Amber

Version 1.0

Revision History

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| **Date** | **Version** | **Description** | **Author** |
| 27/11/2021 | 1.0 | Initial revision - Hippotherapy App | Liz Conway |
| Project Submission date  2022-05-16 |  |  |  |
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Vision

# Introduction

The purpose of this document is to collect, analyse, and define high-level needs and features of the Hippotherapy App to be created called “Amber.” It focuses on the capabilities needed by the stakeholders and target users, and why these needs exist. The details of how “Amber” fulfils these needs are detailed throughout this document. The purpose of the introduction is to provide an overview of the entire document. It includes the purpose, scope, definitions, acronyms, abbreviations, references and overview of this Vision document.

## Purpose

To give a high-level overview of this new application and gather the requirements. To provide an early synchronisation between customer and development organisation on :

* High level requirements
* Business issues
* Stakeholder participation

## Scope

This project is the brain-child of a very dedicated and wonderful Occupational Therapist. She has campaigned and championed children with special needs to embrace more holistic treatment plans. She believes that we all have more than 6 senses and focusing on the vestibular and proprioceptive that allow children and adults to self-heal, mature and flourish with the use of horses. This holistic approach allows these special needs children to prosper and fulfil a destiny full of potential and harmony.

## Definitions, Acronyms, and Abbreviations

**Amber** will be the name of the new application used by occupational therapy to measure key performance indicators.

**KPI** Key Performance Indicators – the means by which a client’s progress towards Occupational Therapy goals is measured.

**Hippotherapy** Use of a horse in an Occupational Therapy setting to achieve specified OT goals for a client.

**OT** Occupational Therapy - therapy based on engagement in meaningful activities of daily life (such as self-care skills, education, work, or social interaction); especially to enable or encourage participation in such activities despite impairments or limitations in physical or mental functioning

**GDPR** General Data Protection Regulation – European data protection rules.

## References

Hippotherapy monitoring spreadsheet – Natalia Campbell OT HSE

## Overview

This vision document is a high-level view of what the new application will entail. How it will be used and what it will accomplish.

Following this introductory section the main areas in this vision document and their corresponding sections are :

1. Technical

* Feature List (section 5)

1. Business (will be used as a stepping stone for grant approval in Ireland and the United Kingdom)

* Product Positioning (section 2)
* Product Overview (section 4)
* Precedence and Priority (section 8)
* Constraints (section 6)

1. Stakeholder Participation

* Stakeholder Profiles (section 3)

# Positioning

## Business Opportunity

By using UX research both qualitative and quantitative research will be used to generate KPI’s. It is essential to capture Key Performance Indicators to illustrate the purpose and benefit of using Hippotherapy as a clinical treatment plan for children with special needs. It will measure the benefits in a tangible, scientific approach allowing parents and guardians to visibly see the results and engage and invest in Hippotherapy as a long-term approach to the care and occupational therapy needs of their children.

## Problem Statement

Hippotherapy is not being measured. The challenges of managing this interferes with the therapeutic benefit that results from this specialised therapy. A lost opportunity for investment is not being adequately explored here due to lack of information, lack of documented results and lack of concrete feedback.

|  |  |
| --- | --- |
| The problem of | Not measuring therapeutic benefits of Hippotherapy. |
| affects | Investment, making informed decisions, data. |
| the impact of which is | Investment opportunity is squandered.  Parents/Guardians do not see the benefit of Hippotherapy using quantitative data |
| a successful solution would be | Give Occupational Therapists tools to do their job more efficiently and effectively.  An ability to demonstrate what Hippotherapy does to improve the functioning of the child (client). Gain funding or a grant to allow this tool to become the defacto standard during a treatment plan |

## Product Position Statement

An overall statement summarizing, at the highest level, the unique position the product intends to fill in the marketplace.

|  |  |
| --- | --- |
| For | Occupational Therapists – Natalia Campbell |
| Who | Needs to measure and record therapeutic benefits |
| The (product name) | “Amber” |
| That | Captures KPI’s from Hippotherapy sessions |
| Unlike | No application or practice like this is being done |
| Our product | Captures, documents and records KPI’s for Hippotherapy and displays the results in a straightforward manner. |

# Stakeholder and User Descriptions

The stakeholder is Natalia Campbell, and the user is Occupational Therapist – Natalia Campbell. It has been stated that all GDPR regulations must be adhered to.

