

SepsisAlert Business Plan

Executive Summary:

SepsisAlert is an app all about Sepsis, which is the body's response to an infection. The Vision and Mission is to save lives with our app.

Our app was named *SepsisAlert* in order to be clear and to the point for the user who may be panicked about Sepsis, and who needs immediate information on symptoms and access to help.

SepsisAlert allows the user to flick through the app without any delay and it's easy to understand. It has links to a few different websites and video links so that you won't have to be reading all text.

My future goal is to expand beyond Sepsis like asthma and prevent any further deaths to people who have asthma. I want enough downloads and reviews to continue with my project.

My goal would be to get the support of the HSE(Health Service Executive) and have healthcare workers present the use of my app at the National Sepsis Summit to gain traction and adoption.

One of my goals would be to have my app linked to SepTec, a Dublin company run by two science Doctors Dr Kellie Adamson and Dr Elaine Spain working on a diagnostic device for hospital use that screens blood for a diagnosis in Sepsis accurately detecting and identifying pathogens within 15 minutes. I have included information on SepTec and a video link for anyone who wants to know the work done by SepTec in the resources screen on the app.

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I chose to do this project because a lot of people don't know whether they have Sepsis or not. I was thinking about what I would do this year for the competition and my mum mentioned a current affairs presenter on our National TV whose son was playing rugby, who had a fall on the rugby pitch and got a small cut on his leg which eventually led to Sepsis. They were at his bedside in intensive care a few days later, thankful he survived his Sepsis infection and that happened around the same time when we were planning our topic for a new app that might help to save people's lives.

I wanted to create a product that would help adults and children to understand and know the symptoms, causes of Sepsis and beware of how Sepsis can arise if you get a cut on any part of your body. To begin to design such a product, I first had to try and understand the symptoms, cause of Sepsis and what to do if you experience a cut on a part of your body.

During my online research I discovered that the developmental age of children can have Sepsis without knowing they have it, what treatment they will be having and where they will be getting treatment. Almost one in five people with Sepsis two years ago died, with mortality rate up 10.1% in 2017. The HSE's 2018 Sepsis Report shows the mortality rate up 10.1 per cent last year, from 17.6 per cent in 2017 to 19.4 per cent in 2018. UNDER ONE in three Irish people have an accurate understanding of what sepsis is, a new study has found. The new research carried out by Behaviour and Attitudes for RCSI and the Rory Staunton Foundation New York for sepsis prevention found that in comparison, 55% of people in the US understand what Sepsis is.

Introduction

Company description:

The company is based in County Mayo. I have been doing the app for the past three years.

Problem Statement

The problem I am addressing is that there is no general knowledge from the public that they know what Sepsis is. We believe that my app educates and informs the general public about this serious disease, by providing easy, accessible information, images and videos on Sepsis.

We are interested in Sepsis because of a known extended family member that was experiencing the tragedy of Sepsis. I also want to highlight it as much as we can among all ages but mainly young sports people.

Reading about the increase in Sepsis in the last few years has been difficult to understand, we would love it if the app could send out as much information that can be used by everyone especially for young people involved in sports, in particular field sports.

There are 50,000 people in Ireland suffering from this disease. These people are more than just a statistic - they are individuals whose lives have been dramatically changed by this disease.

Only under a third of Irish people have an accurate understanding of what sepsis is, a new study has found.

We can say that approx. 70% of the population are unaware of what sepsis is - putting them at risk of fever, extreme pain and high heart rate.

From the research that I have seen many people have died unnecessarily because of late diagnosis and the lack of information on it.

If the population is unaware of how easily the symptoms can appear, the consequences can be lethal.

We plan to sell an app that would educate people of all ages on this deadly infection, that Sepsis can be described as an out of control response to an infection.

We are passionate about my app as it is easy to use and you can access the information quickly if it happened to a family member.

The Product

Product description

- The app was created using MIT App Inventor 2. The app features a home page from where you can navigate to different pages of the app.

Each page on the app features the different content under different categories which are:

- Home Page, this is the landing page when you first open the app.
- Checklist
- Early Signs
- Causes of Sepsis
- Resources - more Information on Sepsis/Statistics.

The links to websites and youtube clips of what Sepsis is and what to do if you or if someone in your family gets Sepsis is included in the app under the resources part of my app.

The Market

Market Research

Of course, there are many online papers/articles. The articles we looked at were the HSE, The Mayo Clinic and The Journal.

