



Mission:

Every 3 seconds, someone in the world dies of sepsis. In the UK alone, 245,000 people are affected by sepsis with at least 48,000 people losing their lives in sepsis-related illnesses every year. This is more than breast, bowel and prostate cancer combined. Globally, sepsis claims 11 million lives a year. Yet, for many patients, with early diagnosis it is easily treatable.

The UK Sepsis Trust was founded in 2012 by NHS consultant, Dr Ron Daniels BEM. Renowned for his systems and translational expertise, Ron had spent the previous 7 years developing and disseminating the Sepsis 6 pathway across the NHS and globally.

Our goal is to end preventable deaths from sepsis and improve outcomes for sepsis survivors. We believe that earlier diagnosis and treatment across the UK would save several thousand lives a year. This can be achieved by improving outcomes for survivors, by instigating political change, educating healthcare professionals, raising public awareness and providing support for those affected by this devastating condition. We will protect people by enabling the prevention of severe infection and the treatment of sepsis, whilst helping to ensure antibiotics are used responsibly.

Context:

Sepsis is a life-threatening condition that arises when the body's response to an infection injures its own tissues and organs. It occurs when the body's immune system - which normally helps to protect us and fight infection - goes into overdrive. It can lead to shock, multiple organ failure and sometimes death, especially if not recognised early and treated promptly. While it primarily affects very young children and older adults, and is also more common in people with underlying health conditions, it can sometimes be triggered in those who are otherwise fit and healthy. Overall, there is a lack of data needed to understand the outcomes and recovery of patients with sepsis.

Sepsis always starts with an infection, and can be triggered by any infection including chest infections and UTIs. It is not known why some people develop sepsis in response to these common infections whereas others don't. 5 people die with sepsis every hour in the UK. By helping us to reach more people with the signs of sepsis, we can work towards ending preventable deaths from this condition.

The UK Sepsis Trust support team currently has three nurses, all with a wealth of experience working in hospitals and critical care. Whether people are experiencing problems with recovery, trying to support a loved one after they leave hospital, have suffered a bereavement, or would simply like to learn more about sepsis, we're here to help and offer

support. Patients and others affected by sepsis can engage with these nurses in a number of ways: by calling a Freephone Helpline, by scheduling a call online, by connecting through email or joining a virtual or Facebook support group, moderated by the support nurses.

Challenge:

The UK Sepsis Trust runs support group meetings for people who have developed sepsis and are recovering from sepsis. We host weekly bereavement and recovery groups online via zoom for 10-12 patients per group. These are promoted weekly on social media channels and found on the website here - <https://sepsistrust.org/get-support/support/my-local-group/>

These groups are relaxed informal gatherings, and they provide a safe, non-judgemental, confidential platform for people to share experiences and ask questions. The groups work on a model of peer support which involves people drawing on shared personal experience to provide knowledge, emotional assistance, and practical help to each other, in a way that is mutually beneficial. Groups are moderated by Support Nurses to provide clinical input.

While the virtual support groups, phone and email support provide meaningful connections to patients and others affected by sepsis, the ability to scale these offerings is limited by the number of support nurses at the UK Sepsis Trust. How can we use technology to create the same level of support, providing for the clinical and emotional support needs of patients, without the high-touch nature of support groups and phone/email support? Bear in mind that different demographics might want to access information in different ways – how can we best provide support to make it more accessible to all? In addition, consider ways that the UK Sepsis Trust can collect data in a structured way to better understand how these patients recover.

Resources that complement our support (can be found on the resource website)

These include:

- ***A guide for patients and relatives*** - this is a comprehensive guide to what sepsis is, how it's treated and what recovery may look like.
- ***A recovery and wellbeing diary*** - this was created to help enhance recovery by monitoring symptoms and tracking progress.
- ***Recovery after critical illness*** - designed to support those who have had an admission to Critical Care
- ***Bereavement following sepsis*** - produced to help and guide those navigating grief following the loss of a loved one to sepsis.

Technology Baseline:

As this tech solution will be serving a very wide range of people, the tool should be both desktop and mobile friendly (i.e. responsive web app). For the sake of this challenge, you can assume every user will have access to the internet.