

**BLENDING SERVICE WITH TRAINING
PROJECT FINAL REPORT**

**TRAFFORD HEALTHCARE NHS TRUST
BLENDING SERVICE WITH TRAINING
FINAL REPORT
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Abstract

The Government's Modernisation Fund released monies to the North Western Deanery to support projects that promote the blending of education and training with service needs. Trafford Healthcare NHS Trust applied for funding through this route, for a project that had the overall aim of developing improvements in patient care, by linking innovation in medical education with the current emerging agenda of quality in the NHS.

The project titled "Blending Service with Training" was established. This report describes how the project ran, highlighting problems encountered, and solutions found. In essence, this facilitated the development of Trafford Healthcare NHS Trust's Intranet, named "Traffnet".

1. Outline Of The Project

1.1 It was envisaged that the project would develop new ideas and promote innovation to establish and maintain improvement to systems involving medical education. It was highlighted that the project should have a multi-disciplinary effect. The money awarded by the North Western Deanery was to fund staff's time and related cost in developing best practice and improved ways of working. Monies from the initiative were not to be used to fund equipment, or increases in medical staffing.

1.2 The project plan was to create an Intranet with a Clinical Guidelines Database and develop a system of learning from adverse incidents. Using "Evidence Based Practice", the Trust was to improve its existing paper based records, by replacing them with an up to date electronic system that would be accessible in all clinical areas, 24 hours a day. Because the funding from the North Western Deanery was not to be used for the purchase of equipment, the Trust was required to raise capital sufficient to fund I.T. equipment purchases required for the success of the project. Funding of the project is discussed later in **section 3**.

1.3 As this project was a new endeavour, in that it was solely IT related, the Project Board considered it appropriate to run a pilot of any system developed by the Project Team. The pilot of Traffnet is discussed further in **section 4**.

1.4 The project was set up to run simultaneously in two directions. The first path was that of the Clinical Guidelines Database. As it was the easier of the two routes to establish and audit, it was the Clinical Guidelines Database that was the focus of the pilot. One Clinical Directorate was chosen to run with the pilot, and through a lead consultant for that directorate, Clinical Guidelines were constructed and then formatted in Microsoft Word. Once typed, they were submitted to the Project Team who then converted them from 'doc' format to 'html' format, under advice from the Intranet Software Developer. When converted, the Clinical Guidelines were uploaded to the Intranet, where they could be viewed from any Personal Computer in the Trust that had Web Browsing software.

1.5 The second path that the project took was the development of a feedback system concerning adverse clinical events. The project team worked closely with the Clinical Risk / Legal Services Manager, who dealt with such matters, to develop a system that could deliver such a facility. It was agreed that a "Bulletin Board" would facilitate such requirements. In a Trust the size of Trafford Healthcare NHS Trust, such incidents vary in relative importance and frequency, so it was decided that only information appertaining to the more serious incidents would appear on the Bulletin Board. This system, once set up, would be run by the Legal Services Department.

2. Staffing

2.1 For the Blending Service with Training initiative, the Trust set up a Project Board to ensure that the project was managed appropriately. The Project Board consisted of two lead Consultants, Information Technology Manager, Deputy Director of Finance, Post Graduate Tutor, Legal Services Manager, and the Clinical Governance Unit Manager, who was also the Project Lead. These people were selected to deliver a wide range of input, covering all aspects of the Trust.

2.2 Once the bid for funding had been approved, the Project Board agreed upon a Project Team. The Project Board agreed the appointment of a Project Manager and a Project Assistant. In accordance with the Trust's recruitment and retention policies, the posts were advertised internally. Unfortunately, internal recruitment did not result in a successful appointment due to the lack of applications, and the two posts were advertised in a regional newspaper.

2.3 In recognising the need for the project to progress, support was taken on an adhoc basis from existing staff within the Clinical Governance Unit, for the compilation of Clinical Guidelines in electronic format. To complement this, a full time admin and clerical officer was employed temporarily from the Trust's internal clerical 'bank', to convert the Clinical Guidelines that were in 'doc' format, and ensure the development of the Clinical Guidelines Database.

2.4 Eventually, the Project Team was created with the appointment of a part time Project Manager and a part time Project Assistant. Their appointments were not secured until three months after the project had begun. This is discussed further in **section 7**.

