Careers in health informatics

Caring, compassionate, committed
Make a difference with a career in health
A career for you

There are more than 350 roles in health, and many of them are part of a wider team which works alongside other health professionals for the benefit of patients and the public. As well as the NHS itself, a great many large and smaller organisations provide healthcare and work to prevent ill health in the UK. These include public and private sector organisations, community interest companies, social enterprises and charities, and you could work for the NHS or any one of these other organisations in a health role.

Some roles give you direct contact with patients, while in others you are part of a vast support network vital to delivering healthcare and preventing ill health, and good team-working is essential. Some jobs are in hospitals, others are based in the community: increasingly, health and social care services are integrated or co-ordinated in order to provide a seamless service for people with a range of needs.

We actively recruit people of all ages, backgrounds and levels of experience, including people who have worked in other sectors or who bring life experience from outside the world of work. This helps us to understand the different needs of patients, families and carers, and to provide the best possible service every day.

NHS values and the 6Cs of compassionate care

To apply for any job or apprenticeship in the NHS or in an organisation that provides NHS services, or for a course with clinical placements in the NHS, you’ll need to show how you think the values of the NHS Constitution would apply in your everyday work.

The NHS Constitution values are:

- Working together for patients
- Respect and dignity
- Commitment to quality of care
- Compassion
- Improving lives
- Everyone counts

These values may also be promoted as the 6Cs of compassionate care, as part of Leading Change, Adding Value. The 6Cs are:

- Care
- Compassion
- Competence
- Communication
- Courage
- Commitment

Find out more about the NHS Constitution and the 6Cs at:

- [www.healthcareers.nhs.uk/nhsconstitution](http://www.healthcareers.nhs.uk/nhsconstitution)
- [www.healthcareers.nhs.uk/6Cs](http://www.healthcareers.nhs.uk/6Cs)
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Your career in health informatics

Health informatics is the intelligent use of information and technology to provide better care. It’s one of the fastest growing areas in health.

Whatever your academic background, you can find a role that’s right for you.

Every day in the health sector, information has to be collected, managed, used and shared. Good patient care depends on this fast and accurate flow of information.

As a health informatics professional, you are a vital part of the healthcare team, the expert on patient information and the latest technology that others rely on to do their jobs.

Whether the job is to provide technical support or to deliver cutting-edge ICT projects, health informatics staff are responsible for the non-stop cycle of information.

All members of the healthcare team, including healthcare professionals, managers and administrators, rely on fast, accurate information to deliver the best care they can. Using IT creatively to achieve this means health informatics is one of the bedrocks of health.

To find out more about working in health informatics, visit www.healthcareers.nhs.uk/healthinformatics

Or if you have any questions, you can call our helpline on 0345 60 60 655 or email advice@healthcareers.nhs.uk
FAQs

What is health informatics?

Health informatics is an umbrella term referring to staff in the NHS who collate, manage, interpret and present patient and healthcare information. They may also manage the computer, phones and other communications systems.

How can I start a career in health informatics? What qualifications do I need?

Some posts require few academic qualifications while others may need postgraduate qualifications or professional membership. Apprenticeships at different levels are also increasingly available.

Find out more about the different roles in health informatics at www.healthcareers.nhs.uk/healthinformatics

How can a background in IT help me to get a job in the health sector?

Many skills, for example website development, gained outside the health sector can be transferred across. Visit www.healthcareers.nhs.uk/healthinformatics and, in particular, the section on www.healthcareers.nhs.uk/ICT

There are also roles in information management that may interest you.

It is essential to read the person specification for any job vacancy you are considering. Visit www.jobs.nhs.uk to search for NHS vacancies.

Where can I find more information about a career in health informatics?

Find more information about careers in health informatics at www.healthcareers.nhs.uk/healthinformatics
Which role is right for you?

If you love working with information technology, enjoy library work, are good at analysing data or find satisfaction in keeping accurate records, there could be a job for you.

Health informatics staff help clinicians keep up with the latest evidence and research. They work with researchers or run their own research projects to advance clinical knowledge. They help find new ways of delivering vital services, such as laboratory test results, x-rays and drug dispensing, while also making them faster and more foolproof. They develop systems to free up clinicians from routine paperwork, allowing them to spend more time treating patients.

They work on systems analysis and development or maintain intranets within hospital or community organisations. They also develop technologies that help patients live independently and longer with a better quality of life.

They run the systems that allow staff to communicate with each other, to access information and to deal with all the day-to-day service needs, such as ordering vital supplies and booking patient appointments. They also train and educate staff on the latest technological developments. In fact, there is very little happening in health today that does not involve informatics.
Health informatics roles at a glance

You can find more detailed information about all the health informatics roles described below on the Health Careers website at www.healthcareers.nhs.uk/healthinformatics

To search for NHS jobs in health informatics, visit www.jobs.nhs.uk

Clinical informatics

Clinical informatics staff are usually healthcare scientists, doctors, nurses or other healthcare professionals who have moved to health informatics.

Using clinical information to improve patient care is a crucial part of your role. If you work in clinical informatics, your job is to capture, communicate and use clinical information to benefit health services. This could be something as simple as analysing information about falls on wards to prevent hospital patients having accidents, or a large-scale, ambitious project such as helping to develop electronic patient records that link healthcare organisations, for example, GPs and hospital clinics.

The work involves using and developing electronic means to support the whole cycle of information about patients and treatment, including research and audit. Clinical informatics staff are usually healthcare professionals who develop a strong interest in using IT and information to find better ways of working.

