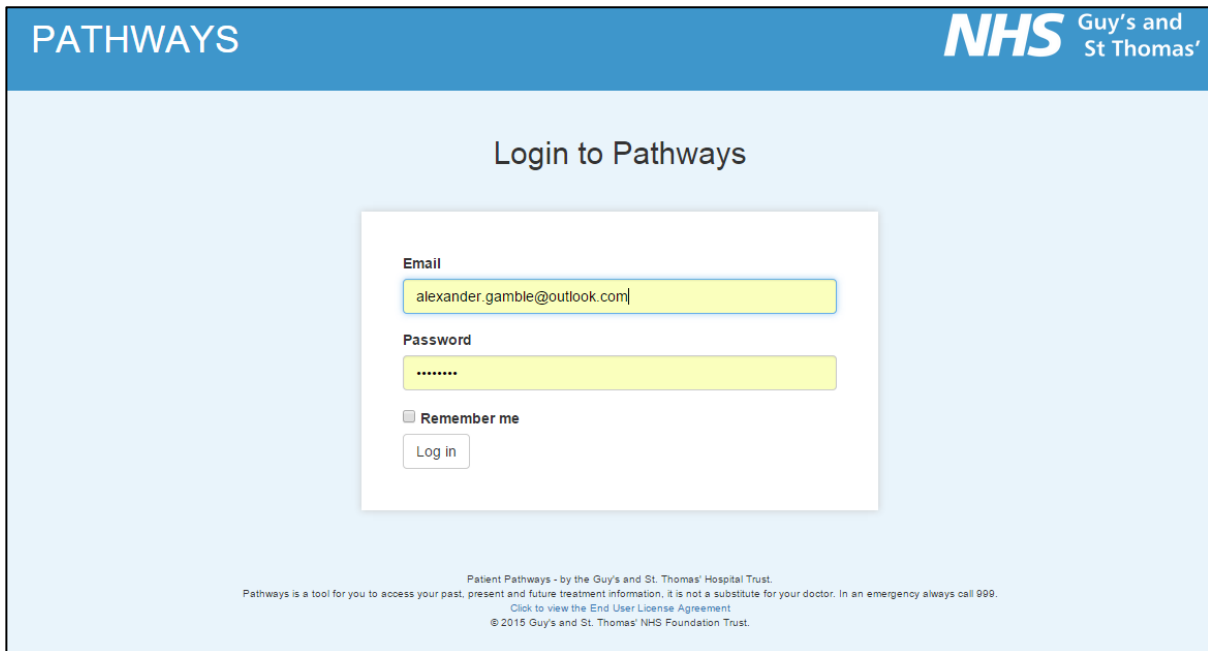


User Manual – Pathways – Medical Professional

To access the medical professional homepage the user must navigate to the following URL:

<http://gstt-pathways.cloudapp.net/admin>

At this URL, the user will be presented with the below login page, where they must input their credentials for authentication.



The screenshot shows the login page for Pathways. The page has a blue header with 'PATHWAYS' on the left and the 'NHS Guy's and St Thomas'' logo on the right. The main content area is light blue and contains the title 'Login to Pathways'. Below the title is a white login form with the following elements:

- Email:** A text input field containing 'alexander.gamble@outlook.com'.
- Password:** A password input field with masked characters '.....'.
- Remember me:** A checkbox that is currently unchecked.
- Log in:** A button to submit the login credentials.

At the bottom of the page, there is a small disclaimer: 'Patient Pathways - by the Guy's and St. Thomas' Hospital Trust. Pathways is a tool for you to access your past, present and future treatment information, it is not a substitute for your doctor. In an emergency always call 999. [Click to view the End User License Agreement](#). © 2015 Guy's and St. Thomas' NHS Foundation Trust.'

Upon successful authentication the medical professional is redirected to the professional hub of Pathways. This hub can be broken down into three parts that are of interest to the user.

On the section of the hub you the user can access the patient search engine and the “Edit account” tab. The search engine is used in order to retrieve the records of a specific patient, and the “Edit account” allows the user to update any information that is related to their own profile.

The screenshot shows the Pathways interface with a blue header containing the NHS logo and 'Guy's and St Thomas' NHS Foundation Trust'. A search bar at the top left has 'NHS Number' and a 'Search' button. An 'Edit Account' button is in the top right. A sidebar on the left lists 'Recently changed patients' with names and NHS numbers, and a 'Create Patient' button at the bottom. The main content area shows a patient profile for 'John Smith' with 'Create new state' and 'Edit Patient' buttons. Below this is a table of treatment information dated 12/06/2016, with 'Edit' and 'Delete' buttons for each row. A 'Manage Global Treatment Information' button is at the bottom right.

