

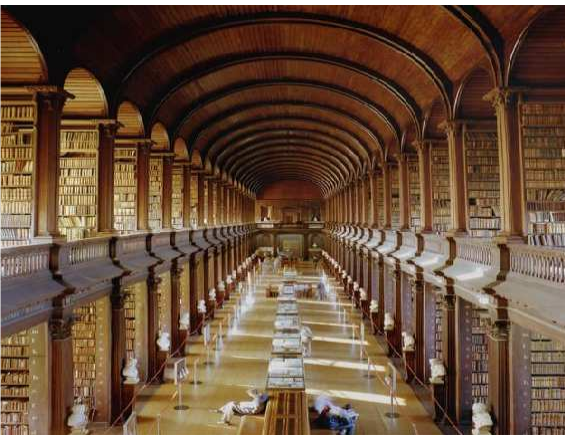
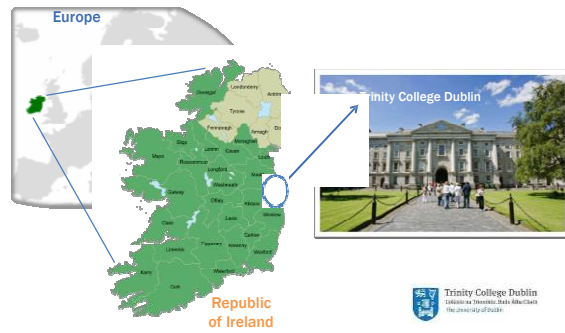


Methods and Tools in Interprofessional Education Teaching Experience from Trinity College Dublin

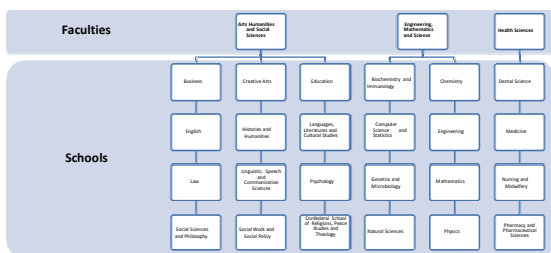
Dr Emer Guinan
 Assistant Professor in Interprofessional Learning
 Faculty of Health Sciences
 Trinity College Dublin



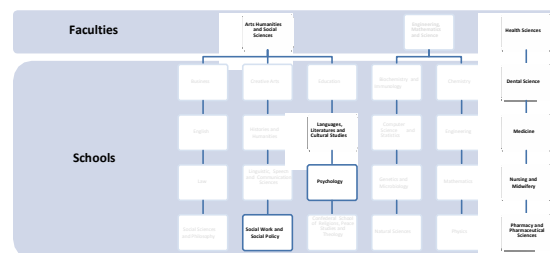
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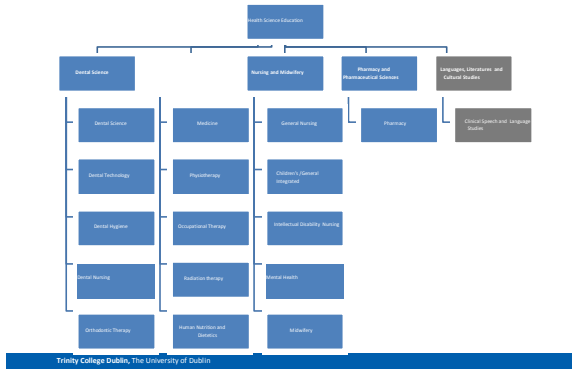
University Structure



University Structure



Undergraduate Health Science Education



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Interprofessional Education Programme

A Developing Programme

Interprofessional Learning Workshops

- Established since 2009
- Evaluation and development

New and Developing Projects

- Interprofessional learning ward
- Preparation for interprofessional learning
- Interprofessional learning case studies