Who will it appeal to?
Those who want to find ways of making services better through the imaginative use of information. A clinical background means you have a thorough understanding of the operational side of services, while you are likely to be interested in harnessing the power of IT and data to make those services work better. Within that there is a wide range of opportunities, such as clinical audit, as well as openings to develop your own problem-solving projects or research.

The roles listed on the next page give an idea of the variety on offer.
<table>
<thead>
<tr>
<th>Type of work</th>
<th>Main responsibilities</th>
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| Clinical informatics specialist manager          | ✤ carries out full or part-time audit or research, using understanding of clinical practice to find ways of improving services  
  ✤ manages information services for a specialist area, for example maternity services  
  ✤ assists the development of specific IT and/or information projects, such as the electronic patient record, which shares patient information across hospitals and GPs                                                                                                                                                                                                                                                                 |
| PACS (picture archiving communication system) administrator | ✤ supports running of the service that stores radiological images, such as x-rays, ultrasound and magnetic resonance imaging (MRI) scans, and transfers them electronically to specialists within a trust and around the country                                                                                                                                                                                                                                                                 |
| Pathology links manager                          | ✤ responsible for the IT systems and applications that link shared pathology services  
  ✤ ensures the system works reliably and is compliant with national information governance regulations                                                                                                                                                                                                                                                                                                                                                                       |

For more information about roles in clinical informatics, visit [www.healthcareers.nhs.uk/clinicalinformatics](http://www.healthcareers.nhs.uk/clinicalinformatics)

You may also want to find out more about the role of healthcare scientists working in clinical bioinformatics. For more information about this new and expanding area of healthcare science, visit [www.healthcareers.nhs.uk/clinicalbioinformatics](http://www.healthcareers.nhs.uk/clinicalbioinformatics)
Education and training

Educators and trainers in health informatics are responsible for making sure that staff are able to use the latest technology, so that the benefits it offers for patient care are realised. Working in training or IT departments and clinical areas, they train healthcare professionals in computer literacy, clinical systems and other applications, and in the use of IT and software.

Who will it appeal to?
People who have an interest in developing the skills of others and a strong knowledge of the latest ICT. They will need to be comfortable delivering training to individuals and/or groups, and have good interpersonal skills.

Many roles will require previous experience or qualifications in education or training and an understanding of clinical care settings and processes is desirable. Health informatics trainers must be keen to see ICT used to benefit patients and will continually update their own knowledge and skills in new software and technologies.

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<tr>
<td>Trainer</td>
<td>◣ identifies learning needs</td>
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<tr>
<td></td>
<td>◣ designs and develops training materials and resources</td>
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<tr>
<td></td>
<td>◣ plans and delivers training interventions</td>
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<td></td>
<td>◣ supports and assesses learners</td>
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<tr>
<td>Training administrator</td>
<td>◣ publicises available training courses</td>
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<td></td>
<td>◣ schedules courses and coordinates bookings</td>
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<tr>
<td></td>
<td>◣ maintains training records, resources and websites</td>
</tr>
<tr>
<td>Training manager</td>
<td>◣ manages provision of training across an organisation or area</td>
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<tr>
<td></td>
<td>◣ plans, delivers and evaluates a range of training and development programmes to meet strategic and operational needs</td>
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<td></td>
<td>◣ acts as a focal point for promoting training and manages stakeholder relationships</td>
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For more information about roles in education and training visit [www.healthcareers.nhs.uk/educationandtraining](http://www.healthcareers.nhs.uk/educationandtraining)
Health records and patient administration

Access to health records is crucial to the delivery of patient care. Healthcare professionals need them to understand a patient’s medical history and deliver care appropriately. Staff working in this area of health informatics are responsible for the health records system.

Health records and patient administration staff collate, store and retrieve records used in diagnosis and treatment. This is a critical role due to the vast number of healthcare professionals involved in patient care who need access to this vital information at short notice. They also promote and support the effective use of data, information, knowledge and technology to support and improve health and the delivery of patient care.

Who will it appeal to?
Those with an acute attention to detail and a commitment to patient confidentiality. Staff in health records and patient administration also need to interpret data and ensure it is easily accessible to a variety of staff and healthcare professionals. Knowledge of the health sector and its health records systems is often essential for anyone working in this field.

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<tbody>
<tr>
<td>Health records assistant</td>
<td>• locates, retrieves, tracks and delivers patients’ health records and case notes</td>
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<tr>
<td></td>
<td>• maintains confidential patient records and case notes</td>
</tr>
<tr>
<td></td>
<td>• participates in audits of patient records</td>
</tr>
<tr>
<td>Health records manager</td>
<td>• communicates and negotiates contentious issues with senior management and clinical staff</td>
</tr>
<tr>
<td></td>
<td>• improves the quality of the service</td>
</tr>
<tr>
<td></td>
<td>• provides advice and guidance to a range of people on all aspects of legislation relating to health records</td>
</tr>
<tr>
<td>Medical summariser</td>
<td>• extracts information from patients’ notes and enters them on to a computer programme</td>
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<td></td>
<td>• displays any significant medical problems prominently so it is obvious to any healthcare professional using the record</td>
</tr>
<tr>
<td>Waiting list co-ordinator</td>
<td>• monitors waiting lists and ensures their accuracy and completeness</td>
</tr>
<tr>
<td></td>
<td>• implements and maintains a system to monitor waiting times and identify changes in demand and any potential problems</td>
</tr>
<tr>
<td></td>
<td>• provides weekly statistical information and reports on performance alerting others where there are specific problems that need to be managed</td>
</tr>
</tbody>
</table>

For more information about roles in health records and patient administration, visit [www.healthcareers.nhs.uk/healthrecordsandpatientadmin](http://www.healthcareers.nhs.uk/healthrecordsandpatientadmin)
Information and communication technology (ICT)

Most people rely on computers and electronic communication to do their job. If you work in ICT, you have a key role helping to run the systems used by (among others) scientists, doctors, therapists and other healthcare professionals, secretaries and managers.

