

2007 NSW Health Awards Entry

Complete under the following headings and use the italics as a guide.

Remove the italics when completed.

Entry Title (50 characters or less)
Cutting the Cost! Mandatories Online
Abstract (120 Words)
<p>The introduction of mandatory training online has resulted in numerous benefits including, reduced time away from core business, reduced travel requirements, improved return on invested training costs, increased mandatory training compliance and a potential cost saving to the organisation of in excess of \$1million per annum.</p> <p>This project was conducted in Coffs Clarence Network of North Coast Area Health Service to pilot a cost effective on-line challenge quiz for assessing and increasing compliance with mandatory training, recognizing prior learning, in fire, infection control, manual handling, security and aggression and occupational health and safety. The project involved development of a pathway for Mandatory training on-line pilot, promotion, advertising and implementation of the program and an evaluation process.</p>
Aim (30 Words)
To reduce staff attendance time at mandatory training from eight hours to less than one hour away from their core business of providing health care or health care support on an annual basis, resulting in potential cost savings in excess of \$1million.
<i>Nature of the Problem (100 words)</i>
Mandatory training (Mandatories) across NCAHS is time consuming taking many hours per staff member per annum with many staff requiring additional hours of backfill to ensure compliance. There are also constraints relating to organisation of the training, presenter time, and attendance is usually restricted to set times per annum. In addition, the effectiveness of current programs is not formally measured, content varies across the Area and the format does not reflect adult learning principles relating to recognition of prior learning. Some facilities are not able to offer mandatory training and staff are then required to travel to other sites to attend training. As a result, this is a high cost,

potentially ineffective process that is mandated across NCAHS.

Extent of the problem (150 words)

The current cost for Mandatory Training in NCAHS is estimated at, in excess of \$1.8million for the Area. Face to face mandatories takes about 8 hours, excluding travel time – at an average of \$28.00/hr for 8 hours for 60% of 7800 employees, this equates to \$1,048,320. For 100% compliance, this equates to 62,400 hours of training time. Assuming backfill for less than 50% of attendees, at an average of \$28 per/hr for 8 hours for 3400 staff, this equates to \$761,600 - an additional requirement of 27,200 hours of backfill costs. As some facilities are not able to offer mandatories, staff are then required to travel to other sites to attend training resulting in further costs. There are also administrative requirements for organising and advertising dates, availability of training facilities, material printing and distribution. The content and format of the mandatory training also varies across the Area Health Service, not usually acknowledging that staff have attended this training previously and have existing levels of knowledge regarding the topic content. There are also inconsistent mechanisms for measuring the effectiveness of, or centrally collating compliance data on, mandatory training.

Strategic importance (100 words)

This pilot project assists in provision of a safer environment, support for clinical service delivery and better compliance with related policy and legislation such as Occupational Health and Safety Act (2000); NSW Health Policy PD2005_247 Infection Control; PD2005_224 Manual Handling Incidents; PD2005_360 Occupational Health and Safety Policy and Workers Compensation Injury Management Policy; and Policy PD2005_315 Zero Tolerance Response to Violence in the NSW Health workplace; NSW Health Security Manual; and NCAHS Policy 021-05 Manual Handling Lift Minimisation; 103-05 Fire Safety; 067-05 Occupational Health and Safety; and 050-05 Security.

Planning and implementing solutions (300 words)

The project involved the following stages:

- Development of pathway for Mandatory training on-line pilot –
A question bank was developed with input from local knowledge experts for:
 1. *Fire;*
 2. *Infection Control;*
 3. *Manual Handling;*
 4. *Security/Aggression; and*

5. Occupational Health and Safety.

For each topic, a random selection of 10 questions, from over 50 questions, is taken and delivered to the participant through an on-line Learning Management System. This question bank is constantly updated with new questions. Participants are required to obtain 100% for compliance. They are allowed three attempts, each time building on the last. This provides the opportunity for a learning process to take place as well as an assessment of knowledge. For example, if a participant is asked a question to identify the picture of a fire extinguisher and is not sure, but seeks advice or walks around and finds the item, then learning process has taken place and the participant will have a greater recall in the future.

- Promotion and advertising of pilot program - Initial information was released to managers about the process and the trial through meetings with managers. Anecdotally, managers were concerned about the educational soundness of the program and the trial. After consultation and provision of evidence, support and engagement increased.
- Demonstration of pilot program - As a direct result of this swell of interest, the Computer Training Room at the major hospital in the Network (Coffs Harbour Health Campus) was booked and training support was provided. During this time the interest and response of participants grew significantly. Local district hospitals, Bellingen and Macksville, also expressed an interest in being part of trial. Training was given to champions at each site. Those without Email addresses were registered manually. Within the Coffs Clarence Network and other sites across the Area, on-line mandatory training has been piloted for just over fifteen months (November 2005 to February 2007).
- Evaluation conducted – process indicators for number of users, sites of users, number of quizzes completed, and qualitative feedback through survey of pilot program.

Outcomes and Evaluation (200 words)

Process indicators:

The following process indicators show effective compliance and usefulness of the on-line mandatory training program, remembering that traditional training methods take 8hrs.

- Average Time Taken: 28.5 Minutes (Range: 9 to 63 minutes);
- Number of Users: 825 enrolled in Mandatories on-line;
- Number of Quizzes completed: 1016 quiz attempts by 825 participants;
- Average number of quizzes per User: 1.23 (of the three possible attempts)
- Some units/wards/dept within these facilities have 100% compliance online with a previous history of <10% compliance with traditional methods.
- Appropriateness of target groups are now compliant (Clinical staff traditionally had poor

compliance rates).

