

Better Training Better Care (BTBC) Inspire Improvement Project Evaluation Report

This report is designed to capture your project in your own words. Each section should be completed in full, with appendices attached where necessary.

When completing the report, please adhere to the points below:

- Ensure that you complete each field provided.
 - Ensure your answers are concise. Although there is no specific word count for each section, we are looking only for the relevant information to support wider adoption of your project. This report is intended to capture the fundamentals and the key outcomes of your project and should be succinct and easy to read, using plain English.
 - Any toolkits, 'how to' guides or other resources that you feel are key to support the delivery of your project should be attached as appendices.
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Title

Please insert the title of your pilot and if applicable, a strapline to sum up the project in one sentence e.g. Enhanced education in handover with supporting e-solution
Improving trainee skills and patient safety

Confusion App: delirium and dementia, a bedside guide. A smartphone app aiming to improve cognitive assessments in junior doctors.

Introduction

The introduction should summarise the background to the project intervention, what it set out to achieve and why.

1. Background

1.1 Rationale and drivers

- What was the rationale for choosing the project?
- What was the situation before the project was initiated?
- What were the local drivers / contextual factors?
- What problems were you trying to solve by implementing the project?

The project was chosen to help patients with cognitive impairment who suffer from increased adverse events and mortality. We also knew less than 50% of patients with cognitive impairment are identified in hospital. We wanted to improve the number of cognitive assessments being carried out in order to potentially decrease the number of adverse events suffered by this patient group.

We chose to create a smartphone app to deliver the information as smartphone ownership is high amongst junior doctors and many hospital wards now have tablet computers that are capable of running these apps. It can be off putting filling in extra sheets of paper to cognitively assess patients on admission and in the wards; and we were aiming to streamline this process to increase engagement by trainees.

2. Approach and engagement

2.1 Project development

- How was the project developed?
- What was the approach taken for delivering the training intervention(s)?
- Who was involved in its development and implementation?
- What were the aims and objectives of the project?

The core objective was to improve cognitive assessment by junior doctors. We also wanted app users to have a clearer understanding of delirium and dementia and how to assess and manage the patients.

The app content was created by two junior doctors with a medical consultant as supervisor. This was based around the National Institute for Health and Care Excellence (NICE) guidelines on delirium and they were developed into an app format in order to help make the content more accessible. To further engage trainees, a case study was written for the app. The content was peer reviewed before being delivered to an external app developer for production.

2.2 Engagement

- Who did you need to engage in the project – for example: trainees, trainers, consultants, patients, executive board members?
- What was the level of lay and patient involvement?
- Did you get support from an academic partner to develop the evaluation and outcome measures?

Trainees needed to be engaged in the project in order to download the app, and to use whilst working on the wards. They were initially engaged in a teaching session and through word of mouth on the wards. It was also beneficial to have other consultants engaged less formally. Also the hospital IT team were involved in the project as they helped to install the app onto hospital tablets in order to further increase use and engagement by trainees.

There was no lay or patient involvement required.

2.3 Project management and governance

- How was the project managed and implemented? I.e. what governance, project management structures and processes were put in place?

The project idea was initially devised between a junior doctor and consultant. The app content was roughly planned before being more formally developed by two junior doctors. This content was then peer reviewed. The app was then developed by the external developer.

The use and effect of the app was audited each month from the clinical notes and the junior doctors were engaged at different levels during this time to increase use of the app.

There were regular meetings between the project team with monthly reports sent to Health Education England (HEE).

3. Resources

3.1 Funding

- What funding did you bid for as part of your application and how much were you awarded?
- What were the overall financial resources required to deliver your project? Please include the amount of trust funding required in addition to the BTBC funding if applicable
- What was the final budget amount at the end of your project? (Please include the detailed funding schedule as an appendix.)

We bid for £7,500 and were awarded this amount. No other financial resources were required other than the funding from BTBC.

The final budget amount was £7,175.

3.2 Staffing

- What were the human resources required to deliver your project?

The junior doctors involved in creating the app content were required as well as the consultant supervisor.

An app developer and graphic designer were required initially, as well as during app updates.

The hospital IT team were required to install the app onto hospital tablet computers and the finance team were required in order to assist with payments for the app.

A coding clerk audited the notes during project evaluation.

3.3 Other key resources

- Did you require any IT equipment or other types of equipment / specialist input?
- Did you require any specialist medical devices or materials?

Tablet computers were used and these were already present on the wards. These were non essential but utilised as they are freely available in the trust.

Other specialist equipment was likely trainee owned (e.g. personal smartphone).