Competitor Analysis

Currently, there are no accessible/helpful resources that educate the public about sepsis. But the language in these publications is extremely difficult to understand to the average person.

SepsisAlert aims to educate and inform the general public about this serious disease, by providing easy, accessible information, images and videos on sepsis.

Below apps are the top three in the app store on the market are related to Sepsis.

Sepsis Toolkit is easy to use but the age is 17+ to download the app. The language is in English. It's weakness is that it has all medical terms for professional doctors and nurses.

Sepsis: the layout is neat and easy to read. There is a broad range of medical terms in the app and some information is easy to understand. There was a bug reported on the app.

Sepsis 3: The layout is complicated but easy to read. There is a broad range of medical terms in the app. The app explains that it has calculators and equations on the app pages.

Comparison of SepsisAlert with competitors

| Criteria | <i>SepsisAlert</i> | Sepsis Toolkit | Sepsis Clinical guide | Sepsis 3 |
|-------------------------|---------------------------------------|---------------------------------------|---|---------------------------------------|
| Accessibility | Very easy to read with simple English | Very easy to read with simple English | Very hard to read with a lot of medical terms | Very easy to read with simple English |
| Features | Youtube videos, research papers | Research papers | Research papers | Calculators |
| Stability / Reliability | Stable | Stable | Unstable | Stable |
| User Market | | 100,000+ | 100,000+ | 10,000+ |

Unique Value proposition

There is a gap in the market for an app dedicated to information on Sepsis in the English language that is easily understood.

With a small amount of sponsorship starting in my own county, it would allow many people to access it for all the information they need on it.

Based on my competitor analysis we found out what users will be downloading it from, they can download the app on any device.

Marketing Launch Plan

Phase 1 = targeting sponsorship and users in County Mayo sports through word of mouth/networking. Setting up a facebook page and sharing it with all the clubs/schools.

Phase 2 = expanding to other clubs in all of Connacht (Western Provinces) here in Ireland.

Phase 3 = expanding to all of Ireland namely all sports clubs, Primary and Secondary schools to target young people.

Phase 4 and 5= Health Service Executive staff through conferences like Sepsis Summit and any other information opportunities that may arise.

Channels

I would advertise my app on Midwest radio as a lot of people listen to it everyday.

I would also advertise my app on Facebook and Instagram as they are popular social media platforms. We will communicate through their mobile app, our predominant channel is social media.

User Profiles

The main users that will be downloading my app will be adults and children who play different sports especially outdoor sports. As you can get a cut easily when you're outside playing a sport.

Target Market

Phase 1

For the initial launch of the app, *SepsisAlert* will be targeting users in County Mayo. Our app will require initial sponsorship and we will target the users who will find this app beneficial for both product use and product sponsorship.

I would target all Mayo GAA clubs Senior and Minor for sponsorship for my app to be known about.

I would target the Primary(157) and Secondary schools(29) in Mayo.

I would like to also target the rugby clubs(8) and soccer clubs(20). Golf clubs(19), all GAA clubs(48), Handball(5).

This would allow for important free information on how Sepsis can happen to anyone without realising it before it's diagnosed. Based on the success of adoption by these users, I will move to Phase 2 of my marketing plan.

See Key Success Metrics section for further information.

I got this information from researching different articles from eg. The Mayo Clinic and The Journal. I got the number of schools from a website called SchoolDays.ie, the clubs from the different websites.

See Pie chart below

Clubs and Schools in Mayo

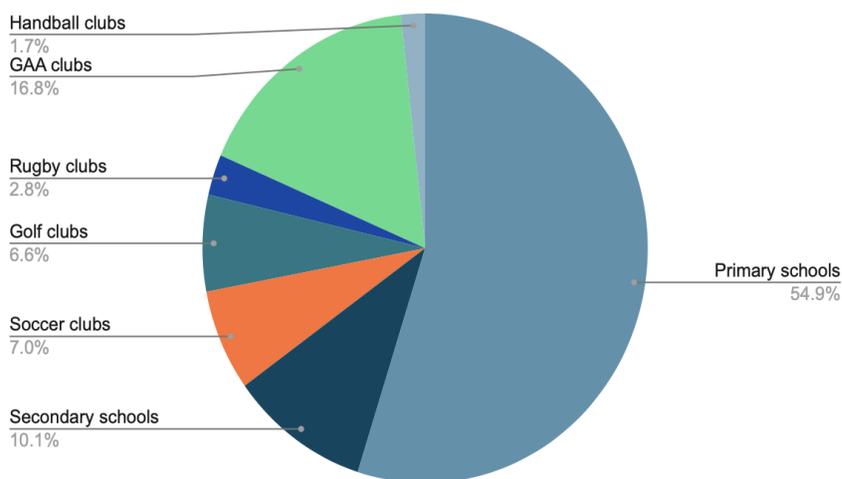


Figure 1: Breakdown of Target Market - Clubs and Schools in Mayo, 2021.