ICT staff are hands-on. You may diagnose and fix faults, support staff who use the systems, and develop improvements. Your work will support computers (as well as tablets, mobile phones and peripheral equipment such as printers and scanners) and communication systems ranging from appointment booking systems to those used in intensive care units.

Who will it appeal to?
Those with a natural flair for computing. Examples include helpdesk support staff, network managers, and system developers who develop better systems for staff and patient services.

ICT staff are responsible for the development, management and support of the ICT infrastructure in one or more NHS organisations.

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| ICT support technician       | ☞ helps set up computing equipment, for example in a hospital  
                                ☞ installs new computers, carries out initial tests, loads programmes and helps maintain computers                                       |
| ICT test analyst             | ☞ supports the technical development and smooth running of new computer systems, for example, development of an electronic patient record system  
                                ☞ analyses a problem within a computer system, diagnoses and solves it                                                                                  |
| Network manager              | ☞ manages an organisation’s IT network infrastructure and provides technical support and advice to all the client organisations                      |
| Service desk operator        | ☞ investigates and helps staff with their computer problems  
                                ☞ resolves faults over the telephone                                                                                                                      |
| Systems developer            | ☞ works on the challenging programme of IT development in the NHS, for example, linking GPs with hospitals by computer, allowing patients to book hospital appointments from the GP’s surgery  
                                ☞ works closely with other healthcare professionals to make sure technical solutions are geared to improving ways of working and patient care |
| Telecommunication manager    | ☞ manages the phone system  
                                ☞ uses the latest technology to design a new hospital phone system and ensure its smooth operation                                                          |

For more information about roles in ICT, visit [www.healthcareers.nhs.uk/ICT](http://www.healthcareers.nhs.uk/ICT)
Information management

Staff in information management gather, analyse, interpret and present information about health and healthcare to improve services and patient care. Such information supports health services in all sorts of ways, from finding out how a trust is performing to planning how many staff are needed to deliver care in an organisation. An example of information that can be used to help improve performance is data that shows how quickly an ambulance trust responds to emergency calls.

**Who will it appeal to?**
People who can interpret statistical data and turn it into meaningful information about services.

This branch of health informatics includes planning and performance management staff who analyse information about patients and services to find ways of improving service delivery. It also includes staff working in data protection and confidentiality, who focus on ensuring information is handled legally and securely. Information management staff need a thorough understanding of health services and the way information is used throughout the health system.

The roles listed below give an idea of the variety on offer.

<table>
<thead>
<tr>
<th>Type of work</th>
<th>Main responsibilities</th>
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<tbody>
<tr>
<td>Clinical coder</td>
<td>- makes a full and accurate computer record of patients’ stays in hospital</td>
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<tr>
<td></td>
<td>- translates patients’ diagnoses and treatment into alphanumeric codes</td>
</tr>
<tr>
<td></td>
<td>- liaises with doctors, nurses and other staff to ensure patients’ diagnoses and treatment are recorded accurately</td>
</tr>
<tr>
<td></td>
<td>- reviews quality of data</td>
</tr>
<tr>
<td>Clinical coding tutor</td>
<td>- designs and delivers training for clinical and non-clinical staff to support the use of clinical coding</td>
</tr>
<tr>
<td></td>
<td>- solves problems, and shares ideas and best practice to make sure the information recorded about patient diagnoses and treatment is full and accurate</td>
</tr>
<tr>
<td>Type of work</td>
<td>Main responsibilities</td>
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</table>
| Data quality manager         | • reviews current information systems to ensure that quality of data meets national standards and regulations  
                              | • establishes and maintains new data audit programmes to ensure information is high quality |
| Information analyst          | • analyses information on health services, for example, a population's health needs or hospital waiting times, and uses it to help managers and healthcare professionals plan services and improve performance |
| Information auditor          | • helps healthcare professionals analyse the way they work, and uses the information to find ways of improving patient care |
| Information governance manager | • ensures information systems comply with national rules about how information is captured, shared and stored |
| Planning and performance manager | • analyses information to monitor current services and plans for the future  
                                   | • helps ensure key performance targets are met, for example on waiting lists |

For more information about roles in information management, visit [www.healthcareers.nhs.uk/informationmanagement](http://www.healthcareers.nhs.uk/informationmanagement)
Libraries, knowledge and information services

Healthcare library, knowledge and information services underpin all aspects of healthcare, and ensure that decision-making is based on sound and reliable evidence. Library, knowledge and information services staff source and supply the evidence to make decisions on treatment options, patient care and safety, commissioning, policy and service transformation, and to enable lifelong learning, undertake research and drive innovation.

Library and knowledge professionals play an essential role, applying their expertise to ensure that NHS bodies, staff, learners, patients and the public have the right knowledge and evidence, when and where they need it.

Who will it appeal to?
If you like varied, stimulating and rewarding work, health library work could be for you. You may run complex literature searches to support patient care, research and improvements in health services, summarise the evidence and manage organisational knowledge. You will provide current awareness services to keep health professionals up to date with latest evidence and best practice in their field and develop and deliver training to help colleagues assess and make best use of this information. You will work with a wide range of colleagues at all levels of seniority.