#	Module Name	Category	Subcategory	Edit	Delete
1	Radiotherapy for oesophageal cancer (cancer of the gullet)	Radiotherapy	Radiotherapy		
2	Targeted therapy for stomach cancer	Chemotherapy	Palliative Specific		
3	Chemotherapy for stomach cancer	Chemotherapy	Curative		
4	ECF chemotherapy	Chemotherapy	Curative		
5	ECX chemotherapy	Chemotherapy	Curative		

On the left side of the hub, each doctor has a list of patients that are available for them to edit. Each patient will have their name displayed along with their NHS number. By clicking the “Create Patient” button from the bottom of the list and following the intuitive patient creation process the doctor is able to add a new patient in the system.



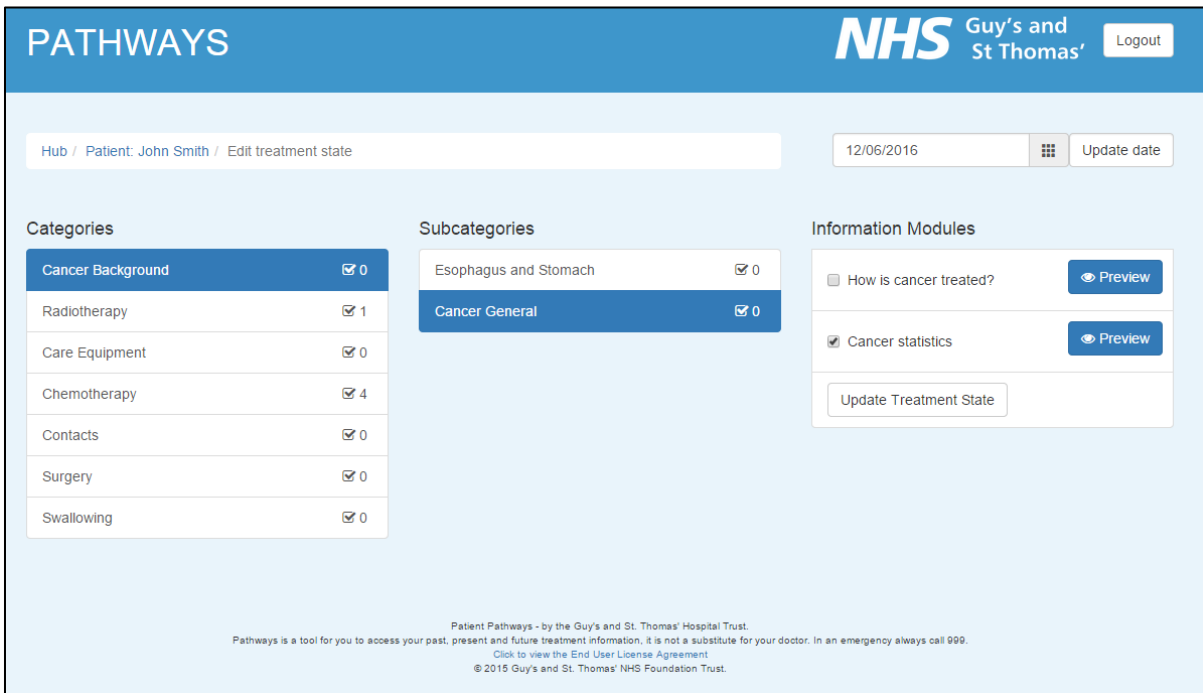
The screenshot shows a web interface for creating a patient. At the top left is the word "PATHWAYS" in white on a blue background. At the top right is the NHS logo, "Guy's and St Thomas'" text, and a "Logout" button. The main content area is light blue and contains a white form titled "Create a patient". The form has the following fields and elements:

- Name**: A text input field.
- Email**: A text input field.
- NHS Number**: A text input field.
- Teams Assigned**: A section with a checkbox labeled "Alex".
- Create Patient**: A button at the bottom of the form.

At the bottom of the page, there is small text: "Patient Pathways - by the Guy's and St. Thomas' Hospital Trust. Pathways is a tool for you to access your past, present and future treatment information, it is not a substitute for your doctor. In an emergency always call 999. [Click to view the End User License Agreement](#). © 2015 Guy's and St. Thomas' NHS Foundation Trust."