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Competency frameworks

Interprofessional Collaboration Competency Domains



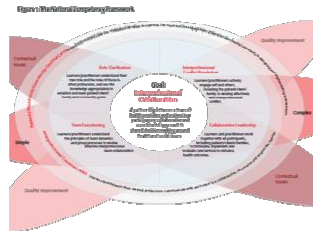
Interprofessional Collaboration

- Interprofessional teamwork and team-based practices
- Interprofessional Communication Practices
- Roles and Responsibilities for collaborative Practice
- Values/Ethics for Interprofessional Practice
- Patient and Family Centred
- Community and Population Oriented

Interprofessional Education Collaborative. (2016). United States

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Competency frameworks



Interprofessional Collaboration

- Role clarification
- Team Functioning
- Interprofessional Conflict Resolution
- Collaborative Leadership
- Interprofessional Communication
- Patient/Client/Family/Community Centred Care

Canadian Interprofessional Health Collaborative (2010). Canada

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Teaching and Learning Methods

Examples

- Case based learning
- Problem based learning
- Experiential learning
- Reflective learning
- Stimulated learning

Principles

- Active
- Interactive
- Reflective
- Patient centred

Create opportunities to compare and contrast roles and responsibilities, power and authority, ethics and codes of practice, knowledge and skill in order to build effective relationships between the professions and to develop and reinforce skills for collaborative practice.

ICPE Guidelines 2016

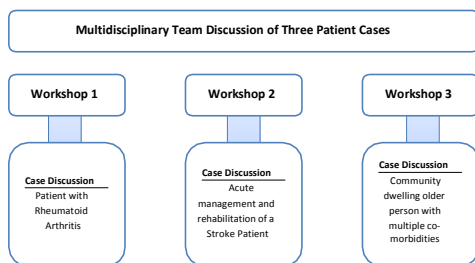
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Interprofessional Learning Workshops

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Interprofessional Learning Workshops



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Interprofessional Learning Workshops

Michaelmas Term 2016

Series of 3 interprofessional learning workshops

3rd year students

- Medicine
- Nursing
- Pharmacy
- Physiotherapy
- Occupational Therapy
- Human Nutrition and Dietetics
- Clinical Speech and Language Therapy

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Learning Outcomes

By the end of the course the student will be able to;

- Justify the team members required to effectively manage a series of patient presentations.
- Explain the role of members of the interdisciplinary team in the management of selected patient conditions.
- Demonstrate effective communication when discussing patient cases with an interdisciplinary student group.
- Justify how effective teamwork and communication can impact on patient care.

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Interprofessional Learning Workshops

Michaelmas Term 2016

Preworkshop preparation on Blackboard

- Self-directed preparation
- Video / PDF of case notes

Case Studies

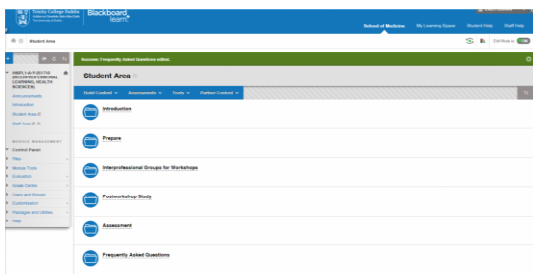
- Rheumatology
- Stroke
- Older person in the community

During the workshop students discuss the case with their interprofessional colleagues

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Virtual Learning Environment

Preparation, Discussion, Postworkshop Study



<https://tcd.blackboard.com/webapps/login/>

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Example of a Case Study

Workshop 2: Stroke

1. Early Phase

Mr Smith a 55 year old accountant was admitted to A&E with sudden onset of left sided weakness. He lives with his wife and 2 teenage daughters.

Discuss the management of the acute phase of this patient (0 – 48 hrs)

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Example of a Case Study

Workshop 2: Stroke

2. Rehabilitation Phase:

CT scan has shown a right MCA ischaemic infarct. Day 3 - Patient is now medically stable and has been referred to the stroke unit for rehabilitation.

