



Workshop – A Curriculum for Health Informatics March 15th - 22nd 2026 at St Edmund Hall, Oxford

This one-week residential workshop brings together participants from around the world, to discuss and formulate a curriculum for the teaching of Health Informatics at undergraduate and postgraduate levels. The workshop leaders are invited experts from universities in Europe, North America and Oceania with established Health Informatics teaching and research programs. Participants are educators and administrators from Ukraine, Pakistan and Africa who are planning the future curriculum for Health Informatics programs at their own universities.

The workshop uses the Applied Health Informatics masters curriculum as a starting point, with participants able to review content and materials, and try out hands-on tutorial exercises.

	Workshop	Evening Social
Sunday 15th	Participants arrive at Teddy Hall.	Welcome Reception. Dinner in the Wolfson Hall.
Monday 16th	Introductions from all participants, including their goals from the workshop. Overview of the Applied Health Informatics curriculum as the starting point for a discussion of needs in each participating country.	Choral recital in the college chapel, followed by a formal dinner in the Old Dining Hall.
Tuesday 17th	Curriculum review and hands-on exercises: Clinical Information Models, Open Standards and Electronic Health Records.	Dinner in the Wolfson Hall, Tour of Oxford Pubs.
Wednesday 18th	Curriculum review and hands-on exercises: Health Data Interoperability/Integration, Engineering Clinical Information Systems and Health Data Analytics.	Dinner in the Wolfson Hall, African Culture Evening.
Thursday 19th	Curriculum review and hands-on exercises: Artificial Intelligence in Healthcare. A review of all aspects of AI in healthcare, including the most recent advances in Generative AI and the associated ethical issues.	Dinner in the Wolfson Hall, Ukrainian Culture Evening.
Friday 20th	Discussion and feedback of the aspirations and plans of each participating institution.	Dinner in the Wolfson Hall with welcome for participants in the GOSEHR Summit.
Saturday 21st	Global Open Source Electronic Health Records - 3 rd annual summit meeting. A review of progress towards the implementation of open source EHR in resource-challenged environments.	Gala dinner at the University of Oxford Examination Schools.
Sunday 22nd	Participants depart after breakfast.	



Curriculum for Applied Health Informatics

The starting point for the workshop is the curriculum for Applied Health Informatics which has previously been used to teach four cohorts of students at Fordham University in New York. This curriculum and its associated teaching materials are owned by Seven Informatics Ltd and are made available under a Creative Commons license for the use of workshop participants.

Regular courses consisting of one summary lecture, and eight classes with a lecture and hands-on tutorial exercise for students:

- **Concepts in Health Informatics**
A high-level overview of the concepts covered in each of the other courses
- **Models for Clinical Information**
From Data to Information – Clinical Models and Open Standards – XML for Structured Clinical Information – ISO 13606 and OpenEHR – HL7 and the Reference Information Model – HL7 Clinical Document Architecture – Ontology Models of Healthcare – Classification and Clinical Coding
- **Electronic Health Records**
Logical Architecture of the EHR – Storing and Visualising the Health Record – Clinical Data Entry – Patient-centred Collaboration – Clinical Correspondence – Scheduling – Order Communications – Electronic Prescribing
- **The Business of Health Informatics**
Preparing the Business Case – Controlling a Health Informatics Project – Procurement of Health Information Systems – Estimation and Budgeting – Evaluation and Return on Investment – Managing Risk and Change – Entrepreneurship – Certification and Regulatory Approval
- **Engineering Clinical Information Systems**
Clinical Systems Architecture – Architectures for Telemedicine – Databases – User Interface Design – UML and Model-Driven Development – Legacy Data Migration – Authentication and Access Control – Security and Encryption
- **Healthcare Integration**
Open Standards and Interoperability – Integration and Messaging Engines – HL7 v2 Messaging – Web Services for Integration – HL7 FHIR – Integrating the Healthcare Enterprise (IHE) – Single Sign On and Context Management – National, Regional and Local Integration
- **Analysis and Reporting in Healthcare**
Patient-centred Summaries – Patient Cohorts for Analysis – Clinical Dashboards – Informatics for Clinical Studies and Trials – Anonymisation of Clinical Information – Principles of Healthcare Statistics – Mining Linked Data – Big Data Analysis
- **Artificial Intelligence in Healthcare**
Clinical Decision Support – Clinical Guidelines and Care Pathways – Natural Language Processing – Rule-Based Reasoning – Ontologies and Description Logic Reasoners – Bayesian Belief Networks – Artificial Neural Networks – Generative AI in Healthcare

Intensive, one-week courses. A selection of these courses are offered each Spring (March/April) and Autumn (September) at St Edmund Hall, Oxford – also suitable for delivery as residential courses in other locations.

- **XML in Healthcare**
- **Model-Driven Electronic Health Records**
- **Telemedicine Integration**
- **State of the Art in Health Informatics**