



Trauma App

Project Initiation Document (PID)

[SUPPORTING DOCUMENT]

Contents

1. Introduction	3
2. Definitions	3
2.1 Purpose	3
2.2 Background	3
2.3 Goals and Objectives	4
2.4 Desired Outcomes/Benefits	4
2.5 Constraints and Assumptions	6
2.6 Project Approach & Scope	6
2.7 Project Budget/Costs	7
2.8 Project Timeline/Plan	7
2.9 Project Team Roles & Responsibilities	8
2.10 Communication Plan	8
2.11 Risk Log	9

1. Introduction

Trauma remains the fourth leading cause of death in western countries, causing significant economic, social and environmental impact on government and society, estimated to cost the UK in excess of £3.75bn. It is the leading cause of death for people under 40.

Trauma care is a complex set of interventions and investigations driven by a structured clinical exam. It is currently delivered by a team with a Trauma Team Leader (TTL) and Scribe for documenting the case. Documenting the care of a trauma patient can be difficult and multi-faceted and within the NHS there are also logistical challenges to this based on the methods of documentation used.

There is a strive for all NHS Organisations to become more digitally enabled, with all NHS England trusts expected to have an Electronic Patient Record (EPR) system in place by March 2025 (NHSE, 2022). Therefore improving and enabling the NHS to access digital technologies has always been at the forefront of innovation and ensures that they utilise new technology to improve outcomes and experience for patients.

2. Definitions

This section should outline the events leading up to the project. It should also establish the rationale for undertaking the work, what the project needs to achieve and the potential benefits.

2.1 Purpose

The purpose of the Project Initiation Document is to define the project, in order to form the basis for its management and an assessment of its overall success. The Project Initiation Document gives the direction and scope of the project and forms the 'contract' between the Project Manager and the Project Board.

The three primary uses of the Project Initiation Document are to:

- *Ensure that the project has a sound basis before asking the Project Board to make any major commitment to the project*
- *Act as a base document against which the Project Board and Project Manager can assess progress, issues and ongoing viability questions*
- *Provide a single source of reference about the project so that people joining the project can quickly and easily find out what the project is about, and how it is being managed.*

2.2 Background

In 2017, NHS Scotland initiated an innovation project to explore options to digitise their current paper processes to support clinical data entry within the four Major Trauma Centres (MTCs) in Scotland. Clinical representatives from all four regional MTC's in Scotland partnered with Daysix Ltd (through a series of funded projects, including InnovateUK under NHS Glasgow and Greater Clyde (NHSGGC) Innovation governance) to co-design and co-develop the Trauma App.

The solution is the Trauma App which is an iPad application designed for Major Trauma Care clinicians, working within a hospital's Emergency Department (ED), to digitally document patient care in major trauma cases. The app, which is connected to the hospital's cloud server, allows for data collection through an iPad App user interface.

The Trauma App aims to streamline this process by replacing paper forms and retrospective note-taking, tracking the full trauma case, and capturing and monitoring interventions in real-time. It seeks to improve adherence to the Advanced Trauma Life Support (ATLS) protocols, which is an international standardised approach to trauma care, addressing the acknowledged variations in trauma care.

2.3 Goals and Objectives

This section identifies the key project objectives – what specifically will this project achieve? It will reference the Business Case, which is usually a separate document.

The Trauma App has been designed to replace and improve upon existing scribing practices (paper forms), and will enable:

- Robust, time-stamped data collection to enable analysis of the clinical care processes.
- Integrated clinical decision support providing decision support to clinicians during trauma care delivery.
- Surfacing of care framework to reduce variability of care provision under the internationally used ATLS protocol.
- It is hoped that the App will radically improve trauma care delivery as a reduced variation standardises care and improves outcomes.
- Early integration with the trauma systems within each hospital will potentially reduce the cost burden of rehabilitation on the NHS and ultimately save lives.
- There is also potential for further integration with prehospital medicine, ward care and multi system rehabilitation and early repatriation.
- Standardised reporting of major trauma cases to reduce variation to support safety, quality and clinical review.

