MASTERS (MSc.) IN HUMAN FACTORS IN PATIENT SAFETY
PROGRAMME BROCHURE 2019-2021
MASTERS (MSc.) IN HUMAN FACTORS IN PATIENT SAFETY – INTRODUCTION

The Royal College of Surgeons in Ireland welcomes you to the Masters (MSc.) in Human Factors in Patient Safety. This programme, the first of its kind in Ireland, is designed for inter-professional healthcare personnel involved in the care of surgical patients.

The aim of this programme is to develop the knowledge, skills, and competencies of health care professionals working in acute hospital medicine. To achieve this aim, the programme will facilitate scholars to explore the evidence regarding error, risk, and safety in complex healthcare systems and to develop their own competencies in all aspects of professionalism, leadership, teamwork and decision-making. The research component of the programme is designed to support the acquisition of scholarship skills through the application of a range of research methodologies to answer a question relevant to the field of human factors in patient safety.

The acquisition of these competencies will develop the performance of health professionals in order to enhance the highest standards of patient care. Underpinning the Human Factors in Patient Safety programme is a commitment to:

- High standards of patient safety and quality of patient care
- Collaboration and effective teamwork between health professionals involved in patient care in hospital medicine.
- Evidence-based practice
- Patient-centered care.

The programme comprises six modules of study - five taught modules and a research dissertation module. Each module will introduce new areas of learning, and online resources will be made available during the delivery of these modules. The group of scholars includes individuals from different, professions and experience and this will ensure a rich blend of expertise. The research dissertation will be carefully monitored at the protocol stage and will be supported throughout.

We know that you will enjoy your time as a scholar on this programme and that the knowledge and skills gained from your participation will benefit you in your professional development.

Dr. Eva Doherty
Programme Director

Eva Doherty DClinPsych,CClin Psychol(AFPsSI),CPsychol(ABPSI)
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COURSE OUTLINE AND SYLLABUS

The Masters in Human Factors in Patient Safety is an inter-professional programme which is open to all health professionals working in acute hospitals and involved in the care of surgical patients. The programme was launched in 2016 and has attracted consultant and senior level trainee surgeons, anaesthetists, emergency medicine physicians, obstetricians, radiologists, pharmacists, along with senior acute care nursing staff and quality managers.

The MSc has four overarching objectives:

1. to develop participants’ knowledge of error, risk and safety in healthcare
2. to advance participants’ practical skills to drive safety and quality improvement in the acute hospital setting
3. to develop participants’ interpersonal and non technical skills to support safe and effective patient care and
4. to develop participants’ skills to conduct high quality human factors research in healthcare.

The Masters is delivered over two years and is a part-time programme. The programme is designed to suit the busy schedules of health professionals working full-time. Courses are delivered using blended learning with online and face-to-face teaching.

There are six modules of study: five taught modules which are delivered by experts in human factors in patient safety plus a research dissertation.
01 ERROR AND SAFETY IN SURGICAL HEALTHCARE
In this introductory module, we take a systems perspective on the issue of patient safety. This is a foundation module, the seminal literature is explored in depth.

02 PERSONAL EFFECTIVENESS AND NON-TECHNICAL SKILLS
This module will focus on the factors that contribute to improving personal effectiveness and team performance in healthcare.

03 LEADERSHIP OF PROCESS AND QUALITY IMPROVEMENT
In this module, the theoretical principles and the practical strategies behind QI will be explored in depth.

04 PROFESSIONALISM AND ADVANCED COMMUNICATIONS
In this module, we explore the key areas of professionalism including relationships with patients and ethical practice. In addition, scholars are introduced to the principles and practice of advanced communication including shared decision-making, obtaining consent, open disclosure, breaking bad news and end of life care.

05 RESEARCH METHODS
At the end of this module, scholars will be familiar with data collection and analysis techniques associated with the most important social science and human factors methodologies. In addition, scholars will apply these skills to the development of a research question, mapping the question to the most appropriate research design and writing a research protocol.

06 RESEARCH DISSERTATION
In this module scholars will apply the knowledge, skills, and techniques developed over the previous five modules. Each scholar will conduct an independent research or quality improvement project which will be presented as a ready for publication research paper.
THE MSC. PROGRAMME:

The MSc. is obtained following the successful completion of five taught modules worth 60 credits plus a research dissertation worth 30 credits.

There are three levels within the MSc. framework:

- **Certificate level modules:** Error and Safety in Surgical Healthcare (15 credits) and Personal Effectiveness and Non-Technical Skills (15 credits). Modules run from September to March in Year 1.