3. Finance

3.1 Trafford Healthcare NHS Trust's successful bid for funding from North Western Deanery for the Blending Service with Training project resulted in the Trust being awarded a sum of £40,000. As part of the bid, Trafford Healthcare NHS Trust agreed to complement this grant with additional monies, for capital equipment purchases. The Trust allocated £33,200 in support of the project.

3.2 The North Western Deanery had stated that its funding was to be used in a specific manner and not to be spent on equipment or additional medical staffing. For this reason, two budget accounts were set up for the project so that no errors in transactions would occur. That is, no computer hardware would be purchased with the money awarded by the North Western Deanery.

3.3 Both the Project Lead and the Blending Service with Training Project Manager retained financial records in regard to the amount of direct cost incurred through the employment of administrative staff to implement the project. The Project Manager and the Trust's Information Technology Manager also kept financial records on the Trust's funded budget, used to purchase computer equipment. To reinforce these records, the Department of Financial Planning and Monitoring worked closely with the Project Manager to ensure that all transactions were in accordance with the spending restrictions requested by the North Western Deanery.

3.4 A budget sheet, which displays all spending for both budgets within the project, can be found in **appendix 1**.

4. Pilot

4.1 Of the 25 clinical areas within Trafford Healthcare NHS Trust highlighted to receive computer hardware capable of running the Intranet, 8 were chosen to take part in the pilot scheme. The lead consultant of the directorate that was involved with the Clinical Guidelines development chose the acute medical wards, as they were the wards most likely to use the Clinical Guidelines developed for the pilot. As each ward received a PC, the Project Manager visited the ward and provided training on the system. Details of the training schedule are explained further in **section 5**.

4.2 Initially, the Intranet was greeted with great anxiety. This was because the majority of clinical staff within the Trust were computer illiterate, or had very little experience of working with computers. Not knowing the vast benefits of time efficiency, and text correctness, staff could not see the benefit brought by the new system. This opinion readily changed after a demonstration of the Clinical Guidelines Database and Intranet, and training had been delivered.

4.3 The project began the pilot using one directorate, which had developed 50 Clinical Guidelines. As its use increased, and the benefits of the new system realised, demand for the Clinical Guidelines Database and Intranet grew quickly. At the end of the three-month trial period, the database containing the Clinical Guidelines had grown five fold, with an additional four directorates submitting Clinical Guidelines to the Project Team. The database then stood at 250 Clinical Guidelines.

4.4 To fully appreciate the volume of use of the Clinical Guidelines Database through the Intranet, and allow the Project Team to audit its effectiveness, a hit counter was coded to the system to allow the Project Team to measure the volume of use of the system. The results of this audit are displayed in a graph, which can be found in **appendix 2**.

4.5 With positive signs from the wards used in the pilot, and small lessons learnt, hospital wide roll out of the Clinical Guidelines Intranet was initiated.

5. Training

5.1 It was agreed that the best procedure to train the clinical staff in the use of the Clinical Guidelines Database and Intranet, was to use cascade training. For each ward, a survey of computer literacy was taken, and staff that demonstrated a higher level of computer knowledge, were selected to receive extensive training on the Clinical Guidelines Database and Intranet. They were then instructed to pass on their knowledge to their colleagues.

5.2 To complement this, a training manual was written, published, and was provided with every Personal Computer installed for this project. A handout detailed a step-by-step account of the training given to the clinical staff, and also provided training to clinical staff that did not even know how to turn a computer on.

5.3 The aforementioned system of training did not seem effective when assessed later in the project. Questionnaires sent out after the completion of the pilot showed that knowledge from the full training was not filtering down to all the end users of the Clinical Guidelines Database. It appeared that there was a gap in between the training given by the Project Manager to the clinical staff, and the full information being passed on to their colleagues. The identified problem was that the clinical staff did not have the confidence to pass on all their information. To compound this problem, the training manuals provided with all the PC's, were only useful to the staff able to access them. More often than not, the manuals were misplaced or put away for safekeeping, thereby negating their original intent.

5.4 This method of training was acknowledged as unacceptable for Trust-wide implementation. A new method of training based upon "drop-in" sessions, where all clinical staff would receive direct training from the Project Manager, was developed. All ward managers, including those that had been involved in the pilot, were then contacted in writing, informing them of the new training scheme. It was explained to them that the previous training method had not been effective and the new system introduced to them. It was agreed that each ward would allow one member of staff on duty to attend one of the drop in sessions. The drop-in sessions were scheduled so that clinical staff had optimum opportunity to attend.