Library staff increasingly work outside the traditional library space to deliver clinical and outreach services, embedding roles within health and management teams.
<table>
<thead>
<tr>
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| Library and knowledge services manager          | • shapes and implements national strategy  
• day-to-day running of the library  
• leads the team                                                                 |
| Librarian                                        | • delivers training to healthcare professionals  
• conducts literature searches  
• promotes and manages resources for evidence and use of the library service |
| Clinical librarian                               | • works alongside clinical teams and accompany staff on ward rounds  
• mobilises and manages organisational knowledge  
• conducts literature searches to find answers to evidence gaps |
| Outreach librarian                               | • finds answers to evidence gaps  
• works with healthcare staff in the community  
• promotes resources and provide training |
| Public health and commissioning librarian        | • provides evidence-based information at population level  
• provides evidence to support care pathways |
| Academic Health Science Network liaison librarian| • promotes research and collaboration between the NHS, higher education and industry  
• conducts complex literature searches  
• profiles NHS organisations to identify common issues |
| Library assistant/senior library assistant       | • runs the enquiry desk  
• researches enquiries  
• orders books and journals |

For more information about roles in libraries and knowledge management, visit [www.healthcareers.nhs.uk/librariesandknowledgemanagement](http://www.healthcareers.nhs.uk/librariesandknowledgemanagement)

There is also a short video about a career as a knowledge and evidence manager in public health on our YouTube channel: [www.youtube.com/Healthcareers](http://www.youtube.com/Healthcareers)
Project and programme management

The NHS is investing heavily in digitisation and health informatics projects are at the forefront of continuously improving patient care. Examples of projects include delivering digital systems for staff to record, analyse, extract and use data for the benefit of patients; development of a healthcare app; making improvements in the way information is shared across healthcare organisations. Roles involve identifying service requirements, working with systems developers and implementing final products. Ensuring projects are delivered within quality, time and cost constraints is a key part of the role.

Who will it appeal to?
Anyone interested in starting and seeing through a successful health informatics project or task will thrive in this environment.

Project management skills/qualifications and experience of working in informatics are very attractive to employers. Knowledge or experience of ICT is desirable, but not essential.

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<table>
<thead>
<tr>
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<tr>
<td><strong>Business analyst</strong></td>
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<td></td>
<td>interviews key stakeholders and reviews documentation</td>
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<td></td>
<td>analyses structures, systems processes and policies</td>
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<td></td>
<td>facilitates improvements to IT systems as a result of their analysis</td>
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<tr>
<td><strong>Programme and project support officer</strong></td>
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<tr>
<td></td>
<td>sets up and maintains project documentation</td>
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<tr>
<td></td>
<td>produces regular and ad hoc project reports</td>
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<td></td>
<td>monitors project risks and achievement of milestones</td>
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<tr>
<td><strong>Senior project manager</strong></td>
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<tr>
<td></td>
<td>plans the project and manages the team</td>
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<tr>
<td></td>
<td>identifies and manages risks</td>
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<tr>
<td></td>
<td>ensures the project stays on track and delivers on time</td>
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For more information about roles in project and programme management, visit [www.healthcareers.nhs.uk/projectandprogrammemanagement](http://www.healthcareers.nhs.uk/projectandprogrammemanagement)
Real-life stories
Education and training

**Name**
Claire Garner

**Job title**
Digital training and development manager, Nottinghamshire Health Informatics Service

**Entry route**
Clerical officer

“I love supporting and developing staff to reach their potential.”

How I got into the role

I worked for a number of years as an admissions manager in medical records but was always interested in working in a training role and I jumped at the chance when an IT trainer role was advertised. It was the start of my health informatics career and the best decision I could have made.

I’ve progressed within IT training and am doing the role I always aspired to!

What I do

I’m responsible for two of our health informatics services: training and products. The training team delivers clinical IT training and support to 5000 acute trust staff and more than 1000 staff working in GP practices and community settings, so there’s a lot to keep track of!

I look after the health informatics apprentices too and have regular meetings with the apprentices and their managers. I support the apprentices to apply for jobs and prepare for interviews. I also process requests for work experience placements and work with managers to create work placement programmes.

I start my day checking what meetings I have in the diary and that necessary actions have been completed. I can receive up to 100 emails a day so a large part of my day is spent dealing with them. I have two team leaders who report to me so I have calls or meetings with them to check on issues and get an update on the projects their teams are delivering.

The best bits

I love supporting and developing staff and the best part is developing an individual from apprentice into a senior role. Many of our apprentices go on to gain a role within our service and I’ve created numerous career pathways since implementing the apprenticeship programme, enabling people to join on lower band roles and progress to more senior positions.
Health records and patient administration

Name
Samantha Hodge

Job title
Information quality clerical officer,
The Royal Liverpool and Broadgreen University Hospitals Trust

Entry route
Health informatics apprenticeship

“Working and learning in a supportive and encouraging environment has really boosted my confidence.”

How I got into the role
I decided to go down the apprenticeship route as a way of earning, learning and gaining practical experience in the workplace. I found the Business Administration Course on the Internet, which I applied for. I was contacted by Skills for Health who told me about the pilot health informatics course, and asked if I was interested in applying. I had never heard of the term ‘health informatics’, however I was intrigued by the prospect of working for the NHS, in a non-clinical role.

My apprenticeship placement was in the Information Quality department at The Royal Liverpool and Broadgreen University Hospital. As a cadet, I am near the bottom of the career framework, which is an incentive for me as I know there is room to progress further in my career. As a result of my health informatics apprenticeship I recently gained full-time employment.