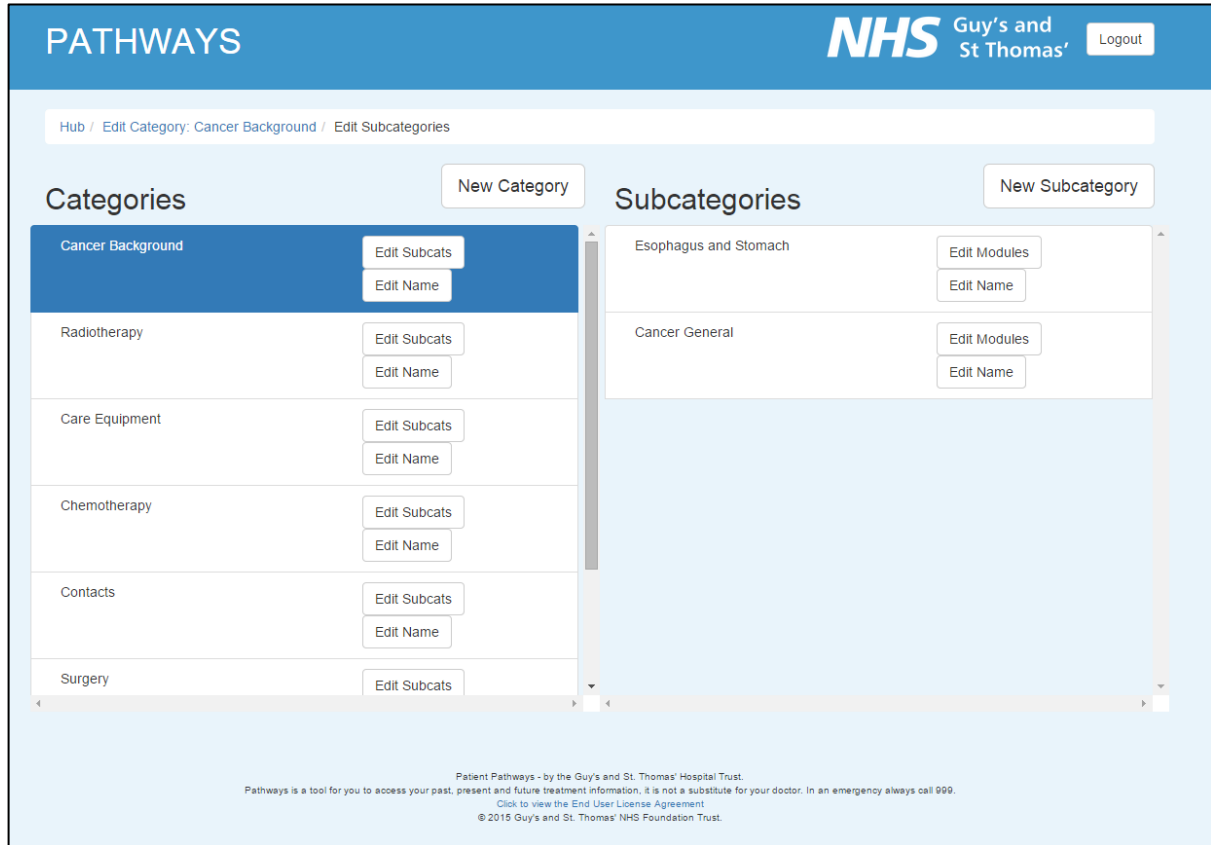
After selecting a patient from the list, all the treatment states that were ever created for that specific patient will be available for editing, and the doctor may create and assign new states. A treatment state represents a record of all the data modules assigned to a patient on a specific date.

By choosing to create or edit a treatment state, the user will be redirected to the page where they are able to assign data modules to a patient by choosing the category and subcategory in which the modules is stored.