6. Deviation From Original Project Plan

6.1 Initially, under advice from the Intranet Software Developer, all Clinical Guidelines were converted from 'doc' format to 'html' format. The reason for this was that using 'html' files offered more efficient download performance for the system, as loading of additional software was not required when viewing the Clinical Guidelines. One aspect of the project plan was that clinical staff could print off the Clinical Guidelines that they had found so that they could take them away with them.

6.2 The identified problem with using 'html' files was that they had to be viewed using a Web Browser, and Web Browsers have limited print facilities. Web Browsers view pages as one long scroll, so when they print, they are effectively printing a scroll. This resulted in lines of text and aspects of diagrams being lost during the printing process. This was not acceptable. Furthermore, it became apparent that converting Clinical Guidelines from 'doc' format to 'html' format was very time consuming. Large, complex documents that contained complicated diagrams were taking in excess of one hour to convert.

6.3 The Project Team, under agreement with the Project Board, decided to revert back to displaying Clinical Guidelines in 'doc' format on the Intranet database. The same applied to the bulletin board that the Legal Services Department were maintaining.

6.4 Endorsement was also sought from the Intranet Manager at Salford Royal Hospitals NHS Trust, who had previously arrived at the same solution, when introducing a similar system within their trust.

7. Delays And Problems

7.1 The project suffered two significant challenges that resulted in delays to the project schedule. The first problem arose at the very start of the project. As mentioned in **section 2**, there was an initial issue of filling the vacant posts of Project Manager and Project Assistant. The project began in July 2000, and employment did not commence until the beginning of November 2000. However, the Project Lead had instigated support that allowed the project to progress while the vacant posts were being recruited to.

7.2 By the end of November 2000, the project was approximately three months behind its planned schedule. Through the quarterly reports submitted, the North Western Deanery was kept abreast of this issue. As a result of hard work by the Project Team and careful planning through the pilot stage, the Project Team was able to recuperate the lost time.

7.3 The pilot finished at the end of March 2001, and had run for three months. The Project Team had instigated procedures for Trust wide roll out prior to the end of the pilot, which allowed a head start for the second phase, avoiding problems that could have arisen over computer hardware purchases at the end of the financial year.

7.4 The Project Team had been successful in getting the project back on its planned schedule, for a finish in July 2001. The new computer hardware for the rest of the Trust had been purchased, and was being distributed across the Trust when the second major challenge developed.

7.5 The Clinical Director of Pharmacy had been approached by the Project Manager to demonstrate the Clinical Guidelines Database and Intranet. During the demonstration, it was noticed that there was a typing error on one of the Clinical Guidelines. A dosage on the Clinical Guideline had been typed incorrectly and was a factor of ten too large. Such a mistake was considered to have potentially serious consequences. The matter was therefore raised at the next Trust Executive Team meeting, where it was decided by the Chief Executive of the Trust, that the Clinical Guidelines Database within the Intranet was to be temporarily disabled until all the Clinical Guidelines were rechecked for other such errors. It was also decided that the existing procedure for reviewing Clinical Guidelines was not robust enough, and it was to be the task of the Blending Service with Training Project to redesign the protocols for Clinical Guidelines submission and review. A copy of these protocols can be found in **appendix 3**.

7.6 It then took three months for the Clinical Guidelines to be reviewed and re-established on the Clinical Guidelines Database. Whilst the system was not operational, the training regime for the clinical staff could not continue. Unfortunately, due to the nature of the problem and its implications upon progressing use of the Intranet, it was not possible to bridge the lost time.

7.7 With the support of the senior officers within the Trust, the Pharmacy Directorate and the Clinical Governance Unit, all existing Clinical Guidelines have been reviewed and amended for accuracy and appropriateness, and the Trust is confident that the foundational work of constructing a Clinical Guidelines Database and Intranet (with Internet access), will be in immense value in the training and development of its staff in clinical management issues.

Appendices

Table 1. Provides a financial breakdown of costs incurred by the Blending Service with Training Project.