Medical notes state the following:

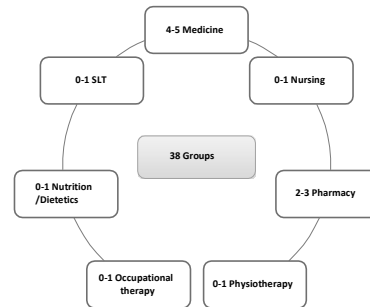
- Weakness and reduced tone and of the UL and LL 2/5
- Dependant on 2 for transfers
- Inattention of the left side
- Mild cognitive impairment
- Unclear speech - ? moderate dysarthria
- Coughing on Liquids

Discuss each of your roles in the management (assessment and treatment) of this patient.

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Interprofessional Learning Workshops

Michaelmas Term 2016



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Workshop Format

Role of Tutor

- Facilitate discussion
- Focus on learning outcomes.
 - Encourage contributions from all professions.
 - Ensure discussion of roles and responsibilities
 - Quality of communication
 - Professional and respectful conduct

The workshops are a student-led activity. Encourage consultation within the room for queries related to the role of other professions.

Workshop Flow

- Introductions
- Ice-breaker activity
- Elect a chair and secretary. Encourage different professions to take each role.
- Prompt 1
- Student led discussion
- Prompt 2
- Student led discussion
- Wrap-up

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Logistics

		Workshop 1	Workshop 2	Workshop 3
Students	Medicine	177	177	177
	Nursing	48	47	47
	Pharmacy	82	82	82
	PT	35	35	35
	OT	42	42	42
	SLT	0	24	24
	Nutrition Dietetics	24	24	24
	Total	408	431	431
Staff	Medicine	2	2	1
	Nursing	3	2	2
	Pharmacy	2	2	2
	PT	1	1	2 (jointly)
	OT	1	1	1
	SLT	0	1	1
	Nutrition Dietetics	0	0	1
	Total	10	10	11
Rooms	Trinity Centre SJH	10	10	10
	Total	10	10	10

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Interprofessional Learning Workshops

Michaelmas Term 2016

Assessment

Medicine

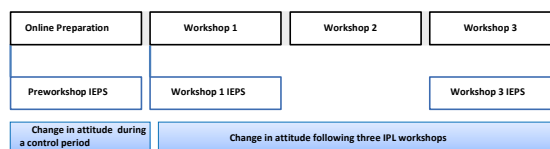
- Individual submission of 500 word reflective essay
- OSCE examination

Workshops not currently integrated into all disciplines limiting assessment.

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Evaluation

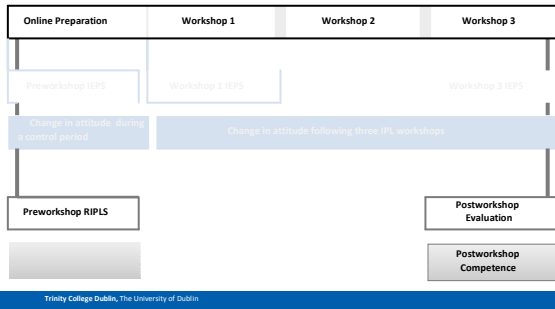
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Evaluation

Michaelmas Term 2016



Evaluation Tools

Readiness for Interprofessional Learning Scale (RIPS)

- Teamwork and collaboration
- Negative professional identity
- Positive professional identity
- Roles and responsibilities

Interprofessional Education Perception Scale (IEPS)

- Autonomy and competency
- Perceived Need for cooperation
- Perception of actual cooperation

Pre-workshop Attitudes

	Minimum	Maximum	Total (n=122)	Percentage Total Score
RIPLS				
Teamwork and Collaboration	9	45	40 (6.5)	89%
Negative Professional Identity	3	15	13 (3)	87%
Positive Professional Identity	4	20	16(3)	80%
Roles and Responsibilities	3	15	9 (2)	60%
IEPS				
Competency and Autonomy	5	30	25 (3)	83%
Perceived Need for Cooperation	2	12	11 (2.5)	92%
Perception of Actual Cooperation	5	30	25 (5)	83%