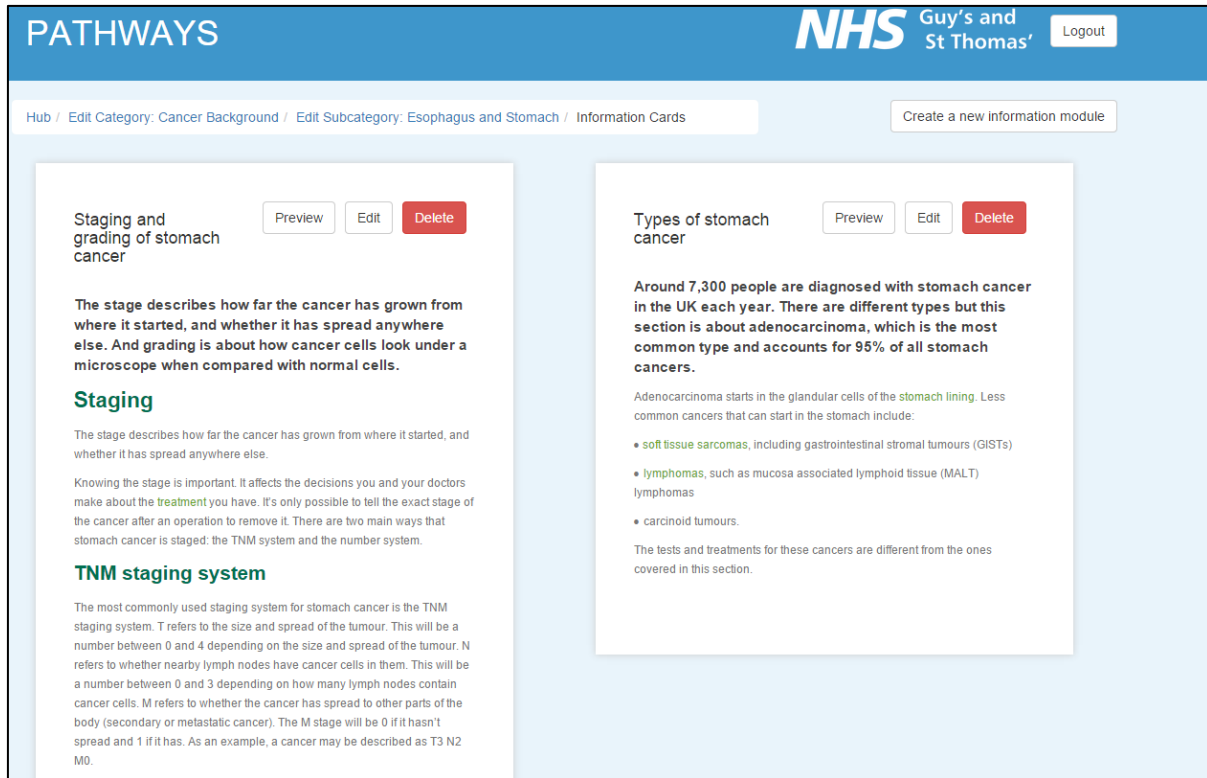


The screenshot shows the 'PATHWAYS' interface for editing a treatment state for a patient named John Smith. The page has a blue header with the NHS logo and 'Guy's and St Thomas' text, along with a 'Logout' button. Below the header, there is a breadcrumb trail 'Hub / Patient: John Smith / Edit treatment state' and a date field '12/06/2016' with an 'Update date' button. The main content area is divided into three sections: 'Categories', 'Subcategories', and 'Information Modules'. The 'Categories' section lists various medical categories with their respective counts: Cancer Background (0), Radiotherapy (1), Care Equipment (0), Chemotherapy (4), Contacts (0), Surgery (0), and Swallowing (0). The 'Subcategories' section shows 'Esophagus and Stomach' (0) and 'Cancer General' (0). The 'Information Modules' section includes 'How is cancer treated?' (0) and 'Cancer statistics' (0), each with a 'Preview' button. An 'Update Treatment State' button is located at the bottom of the Information Modules section. At the bottom of the page, there is a footer with the text: 'Patient Pathways - by the Guy's and St. Thomas' Hospital Trust. Pathways is a tool for you to access your past, present and future treatment information. It is not a substitute for your doctor. In an emergency always call 999. Click to view the End User License Agreement. © 2015 Guy's and St. Thomas' NHS Foundation Trust.'

Each and every doctor has the ability to edit the names and relationships between categories and subcategories by accessing “Manage Global Treatment Information”. On this page they may create new categories, new subcategories, change their name or edit the available ones.



By selecting a category and then a subcategory, they will then be redirected to a page where all the data modules, related to this specific subcategory, will be displayed. Each data module may be previewed, edited or deleted.



The screenshot shows the 'PATHWAYS' interface for 'Cancer Background' / 'Esophagus and Stomach' / 'Information Cards'. It features two information cards, each with 'Preview', 'Edit', and 'Delete' buttons.

