

Developing a job description for a Chief Clinical Informatics (or Information) Officer (CCIO)

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1. Introduction

The Faculty of Clinical Informatics (FCI) recognises that organisations are at different stages of their digital journey and that leadership of this agenda is pivotal to success. This guidance sets out the role and remit a Chief Clinical Informatics Officer (CCIO) has in leading and supporting the organisation on this journey. A CCIO, from any clinical background, is a senior clinical leadership role that contributes to the strategic direction and operational delivery of the organisation, specifically in relation to informatics. Their presence within an organisation helps to ensure that informatics and IT development initiatives are designed with users firmly in mind. Because health IT supports many functions and services within NHS organisations, the CCIO, working with a wider team, will assume a crucial coordinating function.^{1,2}

At a practical level, the CCIO is the bridge between strategy, clinical services, clinicians, IT professionals and services, and often service improvement colleagues. As well as representing the interests of clinical service provision, service users and the views of colleagues, in discussions with IT professionals and other senior colleagues, the CCIO is responsible for translating the strategic implications of informatics to clinicians.¹

A multi-professional working group was established from the FCI Membership (see Appendix A for working group membership) to develop this guidance. The guidance, model job description and person specification (see Appendix B) were developed based on the extensive knowledge and experience of the working group, utilising the FCI Core Competency Framework³ (CF), also informed by the group's review of existing job descriptions. The full report detailing the group's methods is available on the FCI website³.

2. Purpose

This paper aims to provide guidance to all those looking to recruit a CCIO and who require a job description that outlines the requirements for the role. It may also be useful to those currently employed as a CCIO or with aspirations to be so, who may gain clarity about the competencies required for the role. This document should be viewed in combination with the exemplar job description and person specification provided in [Appendix B](#), the report of the work carried out to develop this guidance³, and the FCI Core Competency Framework⁴. This material aims to provide UK-wide, multi-professional and multi-sector guidance. It may also be relevant to international organisations with a similar health system to that of the UK. The FCI fully acknowledges that, for many organisations, this guidance may be aspirational but could be used to inform developing roles in line with each organisation's priorities and informatics requirements.

¹ Read, C., (2015) *CCIO Network Handbook, CCIOs: who, what, why, where, when*; <https://www.digitalhealth.net/eshots/CCIO/2015/Handbook/chap2.html#:~:text=At%20a%20practical%20level%2C%20a,messages%20from%20IT%20to%20clinicians>. [Accessed 28.5.21]

² Wachter, R. (2016); *Making IT Work: Harnessing the Power of Health Information Technology to Improve Care in England Report of the National Advisory Group on Health Information Technology in England*; Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/550866/Wachter_Review_Accessible.pdf [Accessed 31.5.21]

³ Job descriptions; Available at: <https://facultyofclinicalinformatics.org.uk/job-descriptions>

⁴ Core Competency Framework for Clinical Informaticians; Available at: <https://facultyofclinicalinformatics.org.uk/core-competency-framework> [Accessed 14.6.21]

3. Key principles

3.1. Competencies

The FCI Core Competencies Project was established to meet the organisation's [aims](#)⁵ and set out the core competencies required for an individual to be recognised as a professional clinical informatician.

Clinical informatics has been defined by the community as *'the application of data and information technology to improve patient and population health, care and wellbeing outcomes and to advance treatment and the delivery of personalised, coordinated support from health and social care.'*⁶

A clinical informatician *'uses their clinical knowledge and experience of informatics concepts, methods and tools to promote patient and population care that is person-centred, ethical, safe, effective, efficient, timely, and equitable.'*⁶

The FCI CF sets out a core common set of competencies required for a clinical informatician to effectively perform, regardless of the health or care background in which they have entered the field or their current area of practice within this diverse field.

'Competency' has been defined in terms of *'what the individual brings to the job (the input), what the individual does in the job (the process), or what is actually achieved (the output).'*⁶ It can be related to skills, knowledge, or behaviours. A competency framework will show the array of abilities across many domains or aspects in a certain context. Competencies require descriptive qualifiers to define the relevant abilities and context.

The CF demonstrates the breadth and depth of knowledge a clinical informatician is required to have. In total there are 111 competencies described across a total of 36 categories, across six domains: five domains have an even distribution, but there are 34 competencies in domain 2, which focusses on information systems and technologies.