Financial impact:

For the pilot project, face to face mandatory training currently takes about 8 hours, excluding travel time – at average \$28.00 per hour for 8 hours for the 825 employees = \$184,800. Assuming backfill for 50% of these attendees, at an average of \$28 per/hr x 8 hours there could have been an additional cost of \$92,400. Therefore using the traditional face to face training, the conservative estimated cost would have been \$277,200. This does not include an costs related to presenter time, course coordination or travel time of participants.

During the pilot project, only a maximum of one hour staff time was required to complete the online program, reducing training from 8 hours to 1 hour. No backfill was required, reducing the cost further. There is a requirement that practical fire training is still required. Even with the practical training included, the cost savings are over \$231,000 for the 825 participants in the pilot.

In addition there is an additional 6 hours for no time lost in clinical service delivery per person participating in the pilot – a total of 4,950 available core business hours that were previously spent in attending mandatory training.

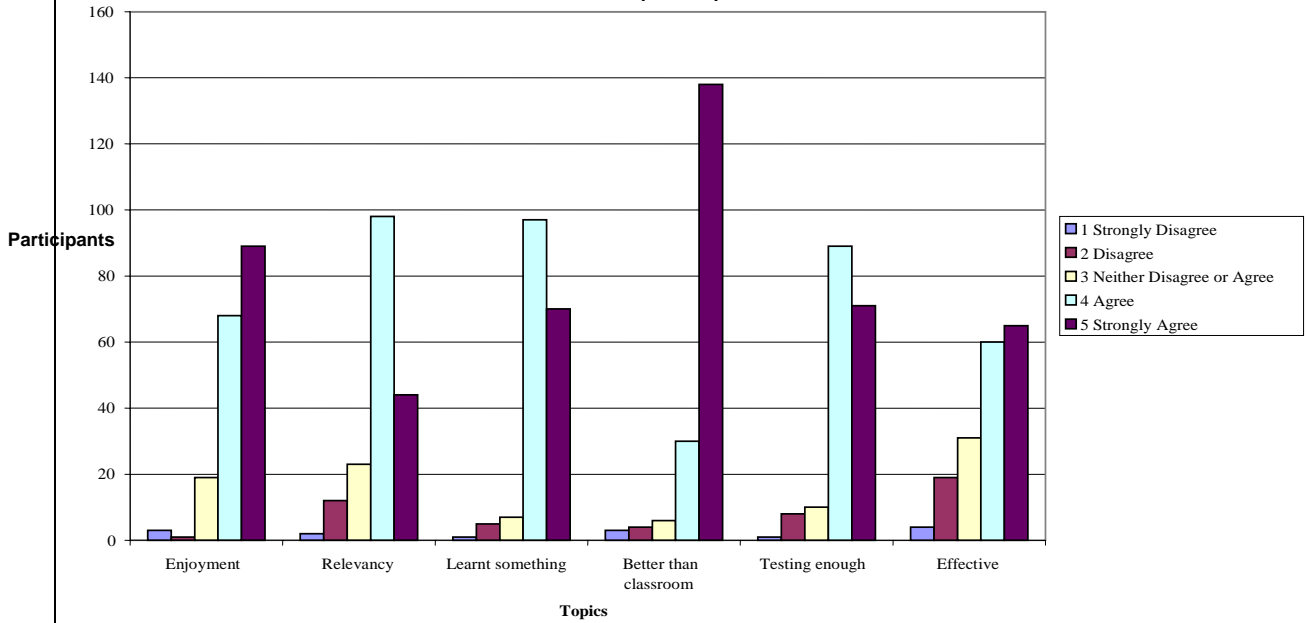
A survey tool was distributed on-line to users of the mandatory training program, rating seven questions on a scale of 1-strongly disagree to 5-strongly agree.

It was noted that the initial data was generated less than 8hrs following the release of the survey tool, perhaps highlighting the enthusiasm for the program.

When asked would they undertake Mandatories Online again in the future of 180 respondents 169 (94%) said yes. The Evaluation tool also solicited three qualitative responses relating to 'likes', 'dislikes' and 'comments'. Key themes gathered by this effective online tool have been incorporated in the ongoing development, evaluation and wider application of the program

The following graph shows the results from the survey conducted to those participating in the Trial. The survey was completed by a random sample of 180 participants.

**Survey results regarding aspects of using Mandatories On-Line
(n=180)**



Sustaining change (100 words)

A system to support mandatories on-line and other E-Learning programs has been supported by the Area Executive. A Steering Committee has been established to oversee the quality and quantity of a range of programs delivered through the on-line environment, including a policy framework, quality control processes and roll-out of E-Learning across the Area.

This process also allows sustainability by providing current reportable information for managers to ensure training compliance and training needs and thereby supporting the delivery of quality care by not losing staff to the classroom for 8hrs of traditional face to face training.

Future Scope (100 words)

There is huge future scope for the use of E-learning as an additional mode of delivery for all learning activities where appropriate, including clinical topics such as medication calculations and non-clinical topics such as Zero Tolerance to Violence training.

The financial cost savings are significant, not just for mandatory training but for other appropriate programs as well. The pilot continues to be requested from facilities across the Area Health Service and has been adopted as an approved method of Mandatory

Compliance for the five key mandatories. As leaders in on-line delivery in the health context, other Area Health Services, NSW Health and other State Health Services are currently investigating this project for application within there own health systems.

Total: 1200 words (including references but excluding reference list and entry title)