM @ 25% for 4.25 months (\$11,333) + IG 25% for 3 months (\$5,573) + \$28,000 + \$28,000 + \$59,000 last transfer + additional expenditures in staff.

² Equipment and material + assembly costs and document printing.

³ Salary (10% of JB) and materials expenditure on design and implementation of evaluation program.

⁴ Adapted from WS email to SJM (30/11/2005): 0.15 FTE RN 1/8/05 – 30/11/05 (n.b. total was 0.25 FTE and ITOL contribution was budgeted at 0.1 FTE) + \$500 consumable. Balance will be spent in deployment, maintenance, evaluation and decommissioning.

⁵ Chubb expenditure cannot be accounted for as they have not supplied statement of account. However, until the deployment was due to start they fully participated in project design and development.

give DCITA an audited statement of receipts and expenditure in respect of the Funds. The audit must be carried out by a person who eligible to be registered as an auditor under section 1280 of the *Corporations Act 2001* and is not an officer or employee of the Recipient. The audit must include:

- a. a statement as to whether the financial accounts, relating to the receipts and expenditure of the Funds, are true and fair; and
- b. a statement identifying the amount in the account referred to in sub clause 6.2 of the Agreement that represents the balance of the Funds.

For the reasons given above, ie need to operate project from other BSL funds whilst ITOL funds were delayed because of delays in project execution, Table 8.2 above must be seen as an approximately correct statement of expenditures. A full audited account will be made available within three months completion of the project.