What I do
As an information quality clerical officer, my daily duties include monitoring patient information on the trust administrative systems, and amending any errors in a timely manner to ensure patient care is not compromised. I also handle telephone calls, read and respond to emails, open and redirect mail and file both manual and electronic records.

The best bits
I was both honoured and thrilled to have won the Cheshire and Merseyside Cadet of the Year. When I started, I was a relatively shy and quiet individual, and am amazed at how far I have come in a relatively short space of time. Working and learning in a supportive and encouraging environment has really boosted my confidence and I feel that my colleagues have really helped me to challenge myself and do things out of my comfort zone. I even gave a speech as part of a National Apprenticeship Week event and even did a live radio interview!
Information and communication technology (ICT)

Name
Harry Brown

Job title
IT support technician, Wirral University Teaching Hospital NHS Foundation Trust

Entry route
Apprenticeship

“The idea of helping the NHS to function whilst working with computers was appealing.”

How I got into the role

When I was younger, some of my close relatives, who were working in IT, introduced me to computers. Through using computers, for example playing games, I began to develop an interest in them. I proceeded to develop my IT knowledge further through school work and I began building and fixing computers as a hobby.

I wanted to have a job that interested me so I decided that a career in IT was it for me. I applied for an informatics apprenticeship with the NHS and was successful. The idea of helping the NHS to function whilst working with computers was also very appealing.

What I do

I investigate and resolve technical issues with hardware and software in four different NHS sites, including two hospitals. The issues can vary from fixing a broken printer to fixing clinical software that is not working.

I also have to assist in planning and carrying out new hardware and software installations. This includes upgrading all the electrical appliances in clinics and other places.

The best bits

My favourite part of the job is when I walk into a department or ward where I have recently helped to install devices and seeing how the department is fully operational and that the devices are being used to help people get better.

My apprenticeship has helped my professional development and allowed me to develop a greater understanding of a wide range of topics relating to my job role, through tutor-led learning. I also gained on-the-job experience and a few internationally recognised qualifications such as the Microsoft Office Master Qualification.

I am most proud of being offered a full-time job after completing my apprenticeship with my current employer. My employer is looking to develop my team leadership skills and technical knowledge further by sending me on more courses to gain qualifications such as the Comptia A+. 
How I got into the role

I had been working as a ward clerk for a couple of years when I was approached about an opportunity in clinical coding. Biology was my favourite science subject at school and my employer thought the role might interest me.

I didn’t know much about clinical coding, but talking to colleagues made me realise what a difference it makes and it seemed a good development opportunity. I didn’t realise then it would be the most important career decision I would ever make!

I got stuck in to the role and completed all the training on offer. I passed the National Clinical Coding Qualification (NCCQ) which meant I was an accredited clinical coder (ACC). I moved into an auditor role after finishing the NHS Digital Clinical Coding Auditor Programme.

I am currently working in a specialist information assurance role across a group of hospitals.

What I do

Coding is often seen as data entry, but it’s really about creating data. Clinical coders have the challenge of taking information about a patient’s stay in hospital and creating a summary, which is then translated into codes. I spend most of my days analysing coded data to ensure it is high quality and fit for purpose. It helps to make sure that hospitals receive the funding they need, so it’s vital we get it right.

Some days, I undertake routine monitoring looking for any inaccuracies in the data before correcting them. Some errors are due to mistakes made by clinical coders so I support their development to see how things can be improved. Others might come from data submitted by clinicians, in which case I provide a presentation or teaching session to try and sort those things out. I love that part of my job because I get to engage with different people across the hospitals.

The best bits

Knowing the data we create plays an important part in improving patient care is the best bit of the job for me. And my interest in biology helps me understand the medical terminology which has given me more confidence.

Passing the National Clinical Coding Qualification (NCCQ) was a really important milestone. I learned a lot and it enabled me to apply for the Clinical Coding Auditor Programme.
Library, knowledge and information services

Name
Holly Case

Job title
Outreach librarian, Surrey and Sussex Healthcare NHS Trust

Entry route
History degree

“My favourite part of the job is helping people.”

How I got into the role

From an early age, I wanted to be a librarian but it wasn’t until I graduated that I started to seriously consider it as a career option. While working for an insurance company, I decided to do a Master’s in Library and Information Management.

My first job before joining the NHS was as a librarian in public libraries. It was similar to my current role as an outreach librarian and, as soon as this job came up, I jumped at the chance. It was everything I’d been looking for!

What I do

An outreach librarian’s day is never the same! I work with up to eight different organisations, providing training sessions, inductions and support. This can mean I’m out and about a lot, which I love, but it also means that my days in the office are precious when I can catch up and spend time with my colleagues.

I balance my time between the outreach work and providing evidence to support frontline NHS staff, such as doctors, nurses and occupational therapists. It can make a real different to patients’ lives. I also chair a national group looking at how we can better support patients and the public with knowledge and information. I love being involved at a national level and getting the opportunity to support my colleagues across the country.

The best bits

My favourite part of the job is helping people. Whether it’s telling a room full of GPs about an electronic resource that will make their working lives easier, or supporting staff in their qualifications, my job often leaves me with an amazing sense of achievement.

Many people think that librarians sit in the library stamping books and shushing people, but I am the complete opposite, as are the majority of librarians in the NHS!

One of my proudest moments was winning an award for Partner Member of the Year from one of the organisations I work with.
**How I got into the role**

Health informatics was an obvious career choice for me as I wanted to work for the NHS and also had experience of analytics and statistics. After graduating, I applied for the NHS Graduate Management Training Scheme. I was really pleased to get a place as it is highly competitive.