- **Diploma level modules:** Leadership of Process and Quality Improvement (5 credits), Professionalism and Advanced Communication (15 credits) and Research Methods (10 credits). Diploma Level modules start at the end of year one (May-June) and continue in year two (September-February).

- **Masters level scholars** undertake a research dissertation worth 30 credits. The dissertation will include an extended literature review (6,000 words) plus an empirical research study on a human factors/patient safety topic or a quality improvement project, the latter to be submitted as a ready-for-publication original research paper.
## COURSE STRUCTURE
### BY LEVEL AND ACADEMIC YEAR OF DELIVERY

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MODULE TITLE</th>
<th>ECTS</th>
<th># WEEKS</th>
<th>SEMESTER</th>
<th>FACE TO FACE DAYS</th>
<th>ASSESSMENT</th>
<th>QUALIFICATION</th>
<th>TOTAL CREDITS</th>
</tr>
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<tbody>
<tr>
<td></td>
<td><strong>Error and Safety in Surgical Healthcare</strong></td>
<td>15</td>
<td>15</td>
<td>One</td>
<td>Sept-Dec</td>
<td>Discussion board 25% Group project 25%</td>
<td>Postgraduate Certificate</td>
<td>30</td>
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<tr>
<td></td>
<td><strong>Personal Effectiveness and Non-Technical Skills</strong></td>
<td>15</td>
<td>15</td>
<td>Two</td>
<td>Jan - Apr</td>
<td>Discussion board 25% Group project 25%</td>
<td>Postgraduate Diploma</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td><strong>Leadership of Process and Quality Improvement</strong>*</td>
<td>5</td>
<td>5</td>
<td>Two</td>
<td>May - June</td>
<td>Group QI project 100%</td>
<td></td>
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<tr>
<td></td>
<td><strong>Professionalism and Advanced Communication</strong></td>
<td>15</td>
<td>15</td>
<td>One</td>
<td>Sept-Dec</td>
<td>Discussion board 25% Group project 25%</td>
<td>Postgraduate Diploma</td>
<td>30</td>
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<tr>
<td></td>
<td><strong>Research Methods</strong></td>
<td>10</td>
<td>10</td>
<td>Two</td>
<td>4 days Jan 1 day Feb</td>
<td>Research protocol: Oral presentation 20% Written protocol 80%</td>
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<tr>
<td></td>
<td><strong>Research Dissertation</strong></td>
<td>30</td>
<td>28</td>
<td>Two March - August</td>
<td>Self-directed study</td>
<td>research article and extended literature review 100%</td>
<td>MSc</td>
<td>30</td>
</tr>
</tbody>
</table>

*This is a diploma level course to be completed at the end of year 1.
Taught Modules

• Face to face days
Taught modules have two, three or five face to face days – depending on the module. Face to face days involve interactive seminars, lectures, workshops, group work and practice. Sessions are facilitated by expert guest facilitators as well as RCSI faculty.

• Online Content
In addition to the face-to-face days, the ‘core’ course content is delivered online through Moodle - the virtual learning platform at RCSI. Within each module, every week is associated with a specific learning topic. Essential and optional readings are provided for each topic, along with selected online video resources and other online learning resources such as reports and websites.

• Weekly discussion boards
A weekly discussion board topic is posted each week that is based on the weekly reading and resources. Scholars submit a 300-word post on the set topic for each week. Scholars engage with each other and with faculty over the weekly discussion board.

• Group projects
For each taught module scholars will present an interprofessional group project on an assigned topic. Groups work online and face-to-face to develop their project and presentation. Groups present their project on the final face-to-face day of the module.

• Written assignment
The 15-credit taught modules require a 2,000-word end of module written assignment. Scholars will use the resources provided and independently sourced literature to investigate the written assignment topic. For the 10-Credit (Research Methods) module, scholars will submit their written research protocol at the end of the module. There is no written assignment associated with the 5-credit module.

Research Dissertation Module

This is an independent learning module. In lieu of classroom time, there will be regularly scheduled meetings with the supervisory team throughout the dissertation period and there will be milestones for the delivery of various research outputs.
MODULE 1: ERROR AND SAFETY IN SURGICAL HEALTHCARE (15 CREDITS)

In this introductory module, we take a systems perspective on the issue of patient safety. We conceptualise healthcare as a system of human, technical, procedural, organisational and cultural factors that interact in complex ways to create risk or reliability. This is a foundation module and the seminal literature is explored in depth.

