

# PG Diploma in Preventative Cardiovascular Medicine

Our Postgraduate Diploma in Preventative Cardiovascular Medicine is approved by HEART UK and accredited by the RCGP

# **Course Information**



# On successful completion of this course, you will receive a University of South Wales Postgraduate Diploma.

Delivered over one year, the online part time distance learning Postgraduate Diploma in Preventative Cardiovascular Medicine course is specially developed for busy health professionals. Comprising of 6 modules (120 credits), each of 6 weeks duration; the course is designed to be practical and clinically focused.

Our online 1 year Postgraduate Diploma in Preventative Cardiovascular Medicine is designed to be practical and clinically focused. Our course will provide an integrated approach to preventative cardiovascular medicine and focus on applying scientific principles to direct patient care.

On completion of the course, graduates will be able to demonstrate:

- A systematic understanding of the care of patients in preventative cardiovascular medicine.
- A critical awareness of current issues affecting the care of patients undertaking Preventative Cardiovascular treatments
- An advanced knowledge of Preventative Cardiovascular Medicine that will facilitate decision-making in unpredictable and/or complex situations.
- An ability to use knowledge to adapt professional practice to meet the changing demands of health care systems.

# **Course Structure**

The online course lasts one calendar year and is a part-time distance learning course. It consists of 6 modules per year, each of 6 weeks duration

## Module 1 - Principles of Preventative Cardiovascular Medicine

Aim of the module:

• Develop a critical understanding of the science underpinning preventative cardiovascular medicine and the assessment of cardiovascular risk as applied to clinical practice.

Synopsis of module content:

- Candidates will establish an understanding of the concept of risk and how this applies to traditional and emerging risk factors for cardiovascular disease.
- They will study the science behind cardiovascular function and how this relates to clinical practice, as well as emerging methods of risk calculation.

On completion of this module the student should have:

- 1. The ability to appraise and apply the use of cardiovascular risk assessment tools in clinical practice and discuss the utility of emerging tools for cardiovascular risk assessment, including imaging techniques.
- 2. An understanding of the pathophysiology of vascular disease and examine its application to current clinical practice.

#### Module 2 - Cardiovascular Risk Management

Aim of the module:

• To develop a critical understanding of nutrition and lifestyle factors in the development of cardiovascular disease.

Synopsis of module content:

- Factors, other than lipid status and hypertension, may have an important impact on cardiovascular risk. Smoking, nutrition, diabetes mellitus and physical activity are of particular importance. The impact of these factors on cardiovascular disease will be evaluated in detail. Topical issues such as macronutrient and micronutrient content of diet and their impact on cardiovascular disease will be evaluated.
- Candidates will evaluate the role of legislation in prevention of cardiovascular disease.
- Candidates will assess and employ strategies to reduce

On completion of this module the student should:

- 1. Understand and apply clinical strategies to reduce smoking.
- 2. Understand and appraise the role of dietary modification in the reduction of cardiovascular disease.
- 3. Be able to critically evaluate the role of obesity and physical activity in contributing to cardiovascular disease.

## Module 3 - Lipid Metabolism in Clinical Practice

Aim of the module:

• To develop a comprehensive understanding of lipid metabolism and disorders, and their presentation and assessment in clinical practice.

Synopsis of module content:

 Lipid metabolism in health and disease and how this relates to clinical presentation. Familial hypercholesterolaemia, the commonest cause of inherited premature cardiovascular disease, will be considered in detail, including the role of family cascade testing in clinical practice. This will also include evaluation of how molecular testing and modern biochemical analysis is enhancing our understanding of lipid disorders in clinical practice.

On completion of this module the student should:

- 1. Understand lipid metabolism in both health and disease and demonstrate expertise in how different lipid disorders present in clinical practice and their underlying pathophysiology.
- 2. Understand and critically evaluate diagnostic techniques used in the clinical assessment of lipid disorders

### Module 4 - Management of Lipid Disorders

Aim of the module:

• To critically understand the management of inherited dyslipidaemias, with a particular focus on familial hypercholesterolemia.

Synopsis of module content:

 Management strategies for lipid disorders. Specific non-pharmacological interventions for lipid disorders as well as current and emerging pharmacological therapies will be evaluated.

On completion of this module the student should have:

- 1. The ability to demonstrate a critical understanding of the management of lipid disorders.
- 2. the ability to critically appraise the potential role of novel therapies in the management of lipid disorders.

#### Module 5 - Hypertension: Diagnosis and Management

Aim of the module:

• To develop a critical understanding of the pathophysiology and management of hypertension.

Synopsis of module content:

 Candidates will consider the pathophysiology of hypertension, including genetic determinants. They will evaluate both primary and secondary causes of hypertension. Diagnostic aspects will be considered, such as use of ambulatory monitoring and the use of tests to evaluate secondary hypertension. • Modern management of hypertension will be considered in detail, including resistant hypertension.