Card 1: Staging and grading of stomach cancer

Staging

The stage describes how far the cancer has grown from where it started, and whether it has spread anywhere else. And grading is about how cancer cells look under a microscope when compared with normal cells.

The stage describes how far the cancer has grown from where it started, and whether it has spread anywhere else.

Knowing the stage is important. It affects the decisions you and your doctors make about the treatment you have. It's only possible to tell the exact stage of the cancer after an operation to remove it. There are two main ways that stomach cancer is staged: the TNM system and the number system.

TNM staging system

The most commonly used staging system for stomach cancer is the TNM staging system. T refers to the size and spread of the tumour. This will be a number between 0 and 4 depending on the size and spread of the tumour. N refers to whether nearby lymph nodes have cancer cells in them. This will be a number between 0 and 3 depending on how many lymph nodes contain cancer cells. M refers to whether the cancer has spread to other parts of the body (secondary or metastatic cancer). The M stage will be 0 if it hasn't spread and 1 if it has. As an example, a cancer may be described as T3 N2 M0.

Card 2: Types of stomach cancer

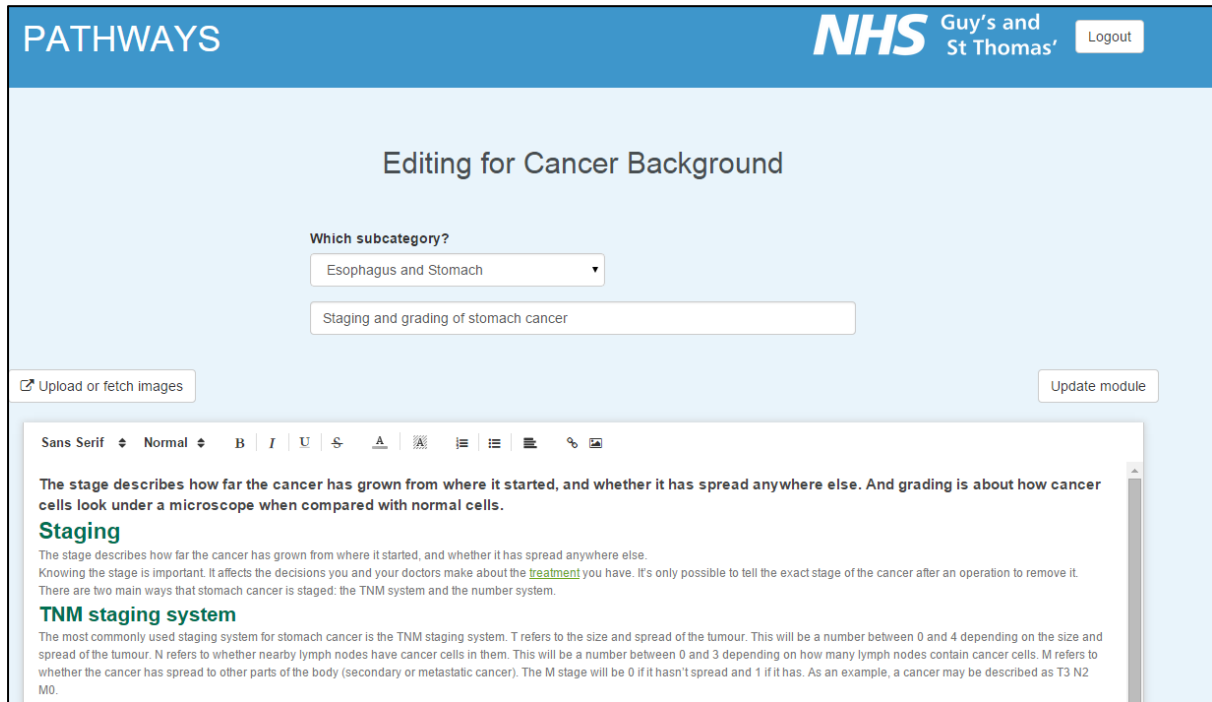
Around 7,300 people are diagnosed with stomach cancer in the UK each year. There are different types but this section is about adenocarcinoma, which is the most common type and accounts for 95% of all stomach cancers.

Adenocarcinoma starts in the glandular cells of the stomach lining. Less common cancers that can start in the stomach include:

- soft tissue sarcomas, including gastrointestinal stromal tumours (GISTs)
- lymphomas, such as mucosa associated lymphoid tissue (MALT) lymphomas
- carcinoid tumours.