## Stakeholder Summary

There are a number of stakeholders with an interest in the development and not all of them are end users. This will be presented to the AOTI – Association of Occupational Therapists of Ireland <https://www.aoti.ie/>

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Responsibilities** |
| Natalia Campbell | Occupational Therapy both in Ireland & UK | * Ensures that all GDPR requirements are adhered to * Supports the creation of KPIs for Hippotherapy * Confidentiality of all patient data is maintained to the strictest levels of security. Enforcing GDPR. |

## User Summary

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Description** | **Responsibilities** | **Stakeholder** |
| Natalia Campbell | Product Creator of new Hippotherapy Application  Hippotherapy Occupational Therapist | User’s Key responsibilities:   * captures details * produces reports & statistics * coordinates work * mentor & trainer | The OT supports the creation of this app with tangible results recorded in the KPI’s. Leading to better awareness education, data and revenue potential |

## User Environment

* Occupational Therapist and volunteers?
* Hippotherapy session takes place off-site at an equestrian centre.
* Observations done at equestrian centre (off-site).
* Unique environmental constraints: wifi and or mobile data on-site capability.
* Currently no active monitoring of therapeutic results from Hippotherapy.
* Mobile phone or tablet to be used.

## Stakeholder Profiles

### Natalia Campbell

|  |  |
| --- | --- |
| **Representative** | The Stakeholder for this project is OT Natalia Campbell |
| **Description** | OT and advocate for people with special needs. |
| **Type** | Natalia is the catalyst of change to therapeutic access for people with special needs. She instigates and enriches peoples’ lives through continuity of care and commitment to excellence. |
| **Responsibilities** | Hippotherapy is a new phenomenon within Ireland and exposure is critical to its success. |
| **Success Criteria** | Generate data, statistics, generate tangible measurable results, explore further research opportunities within the academic arena while exploring IDA funding.  ROI – return of investment, exposure and becoming country’s pioneer to change in strategic health care strategies. |
| **Involvement** | Review, Sanction and act as QA – Quality Assurance for the business |
| **Deliverables** | Anticipate that rev 1 will be the start of future applications for Occupational Therapists, Speech Therapists, Educational Therapists etc., etc., |
| **Comments / Issues** | Upload of patient data to database must be secure and provide GDPR capabilities |

## User Profiles

Natalia Campbell, Senior Occupational Therapist with the HSE. She provides in an off duty capacity an ambition and dream to streamline data for special needs children using Hippotherapy as a productive alternative treatment plan. .Hippotherapy improves neurological function, sensory processing by providing carefully constructed graded motor and sensory input. It is during ambulation that the horse provides rhythmic movement which in turn stimulates the anterior, and posterior swinging movements, this encourages proper balance, posture, and strengthening of core muscles which are required for daily functional tasks from climbing stairs, writing, speaking, listening and engaging in the world successfully.

Hippotherapy can also shorten recovery time and ensure correct development of the paraspinal muscles. Multifaceted swinging movement and rhythm of the horse’s gait effects the bones of the patient’s girdle twice more strongly than the gait of the individual patient. The therapeutic benefit needs to be measured and Natalia OT has created an application that measures this precisely. Her focus and attention to details in her spare time and as her capacity of a trained occupational therapist is noteworthy and inspiring.

This will serve to prove the therapeutic benefits of Hippotherapy as an essential and much required occupational therapy for people with special needs, brain injuries, shortening the recovery time of medical and surgical treatment.

