

# WISDEM

A Collaborative Approach Towards  
Tackling Diabetes and Associated Conditions  
in Coventry and Warwickshire



## Our mission

'To improve the life and well-being of those with diabetes and metabolic disorders within the West Midlands and Warwickshire, through the provision of excellent integrated clinical care, underpinned by first class basic and clinical research and the delivery of high quality, patient-centred education for diabetes healthcare professionals, and support for patients and their carers.'

# WISDEM – a flagship partnership tackling diabetes and related metabolic conditions



The Warwickshire Institute for Diabetes, Endocrinology and Metabolism (WISDEM) – a specialist Centre providing treatment and support for the more complex cases of diabetes, endocrine and metabolic conditions – was officially opened in January 2007 in the East Wing of University Hospital, Coventry.

In addition to providing over 20 specialist clinical services, research and teaching activities are also ongoing. Clinical services are mostly Consultant-led; however there are also services led by nurses, dietitians and a podiatrist. The Centre's location is adjacent to important clinical research facilities, such as the human metabolism unit housing two whole-body calorimeters, body composition analysis and a vascular lab, and provides excellent infrastructure for clinical academic training. The location is also ideal for translational clinical research in metabolism because it is adjacent to the Clinical Sciences Research laboratories which are part of the University of Warwick. Retinopathy screening for the county and also the DIAMOND clinical database for diabetes are examples of the infrastructure hosted by WISDEM at University Hospital, Coventry that facilitate excellent clinical care. The Diabetes Centre at the Hospital of St Cross in Rugby is also part of WISDEM.

Whilst the WISDEM Centres provide clinical care, WISDEM is also a unique collaboration between Warwick Medical School and University Hospitals Coventry and Warwickshire (UHCW) NHS Trust, and plays a critical part in UHCW's strategy to Care, Achieve and Innovate for its patients and staff. Infrastructure funding is provided by Novo Nordisk A/S, the Danish pharmaceutical company. WISDEM - led by Warwick Medical School's Professor and UHCW's consultant Sudhesh Kumar – provides a hub for local diabetes healthcare professionals by working as a single local network promoting partnership working to ultimately improve the life and wellbeing of people with diabetes and other metabolic conditions, including common diseases such as obesity and cardiovascular disease. It does this through iDREaM (integrated Diabetes Education Research and Management) – a flagship project designed to unite health and social care professionals with other stakeholders in chronic disease management across primary and secondary care in Coventry and Warwickshire. WISDEM aims to develop novel and accessible models of clinical care and services that are delivered to an excellent standard. These services are driven by local need and underpinned by quality research, and a desire to deliver the highest quality experiential education and training for diabetes healthcare professionals, and appropriate support for patients and their carers in the region.

"Our institute is pleased to be undertaking this unique programme that aims to help those with diabetes achieve a quality of life similar to that of a person without this condition. By working in partnership with a variety of other healthcare organisations, I believe we are closer to achieving the goals set out by iDREaM."

A handwritten signature in black ink, appearing to read 'Sudhesh Kumar'.

**Sudhesh Kumar**

Professor Of Medicine, Warwick Medical School





## Organisation and Management

A manager oversees WISDEM's day-to-day activities, while it is strategically driven by the WISDEM Steering Board, chaired by Sudhesh Kumar. The Board incorporates a number of clinical leads from primary and secondary care across Coventry and Warwickshire, scientific and clinical research leads, diabetes education lead, manager, other key University of Warwick staff, and local PCT and patient representatives. Projects have been identified by this Board that are relevant to the development and implementation of WISDEM's overarching goal – providing specifically tailored pathways for clinical care delivery that are based upon the views of patients themselves. Rather than perpetuate tiers of care, WISDEM is making it a priority to work across primary and secondary care tackling health inequalities by focusing on interventions tailored for specific localities and populations. Wherever feasible, the drive is for care to be provided within primary care, and as close as possible to the home of the patient, with only the most complex cases being reviewed in secondary care. WISDEM has been involved with NHS Coventry and other healthcare providers in the area in the design of just such a service, and has taken a strategic approach to service development in an attempt to improve patient care.

For further information about WISDEM, contact [virginia.brown@warwick.ac.uk](mailto:virginia.brown@warwick.ac.uk)

## WISDEM Initiatives – Past and Present

Our work includes:

### **Psychological therapies for Type 2 diabetes patients**

Doctors could help Type 2 diabetes patients cope with the emotional aspect, as well as physical impact of their condition, according to researchers at the University of Warwick. Interventions such as counselling and cognitive behavioural therapy have been shown to help people with Type 2 diabetes control their blood glucose. However, a shortage of psychological therapists in the NHS means that access to these services is severely limited.

In a paper published in the Journal, 'Patient Education and Counselling', a team at the University of Warwick's Warwick Medical School and WISDEM reviewed 35 trials exploring the effects of psychological interventions delivered by trained general health professionals and psychological therapists. There was

found to be little difference between therapies delivered by the two different groups. Dr Jackie Sturt, Associate Professor of Behavioral and Social Sciences at Warwick Medical School led this research. Dr Sturt emphasized the vital importance of psychological therapies for people with Type 2 diabetes and has called for a regulated training course for general health professionals.