On completion of this module the student should have:

- 1. The ability to demonstrate a critical understanding of the pathophysiology of hypertension and its diagnosis in clinical practice.
- 2. The ability to critically evaluate the use of current drugs used to treat hypertension and their limitations.
- 3. The ability to critically appraise future targets for the treatment of hypertension.

### Module 6 - Preventative Cardiovascular Medicine in Special Situations

Aim of the module:

• To gain a critical understanding of preventative cardiovascular medicine in a wide range of relevant clinical conditions.

Synopsis of module content:

- A detailed understanding of the role of preventative cardiovascular medicine in conditions where this is of particular or emerging importance. The examples of diabetes mellitus, renal disease and Human Immunodeficiency Virus (HIV) infection will be considered in detail. The importance of preventative cardiovascular medicine in individuals with mental health conditions and chronic inflammatory disease, such as rheumatoid arthritis will be evaluated.
- Preventative cardiovascular medicine in children and older people will also be explored in detail.

On completion of this module the student should have:

- 1. The ability to critically evaluate the role of chronic disease in the pathogenesis of cardiovascular disease.
- 2. The ability to discuss strategies for reducing cardiovascular disease in patients with specific medical conditions.

## Assessment

## Online Postgraduate Diploma in Preventative Cardiovascular Medicine

The course puts assessment at the heart of learning by using clinical scenarios to facilitate problem-solving, critical analysis and evidence-based care. The scenarios act as both the focus for learning and assessment thus embedding assessment within the learning process.

Each of the 6 modules has the same assessment format. Due to the online nature of the course, students are expected to login and participate in the course regularly throughout the module (ideally on a daily basis).

Students are split into groups of 10-15 students and are assigned a dedicated expert tutor who:

- Facilitates clinical case discussions with the group.
- Monitors, assesses and marks each student throughout the module.

• Students use the skills gained during the lectures to engage with the different activities (see below).

Clinical case scenarios with case based discussion - 40%

Each week, students are presented with 2/3 clinical cases with associated questions. These cases are designed to promote discussion within a specific clinical area. Students:

- Complete the questions.
- Discuss the cases and issues surrounding the cases in a discussion forum.

Students discuss the cases within their tutor groups, facilitated by their tutor. They use an online discussion forum to write well referenced, scientifically written postings.

### Individual learning portfolio - 10%

The individual portfolio or journal is a learning log/diary. The purpose is for the student to reflect on their personal progress throughout the module. Students would typically include the following:

- Initial expectations of the course, reasons for undertaking the course.
- Module and/or personal learning objectives.
- Description of events/issues/learning points within their personal practice.
- Examples of change in personal practice due to knowledge gained throughout the module.
- A description of what has been learned during the module.

Students are asked to think reflectively about what they are learning from each module, how this differs from their current practice, and how they can apply what they have learned through the course to their everyday practice as a health professional. Referencing would not typically be found in a learning portfolio nor would a simple list of points learned.

#### Group/individual activity - 20%

The group activity is designed to encourage group dynamics catering to the multidisciplinary nature within the field of Preventative Cardiovascular Medicine. Students are required to produce the following:

- A group submission.
- An individual submission.

Students are also marked according to their contribution to the group submission.

The group is given a specific task to accomplish over the 6 weeks of the module e.g. Develop an appropriate screening method for your clinic. Students are required to write well referenced, scientific reports.

Case based examination - 30%

- 30 single best answer (SBA) questions.
- One hour online assessment.
- Questions are based on the clinical aspects of the module and their discussion topics.

# **Teaching Methods**

Each module has the same format. Using an online platform and one tutor per 10-15 students, the self-directed distance learning is guided by tutor stimulated discussion based on rich case scenarios. Group projects are undertaken alongside independent projects. Reflective practice is recorded in a reflective portfolio to help students consider how the learning can be translated into everyday work and practice.

Teaching starts with an induction day. Students may attend the event in the UK (Glyntaff campus, University of South Wales) and also online via a webinar.

They are a pre-course organiser, giving students the tools required to undertake the online course such as:

- Scientific writing
- Levels of evidence
- Harvard referencing
- Reflective writing

The day gives an opportunity to meet face to face with tutors/other students prior to the online course.

Students are **not required** to attend the induction day however those who attend do benefit as they get a "**jump start**" to the course. Students who are not able to attend, should request a skype/telephone call to orientate them onto the course and are advised to review the slides.

# **Entry Requirements**

Health professionals working within a clinical setting, both UK and overseas, with a related Healthcare Science degree (including international qualifications) are eligible to apply for the PG Diploma in Preventative Cardiovascular Medicine course.

Applicants without the above academic criteria but relevant/suitable experience can apply. Applications will be judged on the individual specifics of background and qualifications including ability to work at Postgraduate level (applicants may be asked to submit a piece of work for assessment to confirm that they are able to work comfortably at Postgraduate level and demonstrate requisite clinical/professional knowledge).

Applicants should submit copies of the following with their application:

- Qualification certificates
- One written reference
- English language qualification