Blending Service with Training Budget Sheet

Budget Code 157 (Deanery Funding)

Project Manager	8,365
Project Assistant	3,987
Project Lead	2,000
Training and Development	4,876
Advertising	950
Clinical Guideline Development	12,000
Database Software Development	4,000
Administration Costs	4,000

Total Cost Incurred 40,178

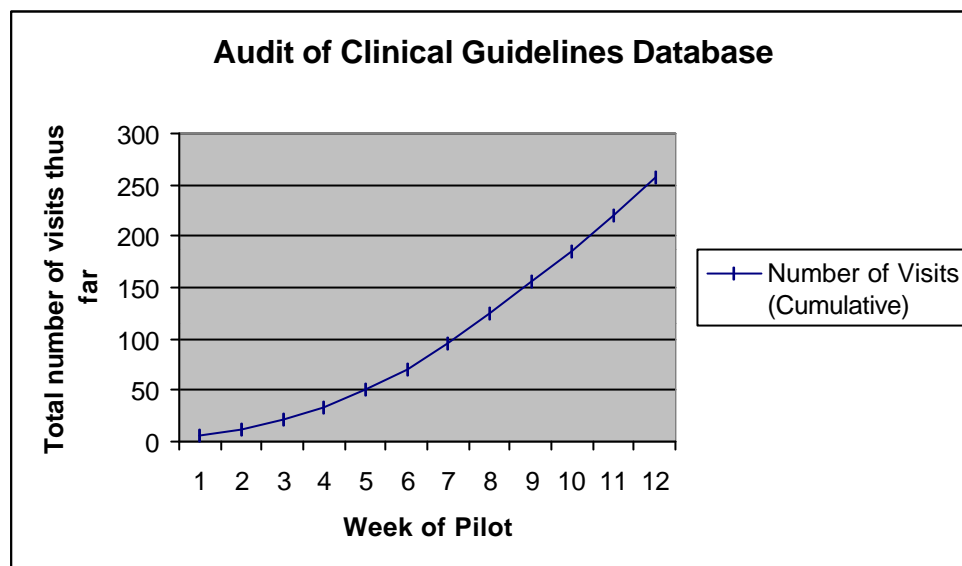
Budget Code 158 (Trust Funding)