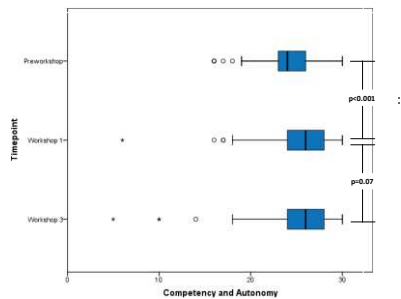
Pre-workshop Attitudes

Multiple Linear Regression Analysis

	Independent Variable	Standardized Beta	P-value	R ²
RIPLS				
Teamwork and Collaboration	Male gender	-0.25	0.009	0.18
Negative Professional Identity	Discipline: Medicine	-0.25	0.023	0.20
Positive Professional Identity	Discipline: Medicine	-0.29	0.008	0.09
IEPS				
Perception of Actual Cooperation	Discipline: Medicine	-0.32	0.003	
	Experience joint patient treatment session on clinical placement	0.283	0.005	0.17

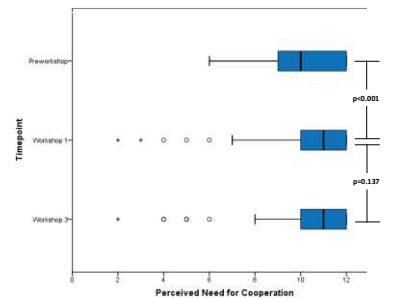
Change in Attitudes

IEPS: Competency and Autonomy



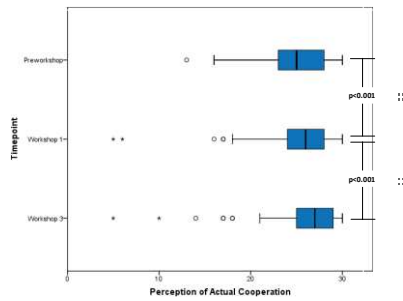
Change in Attitudes

IEPS: Perceived Need for Cooperation



Change in Attitudes

IEPS: Perception of Actual Cooperation



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Post-workshop Evaluation

	**	B	AW	L	Good	Excellent
...					150 (97.5%)	13 (26.4%)
...					120 (97.5%)	13 (27.4%)
...					127 (97.5%)	36 (26.2%)
...					119 (93.0%)	82 (36.9%)
...					85 (20.9%)	102 (76.1%)
...					57 (25.7%)	150 (78.8%)
...					119 (93.0%)	51 (43%)
...					111 (95%)	51 (43%)

Summary

Pre-workshop attitudes scores were >80% of maximum values in all domains with the exception of Roles and Responsibilities.

Significant improvement in attitudes and perception to IPL following completion of the workshop programme

- Students improved in all domain following online preparation
- Perception of Actual Cooperation domain improved significantly following the face-to-face workshops

Post-workshop over 80% of students rated both their own and their teams' performance in all competency domains as either good or excellent

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Implications

Lessons from Evaluation

Students demonstrate high readiness for IPL in 3rd year. Potential to introduce IPL earlier in the curriculum.

Students demonstrate learning following online preparation. Potential to optimise the online preparation and following interactions of students to expand each IPL activity.

Face-to-face contact required to achieve learning in certain domains

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Implications

Workshops

Conflicting clinical placements compromise attendance for some groups

Flexibility required to facilitate large interprofessional group

- Suggested solutions
 - Mixing year groups
 - IPL workshops throughout the year with optional participation

Integration into undergraduate programmes central to introducing assessment.

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Evaluation

Guinan E.M., Barrett E.M., Neil F., Grimes, T., Sullivan, D., O'Sullivan M., Patterson A., Stapleton T., Walsh I., Walsh J.J., Conlon K.C. Attitudes to Interprofessional Education Among Health Science Students Engaging in a Multidisciplinary Workshop Series. *International Journal of Health Science Education*. (under review)

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New and Developing Projects

Interprofessional Learning Wards

Developing sustainable models of interprofessional learning in practice – The TULIP project

Helen Armitage^{1,2}, Jim Connolly³, Richard Pitts⁴

¹ Faculty of Health and Wellbeing, Sheffield Hallam University, 645 Boombell Road, Sheffield, S18 1PL, United Kingdom
² Institute of Health and Wellbeing, East Midlands Healthcare, United Kingdom
³ Faculty of Health and Wellbeing, University of Nottingham, United Kingdom

