# What we’ve been asked to do

## A. User Stories

1. Care Provider User Story

As a care provider,

I want to update real-time vacancy and available facility information on the platform,

So that social services and NHS organizations can quickly find and assign appropriate care placements for patients.

2. Social Services / NHS User Story

As a social services worker or NHS staff member,

I want to quickly view real-time vacancy and available care resource information on the platform,

So that I can swiftly find suitable care placements for patients, reducing discharge times and relieving hospital capacity.

3. Administrator User Story

As a system administrator,

I want to manage and configure platform permissions and features,

So that I can ensure the system operates smoothly, add or update features, and maintain security and access controls.

4. Cross-Department Collaboration User Story

As a member of different departments (e.g., NHS, social services, government),

I want to share care needs and resource information on the platform,

So that we can collaborate efficiently across agencies, optimize resource allocation, and improve patient care.

5. Data Analysis User Story

As a decision-maker in government or health and social care sectors,

I want to access real-time reports and analytics from the platform,

So that I can make informed policy and resource allocation decisions based on the latest data, ensuring targeted support where needed.

6. User Access User Story

As a user (care provider, social services worker, NHS staff),

I want to access the platform from any internet-enabled device at any time,

So that I can update, view, and search for available care spaces whenever needed, ensuring continuous platform functionality.

## B. Demand Analysis

Main Requirements:

1. Real-Time Vacancy Sharing:

Allow care providers to update real-time vacancy and available facility information.

Enable social services and NHS bodies to quickly access this information, reducing discharge times and easing hospital capacity.

1. User Accessibility:

Ensure users can access the platform from any internet-enabled device, providing 24/7 availability.

1. Cross-Department Collaboration:

Facilitate sharing of patient care needs and available resources across multiple agencies (e.g., social services, NHS, police) to promote collaboration.

1. Data Analytics and Reporting:

Provide real-time data analysis and reporting tools for government and decision-makers to allocate resources and plan policies based on current data.

## C. Software Design Sprint Cycle:

### Sprint 1: Project start and Requirements Analysis

Goal: Understand business requirements and define system features.

Tasks:

Define the basic system features: care provider portal, social services/NHS portal, and administrator portal.

Identify user stories and prioritize them.

Design the initial database architecture to support real-time data and security.

### Sprint 2: Basic Feature Development – Data Sharing and Access

Goal: Implement basic functionality for vacancy sharing and access.

Tasks:

Develop the care provider portal to allow them to input and update vacancy information.

Develop the social services/NHS portal for real-time vacancy viewing.

Implement basic user registration and authentication functionality.

Start user permission management (e.g., admin rights).

### Sprint 3: Cross-Department Collaboration and Data Synchronization

Goal: Enable cross-department collaboration and ensure real-time data synchronization.

Tasks:

Implement data synchronization between care providers and social services/NHS.

Develop API interfaces for cross-department data sharing, ensuring real-time updates.

Design and develop user-friendly interfaces for multiple departments to view and update information.

### Sprint 4: Data Analytics and Reporting Functionality

Goal: Develop data analytics and reporting features to support decision-making.

Tasks:

Implement real-time data reporting functionality, providing statistics on vacancy rates, resource allocation, patient flow, etc.

Provide data visualization tools (charts, graphs) to help stakeholders make informed decisions.

Enhance platform security and refine user access controls.

### Sprint 5: Nationwide Coverage and Platform Optimization

Goal: Extend the platform's functionality to provide national coverage and optimize performance.

Tasks:

Complete nationwide coverage of Wales to ensure healthcare providers in all regions can update and query information.

Conduct performance testing to optimize the platform's response time and concurrent processing.

Ensure the platform works seamlessly on a variety of devices (computers, cell phones).

### Sprint 6: Deployment and Launch

Goal: Complete the deployment and public release of the platform.

Tasks:

Perform final system testing to ensure all functionality is working properly.

Configure the production environment and deploy the platform on the cloud.

Provide user training, create documentation and provide ongoing support.

Launch the platform and monitor initial usage to ensure smooth adoption.

## D. Database Infrastructure