2.4 Desired Outcomes/Benefits

Patient safety continues to be a concern in ED Departments across the NHS, with the complex and high-pressured environment of a trauma event being open to potential errors, despite national guidelines and standards, affecting patient safety. The Trauma App is an opportunity to actively influence patient safety and provide ongoing data for continuous improvement and innovation.

Using the Trauma app would allow better flow in the trauma environment, and better tracking of a complex scenario, ensuring clinicians can carry out their roles with synergy, and a clearer and more accurate real-time tracking of procedures performed, and medications administered. This will reflect that of previous paper documentations as the formatting of the information captured within the Trauma App has been designed to reflect the necessary trauma patient documentation as well as STAG/NMTR audits.

The collective use of the Trauma App amongst clinicians involved will further standardise ways of working, and help facilitate the introduction of best practice processes.

In addition, further desired outcomes/benefits have been outlined:

Overview:

- Enables closer analysis of the clinical care processes.
- Reduces variation and standardises care, improving patient outcomes.
- Enhances accuracy of reporting to Trauma audit bodies.

- Improves access to any available uplift tariff with audit bodies.
- Reduces administration requirements saving time and money.
- Reduces length of stay by improving pathways of care.
- Real-time metric against KPIs, surfacing Power BI tools, enhancing analysis.
- Prompts to help deliver specific care elements safer with assurance.
- Provides learning opportunities for clinicians with access to performance data.
- Identify and spread examples of excellent practice.

For Clinicians:

- Helps them perform at their best - Active decision support at the point of care increases their ability to deliver safe and consistent care (especially helpful when nearing the end of long shifts where tiredness is a proven issue). The Trauma App actively evaluates all data points and reviews against the ATLS protocol to lightly prompt clinicians with excerpts/references when relevant.
- Time saving / Reduce admin - Automated reporting, reducing paperwork and validation to ensure completeness. (No case admin after the clinical episode, no illegible handwriting, reduction in follow-ups from colleagues and no loss of key data.)
- Immediate performance data - Surfacing of appropriate key performance indicators provide instant validation of the care delivered. Additionally, metrics provide a growth target and a means to analyse personal performance.

For Patients:

- Improved care - Optimised care delivery in the Emergency Department, increased adherence to checklists and reduction in variation.
- Reduced morbidity and mortality
- Enhanced rehabilitation pathways

For Hospitals:

- Increased revenue - Increased accuracy of documented procedures, prescriptions and tests. More acute billing to insurance companies and increased uplift from national audit bonus schemes (e.g National Major Trauma Registry (NMTR) within NHS England).
- Cost savings - Reduced requirement for administrative staff to collate and prepare trauma documentation.
- Reduced patient stays - Improved patient outcomes leads to reduction in ongoing bed usage for major trauma patients.
- Improved documentation - Vastly improved case documentation, improving communication of patient travelling through hospital departments while affording better protection from litigation.
- Simplified national reporting - Improved adherence and reporting to national standards with much lower administrative footprint.
- Real time performance metrics - Review overall hospital performance against national KPIs in real time. (Existing paper systems see hospitals looking at data that is 6 months behind making it difficult to evaluate the overall impact of optimisations)
- Identify weaknesses early - Live data feeds enabling offering rich insights to help identify strengths and weaknesses and facilitate rapid evolution of practice.

For Boards & Trusts:

- As above for hospitals.

- Performance evaluation across the entire network - Compare hospital performance across the network to identify where support is needed early.

2.5 Constraints and Assumptions

Constraints

Constraints are the factors that will affect how and when a project will be done, such as:

- *Time: for example does it have to be completed by a certain date, eg to meet a delivery deadline?*
- *Costs: for example the total maximum budget*
- *Resources: the people required to complete the work on time*

Assumptions

List here any assumptions you have made about the project and which have influenced the approach you're taking, such as:

- *"We expect most users will access the Trauma App through the use of an iPad with a broadband connection"*

2.6 Project Approach & Scope

A project approach refers to how a project manager performs a project. It's the guideline to logically and systematically make decisions about a project. Project managers can easily assign tasks to their team members with a defined project approach.

The approach will focus upon delivering the app successfully into the ED Department and integrating it into the role of the Major Trauma Service personnel that attend a Trauma call as part of the Major Trauma Team.