Although other career frameworks exist, such as the Skills Framework for the Information Age (SFIA)⁷ and the Federation for Informatics Professionals (FedIP) Specification⁸, the FCI CF is unique to clinical informaticians in the UK.

There is a range of perspectives on the types of skills and experience that are essential to be a successful CCIO – this was true within the working group that developed this guidance and in the discussion that has been observed across social media, in blog posts^{9,10} and on the Digital Health Discourse forum. However, it is the FCI's position that a CCIO, as the senior clinical informatician, should be able to and/or *aspire* to be able to demonstrate competence in line with all 111 of the core competencies in the FCI CF. See also, section 3.2 Local context and personal development

⁵ Vision, values and plans; Available at: <https://facultyofclinicalinformatics.org.uk/vision-values-and-plans> [Accessed 28.5.21]

⁶ Hassey, et al., (2020) *Development of Core Competencies for Clinical Informaticians in the United Kingdom. Phase 1 – Summary Report*; Available at: <https://facultyofclinicalinformatics.org.uk/core-competencies-phase1> [Accessed 28.5.21]

⁷ SFIA; <https://sfia-online.org/en> [Accessed 29.5.21]

⁸ BCS; *Federation for Informatics Professionals (FedIP) Specification*; Available at: <https://www.bcs.org/media/1056/fedip-standard.pdf> [Accessed 29.5.21]

⁹ Rahim, A., (2019) *The role of CCIOs in Digital Transformation of the NHS*; Available at: <https://www.england.nhs.uk/blog/the-role-of-ccios-in-digital-transformation-of-the-nhs/> [Accessed 28.5.21]

¹⁰ Lockley, J., (2012) *The role of the CCIO in the CCG*; Available at: <https://www.digitalhealth.net/2012/05/the-role-of-the-ccio-in-the-ccg/> [Accessed 28.5.21]

below.

3.2. Local context and personal development

As described in 3.1, above, the FCI CF provides a set of core competencies for any clinical informatician to effectively perform. However, the role of a clinical informatician, and of a CCIO, is relatively new in relation to other clinical specialities. The first NHS national CCIO role was appointed in 2016,¹¹ although local CCIOs were in place before this time. The critical role of the CCIO, who is also a key strategic leader within NHS and care organisations, was explicitly emphasised in both the 2016 Wachter Report² and the Topol Review¹².

When recruiting a CCIO, an organisation will consider specific, context-related requirements, especially in the immediate term. It is felt important that all the six domains contained within the FCI CF are reflected within the role descriptor, however, the employing organisation will determine which categories and competencies within these domains are of primary importance and which can be deemed as “desirable” or aspirational.

Whilst recognising the importance of applicants demonstrating knowledge and skills in relation to all the domains within the FCI CF, it is also accepted that, in practice, satisfying all the individual 111 competencies may not be achieved. Therefore, it is recommended that formal plans be put in place to support gaps in knowledge as identified areas for personal development. Such gaps may also be filled or supported by other individuals within the CCIO team¹⁴ (see also sections 3.7 and 3.8 below). As the CF competencies are critical to the role of all clinical informaticians, it is also recognised that some applicants may exceed many or most of the requirements, which reflects the purpose of the CCIO.

The FCI has committed to reviewing the CF annually and to developing levels across the competencies to take the *core* competency framework to a further *advanced* level.¹³ In future, this advanced competency framework for clinical informaticians will be relevant to the development of the CCIO as an advanced and senior practitioner role.

3.3. Professions and job title

The CCIO is a role that an individual can fulfil from **any professional background** who is a member of a statutory body registered by the Professional Standards Authority for Health and Social Care and can demonstrate competencies outlined in the FCI CF⁴. Although some current roles are advertised as being relevant to a specific profession (Chief Nursing Information Officer (CNIO) or Chief Medical Information Officer (CMIO), for example), we recommend that the CCIO role, a single individual, within an organisation should be focused on the competencies of the individual and therefore potentially open to all clinical backgrounds. Similarly, the FCI CF, which all clinical informatician and CCIO JDs should be based on, is common to all professional backgrounds. Although it is advocated that there is only one CCIO role, it is expected that the individual will work with their multi-professional lead colleagues and provide leadership to ‘the office’ of the CCIO¹⁴ as well as diffusing informatics knowledge throughout the organisation. If the tasks required for a role are specific to a particular profession then it is suggested that these should use alternative job titles, e.g. Clinical Nurse Informatician, Clinical Medical Informatician or leads for these roles etc. and that the title