**What I do**

I spent two years on the scheme experiencing health informatics in different settings. My first year was spent in information analysis at Leeds and York Partnerships NHS Foundation Trust. It involved developing and delivering intelligence for senior colleagues and doctors that showed local trends in mental healthcare and identified areas for service improvement.

Between NHS placements, I got to experience the private sector at a company offering services to the NHS. It offered the chance to work in a commercial setting as a market analyst and research how the company’s products were perceived by the health service.

For the final year, I joined the Health and Social Care Information Centre (now NHS Digital) as a business analyst. I worked on a project establishing a new service collecting and disseminating post-operative patient survey information nationally. I really enjoyed being involved in the creation and improvement of systems and services and knew that business analysis was the career for me.

After completing the scheme, I took a full-time post at NHS Digital as a Higher Business Analyst gaining more responsibility and autonomy. NHS Digital values professional development, so I’m always learning new skills and am now studying towards a business analysis diploma.

**The best bits**

Informatics is critical to forging a sustainable NHS. In my current role, I am able to design services and build tools that provide the health sector with intelligence to drive efficiency and improve outcomes. I get great satisfaction from seeing something I helped create be so important to patient care.
Getting started in health informatics

Anyone can enjoy a career in health informatics. There are roles for everyone, no matter what qualifications or previous work experience you have. Wherever you start, you will have the chance to learn on the job and carry on studying if you choose.

Health informatics staff work in every area of healthcare on a huge variety of projects and tasks. This means that the scope for people with different interests, skills and qualifications is enormous.

People come into health informatics from many different backgrounds. They include librarians, academics, scientists, business specialists, statisticians, managers, IT specialists and also clinicians such as doctors, nurses and allied health professionals. They come from within healthcare, like the clinicians who move over into a full-time health informatics role, or they come from outside, bringing their specialist expertise to the health sector.

The entry requirements will vary depending on the job. It is possible to enter some roles with no formal qualifications, while others will require very specific professional qualifications, relevant experience and a commitment to professional registration.

You can take up a career in health informatics straight from school, college or university, or from a previous unrelated career, entering at the appropriate level and choosing whether to remain at that level or progress after further study and experience.

This section outlines your options and some of the routes into health informatics.

For more information on roles in health informatics in the health sector, go to www.healthcareers.nhs.uk/healthinformatics
Remember that if you’re applying for a role either directly in the NHS or in an organisation that provides NHS services, you may be asked to show how you think the values of the NHS Constitution apply in your everyday work. Find out more at www.healthcareers.nhs.uk/nhsconstitution and www.healthcareers.nhs.uk/6Cs

Work placements and volunteering

Doing volunteer work or arranging a work placement is the best way to find out if a role is right for you. It will give you experience of the working environment, show you the kind of work you would be doing and the people you would be helping, and let you talk with people who are already doing the job.

The number and type of work placements or volunteering opportunities available vary, depending on where you are in the country. Experience doesn’t always need to be gained in the NHS either, so think about the independent health sector, charities and other organisations where healthcare is provided.

For more information about opportunities in your area, get in touch with your local healthcare providers or voluntary organisations to find out what is available. You can find more information on gaining experience at www.healthcareers.nhs.uk/experience

Entry level

You may not need formal qualifications to begin working in health informatics, although GCSEs or equivalent qualifications and/or some work experience may be an advantage. Entry level certificates and vocational qualifications at levels 1 and 2 offer an alternative means of acquiring essential skills, providing a mix of classroom learning, creative thinking and hands-on experience.

At entry level, you can apply for a range of assistant jobs, working in libraries, outpatient departments or IT helpdesks, supporting healthcare and health informatics professionals. Jobs at this level include assistant library or information officers and IT helpdesk advisers.

You will also be given access to IT training and assessment through the IT Skills Pathway. It allows everyone working with IT to identify their training requirements and learn new skills.
Apprenticeships

Apprenticeships in health informatics combine on-the-job training and work experience while in paid employment, with formal off-the-job training. Apprenticeships are open to anyone over 16 and not in full-time education. Availability varies around the country, so it’s best to speak to your local healthcare provider for more information about opportunities in your area.

Examples of apprenticeship standards that have been approved include library, information and archive services assistant (level 3); software tester, software developer and intelligence analyst (all at level 4); project manager and digital and technology solutions professional - both at level 6 (degree).

Health informatics qualifications

Currently there are a few specific qualifications developed and certified directly by the NHS for health informatics. For clinical coders, there is the National Clinical Coding Qualification, which is available through the Institute of Health Records and Information Management, the awarding and administrative body. An increasing number of undergraduate and postgraduate courses in health informatics are available. These can be gained as part of a degree or masters qualification, or you can study for them within the job role. Many universities now have part-time Master’s courses and offer diplomas in health informatics, as well as undergraduate courses in health informatics management.

Foundation degrees, designed primarily for existing healthcare employees, combine academic study with workplace learning, equipping you with the relevant knowledge, understanding and skills for your chosen career path. A number of foundation degrees are available in health informatics.

Many staff taking up health informatics roles in the NHS will already have many of the core skills needed for the job and, once employed, will be supported in identifying any gaps and receive help towards bridging them.
**Graduate opportunities**

The NHS Graduate Management Training Scheme has an option to specialise in informatics management.

A strong academic background and sound management experience in health opens up opportunities in senior management positions in health informatics.

Staff working in information management often hold a degree or Master’s degree in health informatics.

A degree in library and information studies or information science will allow you to join the professional tier of the library service. For a very senior role, such as knowledge services manager, you may also need a postgraduate qualification in information and library work.

A particularly specialist role, such as a head of archives and museums, might require specific qualifications or experience, such as a postgraduate qualification in museum or heritage studies.