Module Aims
1. To introduce scholars to models, theories, frameworks, and methodologies of human factors in healthcare
2. To present the evidence around error and harm in healthcare
3. To explore the notion of hospitals as complex socio-technical systems
4. To provide examples of risk and error management strategies from other industries and explore their application to healthcare
5. To explore the notion of organisational culture and its relevance to healthcare.

Module Topics
The following topics will be covered in this module:

1. The case for patient safety
2. The nature and scale of error and harm
3. The science of human factors
4. Understanding complex organisations
5. Understanding error 1 - theories and models of error
6. Understanding error 2 – violations, migrations, and problems
7. Infection prevention and control
8. Patient safety and invasive procedures
9. Improving medication safety
10. The investigation and analysis of clinical incidents (Systems Analysis)
11. Safety culture
12. Just culture
13. Organisational learning
Learning outcomes

At the end of this module, scholars will be able to:

- explain the emergence of human factors in healthcare and critique its application to patient safety
- explore error and risk in hospitals from a sociotechnical perspective and evaluate risk management strategies
- evaluate risk management strategies associated with infection prevention and control, invasive procedures and medication safety
- apply knowledge of systems analysis to critically analyse an error or adverse event using evidence-based methodologies and in accordance with national guidelines
- examine the notion of safety culture and just culture and their role in creating and maintaining safety
- evaluate reporting and learning systems in healthcare
- critique methods of safety measurement and monitoring in healthcare.

Delivery Modes

There will be three days of face-to-face teaching and interactive workshops for this module along with 15 weeks of online learning topics and discussion boards.

Assessment

Discussion Board – 25%
Group Project – 25%
Written Assignment – 50%
MODULE 2: PERSONAL EFFECTIVENESS AND NON-TECHNICAL SKILLS (15 CREDITS)

This module will focus on the factors that contribute to improving individual effectiveness and team performance in healthcare. Non-technical skills include: (i) personal resource skills such as stress coping strategies, and resilience; (ii) cognitive skills of decision making and situation awareness; (iii) interpersonal skills of leadership, teamwork, and communication.

Module Aims

1. Introduce scholars to the concepts of resilience and emotional intelligence
2. Present the evidence around stress and burnout in healthcare
3. Experience interventions designed to enhance healthcare professionals’ well-being
4. Examine the research evidence linking non-technical skills to patient safety and other performance indicators
5. Experience how non-technical skills contributes to team effectiveness and patient safety
6. Facilitate scholars’ understanding of the methods and challenges of conducting research in this domain.

Module Topics

The following topics will be covered in this module:

1. Stress and burnout in healthcare
2. Stress management in healthcare
3. Personality, resilience and emotional intelligence
4. Non-technical skills and performance
5. Studying teamwork
6. Teamwork and patient safety
7. Team communication
8. Skilled performance: situation awareness and decision making
9. Inter-professional collaboration
10. Team training
11. Team performance assessment
12. Leadership theories and principles
13. Clinical leadership
14. Leadership and culture change.
Learning outcomes

At the end of this module, scholars will be able to:

- critically evaluate strategies to reduce and manage stress and burnout
- discuss the evidence for fatigue in healthcare workers and its effect on performance
- evaluate the evidence supporting non-technical skills on error prevention and team performance
- discuss common biases in human decision-making which can lead to error
- describe theories of decision making and situation awareness
- critically evaluate the evidence around team training and team performance assessment
- identify facilitators and barriers to inter-professional practice and demonstrate the ability to work efficiently and respectfully in a multi-professional environment
- communicate vision and strategy to create a culture of safety and accountability
- describe and explain leadership principles, theories, and frameworks
- demonstrate skills of effective leadership of inter-professional teams.

Delivery Modes

There will be 3 days of face-to-face teaching and interactive workshops for this module along with 15 weeks of online learning topics and discussion boards.

Assessment

Discussion Board – 25%
Group Project – 25%
Written Assignment – 50%
MODULE 3: LEADERSHIP OF PROCESS AND QUALITY IMPROVEMENT (5 CREDITS)

The discipline of process and quality improvement is concerned with improving the quality and safety of healthcare services. In this module, the theoretical principles and the practical strategies behind QI will be explored in depth. Scholars will build on the theory, principles and techniques learned in this module to design a quality improvement project tackling a real healthcare problem.