¹¹ Hoeksma, J., (2016) *Former Cambridge CEO appointed first national CCIO*; Available at: <https://www.digitalhealth.net/2016/07/former-cambridge-ceo-appointed-first-national-ccio/> [Accessed 29.5.21]

¹² Topol, E. (2019) *The Topol Review. Preparing the healthcare workforce to deliver the digital future*. Available at: <https://topol.hee.nhs.uk/> [Accessed 18.6.21]

¹³ Faculty of Clinical Informatics (2021); *Implementation of the FCI Core Competency Framework (CCF)*; Available at: <https://facultyofclinicalinformatics.org.uk/ccf-implementation> [Accessed 29.5.21]

CCIO is reserved for the single most senior clinical informatician within any organisation. It is a role that requires diversity and flexibility.¹⁴

3.4. Clinical practice

A CCIO should have and maintain credibility with their peers. This may include having a concurrent patient-facing role for part of their work which is desirable but not essential. Credibility can be achieved in other ways, for example, through management, teaching, research or contributing to professional activities. What is important is that the CCIO continues to understand the context, aspirations and challenges associated with the organisation and the wider informatics agenda. It is also recommended that CCIOs have meaningful clinical experience built over time to equip them with a good understanding of the requirements of clinicians, clinical care and service delivery and how informatics can support further improvements in the care of patients and the efficiency and effectiveness of the organisation.

3.5. Hours

In terms of time commitment, this will be determined by the employing organisation and take cognisance of the scope of the role.

The Wachter report (2016) recommended that an average sized Trust in England should have a CCIO who devotes at least 75% of their time to this task.¹⁵ The Wachter advisory group estimated that an average-sized trust in England should have approximately five (WTE) clinical informaticians (“well-qualified clinicians with advanced informatics training”) representing a range of disciplines (medicine, nursing, allied health and pharmacy).¹⁵ The CCIO, although an integral part of this team, should provide overall leadership and represent the interests of all professions, particularly in relation to organisational strategy. Organisations are advised to consider this guidance in line with local needs and service provision. In addition, the team of clinical informaticians should work closely with their information technology colleagues to support the delivery of the organisation’s strategic aims. The CCIO also has a role in supporting the personal development of the competencies of the clinical informaticians within the team and to support a route to career progression.

3.6. Grade

The CCIO is a senior/Executive role and the grade and associated salary needs to reflect this. In line with section 3.3 above, it is suggested that the salary is presented in a similar way to the other key Director/ Executive roles that attract clinicians within the organisation. The post needs to be appropriately funded and empowered to deliver on its remit and responsibilities; therefore, it is suggested the JD should reflect this level of scope and accountability and appropriate remuneration.

3.7. Key relationships

The CCIO should be given appropriate authority to be in a position to influence¹⁵. We recommend that, wherever possible, the postholder reports to the Chief Executive Officer (CEO) with a ‘dotted’ reporting line to the Chief Information Officer (CIO) and not, as is sometimes currently found, the

¹⁴ Cavaye, M & Stewart, D. (2021); *Is now the time for the ‘Office of the CCIO’? — A State of the Nation Reflection on Digital Clinical Leadership*; Available at: <https://medium.com/sabpdigital/is-now-the-time-for-the-office-of-the-ccio-cb92c632cd2e> [Accessed 1.6.21]

¹⁵ Wachter, R. (2016); *Making IT Work: Harnessing the Power of Health Information Technology to Improve Care in England Report of the National Advisory Group on Health Information Technology in England*; Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/550866/Wachter_Review_Accessible.pdf [Accessed 31.5.21]

Chief Medical Officer (CMO) or Chief Financial Officer (CFO). This will ensure that:

- the CCIO contributes to the development of the organisations’ strategies
- the organisation's monitoring and evaluation remains independent
- the CCIO role has equal value to others in the Executive Team in terms of high-level decision making.

Therefore, the CCIO should have direct access to the Executive Team and Board, particularly when developing strategy; it is to the lead of this forum that they are accountable. In addition, the CCIO must have sufficient resources and authority to lead successful digitisation and benefits realisation within the organisation. See also 3.8 below.