Interprofessional training in the context of clinical practice: goals and students' perceptions on clinical education wards

From Richard Pitts, Helen Armitage, Jim Connolly, University of Nottingham, United Kingdom
 to h.armitage@sheff.ac.uk

www.sheff.ac.uk/interprofessional-projects

RESEARCH ARTICLE Open Access

Interprofessional training for final year healthcare students: a mixed methods evaluation of the impact on ward staff and students of a two-week placement and of factors affecting sustainability

Helen Armitage^{1,2} and Jim Connolly³

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Interprofessional Learning Ward

Pilot initiative

Pilot ward planned for March 2018

Students

- *n=8-10
- *2nd and 3rd year
- *Medicine, Nursing, Physiotherapy, Occupational Therapy

Rehabilitation and acute medical care unit for community dwelling elderly patients at St James's Hospital Dublin

Students will work together to deliver care as an interprofessional team

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Interprofessional Learning Ward

Learning Outcomes

To work together as an interprofessional team to deliver safe and effective patient-centred care.

To communicate effectively with student colleagues, hospital staff, patients and the families to deliver patient-centred care.

To increase knowledge of one's own role within the multidisciplinary team and to gain insight into the roles and responsibilities of other professions in the planning and delivery of patient care.

To work professionally and respectfully within an interdisciplinary team.

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Daily Schedule

DRAFT

Time	Student Schedule (Draft)
0800 - 0900	Student tutorials (Please see Table 2) Tutor in attendance
0900 - 0930	Break
0930 - 1000	Student led case conference Plan patient care and timetable for the day. Tutor and/or supervising clinician in attendance
1000 - 1200	Clinical activities Students work in pairs to provide patient care Session led by appropriate student discipline e.g. physiotherapy student leads on physiotherapy treatment – each student works within their own scope of practice. Supervision and sign-off provided by each discipline in line with regular practice Students timetabled to attend/deliver falls education group (30mins) and any other RMDH activities.
1200 - 1230	Admin time
1230 - 1330	Lunch
1330 - 1530	Clinical activities Students timetabled to attend/deliver balance re-education class (30mins) and any other RMDH activities.
1530 - 1600	Patient centered documentation of notes - Students discuss and document patient care with discipline supervisor Patient care signed off by discipline supervisor
1600 - 1630	Debrief session/Reflective practice Students discuss patients seen during the day and ongoing plans for patient. Tutor and/or supervising clinician in attendance

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Interprofessional Learning Ward

Evaluation

The primary purpose of the pilot project will be to examine the feasibility of the ward to inform future development. To evaluate this endpoint we will examine the experiences of (i) students participating in the ward, and (ii) clinical staff supervising the students during their clinical placement.

The objectives of the evaluation are:

- To examine the learning experiences of students participating in the pilot IPL ward.
- To examine student perspectives on ward organisation and implementation.
- To examine clinical staff perspectives on ward organisation and implementation.
- To examine clinical staff perspectives of student learning experiences in the pilot IPL ward.

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Interprofessional Learning Ward

Evaluation

Focus Groups

Students: The purpose of the focus groups will be to gather information across five major themes:

- The overall student experience on the IPL ward
- Student learning that was achieved on the ward
- The interprofessional learning experience for students on the ward
- Students evaluations of their preparation for the IPL ward
- Students evaluations of the daily running of the ward

Staff: The purpose of the focus groups will be to gather information across four major themes:

- The overall staff experience of working on the ward
- Staff evaluations of the level of preparation that they received for the IPL ward
- Staff evaluations of the daily running of the ward
- Staff impressions of student learning experience while on the ward

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Preparation for Interprofessional Learning