Natalia is passionate about the work of Occupational Therapy as a profession and loves that it is holistic and grounded in engagement which resonates with her core value that we all deserve the best chance possible to be what we want to be and the best version of ourselves. Hippotherapy dynamically reflects this. It is her passion, commitment to excellence and patient advocacy that propels her forward to become the catalyst of change for her patients and cement their untapped potential to self- heal in a holistic with the responsive inclusion of a horse. This allows data to be captured and data mining real pertinent information that is reflective into tangible measureable results.

### Natalia Campbell

|  |  |
| --- | --- |
| **Representative** | Natalia Campbell, Senior Occupational Therapist, Sensational Kids |
| **Description** | Product Owner & Creator – Hippotherapy App – “Amber” |
| **Type** | Computer Application User documenting Hippotherapy clinical sessions and measuring results. |
| **Responsibilities** | Captures details, produces reports, and coordinates work & tasks, trainer and mentor. |
| **Success Criteria** | Successfully capture data.  Generate reports that record therapeutic results.  Tracks any anomalies. |
| **Involvement** | Create the KPIs that the system will measure and monitor.  Iterative development – will be informed during each sprint.  Test and approve the app. |
| **Deliverables** | Produce a unique Hippotherapy app that captures and displays pertinent individual information that can be uniquely customized as part of a holistic treatment plan for patients. |
| **Comments / Issues** | Too much paper work, recording information in real-time is key |

## Key Stakeholder or User Needs

• Clinical sessions are not adequately recorded due to no existing application that measures Hippotherapy.

• No statistical analysis generated. No charting capabilities.

• Visible, measurable data is not being captured at present.

# Product Overview

• Product perspective – Customised Occupational Goals & Objectives generated

• Captures, stores, records data for later dissemination with other clinicians, fed into other clinical domains to give a precise and candid reflection of patient’s progress that will affect other areas e.g. speech therapy, psychotherapy, educational therapy etc., etc.,

• Generate statistics, reports, and data analytics

## Product Perspective

The product is independent and totally self-contained. This newly self-contained system will not have identifiable patient details, it will be encrypted. Version 1.0 of this product will ensure fast, quick data recording between patient appointments with the ability to generate charts representing the Hippotherapy session.

## Summary of Capabilities

The major benefits and features the product will provide.

**Table 4-1 Customer Support System**

|  |  |
| --- | --- |
| **Customer Benefit** | **Supporting Features** |
| Demonstrate the benefits of Hippotherapy to parents/guardians. | Reports showing the child’s improvement after partaking in Hippotherapy sessions. |
| Capture the Hippotherapy metrics close to real-time, rather than relying on the therapist’s memory to recall all details. | Details are captured **on-site** on a mobile device (phone or tablet). |
| Complies with GDPR. | No personal identifying information is stored on the mobile device. |

# Product Features

## Existing features

None. This is version 1.0 of the Amber system.

## Features for the current project

### Record Hippotherapy metrics

Record the detailed metrics for Hippotherapy sessions.

### Generate reports

Generate details reports showing the improvements made due to Hippotherapy.

## Future Features

### Integrate data with other GP, HSE applications

# Constraints

The Amber system will be used in an environment which will have Wi-Fi access or use mobile data. The Amber app will be a stand-alone system

# Applicable Standards

GDPR

The Amber system must comply with GDPR (General Data Protection Regulation).

Furthermore, no personal, identifying information will be kept on the Amber system. This is because Amber is a stand-alone system and keeping identifying information on stand-alone systems is prohibited.

# Precedence and Priority

The Amber system must include all the core functionality listed in section 5 – recording Hippotherapy metrics, generating reports.

The Amber system could have the ability to allow the therapist to define and modify the metrics to be measured.

The Amber system won’t have any of the features listed as future features in section 5, in this first release of the system.