Module Description

This module is designed to give students a critical understanding of digital transformation in healthcare communities and how Information Communication Technology will be critical to ensure safe sustainable and quality healthcare in the context of a growing and ageing population. Initially, the module examines the sociological relationship between the patient/client and the healthcare provider and the transformation and change of that relationship through the growing introduction of technology/software. Digital society, social media, digital citizenship, research, and evaluative enquiry are further explored.

The module then explores digital transformation projects and the digital community lifecycle. Key factors for successful digital implementations, working on shared digital platforms; digital literacy, and collaborative practice. The concepts of digitally integrated care are presented in terms of the current structures of community healthcare, the driving forces for the stay left shift left policy approach, the driving forces and key requirements, barriers and challenges for digitally enabled and enhanced care delivery and the state of digital maturity in the community healthcare setting. The module goes on to investigate ethical, legal, quality, safety and risk issues for digital healthcare communities including health information autonomy, GDPR, patient safety considerations, public patient involvement, risk management, human factors and implementation/improvement science.

Learning Outcomes

On completion of this module the learner will/should be able to:

1. Demonstrate a critical knowledge of digital media and society and the evolving relationship between patient/client and healthcare provider through the growing introduction of technology and software.

2. Distinguish the various components of the digital community lifecycle and the varied approaches used to implement and evaluate systems.

3. Using detailed clinical workflows and process mapping, examine and analyse patient and healthcare provider user requirements to enable and enhance integrated digital capabilities

4. Critically examine clinical information capture in the community EHR, nursing and HSCP documentation requirements; coding, naming conventions, standardised language/terminologies, and clinical data types

5. Interpret the Ethical and Legal Issues for digital healthcare communities and the concept of Health Information Autonomy


Indicative Syllabus

1. Digital Media and Society — 20 %

The relationship between patient/client and healthcare provider based on trust; transformation and change of that relationship through growing introduction technology / software; greater degree of anonymity; patient empowerment through use of tech-tools versus greater patient vulnerability (health data collection and harvesting) and gradual loss of human treatment.

Psychology of digital platforms, Potential empowerment and gain in autonomy and independence by joining an online self-help community through technology; Potential emancipatory effect on patients transforming them from recipients of treatments to active participants; Digital society, social media, feeling digital, digital citizenship, digital social research, evaluative enquiry, ethnography.

2. Understanding the Digital Community Lifecycle — 20%

Digital transformation projects; stakeholder engagement, representation & communication; finance/technology/people. Systems life cycles
3. Digitally Integrated Care, Systems, Pillars and Processes — 40%

Healthcare IS user requirements; patient/client requirements. Quality measuring functions, Information System Success Models/Use Case Modelling, user centred design. Stay left shift left; Social Care, Mental Health, Primary Care & Health & Wellbeing services and actual and potential systems. The role of private services (e.g. Pharmacy services) and solutions providers as well as GP’s and primary care centres.


Case studies detailing areas of best practice will be employed with guest lecturers contributing in their specific areas of expertise. Community will be very much encouraged, to facilitate a shared learning experience. As the area of eHealth/digital health continues to evolve, experiences and challenges to the learning environment. In this context, online class discussions/blogs around building the digital healthcare service. Here, it may be possible to link with institutions/organisations where GMIT already has an academic relationship. As this is a part-time external guest lecturers (6 Hours) with specific expertise in certain areas of digital healthcare and integrated community health and social care. Here, it may be possible to link with institutions/organisations where GMIT already has an academic relationship. As this is a part-time programme it is recognised that potential students will come from diverse healthcare settings, and as such will bring their own unique experiences and challenges to the learning environment. In this context, online class discussions/blogs around building the digital healthcare community will be very much encouraged, to facilitate a shared learning experience. As the area of eHealth/digital health continues to evolve, case studies detailing areas of best practice will be employed with guest lecturers contributing in their specific areas of expertise.

4. Ethics and Legal Issues for digital healthcare communities — 10%

Research ethics; lack of legal framework for deployment of eHealth apps, programmes, and gadgets. Health Information Autonomy, Awareness of the special nature of personal health information compared general personal information; vulnerability and risks of collection, distribution, trading, and use of personal health information by and through third parties; required extra level of protection; informed consent and fictitious consent; meaning of GDPR principle "data protection by design and by default"; defining set of minimum standards for eHealth apps, programmes, and gadgets: licensing and regulating evaluation and approval by the Health Products Regulatory Authority (or similar) (HiQA), protection against unregulated, "free" apps by commercial interest - use for research is subject to strict control by research ethics committees, continued control of storage and processing.