Module Aims

1. Introduce scholars to the main theories and principles of process and quality improvement.
2. Demonstrate the main techniques and strategies and methodologies of process and quality improvement and Lean methodologies.
3. Provide scholars the opportunity to practice QI skills in the classroom context and in the context of a QI project.
4. Present the scholar with up to date resources to support their continuing learning in process and quality improvement.

Module Topics

The following topics will be covered in this module:

1. Process and quality improvement principles
2. Fostering a culture for quality improvement
3. Implementation science
4. Quality improvement techniques and methodologies
5. Measuring improvement
Learning outcomes

At the end of this module, scholars will be able to:

- describe and discuss the main theories, principles, and methodologies of process and quality improvement
- describe the processes and known frameworks for successful implementation of change in complex organisations
- appraise and select implementation strategies for different types of improvement project.
- explain how patient safety can benefit from quality improvement methods
- explain advancements in improvement measurement
- demonstrate the ability to devise and plan a process and quality improvement project
- display proficiency in applying the tools, techniques, and methodologies of process and quality improvement to a real healthcare problem.

Delivery Modes

This module starts with 1.5 face-to-face days of interactive workshops on process and quality improvement and Lean methodologies. On the final day of the module scholars will return for a further .5 day to present their QI projects to the class and to expert judges. The reading and resource materials will be delivered online through Moodle.

Assessment

Group quality and process improvement project presentation - 100%

Groups will develop a QI project to respond to a need in the healthcare system. Groups will utilise at least two methodologies or QI tools learned on the course and present their implementation plan.
In this module, we explore the key areas of professionalism: relationships with patients, relationships with society, ethical practice, honesty and integrity, continuity of care, consent, evidence-based medicine, maintaining fitness to practice and scholarship. In addition, this module seeks to introduce scholars to the principles and practice of advanced communication. Scholars will develop the skills to tackle difficult interactions with patients and relatives such as breaking bad news and discussing end of life care. Other advanced skills included shared decision-making, obtaining consent, open disclosure.

Module Aims

1. To introduce scholars to the four main tenets of professionalism: values, knowledge, competency and ethics.
2. To introduce scholars to the most important literature on shared decision making, continuity of care, consent, evidence-based medicine, and scholarship
3. To facilitate scholars to explore the core professional values of compassion, empathy and cultural sensitivity; and to explore how healthcare culture can impact on these positively and negatively
4. To familiarise scholars with the key ethical principles in healthcare
5. To demonstrate key skills when managing difficult conversations with patients, relatives, and colleagues.

Module Topics

The following topics will be covered in this module:

1. Introduction to professionalism - professional conduct and professional regulation
2. Relationships with patients: respect, compassion, empathy, and cultural sensitivity
3. Relationships with patients: communication, shared decision making
4. Consent
5. Specialist communication – breaking bad news/end of life care
6. Open disclosure of error/ Medical litigation
7. Relationships with colleagues: interdisciplinary and inter-professional practice
8. Conflict management
9. Medical ethics
10. Continuity of care/Handover
11. Confidentiality
12. Evidence-Based Medicine
13. Fitness to practice/ Scholarship

**Learning outcomes**

At the end of this module, scholars will be able to:

- examine the principles of good professional practice in the Irish healthcare context
- analyse the key legal and ethical principles applicable in healthcare
- explain the principles of consent and demonstrate skills in obtaining consent
- demonstrate the ability to communicate risk appropriately to patients
- review and assess the principle of continuity of care
- review and assess the principles of evidence-based medicine
- demonstrate the skills of advanced communication with patients and relatives
- critically evaluate different handover tools and methodologies and demonstrate proficiency in structured handover techniques
- identify the processes involved in open disclosure of error and demonstrate skills in error disclosure
- demonstrate the ability to effectively manage difficult interactions between healthcare professionals.
- be familiar with the advanced skills of shared-decision making and end of life care

**Delivery Modes**

There will be three days of face-to-face teaching and interactive workshops for this module along with 15 weeks of online learning topics and discussion boards.

**Assessment**

Discussion Board – 25%
Group Project – 25%
Written Assignment – 50%
MODULE 5: RESEARCH METHODS (10 CREDITS)

This course is designed to introduce scholars to the fundamentals of human factors research in the healthcare domain. At the end of this module, scholars will be proficient in the data collection and analysis techniques associated with the most important human factors methodologies. In addition, this module will provide scholars with instruction on how to develop a research question and map it to the most appropriate research design. Following this, scholars will write a research protocol, using standardised reporting guidelines. These are core skills that are critical to the scholars’ ability to advance or practice in the discipline.