3.8. Organisational chart

Below is an **example** of an organisational chart showing the key relationships of a CCIO. The CCIO represents all professions and is supported by a team of individuals who provide additional expertise across all professions. The CCIO’s team will vary between organisations based on the size of the organisation and the skillsets, clinical backgrounds and experience of all the individuals in the team. The CCIO is an Executive level role, with direct reporting to the CEO and dotted reporting lines to the CIO. See also, 3.7 Key relationships, above.

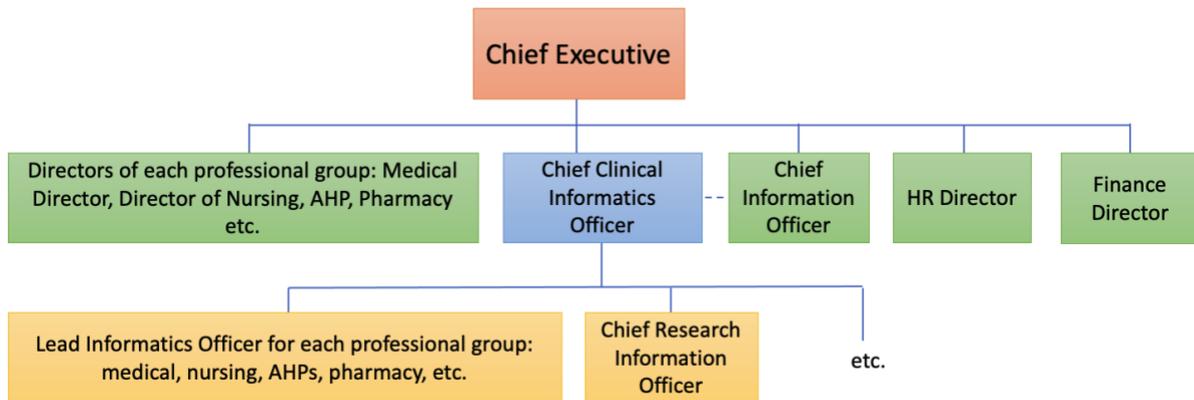


Figure 1: Example of an organisational chart to show key relationships between senior leaders.

Appendix A: CCIO job description development working group members

Name	Role
Lesley Holdsworth (Chair)	Clinical Lead for Digital Health and Care, Scottish Government
Stephen Baguley	Consultant Sexual Health & HIV Physician, NHS Grampian Clinical Director eHealth, NHS Grampian Clinical Chair of Health Board Digital Leads, Scotland
Anna Bunch	Digital Medicines Programme Lead Portsmouth Hospitals NHS Trust
Vaibhav Joshi	Chief Data Officer, Centogene
Ramandeep Kaur	EPMA Lead Pharmacist Barking, Havering and Redbridge University Hospitals NHS Trust
Caroline Monzon	Divisional Nurse Informatics Lead Surgery, Women's and Oncology (SUWON) and Clinical Support Services (CSS) Oxford University Hospital NHS Foundation Trust
Brendan O'Brien	Chief Clinical Informatics Officer (CCIO) at NHS National Services Scotland
Sid Singh	Consultant Urologist & Chief Clinical Informatics Officer; George Eliot Hospital NHS Trust
Lindsay Turner (secretariat)	Project Manager, Faculty of Clinical Informatics

Appendix B: Exemplar job description and person specification for a Chief Clinical Informatics Officer

Job Description

Job Title:	Chief Clinical Informatics Officer (CCIO)
Salary:	As determined by the organisation and comparable to other Executive positions <i>(Please refer to separate guidance, section 3.6)</i>
Hours of work:	As determined by the organisation <i>(Please refer to separate guidance 3.5)</i>
Reporting to:	Chief Executive Officer

Job Summary:

Reporting to the board, this Executive role is predominately transformational; leading on the innovation and improvement of clinical services through the use of informatics to achieve:

1. A better patient experience
2. Digital empowerment of patients and citizens
3. High quality integrated care with better health outcomes
4. Improved staff satisfaction
5. Financial sustainability

The role leads on new ways of working through the use of digital and informatics technologies, transforming care delivery across all clinical environments and professions. It requires the postholder to act as an ambassador for the agenda across the system including acting as a spokesperson for the organisation.