The tests and treatments for these cancers are different from the ones covered in this section.

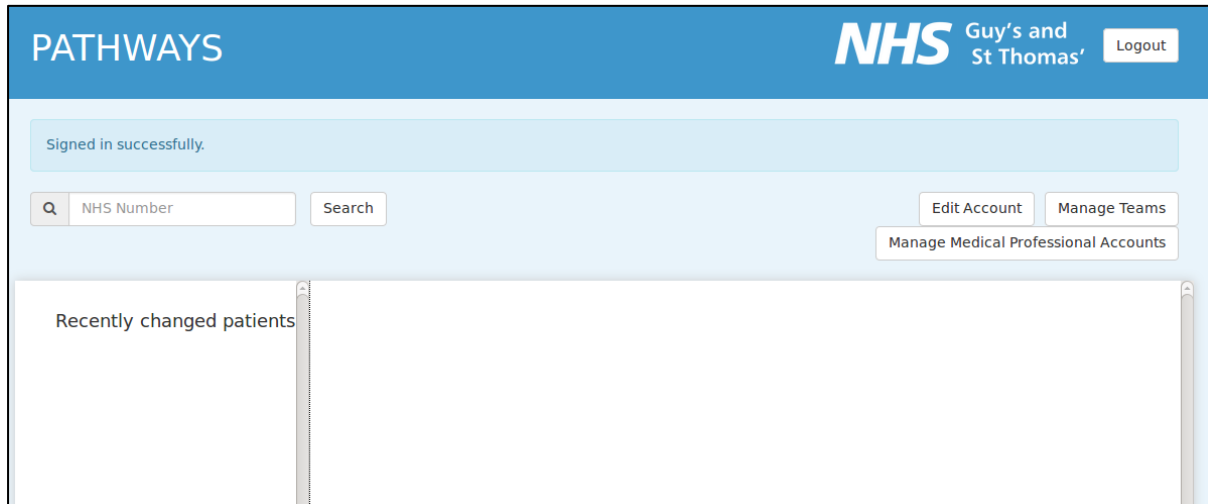
From this page the user has the ability to create and format new data modules as you see below.



The screenshot shows a web interface for editing a pathway. At the top, there is a blue header with the text 'PATHWAYS' on the left and the 'NHS Guy's and St Thomas' logo with a 'Logout' button on the right. The main content area is light blue and titled 'Editing for Cancer Background'. Below the title, there is a form with a dropdown menu labeled 'Which subcategory?' set to 'Esophagus and Stomach', and a text input field containing 'Staging and grading of stomach cancer'. To the left of the text editor is a button 'Upload or fetch images', and to the right is a button 'Update module'. The text editor itself has a rich text toolbar with options for font face (Sans Serif), size (Normal), bold (B), italic (I), underline (U), strikethrough, text color, background color, bulleted list, numbered list, indent, link, and unlink. The editor content includes a paragraph: 'The stage describes how far the cancer has grown from where it started, and whether it has spread anywhere else. And grading is about how cancer cells look under a microscope when compared with normal cells.' This is followed by a section header 'Staging' and a paragraph: 'The stage describes how far the cancer has grown from where it started, and whether it has spread anywhere else. Knowing the stage is important. It affects the decisions you and your doctors make about the [treatment](#) you have. It's only possible to tell the exact stage of the cancer after an operation to remove it. There are two main ways that stomach cancer is staged: the TNM system and the number system.' Below this is another section header 'TNM staging system' and a paragraph: 'The most commonly used staging system for stomach cancer is the TNM staging system. T refers to the size and spread of the tumour. This will be a number between 0 and 4 depending on the size and spread of the tumour. N refers to whether nearby lymph nodes have cancer cells in them. This will be a number between 0 and 3 depending on how many lymph nodes contain cancer cells. M refers to whether the cancer has spread to other parts of the body (secondary or metastatic cancer). The M stage will be 0 if it hasn't spread and 1 if it has. As an example, a cancer may be described as T3 N2 M0.'