Module Aims
1. To familiarise scholars with the array of research methodologies, tools, and techniques in human factors health care research
2. To develop scholars’ proficiency in using an array of qualitative and quantitative methodologies
3. To facilitate scholars understanding of research phenomenology in human factors.

Module Topics
The following topics will be covered in this module:

1. Research design
2. Writing a research protocol
3. Quantitative methods: Questionnaire and survey research
4. Qualitative research: structured Interviews, and critical incident interviews
5. Fundamentals of systematic reviews and meta-analysis
6. Task Analysis: Cognitive Task Analysis (CTA), Hierarchical task Analysis (HTA)
7. Error Identification and analysis methods
8. Training Needs Analysis
9. Introduction to standardised reporting guidelines
Learning outcomes

At the end of this module, scholars will be able to:

- apply the fundamental principles of human factors research in healthcare towards the identification of an appropriate research question that complies with the FINER criteria
- select an appropriate research strategy to answer the research question
- write a research protocol to the standard of a publishable protocol
- demonstrate familiarity with the basic qualitative and quantitative methodologies in human factors research.

Delivery Modes

This module will commence with a four-day research methods workshop. This will be followed by five weeks of online reading resources, plus other online resources, PowerPoint lectures, and skills presentations. The final face-to-face day will be held at the end of the module, on this day students will present their research protocol to the class. Presentations will be marked by an expert panel. At the end of the module students will submit a research protocol with an introduction, full methodology, research design, and data analysis plan.

Assessment

Oral protocol presentation – 20%
Written protocol – 80%
MODULE 6: RESEARCH DISSERTATION (30 CREDITS)

In this module, scholars will engage in an independent research or a quality improvement project. They will utilize the knowledge, skills and techniques developed over the previous five modules towards the implementation and execution of their own research protocol. This will include achieving ethical approval, implementing the recruitment, data collection, and data analysis plan, interpreting the findings in the context of the literature and writing the research in the format of a manuscript ready for submission to a peer-reviewed journal.

Module Aims
1. To apply the knowledge acquired in the previous modules to the development of an independent research or quality improvement project that is of publishable quality.

Learning outcomes
At the end of this module, scholars will be able to:

- demonstrate an ability to execute an original research investigation
- submit a research ethics application if indicated to the appropriate research ethics committee
- implement the appropriate research strategy and methodology to answer the research question
- connect the research hypothesis to the wider knowledge in the subject area
- demonstrate data management and analysis skills for qualitative and quantitative data
- interpret the research findings in the context of existing knowledge in the area
- synthesise the knowledge in the chosen area into an extended literature review
- execute, analyse and report research to the standard of a high-quality research article.

Delivery modes
This is an independent learning module. In lieu of classroom time, there will be regularly scheduled meetings with the supervisory team throughout the dissertation period and there will be milestones for the delivery of various research outputs.
Assessment

Extended Literature Review – 25%
A 6,000-word literature review on the research topic is submitted as an appendix to the research article.

Research Article -75%
A 4,000-word submission-ready research article based on an original research study on a Human Factors/Patient safety topic or a QI investigation.
## STUDENT EFFORT REQUIREMENTS

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<th>MODULE TITLE(S)</th>
<th>YEAR</th>
<th>TERM</th>
<th>CREDITS</th>
<th>TOTAL HOURS</th>
<th>ACTIVITY HOURS</th>
<th>FACE TO FACE</th>
<th>ONLINE</th>
<th>ASSESSMENT</th>
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<td>CERTIFICATE PROGRAMME</td>
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<td>Self-directed</td>
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<tr>
<td>Error and safety in surgical healthcare</td>
<td>1</td>
<td>1</td>
<td>15</td>
<td>375</td>
<td>45 hours</td>
<td>80 hours</td>
<td>90 hours</td>
<td>60 hours</td>
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<td></td>
<td>1</td>
<td>2</td>
<td>15</td>
<td>375</td>
<td>45 hours</td>
<td>80 hours</td>
<td>90 hours</td>
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<tr>
<td>Personal effectiveness and non-technical skills</td>
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<td>15</td>
<td>375</td>
<td>45 hours</td>
<td>80 hours</td>
<td>90 hours</td>
<td>60 hours</td>
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<tr>
<td>Leadership of process and quality improvement</td>
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<td>3</td>
<td>5</td>
<td>125</td>
<td>25 hours</td>
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<tr>
<td>Professionalism and advanced communication</td>
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<td>1</td>
<td>15</td>
<td>375</td>
<td>80 hours</td>
<td>90 hours</td>
<td>60 hours</td>
<td>40 hours</td>
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<tr>
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<td>10</td>
<td>250</td>
<td>80 hours</td>
<td>25 hours</td>
<td>Protocol development write up and presentation 80 hours</td>
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<td>MASTERS PROGRAMME</td>
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<tr>
<td>Research dissertation</td>
<td>2</td>
<td>3</td>
<td>30</td>
<td>750</td>
<td>Supervision meetings 20</td>
<td>Research and write up 725 hours</td>
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Candidates must hold either:

1. A Bachelor of Medicine (MB) degree and be registered with the Irish Medical Council or the General Medical Council in the UK, or;
2. A primary degree in a health sciences field with a qualification achieved at the level of 2.2 Honours.

All candidates must have evidence of four years’ work experience in acute hospital care and must be currently working in the acute hospital setting and involved in the care of acute hospital patients.
TESTIMONIALS

"The MSc in Human Factors (Patient Safety) was relevant to every part of my clinical practice as a nurse and a manager. The facilitators and subject experts for each module were inspiring but the course structure also facilitated participants to learn from each other. This course has changed my way of thinking and given me an insight into healthcare and patient safety that I never had before. I believe this course is relevant to members from every healthcare discipline and it is the interdisciplinary element of this course that makes it so effective."

CLAIREE NOONAN, CNM3 SURGICAL ONCOLOGY, BEAUMONT HOSPITAL

"It is almost impossible to narrow down learning from the Master’s programme to a few key points. From a deeper understanding of the science of safety, appreciation of the structure and vulnerabilities of complex organisations and lessons for healthcare from other HRO’s to elements of (multi)professionalism in practice and comprehensive coverage of all aspects of nontechnical skills — the course offers so much that was new yet immediately utilisable for me despite many years of professional involvement in risk management, medical education, and simulation training. The quality of international faculty is astonishing. Some of them would command keynote slots on almost any scientific programme, but we got to spend hours with them sharing experiences of real clinical dilemmas and potential research ideas."

DR. NIAMH HAYES, CONSULTANT ANAESTHETIST, ROTUNDA AND MATER MISERICORDIAE HOSPITALS, HONORARY CLINICAL SENIOR LECTURER, RCSI

"The MSc in Human Factors in Patient Safety provides a framework for developing high-reliability practice. Safety, quality improvement, and communication are important factors in surgery and the MSc was an excellent opportunity for further study and reflection of these topics. The industry experts that visited from all over the world provided enormous depth of learning and interest in the area of human factors. I find that I apply the lessons learned in every day of my practice - from risk and safety meetings to rapid improvement events to teaching in the operating theatre."

MS. ELEANOR FAUL, CONSULTANT COLORECTAL SURGEON AT THE MATER HOSPITAL, DUBLIN

"I found the MSc an excellent course for understanding system risk and human error. The individual modules combine well to provoke valuable reflection on how we provide care, quality and safety, collaboration, teamwork communication, shared care and much more. All these were mere buzzwords before but now retain daily significance and application. The course is taught by experienced faculty and experts in a fun and interactive way. The blogs were excellent for embedding concepts and insights into each other’s disciplines. A worthwhile course and ranks as one of my best educational experiences to date."

DR. SAMUEL KUAN, CONSULTANT IN EMERGENCY MEDICINE AT MIDLANDS REGIONAL HOSPITAL, MULLINGAR

"I've really enjoyed this Masters and hope to continue to build on what I have learned as well as implement it!"

DR. CAOIMHE DUFFY, ANAESTHESIOLOGY SPR, SIMULATION FELLOW
Places on this programme are strictly limited to a maximum number of 20 scholars. Fees for the academic year 2019/2021 are as follows:

**EU Scholars:** €5,000 for Year 1 + €7,500 for Year 2;

**Non-EU Scholars:** €10,000 for Year 1 + €15,000 for Year 2
Applications are now open for the course starting in August 2019. Interested candidates can apply now at

http://www.rcsi.ie/pghumanfactors

Any queries can be directed to emerpyke@rcsi.ie
Any queries regarding the Masters (MSc) in Human Factors in Patient Safety should be addressed to the following:

Emer Pyke  
Department of Surgical Affairs  
Royal College of Surgeons in Ireland  
121 St Stephens Green  
Dublin 2

Email: emerpyke@rcsi.ie  
Website: rcsi.ie/pghumanfactors