With a first degree in a subject such as genetics, biology, computer science or health informatics (courses with significant IT content), you could consider a place on the NHS Scientist Training Programme (STP), specialising in an area of clinical bioinformatics. The STP lasts for three years and offers you the opportunity to gain approved and accredited workplace-based training and a Master’s degree in your chosen area of work.

For information on the graduate management training scheme for the NHS, visit [www.nhsgraduates.co.uk](http://www.nhsgraduates.co.uk)

For more information about clinical bioinformatics, visit [www.healthcareers.nhs.uk/clinicalbioinformatics](http://www.healthcareers.nhs.uk/clinicalbioinformatics)
Next steps and progressing your career

If you want to work in health, it’s important to find out as much information as you can about the qualifications you need and the opportunities that are available.

If you need a degree, UCAS can advise on which universities offer which courses. Each university will be able to tell you what it looks for in applicants. For example, getting some work experience is an excellent way of showing your commitment and enthusiasm.

Whatever position you’re in now, the Health Careers service can help. Call us on 0345 60 60 655, email advice@healthcareers.nhs.uk or visit our website at www.healthcareers.nhs.uk

To search for jobs, with organisations providing NHS services go to www.jobs.nhs.uk

To find information about professional bodies and other organisations relevant to health informatics careers, see the appropriate role pages on our website www.healthcareers.nhs.uk/healthinformatics
Here are some other things you can be doing, depending on where you are right now:

<table>
<thead>
<tr>
<th>Where are you now?</th>
<th>What should you do now?</th>
<th>Who can help?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studying for your GCSEs</td>
<td>✞ Check what your likely exam grades/results will be. ☞ Explore routes into your chosen career – will you need a degree or other qualification before you join, or will the employer train you on the job? ☞ Are there any particular skills or experience that will improve your chances of getting into your chosen career? ✞ Enquire about volunteering or work experience. ✞ Find out if you need any specific A-levels, or equivalent qualifications. ✞ Consider the option of an apprenticeship.</td>
<td>Subject teachers Your careers adviser Professional bodies Health Careers National Careers Service</td>
</tr>
<tr>
<td>Studying for A-levels or another course at your school or a local college</td>
<td>As GCSEs, plus: ✞ If you need to study a particular degree, investigate which universities offer it. ✞ Investigate any further qualifications you might need for your chosen role. ✞ Search the NHS Jobs website at <a href="http://www.jobs.nhs.uk">www.jobs.nhs.uk</a> and speak to your local trust to get an idea of current job and apprenticeship vacancies. ✞ Also visit <a href="http://www.gov.uk/apply-apprenticeship">www.gov.uk/apply-apprenticeship</a> to look for apprenticeship vacancies.</td>
<td>Subject teachers Your careers adviser UCAS Health Careers Professional bodies NHS Jobs National Careers Service</td>
</tr>
<tr>
<td>At university</td>
<td>As A-levels, plus: ✞ Visit the Graduate Management Training Scheme website at <a href="http://www.nhsgraduates.co.uk">www.nhsgraduates.co.uk</a> ✞ Visit the National School of Healthcare Science for details about the NHS Scientist Training Programme at <a href="http://www.nshcs.hee.nhs.uk/join-programme/nhs-scientist-training-programme">www.nshcs.hee.nhs.uk/join-programme/nhs-scientist-training-programme</a></td>
<td>University careers service Health Careers Professional bodies NHS Jobs National Careers Service</td>
</tr>
<tr>
<td>Looking for a new career</td>
<td>As A-levels, plus: ✞ Find out if you will need to retrain before you apply for new roles or if the NHS will train you while you are working.</td>
<td>Your careers adviser Health Careers Jobcentre Plus Professional bodies NHS Jobs UCAS National Careers Service</td>
</tr>
</tbody>
</table>
Fulfil your potential

The NHS is committed to offering development and learning opportunities for all full-time and part-time staff. If you work for the NHS, no matter where you start, you’ll have access to extra training and be given every chance to progress within the organisation. You’ll receive an annual personal review and development plan to support your career progression.

You will also be encouraged to extend your range of skills and knowledge and take on new responsibilities through the Knowledge and Skills Framework (KSF). The KSF is available on the NHS Employers website: www.nhsemployers.org/SimplifiedKSF

The example career routes on p.38-39 makes it easy to see at a glance how you can progress within your chosen career.

Other organisations that provide healthcare and work to prevent ill health will offer similar development opportunities and the chance to review your work. It’s a good idea to discuss career development with any employer you are considering.
Benefits of working in the NHS

If you work in the NHS, you will enjoy one of the most competitive and flexible benefits packages offered by any employer in the UK and a wealth of opportunities to develop your career. You will join one of the country’s most respected organisations and one which has the values of compassionate care and staff wellbeing at its very heart.

If you work in the private or voluntary sectors or another public sector organisation, your pay and benefits will vary depending on your employer.

Your pay in the NHS

Most jobs are covered by the Agenda for Change (AfC) pay scales. This pay system covers all staff except doctors, dentists and the most senior managers. The NHS job evaluation system determines a points score, which is used to match jobs to pay bands and determine levels of basic salary. Each pay band has a number of pay points.

Your career in health informatics could start at an AfC band 1 as a helpdesk adviser, rising to band 7 for an information management and technology section manager. More senior managerial posts attract higher bandings or are covered by the salary scheme for very senior managers in the NHS. Examples of other roles in this group, with typical AfC pay bands, include clinical coding support worker (band 2), service desk operator (band 3), information officer (bands 4–5), systems developer (band 5) and health records manager (band 7).