The post holder will provide sound clinical advice and guidance, working collaboratively with clinical leaders and key stakeholders to ensure the appropriate, consistent and successful use of integrated knowledge and information systems, for example electronic patient record systems, including decision support. They will also promote innovation and champion the development of a clinically appropriate information culture, as an enabler of change and quality improvement across the organisation.

The CCIO role will demonstrate that they maintain professional credibility which can be achieved through a variety of activities. The scope of the CCIO role should be based on the [Faculty of Clinical Informatics Core Competency Framework](#), with an ability to demonstrate competence in all areas. For those aspects not fully evidenced, the Framework should be used to inform personal development plans where upskilling is required.

Key responsibilities:

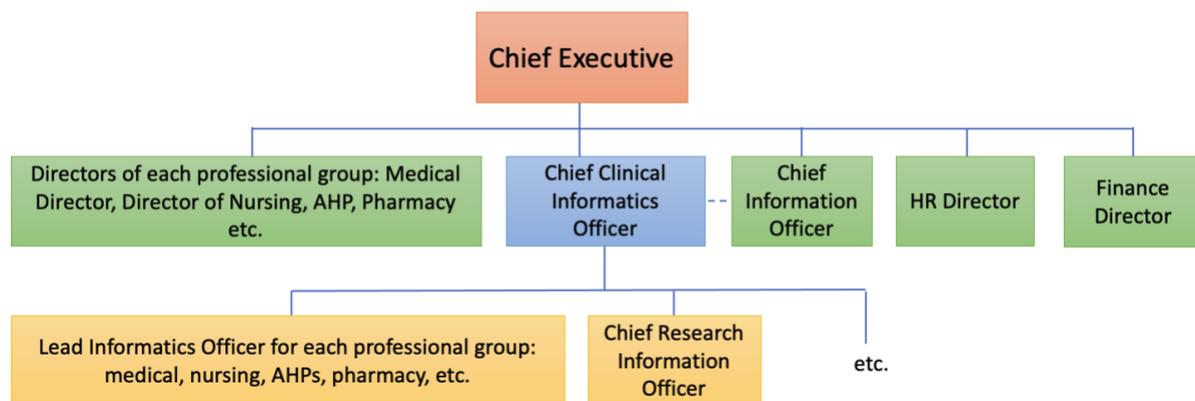
The CCIO will take leadership responsibility across the organisation for the following areas:-

- Providing strong clinical leadership of the strategic development, design and implementation of informatics and information technology across the organisation to support better health and care, improved patient outcomes and experience, and better value and affordability.

- Overseeing the strategic leadership of the procurement, development, deployment, re-engineering, optimisation and integration of clinical information systems to ensure they support clinicians in the delivery of safe and effective patient care.
- Ensuring that the clinical organisation is maximising the use of technology and shared information to provide high quality, safe and effective care for service users.
- Ensuring that delivery of the technology and information changes appropriately balance the needs of improving operational performance, improving quality of care, reducing delays in the patient pathway, meeting security and confidentiality needs, enabling continuous improvement through monitoring and research to develop improved treatment methods, and extending patient choice and patient involvement.
- Specific leadership roles in a wide range of deployment and improvement projects across the full range of clinical information systems.

The role is aligned to and supports the organisation's strategic objectives and facilitates the delivery of excellent, safe patient care through the digitalisation of services and service delivery and the utilisation of information. The CCIO will lead this work, working closely with the Chief Information Officer and their team, and supported by other clinical informatics leads.

Organisational chart:



Key working relationships:

Internal:

Working with:

- Board and Executive;
- Stakeholders of Health Informatics Systems across the organisation;
- Clinical informatics and clinical leads representing all clinical backgrounds;
- Groups, committees, leadership and governance for clinical process as it relates to safety, quality, design, improvement and standards related to the configuration, adoption, use and improvement of Health Information Systems;
- Healthcare Informatics Specialists (clinical and technical) to ensure that clinical process, design, requirements, procurement, assurance, integration and services are reflective, communicated, engaged and supported throughout the clinical community.