5. Quality, Patient Safety, Risk — 10%

Quality Improvement Methodology, implementation science, improvement science, audit, risk management process/Privacy Impact Assessments, human factors design and ergonomics, patient safety, person centred care, Information standards and governance.

Teaching and Learning Strategy

The module will be delivered in 100% online format using synchronous and asynchronous modes of delivery as required. Lecture notes and video materials will be available to students asynchronously on the GMIT moodle platform. Weekly live tutorial sessions will also be made available to supplement lecture materials. As a part-time 10 credit module, the total student workload required is in the region of 220 hours of which 65 hours are designated as contact hours, with the remainder representing independent student engagement. Over a semester, this represents approximately 5 hours contact per week comprising 2 hours of live online tutorial sessions, and 2.5 hours of blogs, chats, e-mails, and a student helpdesk, etc, where the lecturer is available asynchronously to the student. It is also intended to include live webinars from external guest lecturers (6 Hours) with specific expertise in certain areas of digital healthcare and integrated community health and social care. Here, it may be possible to link with institutions/organisations where GMIT already has an academic relationship. As this is a part-time programme it is recognised that potential students will come from diverse healthcare settings, and as such will bring their own unique experiences and challenges to the learning environment. In this context, online class discussions/blogs around building the digital healthcare community will be very much encouraged, to facilitate a shared learning experience. As the area of eHealth/digital health continues to evolve, case studies detailing areas of best practice will be employed with guest lecturers contributing in their specific areas of expertise.

Assessment Strategy

The module will be assessed in line with GMIT’s Code of Practice No. 3; Marks and Standards. The learning outcomes will be assessed through ongoing activities, elements and e-tivities such as; MCQ quiz, discussion blog, chat, reflection and review as well as using online tools to explore clinical workflows and process mapping. These assessment elements will be completed and submitted online within and throughout the process of the module delivery and form 100% assessment of the module. Each assessment component will follow the indicative content themes related to the learning outcomes and will promote innovative, engaging, collaborative, learner-oriented and an integrated approach to assessment taking account of the varied disciplines and backgrounds of the learners. The assessment strategy aims to enhance the student experience of assessment and adopts a formative approach for learning and as learning.

Repeat Assessment Strategies

Repeat assessments will mirror the initial module assessment, and will be staged in line with GMIT’S CoP No. 3, and in agreement with the external examiner.

Indicative Coursework and Continuous Assessment: 100 %
### Form

<table>
<thead>
<tr>
<th>Title</th>
<th>Percent</th>
<th>Week (Indicative)</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Formative Continuous Assessment Elements for Learning</td>
<td>100 %</td>
<td>OnGoing</td>
<td>1,2,3,4,5,6</td>
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### Online Learning Delivery Mode Average Weekly Workload:

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<th>Location</th>
<th>Hours</th>
<th>Frequency</th>
<th>Weekly Avg</th>
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<tbody>
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<td>Tutorial</td>
<td>Online Learning</td>
<td>Online</td>
<td>2.0</td>
<td>Weekly</td>
<td>2.00</td>
</tr>
<tr>
<td>Other</td>
<td>Asynchronous Student Engagement, helpdesk, blogs, chats, email, etc</td>
<td>Online</td>
<td>2.5</td>
<td>Weekly</td>
<td>2.50</td>
</tr>
<tr>
<td>Independent Learning</td>
<td>Independent Student Workload</td>
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<td>12.0</td>
<td>Weekly</td>
<td>12.00</td>
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<tr>
<td>Other</td>
<td>Global Perspective / Guest Lecture</td>
<td>Online</td>
<td>0.5</td>
<td>Weekly</td>
<td>0.50</td>
</tr>
</tbody>
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### Required Reading Book List


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### Journal Resources

Quinn Grundy, Kellia Chiu, Fabian Held, Andrea Continella, Lisa Bero, Ralph Holz:

Data sharing practices of medicines related apps and the mobile ecosystem: traffic, content, and network analysis

BMJ 2019;364:l920 | doi: 10.1136/bmj.l920

http://dx.doi.org/10.1136/bmj.l920

### Online Resources


NSAI (National Standards Authority of Ireland), Ireland's official standards body has also been included.

[https://www.nsai.ie/](https://www.nsai.ie/)
<table>
<thead>
<tr>
<th>Programme Membership</th>
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<tbody>
<tr>
<td>GA_SBHCC_S08 202000 Certificate in Building Digital Healthcare Communities</td>
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