25 PC's and Printers	24,440.00
Network and Cabling	5,300
Office Equipment and 2 PC's	2,000
Software Licences	1,000

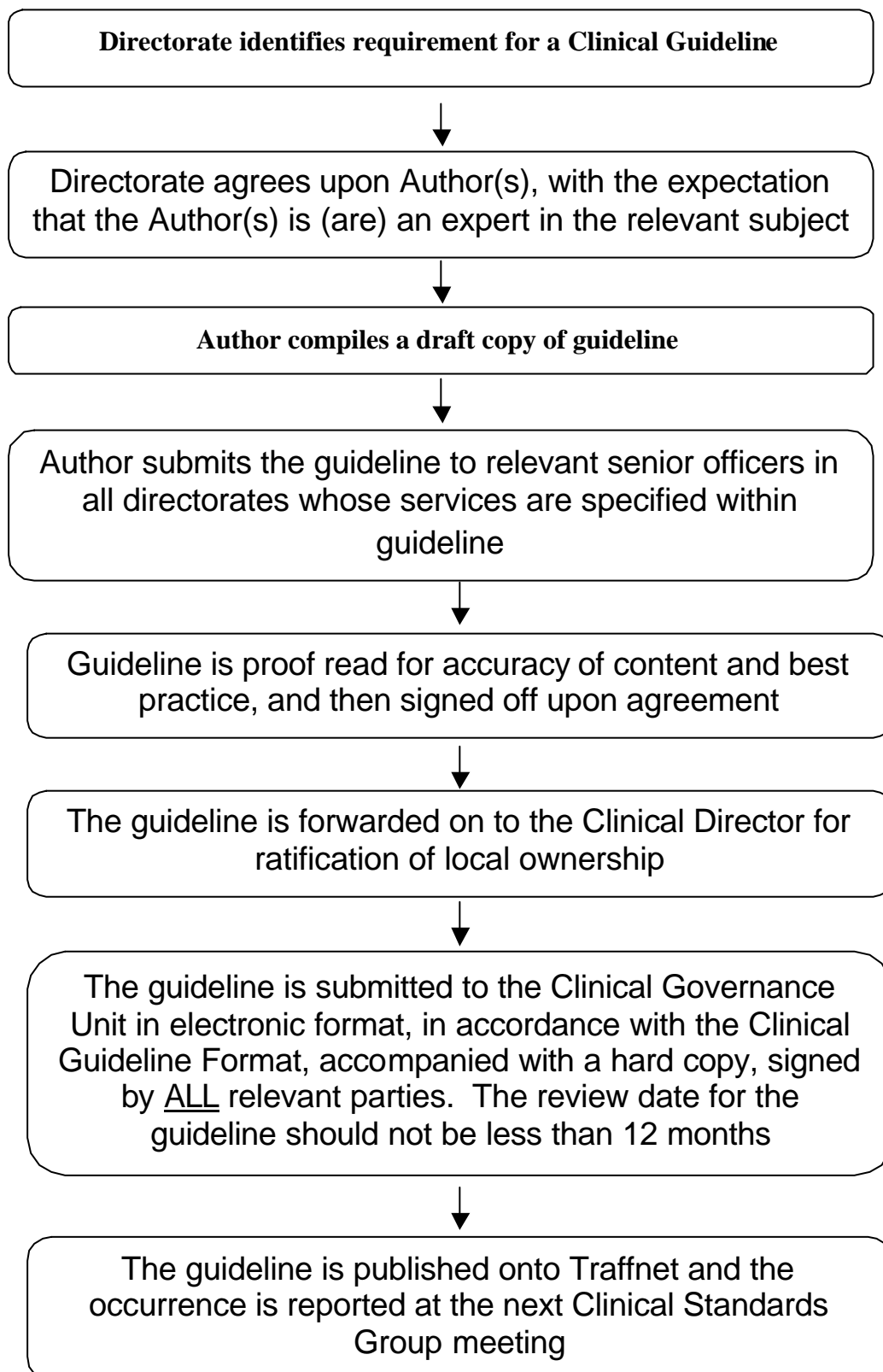
Total Cost Incurred 32,740

Total spent on project 72,918

Graph 1. Demonstrates the increase in use of the Clinical Guidelines Database and the Trust's Intranet. As the pilot is completed and more staff trained on the system, its use becomes greater.



Clinical Guideline Submission Protocol



Clinical Guideline Review Protocol

Clinical Guidelines are to be submitted to the *Clinical Governance Unit* as per the *Clinical Guideline Submission Protocol*, in accordance with the *Clinical Guideline Format*. Guidelines that are submitted should have a review date of not less than **12 months**. On submission, the guideline is uploaded onto *Traffnet* and the review date is entered into a database.



The review database is searched by Clinical Governance Unit staff at the start of each month. Guidelines that are a month from their review date are flagged up. The authors of these guidelines are notified along with the relevant Clinical Director, of the imminent review date.



It is then the task of the author to review the guidelines and submit them as per the Clinical Guideline Submission Protocol.

Clinical Guidelines Format

Clinical guidelines submitted for viewing on Traffnet, should be submitted in a particular format. This will allow for easy viewing and give a corporate image.

Each guideline submitted, should conform to the following structure.

It has been agreed that the best software package to view Clinical Guidelines on Traffnet is Microsoft Word.

Under NHS identity guidelines, only certain typefaces can be used. Trafford has elected to use Arial, size 10. Text is more legible if it is not italic, and this facility should only be used when accentuating words. Black is the default colour of text and the background should be white, as this gives a strong contrast.

Diagrams and pictures should be as clear and legible as possible. Photographs should be kept as small as possible, but not so small that they can no longer be viewed easily.

Guidelines should be given a title, which is centred, font size 12, and bold.

Tables should be in simple grid format, with black lines and no borders or shading.

The guidelines should contain the name of the author, the month and year it was written, and the review date in month and year. This is achieved using a foot note in Microsoft Word, and should be formatted to block letters, bold and size 10. The footer should look like the following:

WRITTEN: (tab) DOCTOR'S NAME, MONTH YEAR
REVIEW: (tab) MONTH YEAR

Example

WRITTEN: DR W.P. STEPHENS, APRIL 2001
REVIEW: OCTOBER 2002

Trafford Healthcare NHS Trust would like to take the opportunity to thank the North Western Deanery for its continued support throughout the duration of the project, and looks forward to any further collaboration between the two organisations.