4. Achievements and outcomes

4.1 Overall achievements and critical success factors

- What have been your greatest achievements and why?
- What have been the critical success factors for enabling these achievements?

The greatest achievement has been the success of the app amongst peers across the country, particularly for a project from a small team within a district general hospital.

The main success factor has been the use of social media, which has allowed the app to spread by word of mouth particularly as cognitive impairment is currently a very topical issue.

4.2 Delivered outcomes

What outcomes has the project delivered for the following:

- For trainees
- For trainers
- For patients
- Across the wider multidisciplinary team
- That provide value for money.

Please provide headline key findings.

For trainees
Handheld resource for assessing cognitive impairment. Making cognitive assessment quicker and easier is beneficial to patients and helps incorporate this into daily work. Doctors reported (through a questionnaire) that the app was easy to use and the scenarios were helpful. All the doctors found improved knowledge of the topic after using the app. Case study available to work through with certificate on completion that can be linked to the e-portfolio.
For trainers
N/A
For patients
Aiming to improve their outcomes by assessing cognitive impairment earlier, which has been shown to decrease morbidity and mortality.
Across the wider MDT
Helping to identify cognitively impaired patients and allowing their multiple needs to be presented to the MDT earlier in order to prevent adverse events.
That provide value for money
Few ongoing costs once app is developed and nil to individual users.

5. Experienced challenges

List the challenges you experienced, why you experienced them and what steps you took to overcome them, or if not, why not? It is important to capture any challenges or issues that made an impact on progress - irrelevant of how small.

Developing the app across multiple platforms

The app was initially developed for iPhones before an android version was created. This delayed the uptake of the app as the android version was not launched at the same time as the iPhone. Also it was difficult updating both versions; which was resolved by creating a web based version so that future updates would update all versions of the app.

Marketing

Setting up twitter and facebook accounts with engagement activities to ensure increased followers and likes. Initially tweeted a lot to create the base of followers but found it difficult to keep up momentum. However, have kept up interest through other resources such as learning presentations based around delirium with references to the app.

6. Lessons learnt and recommendations

6.1 Lessons learnt

- Other than the above challenges, what have you learnt through your experience of designing and implementing the project?
- Were there additional benefits realised that were not originally identified at the start of the project? E.g. knock-on impacts to other members of staff who were originally not targeted; greater collaboration across teams; and/or a financial gain which was not originally in the plan.
- If you were to undertake a similar project, what would you do differently?

Perception problems with using smartphones in the workplace as it can appear to some staff/patients that they are being used for social reasons rather than work related. Would need to consider use of hospital tablets more. We would expect this reason to become less important as more medical apps are being developed and the use of smartphones as an educational resource becomes more popular.

6.2 Recommendations – project enablers

What recommendations can you provide to other NHS trusts who may want to adopt your project? Please think about the critical 'enablers' that need to be in place to ensure the success of the project.

Try to engage the user base early on in the project and contact the hospital IT team to assess whether the app can be used on hospital devices or links about the app on the hospital intranet.

Discuss methods of auditing cognitive assessment and adverse events prior to initiating the app in the trust to be able to best assess how the app has impacted these events.

7. Sustainability and adoptability

You should be able to use the information provided in your project closure report as a basis for completing this section.

- What plans are in place to continue the project within your trust – please include details of wider trust roll-out and/or spread to other specialties?
- How is the project being managed and by who?
- What are the governance arrangements in place?

The project will continue to be managed by the consultant supervisor with input from new junior doctors each year. The consultant will create the new content as clinically required as a project with their current junior doctors or medical students.

The web based version of the app will make updating easier.

8. Feedback and testimonials

- Please use this section to capture the feedback and testimonials you have received throughout the project (where consent is given). This will be used for the final case study to support the engagement with and adoption by other trusts. You may include this as an appendix, weave the comments throughout the report or insert them in this section. Please state the title of the person concerned.
- Please aim to include a good selection of quotes from trainers, trainees, other members of the MDT, the Medical or Education Director and CEO if possible.

Questionnaire

“Really great, easy to use and certificate great for portfolio!”

Twitter

“Good news at Confusion app now available on android. Looking forward to trying it on the wards today.”

Liz Sampson (research in dementia)

“This is excellent. Just downloaded and spread the word.”

Zoe Wryko (Geriatrician)

“Mobile apps are useful guides. Download @Confusion app...”

Royal College Physicians, Edinburgh

Appendices

If you have developed any toolkits, ‘how to’ guides or other resources that you would like to share, please include these as an appendices to the report.