External:

Working with:

- Suppliers of all health informatics systems and hardware to ensure alignment with the organisation's strategic objectives and plans to support better outcomes and efficiency; integration across supplier systems and digital empowerment of patients and citizens;
- Patients and patient advocacy groups to ensure that the patient voice is central to vision, strategy, implementation and their outcome;
- The Faculty of Clinical Informatics;
- Regional / national partners and commissioners to drive and support informatics convergence and integration;
- National and devolved care agencies (support, improvement and innovation) and regulatory bodies on promotion of healthcare informatics;
- Clinical regulatory, compliance and reference groups;
- Professional, regional, national and international specialist interest groups and organisations.

Main duties/key results areas:

1. Health and wellbeing

- Employ an understanding of the NHS landscape, policy, regulations, evidence, combined with an understanding of clinical information systems, informatics concepts and clinical processes.
- Assess evolving patient care delivery models, hospital operations, human resource processes and healthcare finance and payment models impacting the continuum of care.
- Lead the development/procurement and deployment of high quality and innovative clinical information systems to ensure that they assist the clinician in their delivery of care and are developed collaboratively with the relevant teams, i.e. administrative teams, clinical leaders, information technology, financial services, quality/regulatory/risk management and clinical governance, amongst others.
- Have responsibility for the health, safety and welfare of self and others and to comply at all times with the requirement of the Health and Safety Regulations.

2. Information technologies and systems

- Employ appropriate health informatics standards systems based on objective assessments, including coding systems, terminologies, ontologies, data models, data security and privacy, and system-to-system messaging to enable system interoperability and procurement/design of future systems.
- Contribute, develop and, where appropriate, lead informatics projects and programmes on clinical, social, biomedical and genomics.
- Lead the translation of clinician requirements into coordinated specifications for information system needs for clinical, teaching and research systems, aligned to the strategic plan.
- Lead the development of clinical informatics strategies related to health IT procurement, implementation, maintenance and optimisation ensuring that they are developed in

collaboration with other senior clinical informatics and operational leaders.

- Oversee the selection, design/redesign, investment, implementation and decommissioning of health information systems that will support the transformation of care ensuring every clinical intervention counts and maximising the benefit to patients and staff.
- Direct the integration of clinical activities to allow for the mutual development and achievement of organisational goals in conjunction with the CIO's team to ensure the delivery of enhanced and safe patient care.
- Provide critical analysis and evaluation of health IT systems and practices and recommend revision of clinical systems, processes, and workflow to ensure achievement of positive patient outcomes.
- Ensure that processes are in place for the assessment of potential risks from informatics solutions from a clinical perspective (clinical safety), and advise on actions from the organisation and from suppliers to mitigate these risks. This includes ensuring that relevant reporting procedures are adhered to.

3. Data and analytical methods

- Understand and ensure security and 'data governance' of clinical data, systems, devices and networks (including trends in cybersecurity risk in healthcare), international and national standards and regulatory frameworks for quality management, software deployment, medical devices, clinical safety.
- Provide advice on models for effective knowledge acquisition, storage, modelling into a computable form, and dissemination, including strengths and limitations, to inform procurement and design of clinical information systems.
- Establish systems to monitor performance through department and organisation monitoring systems, including regular interpretation of data taking corrective action and escalation as necessary.
- Promote advancement of clinical and business intelligence systems capable of reporting variables to evaluate patient outcomes, to support research, and operational improvement across the continuum of care.
- Work in partnership with the CIO and team to leverage predictive analytics tools to identify at-risk patients and populations.
- Advise on the importance of data linkage, record linkage methods and the relevant strengths and limitations to be able to conduct or review linked data analysis.
- Provide guidance on a range of visualisations used to present data analyses, and their usage.
- Work with others to continuously collect, analyse, and report data on patient safety issues and outcomes.
- Promote the use of health informatics to improve patient safety by designing, developing, implementing, and educating on decision support tools.

4. Change management

- Raise the awareness of the CCIO role representing clinical informatics across the whole organisation and wider sectors.