Super User

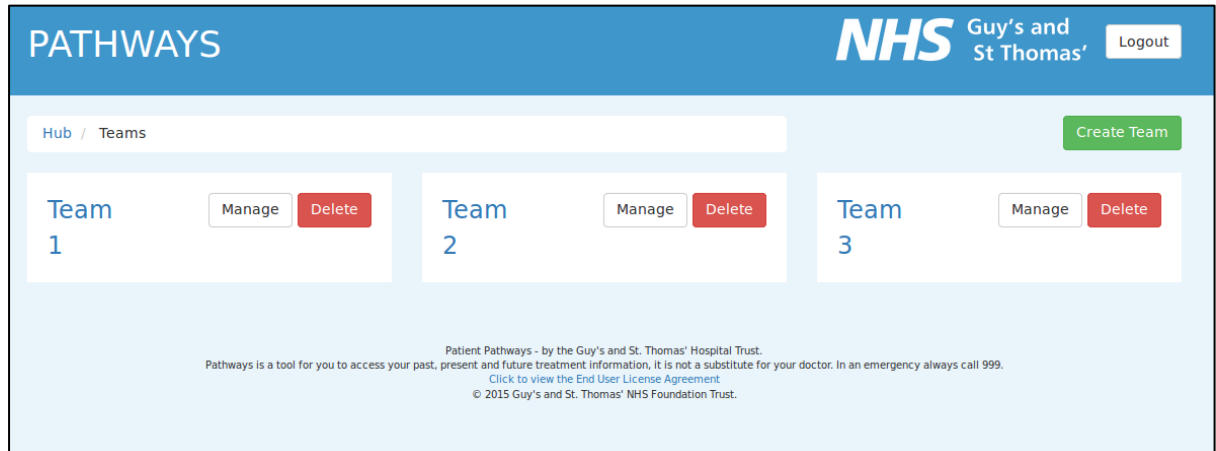
The Super User is a doctor account with a higher access level, and consequently the user should login via the same URL as provides doctor access. The difference between this account and the doctor account is that the Super user may edit all the patients and doctors accounts registered in the system, and assign them to teams.



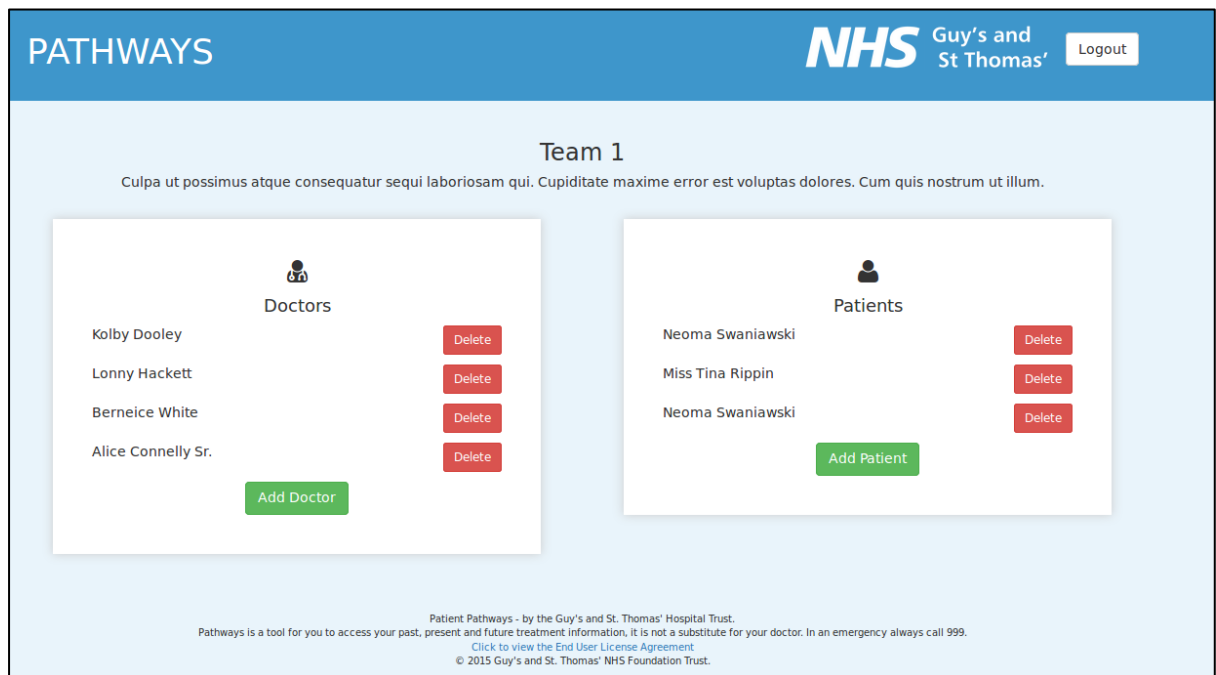
Through teams all the access controls levels and restrictions are imposed in this application. Only doctors who share a team with a patient will be able to update their records. Doctors are able to edit patients that are in the same teams as them, but may not update patients in any team that they are not currently part of.