Key Success Metrics

- Number of downloads
- Number of Active Users
- Social media hits/ how often people see the app
- Positive reviews on the app store?

Phase 1 Goal: e.g. 20% of clubs signed up/downloaded app and €3000 in sponsorship money.

Phase 2 Goal: Resources and Financing

Funds Required

In order to get our app to market, we will need a working capital of €5,000. This money will cover marketing materials, paid marketing on social media for ads, addition of apps to the app stores for better distribution, labour costs to make sure the app is working well etc etc.

The main sources of funding will come from a government grant and sponsorship eg. (Enterprise Ireland)

See Table below.

| Sources of Funds | Sponsorship from clubs and schools |
|----------------------|------------------------------------|
| Sponsorship | €149,299 |
| Government Grant | €5,000 |
| Total Funding | €154,299 |

Expected Sales

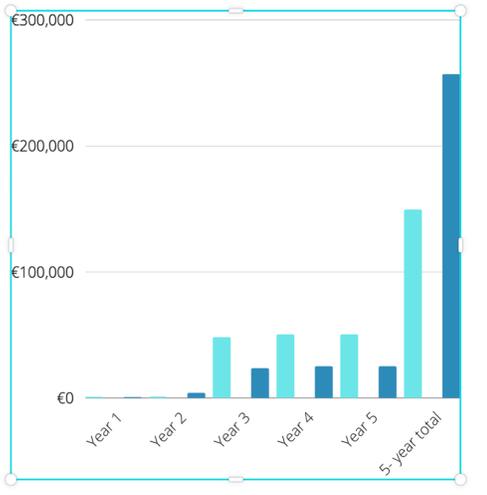
GAA headquarters, free for everyone to use, maybe put in the logo of the company or sponsorship club.

Target size: Year 1, I'm targeting all clubs and schools in Mayo. Year 2, I'm targeting all clubs and schools in Connacht. Year 3, all clubs and schools in the whole of Ireland. Year 4 and 5, I'm targeting the HSE board.

| | Year 1-Mayo | Year 2 | Year 3 | Year 4 | Year 5 | 5-Year total |
|--------------------|-------------|--------|--------|---------|----------|--------------|
| Income | | | | | | |
| Target Size | 500 | 1024 | 47775 | 50,000 | 50,000 | €149,299 |
| App Price | €5 | €5 | €5 | €5 | €5 | €20 |
| Revenue | €350 | €3600 | €23409 | €250000 | €25,0000 | €256495 |

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--|--------|--------|---------|----------|----------|
| Maintenance and Enhancement costs (20%) | €70 | €720 | €4682 | €50,000 | €50,000 |
| Advertising (10%) | €35 | €360 | €360 | €360 | €360 |
| Profits (Income-cost) | €245 | €2,520 | €18,367 | €199,640 | €206,135 |

| | | | |
|---------------|----------|-----|---------|
| Year 1 | 500 | €5 | €350 |
| Year 2 | 1024 | €5 | €3600 |
| Year 3 | 47775 | €5 | €23409 |
| Year 4 | 50,000 | €5 | €25,000 |
| Year 5 | 50,000 | €5 | €25,000 |
| 5- year total | €149,299 | €20 | €256495 |



It would be my hope that the profits from year 4 and year 5 would go to the SepTe company for their developing diagnostic device that would save many lives from Sepsis.

Projected Revenue

This company is not-for-profit so the revenue from the app will be reinvested into creating a better functioning app. The main aim is to cover the costs of operations. In Phase 3, we will introduce a space for advertisements so that other apps can advertise with our free app.

Conclusion

In conclusion we believe that our app educates and informs the general public about this serious disease, by providing easy, accessible information, images and videos on sepsis.

But especially we want to target younger people involved in all sports, in schools, clubs and That young people will focus on learning about Sepsis when it's done as a coding app.

If the app is a success on Sepsis, it will hopefully allow for better adoption and education in health apps.

An example of other apps in particular for young people would be on Asthma and Epilepsy.