How many people is this going to affect and staff this is going to affect i.e.

- *Hospital X treats approx 500-1000 trauma patients per year*
- *Hospital X has approx 100 members of staff working in the ED Department with a further approx 100-150 staff members working within the wider Major Trauma Service.*

Also include any other projects or pieces of work that this project will link/interface with e.g.

- *Electronic Patient Record (EPR)*

2.7 Project Budget/Costs

In this section, you should list initial estimates for key tasks or parts of the project

Cost of set-up	£
Cost of Trauma App License (Annual)	£
Cost of Integrations	£
Cost of iPads and equipment	£

Cost of iPad management software (if applicable)	£
Cost of other resources to implement Trauma App (e.g. project management, training support, administration)	£

2.8 Project Timeline/Plan

This section should define the high level milestones, linked to the critical path, so there is clarity for the Steering Group/ Project Board, Stakeholders and Project Team on what will be produced/provided by the project and when.

Key/High Level Project Milestones	Start Date	End Date
Commence Informal Pilot		
Identify requirements for project (PID and Business Case)		
Analysis of technical support, benefits & training required		
Commence Formal Pilot		
Complete DPIA		
Review DCB0129 - provided by DaySix		
Complete DCB0160 (Hazard Workshop and Hazard Logs)		
Complete Integrations into EPR System*		
Complete UAT Testing		
Write internal Business Continuity Plan		
Training Controls		
User Awareness Sessions		
Training		
Pilot go-live		
Review pilot users feedback		
Go-live		
Evaluation		
3, 6, 9 and 12 month benefits realisation review		

*Subject to EPR system status

2.9 Project Team Roles & Responsibilities

List here all those working on the project, with brief details of their roles and responsibilities and their contact details. For a larger team or project, you could also create a project organisation structure diagram, showing who is doing which work, who they report to, etc.

A RACI chart is a great tool to document these dependencies. A RACI chart outlines who is/needs to be:

- *Responsible: Who gets the job done?*
- *Accountable: Who is the decision maker?*
- *Consulted: Who needs to be asked before proceeding?*
- *Informed: Who needs to be kept in the loop?*

The best way to develop a RACI chart is to list the project deliverables or activities and map them to project roles for both internal and external team members. Then, assign the RACI status. Make sure only one person is accountable for a project deliverable.

In the table below, we have highlighted who tends to take responsibility for each given area. This should help you to know who you need to work with, from within your organisation.

Input required from:	Details
Medical and Nursing staff	Trauma Coordinator, Scribes, Clinicians, Nurses
Governance	At certain stages your eHealth/Governance team will be required to support the development of a data protection impact assessment (DPIA) and system security policies, etc.
Clinical Safety	This may be the same team as above, but the app requires certain manual processes to be in place to ensure patient safety, e.g. have a paper trauma booklet backup in the case of emergency. There also needs to be a DCB0160 completed. We can provide you with our version DCB0129.
IT	There are a variety of integration options available, including patient lookup and pushing the trauma report into your patient record. These require engagement in IT/EPR integrations.
Procurement	Should you wish to roll out the app in the ED, you'll need your procurement team at hospital or board to purchase the appropriate app licence for you.

2.10 Communication Plan

This section describes the approach to communications (how/when/by whom) within the project to ensure that the objectives of the projects are clearly communicated to all stakeholders. There may be two aspects of communication within a project: the first focused on the internal communication and reporting with regard to the delivery of the project, and the second focused on communication both internal and external about the nature of the project, its objectives and deliverables.

2.11 Risk Log

Include the key risks to the successful delivery of the project. These should be specific to this project and not just a reiteration of the risks common to all projects. You can also link to any risk control or monitoring documents, such as the risk register.

Describe any risks you feel could affect the project, whether internal or external. This section may include a table and will have typical risk register headings e.g. ID, risk description, impact, likelihood, proximity, mitigating actions, owner etc. There will always be risks but not all risks will have an impact that would be detrimental. It is important to consider the risks so that you can also plan how you can reduce or remove them and help to ensure the project's success. Describe any plans you have for what you would do if a risk materialised.

ID	Risk	Impact Description	Impact	Probability	Risk Score	Risk Mitigation	Responsible Person