- Articulate to and educate all levels of the organisation around the importance of informatics to clinical care.
- Within the specific functions of the CCIO role, identify opportunities to develop the role beyond traditional boundaries in order to positively impact on the patient experience and maximise the potential of individual staff members or teams.
- Act as a change agent, working with clinical leadership teams, in the identification, development, planning, implementation, and value measurement of informatics strategies to support improved quality patient care and professional practice.
- Combine knowledge of patient care, informatics concepts, and change management to effectively address the information and knowledge needs of healthcare professionals and patients to promote safe, effective, and efficient clinical care through the use of health IT.
- Ensure any changes to clinical practice as a result of IT implementations are in accordance with evidence-based practice, as well as organisation policies and guidelines.
- Advocate for ethical decision-making on behalf of patients and staff. Develop an environment for ethical decision-making at the organisation/system level.
- Articulate the value of technologies that enable co-production of health to improve health and promote citizen / patient engagement.
- Work with clinical leaders to develop strategies and processes to continuously monitor, evaluate and improve patient and staff satisfaction as it relates to the use of health information systems.
- Ensure that the organisation adopts and adheres to professional standards relating to clinical informatics, including national standards for the structure and content of patient records and communications.
- Ensure the delivery and progression of service improvements, national initiatives and organisation/regional/national campaigns across the organisation, in collaboration with clinical leaders and CIO and team.
- Ensure that quality improvement is consistent with promoting informatics research, regulatory bodies, and guidelines as well as evidence-based practice that supports positive clinical outcomes.

5. Leadership and management

Management

- Lead the clinical informatics team and those working in the organisation in clinical informatics.
- Set clear goals and objectives for the team, communicate these effectively, internally and externally, and monitor individual and team performance.
- Create a professional culture and facilitate continuous individual and team organisational development.
- Provide mentorship, coaching, supervision and shadowing opportunities to individuals, including those in leadership positions, in order to support their development, as appropriate.
- Ensure and actively manage a competent, technology-enabled clinical workforce, ensuring

their development through appraisal, personal development planning, coaching and mentoring.

- Be responsible for the recruitment and retention of all positions created in the clinical informatics team.
- Oversee the management of budgets within areas of responsibility, ensuring the budget is managed appropriately and by taking corrective action where needed.

Leadership

- Articulate to and educate all levels of the organisation around the importance of informatics to clinical care.
- Partner with the CIO and other fellow Executives to create the organisational mission and vision for a digitally mature organisation.
- Contribute to project planning, implementation, monitoring and evaluation of informatics projects, utilising project management and change management methodologies to ensure that programme/project goals remain aligned to clinical and operational objectives where appropriate, to increase project/programme success.
- Improve the quality and effectiveness of the organisation's overall healthcare programme by providing leadership, coordinating and facilitating the evaluation and improvement of a wide range of programmes. Excellence is reflected in improved patient outcomes and organisational performance.
- Advise and collaborate with clinical leaders in planning and implementing clinical informatics developments, including new service developments.
- Ensure that there are relevant education and practice development action plans and provision aligned to meets the needs of the organisation and are compliant with the relevant healthcare standards.

6. Other

- Maintain relationships with key business partners and other senior industry leaders to leverage best practices, evaluate emerging technologies, and distribute knowledge internally to inform plans and strategies.
- Work with vendors to proactively strategise on development and/or enhancement of clinical information system solutions to meet organisational business needs.
- Provides input to the development of business cases for areas of responsibility and provide leadership on specific projects where required.

Personal development

- Responsible for developing and sustaining own knowledge, management and clinical skills (as appropriate) and professional awareness in accordance with CPD requirements and maintain a professional profile.
- Accountable for and maintain own competence to practice.
- Appraised at least annually and contribute to own personal development plan (PDP), utilising the Faculty of Clinical Informatics Core Competency Framework to identify gaps in skills and experience.

Good practice

- Ensure confidentiality at all times, only releasing confidential information obtained during the course of employment to those acting in an official capacity in accordance with the provisions of GDPR, the Data Protection Act and its amendments.
- Ensures skills are up-to-date and relevant to the role, to follow relevant organisation policies and professional codes and to maintain registration where this is a requirement of the role.
- Complies with the organisation's No Smoking policies.
- Undertake such duties as may be required from time to time as are consistent with the responsibilities of the grade and the needs of the service.
- Skilled in and demonstrates fair employment practices, in line with organisation policies.

Equality and diversity

- Works in accordance with the organisation's Equality and Diversity policy to eliminate unlawful discrimination in relation to employment and service delivery.
- Promotes, at all times, equal opportunities for staff and patients in accordance with the organisation's policies to ensure that no person receives less favourable treatment than another on the grounds of: age; disability; marriage and civil partnership; pregnancy and maternity; race (ethnicity); religion or belief; sex (gender); gender reassignment or sexual orientation.