1-Year Dietetics

Topic	Content	Hours
Stereotypes	Lecture on stereotypes in healthcare	45 minutes
	Student activity: Pictionary activity in small groups	
Teams and Teamwork	Lecture on the role of interprofessional teams in healthcare and principles of 45 minutes teamwork Student activity: Small group discussions on clinical scenarios	
Roles and Responsibilities	4th year student leaders: one OT, one PT and two dieticians Leaders panel: Each student leader described their professions role in healthcare and their experiences. 1 st year students interacted by asking questions of the leaders	45 minutes
Multidisciplinary Teamwork	Case study provided to 1 st year students and student leaders in advance. 1 st year students were divided into four small groups in class. One student leader joined each group and discussed the case with the 1 st years. Student leaders rotated every 10-15 minutes. Using this format the 1 st year students received support with the case from two dieticians. This activity helped them develop and understand their own professional role. They also interacted with one OT and one PT. This activity exposed them to the roles of other health professionals in the management of this case. 1 st year student groups each generated three multidisciplinary treatment goals for the patient which were discussed with the full class.	90 minutes
Assessment	500 word reflective piece	

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Preparation for Interprofessional Learning

Student Feedback

"Very Beneficial – enjoyed it thoroughly and learned a lot – it seemed more relevant to our course than many other modules in first year"

"One of the most interesting and relevant things we've done all year, I really enjoyed it, getting a chance to ask them questions (the leaders) and hear about their placements was great"

"It's a very engaging practical learning, very useful, and a lot better than learning the theory of different roles"

"IPL is really useful in finding a realistic insight as to how professions function in hospital / community based cases – finding out the limits to solutions and treatments and finding out the types of cases that are encountered at work"

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Interprofessional Learning Case Studies

Identifying Opportunities

Opportunities to increase interprofessional learning activities throughout programmes.

Developed by identifying opportunities within the curricula where overlap exists.

Topic	Disciplines	
Management of a patient with COPD	Pharmacy	Physiotherapy
Medication management in dentistry	Pharmacy	Dentistry
Medication Safety	Pharmacy	Nursing
Management of a patient with head and neck cancer	Pharmacy	Clinical Speech and Language Therapy

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Interprofessional Learning Case Studies

Management of a Patient with COPD

Aim

The aim of this seminar is to enable students to experience collaborative practice through completion of an interprofessional learning seminar on management of a patient with COPD. The activity aims to increase student's awareness of the roles of other members of the multidisciplinary team in patient care and to recognise the importance of teamwork and good communication in patient care planning.

Methods of Teaching and Learning

- Small group learning
- Peer-learning

Hours

- 1 hour seminar per student

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Interprofessional Learning Case Studies

Management of a Patient with COPD

Learning Outcomes

On completion of this seminar students should be able to:

- Explain and demonstrate one's own role and responsibilities in the management of a patient with chronic obstructive pulmonary disease (COPD) to other members of the multidisciplinary team.
- To recognise the role of other professions in the management of a patient with COPD
- To demonstrate effective teamwork skills to generate team approaches to management of a patient with COPD
- To communicate professionally and respectfully with other healthcare discipline.

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Interprofessional Learning Case Studies

Management of a Patient with COPD

Session Outline

Students will be organised into small interprofessional groups to discuss the following case study.

Introduction

Students will receive a short (5 minute) introduction outlining the purpose of the interprofessional learning session, the learning outcomes for the session and the format of the session. Students will introduce themselves and their profession to their groups.

Case Study

Mary is a 70-year-old woman with COPD. She arrives at her local primary care clinic complaining of breathlessness and difficulty clearing sputum. She is due to visit both the physiotherapist and the pharmacist working in the primary care clinic.

Students should complete the following tasks within their groups (40 minutes):

Student Group	Task
Physiotherapy	Explain the role of the physiotherapist in the management of COPD
Pharmacy	Explain the role of the pharmacist in the management of COPD
Physiotherapy	Demonstrate and explain positions of case
Pharmacy	Demonstrate and explain inhaler technique
Physiotherapy	Demonstrate and explain ACBT
Pharmacy	Demonstrate and explain a patient medication record
Physiotherapy	Demonstrate and explain St George's Respiratory Questionnaire
Pharmacy	Demonstrate and explain the Medication Beliefs Questionnaire

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Challenges for the Future

Assessment**

Integration

Continued development

Opportunities for research and evaluation Staff development

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Thank you.

Questions?