However, a super user assigns each doctor to a team and is able to edit the patients' or doctors' information or current team selection as they wish. In order to manage teams the super user may navigate to the team management page by pressing the "Manage Teams" button.

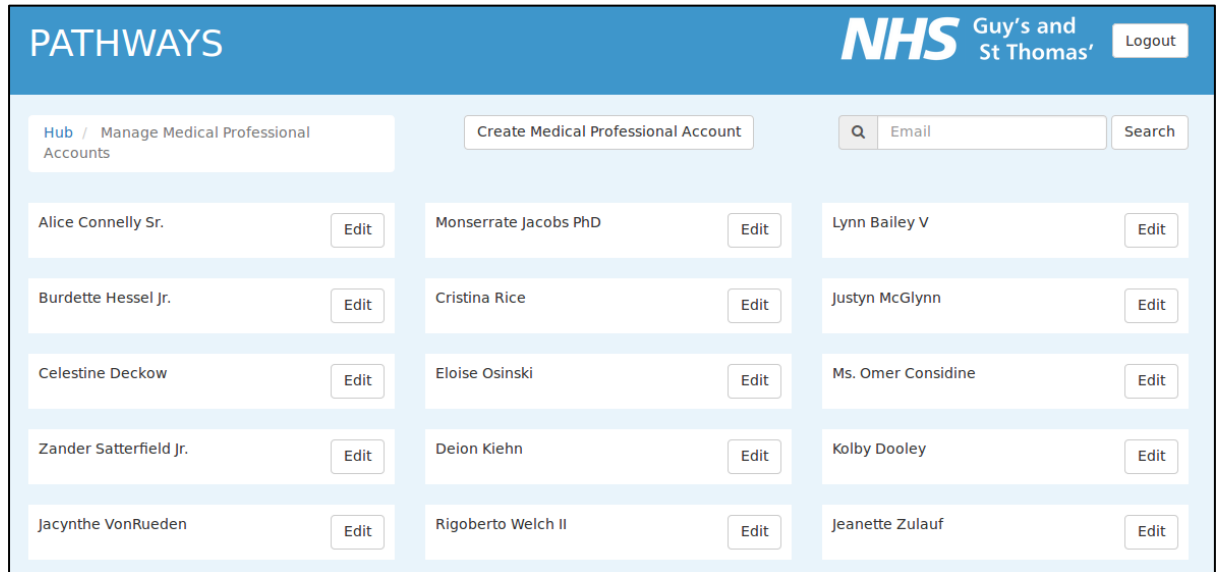
In the next step the user needs to select a team or create a new team that he/she wants to manage and the click the “Manage button”.



After selecting a team, the super user may easily add patients or doctors to it.



Also from the main page, the super user may edit all the available doctors and create new ones by pressing the “Manage Medical Professional Accounts”



The screenshot shows a web interface titled "PATHWAYS" for "NHS Guy's and St Thomas'". The page has a blue header with the NHS logo and a "Logout" button. Below the header, there is a breadcrumb trail "Hub / Manage Medical Professional Accounts" and a "Create Medical Professional Account" button. A search bar with a magnifying glass icon and the text "Email" is followed by a "Search" button. The main content area displays a grid of 15 medical professional accounts, each with a name and an "Edit" button. The accounts are arranged in three columns and five rows.

PATHWAYS			NHS Guy's and St Thomas'	Logout	
Hub / Manage Medical Professional Accounts		Create Medical Professional Account	Q Email	Search	
Alice Connelly Sr.	Edit	Monserrate Jacobs PhD	Edit	Lynn Bailey V	Edit
Burdette Hessel Jr.	Edit	Cristina Rice	Edit	Justyn McGlynn	Edit
Celestine Deckow	Edit	Eloise Osinski	Edit	Ms. Omer Considine	Edit
Zander Satterfield Jr.	Edit	Deion Kiehn	Edit	Kolby Dooley	Edit
Jacynthe VonRueden	Edit	Rigoberto Welch II	Edit	Jeanette Zulauf	Edit