For general information on pay bands, visit www.healthcareers.nhs.uk/pay

For salary information for specific roles, visit the relevant role page on our website www.healthcareers.nhs.uk/healthinformatics
One of the UK’s best pension schemes

The NHS Pension Scheme is one of the most generous in the UK. Every new employee automatically becomes a member, unless you choose to opt out.

Other employment benefits for NHS staff

Everyone employed on NHS terms and conditions of service (Agenda for Change) is entitled to:

- a standard working week of 37.5 hours
- holiday entitlements of 27 days per year, plus eight general and public holidays, rising to 33 days after ten years’ service
- pay enhancements to reward out-of-hours, shift and overtime working
- career and pay progression based on the application of knowledge and skills
- annual personal development review to support career aspirations
- occupational health services
- study leave for sponsored courses

Many of these benefits apply across the whole of the NHS, although local organisations may offer additional benefits, such as cycle to work schemes and nurseries. Many local shops, restaurants and services offer discounts to health staff too, including most gyms and leisure centres. Health Service Discounts is an employee benefit provider for many NHS organisations and offers discounts and deals for NHS staff on shopping, holidays and financial services from well-known brands: www.healthservicediscounts.com.

Health and wellbeing at work and your work-life balance

The NHS is committed to helping staff to stay well, including serving healthier food, promoting physical activity, reducing stress, and providing health checks covering mental health and musculoskeletal problems.

The NHS will help you combine your work with commitments in your everyday life and at different stages of your career - whether you’re studying for a new qualification, raising a family or have other responsibilities.

The size and diversity of the NHS means we can offer you a range of flexible working and retirement opportunities. Part-time roles and job-share opportunities are often available, as well as term-time only, evening and weekend positions. Many people take an extended break to look after young children or other dependants who need special care, or to study full-time.

As well as advice and support for people looking after sick or elderly relatives, the NHS provides a range of childcare services for employees, including:

- nursery care
- after-school and breakfast clubs
- holiday play schemes
- emergency care

You can find more information on health and well-being at work at www.nhsemployers.org/healthyworkplaces.

Get more information about the benefits and opportunities offered by the NHS at www.healthcareers.nhs.uk/payandbenefits.
Example career routes

This diagram has been designed to provide examples of how staff can progress throughout their career in health.

The real-life story on page 22 describes how Claire Garner has progressed within health informatics. You can follow her career path in the white boxes on the diagram, alongside other potential paths in the different areas of health.

<table>
<thead>
<tr>
<th>Initial entry level jobs</th>
<th>Support workers</th>
<th>Senior healthcare assistants/technicians</th>
<th>Assistant practitioners/Associate practitioners</th>
<th>Practitioners</th>
<th>Senior practitioners/specialist practitioners</th>
<th>Advanced practitioners</th>
<th>Consultant practitioners</th>
<th>More senior staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental care team</td>
<td>Dentist/health</td>
<td>Dental nurse</td>
<td>Student dental technician</td>
<td>Assistant dental technician</td>
<td>Dental technician</td>
<td>Senior dental technologist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health records assistant</td>
<td>Support desk assistant</td>
<td>Medical records clerk</td>
<td>ICT trainer</td>
<td>ICT training coordinator</td>
<td>ICT training manager</td>
<td>Digital training and development manager</td>
<td>Access, booking and choice manager</td>
<td>Director of information management and technology</td>
</tr>
<tr>
<td>Allied health professions</td>
<td>Health records assistant</td>
<td>Support desk assistant</td>
<td>Medical records clerk</td>
<td>ICT trainer</td>
<td>ICT training coordinator</td>
<td>ICT training manager</td>
<td>Digital training and development manager</td>
<td>Access, booking and choice manager</td>
</tr>
<tr>
<td>Midwifery</td>
<td>Healthcare assistant (maternity)</td>
<td>Maternity support worker</td>
<td>Midwife</td>
<td>Community midwife</td>
<td>Head of midwifery</td>
<td>Consultant midwife</td>
<td>Director of maternity services</td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Pharmacy porter</td>
<td>Medicines counter assistant</td>
<td>Senior pharmacy assistant</td>
<td>Pharmacy technician</td>
<td>Pre-registration pharmacist</td>
<td>Pharmacist</td>
<td>Lead pharmacist for admissions</td>
<td>Director of clinical support services</td>
</tr>
<tr>
<td>Psychological therapies</td>
<td>Psychological therapist</td>
<td>Healthcare assistant (mental health)</td>
<td>Mental health support worker</td>
<td>Assistant clinical psychologist</td>
<td>Psychological wellbeing practitioner</td>
<td>High intensity therapist</td>
<td>Consultant clinical psychologist</td>
<td>Assistant director - clinical professional practice</td>
</tr>
<tr>
<td>Public health</td>
<td>Public health champion</td>
<td>Health champion</td>
<td>Health trainer</td>
<td>Stop smoking adviser</td>
<td>Health improvement practitioner</td>
<td>Senior health improvement practitioner</td>
<td>Specialty registrar in public health</td>
<td>Public health consultant</td>
</tr>
<tr>
<td>Wider healthcare team</td>
<td>Clerical officer</td>
<td>Medical records officer</td>
<td>Admissions coordinator</td>
<td>Admissions manager</td>
<td>Catering manager</td>
<td>Chaplain</td>
<td>Head of estates</td>
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</tbody>
</table>

It gives an illustration of a range of health careers and how someone could progress through different levels. It is not exhaustive; details on other careers can be found in the relevant Health Careers booklets and on the Health Careers website.