This job description is not an exhaustive document but is a reflection of the current position. Details and emphasis may change in line with service needs after consultation with the postholder.

Person Specification

Job Title: Chief Clinical Informatics Officer (CCIO)

Factor	Essential	Desirable
Qualifications and Training	<p>Registration with a statutory body overseen by the Professional Standards Authority for Health and Social Care (PSA).</p> <p>Current good standing registration with relevant professional body, maintenance of all revalidation requirements as necessary, compliance to the Seven Principles of Public Life.</p> <p>Leadership Qualification or evidence of recent professional development (within the last three years).</p> <p>Management Qualification or evidence of recent professional development (within the last three years).</p> <p>Member or Fellow of the Faculty of Clinical Informatics (FCI) or associated professional body.</p>	<p>Diploma or Degree in informatics/IT</p> <p>Post graduate degree in Leadership and Management</p> <p>Clinical Safety Training</p> <p>Project Management training i.e. Prince 2 Foundation or equivalent</p>
Experience	<p>Senior clinical experience as a Consultant, Nurse Director/Assoc. Director, Principal in General Practice or Director/Head of AHP Services or equivalent, with a track</p>	<p>Experience of developing and implementing</p>

	<p>record of inclusive clinical leadership and strategic vision.</p> <p>Senior management experience and competencies, including the development of business and workforce plans in line with service requirements, and performance management of staff.</p> <p>Wide ranging knowledge and experience of using information and analytics, and harnessing technology to drive service improvement, access to services and patient empowerment across health and social care.</p> <p>Experience of leading significant change, delivering tangible and sustained improvements.</p> <p>Experience of agile project management methods.</p>	information and data strategies.
Skills	<p>Leadership skills: excellent leadership and influencing skills with the ability to enthuse motivate and involve individuals and multi-disciplinary teams.</p> <p>Able to build rapport and credibility with senior clinical and managerial colleagues.</p> <p>Track record of effectively identifying and handling priorities, meeting challenging deadlines and delivering under pressure.</p> <p>Excellent presentation and communication skills.</p> <p>Demonstrate an understanding of a range of visualisations used to present data analyses and information.</p> <p>Ability to understand complex and technical detail and data and have strong analytical skills in order to identify trends and impact.</p> <p>Track record of strategic thinking.</p> <p>Financial and budget management.</p> <p>Able to demonstrate evidence of a breadth of knowledge skills and experience that relates to the FCI Competency Framework.</p> <p>Setting up governance structures to ensure clear accountability and management/ownership of risk.</p> <p>Skilled in managing vendor relationships.</p>	
Knowledge	<p>Knowledge and understanding of the NHS, social care, political environment and evidence-based approach to decision making.</p> <p>Knowledge and experience of practice and policy across a broad range of responsibilities, e.g. digital, financial systems and budgetary control, corporate and clinical governance, Health and Safety and Human Resources.</p> <p>Knowledge and experience of clinical service improvement methodology.</p> <p>Has awareness of project management and change management and is able to apply them to informatics projects/programmes.</p> <p>Knowledge about cybersecurity capability, counter measures</p>	

	<p>and risk mitigation so as to develop secure systems and team/local policy and protocols to protect patient safety.</p> <p>Understands the qualities of a system/technology and the trade-off between them when developing/deploying them (e.g., maintainability, scalability, performance, recovery).</p> <p>Knowledge and experience of delivering interoperability, and awareness of challenges that can arise.</p> <p>Demonstrate in-depth knowledge of the range of technology for transmitting information (e.g., messaging between systems) and clinical standards (e.g., standards for structuring clinical information) for information needed to support the creation of interoperable systems.</p> <p>Demonstrates in-depth knowledge of the basis, application and limitations of clinical coding systems, terminologies and classifications and understands their purpose in delivering safer health care.</p> <p>Demonstrates how data quality affects analysis, and resulting clinical and healthcare insights, and how important it is to improve to derive maximum potential from its utilisation.</p> <p>Understands the importance of data linkage, record linkage methods and the relevant strengths and limitations to be able to conduct or review linked data analysis.</p>	
Other	<p>Strategic and business planning: able to think and plan strategically, tactically, and creatively, to gain agreement to relevant plans and to implement plans through service delivery.</p> <p>Ability to promote equality of opportunity and confidentiality for service users and staff. Appropriate changes that will be required to be undertaken.</p>	