### Diabetes Self-Management Facilitation

Dr Sturt is working with the WISDEM clinical team to deliver effective strategies for the promotion of self-management of Type 2 diabetes, and has initiated the implementation of a novel diabetes facilitation service at the WISDEM Centre, called 'Diabetes Listener'. This service, which has attracted strong patient interest, offers up to six 40-minute appointments providing patients with an opportunity to talk about their diabetes and elements causing concern or anxiety. It is anticipated that patients will find better ways of living with their diabetes, in addition to finding new and different ways to deal with problems, resulting in generally gaining greater control. The impact of the service will be audited. Furthermore, it has attracted the interest of NHS Diabetes who may be willing to support this type of role.

For further information about this service, please contact [jackie.sturt@warwick.ac.uk](mailto:jackie.sturt@warwick.ac.uk)



**Dr Jackie Sturt,**  
Nurse and Associate  
Professor Behavioural  
and Social Sciences,  
Warwick Medical School  
and WISDEM Self-  
Management Facilitator,  
UHCW NHS Trust

### Co-Creating Health

University Hospitals Coventry and Warwickshire NHS Trust is a 'Comparator Site' for diabetes for the National Co-Creating Health project funded by the Health Foundation. Mr Peter Zeh is leading this work, investigating the Trust's strategy for managing Type 2 diabetes, and reporting on how diabetes self-management is facilitated by diabetes services in WISDEM. Activities undertaken have included investigating the use of the Diabetes Manual and determining the impact of the University of Warwick's postgraduate diabetes courses on patient self-management at the Trust.



**Mr Peter Zeh,**  
SHA Research Fellow

### Management of diabetes in hospital clinical areas

Studies of inpatients with diabetes have shown that patients have a prolonged length of stay, feel disempowered, and are subject to risks in drug error. With this in mind, regular annual audits of inpatients across University Hospital, Coventry, have found that approximately 10-15% of inpatients have diabetes as a co-morbidity. In order to continually strive for improved standards of care, two initiatives have been implemented at WISDEM. The first has seen a number of nurses throughout the Trust undertake training in the 'Management of Diabetes in Hospital Clinical Areas'. This new and timely course run by Warwick Medical School, has been designed to support hospitals to implement national health policy and will enable staff to feel confident to care for people with diabetes, whilst enhancing the hospital experience of inpatients with diabetes, reducing inappropriate emergency admissions, and potentially reducing length of stay.



For further information about the Management of Diabetes in Hospital Clinical Areas course, please contact Louise Skelton: [l.skelton@warwick.ac.uk](mailto:l.skelton@warwick.ac.uk) or [wendy.goodwin@uhcw.nhs.uk](mailto:wendy.goodwin@uhcw.nhs.uk)



### **'Think Glucose'**

This national campaign from the NHS Institute to help improve standards of diabetes care in hospital has also been implemented at University Hospital, Coventry. The campaign sets out to raise awareness throughout the hospital of the importance of glucose management. Tools are provided to assist ward staff determine the need for specialist input and to agree with patients their ability to self-manage their diabetes and to reduce drug errors.

### **Hypoglycaemia and inappropriate treatment of elderly residents in care homes**

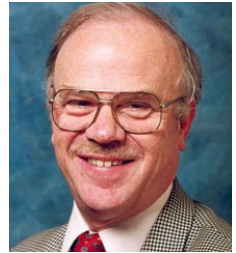
Much has been written about poor standards of care for older people with diabetes living in care homes. This has largely been concerned with under-treatment and poor quality care. A Standards of Care document for care home residents with diabetes was published by the British Diabetic Association (now Diabetes UK) in 1999 and is currently being revised.

Much less is known about the possibility of 'over-treatment' of some residents, particularly in the area of inappropriate sulphonylurea prescribing and inappropriate insulin treatment, resulting in increased risk of hypoglycaemia, leading to a reduced quality of life, an increase in the number of falls, hospital admissions and mortalities.

Dr Gadsby is currently undertaking a pilot clinical audit across care homes in Coventry, with the aim of improving the quality of life for elderly patients, particularly reducing sulphonylurea-induced hypoglycaemia, and achieving rationalisation of prescriptions, ensuring administration of appropriate therapies.

This project is supported by Novo Nordisk and Takeda UK through provision of unrestricted educational grants to the University of Warwick.

For further information regarding this pilot clinical audit, contact [roger.gadsby@warwick.ac.uk](mailto:roger.gadsby@warwick.ac.uk)



**Dr Roger Gadsby MBE,**  
GP and Associate Clinical  
Professor, Warwick  
Medical School



## Delivering Diabetes Care to Ethnic Minority Groups in Coventry (DEDICATED)

DEDICATED was launched in March 2010 and is a 3-year study funded by the West Midlands Strategic Health Authority as part of a research fellowship with Warwick Medical School. The project, which works in collaboration with WISDEM, seeks to identify why some ethnic minority groups (EMGs) struggle to manage their diabetes and thus find new ways for EMGs and NHS staff to work effectively together, to share knowledge and provide support.

For further information about this project, contact [peter.zeh@uhcw.nhs.uk](mailto:peter.zeh@uhcw.nhs.uk)

## Familial Hypercholesterolaemia

The WISDEM collaboration and Warwick Hospital are partners in a major and vital new initiative aimed at preventing 2000 unnecessary deaths from coronary heart disease in our region. Familial Hypercholesterolaemia (FH) is an inherited condition affecting 1 in 500 people. FH patients have extremely high cholesterol levels in the blood, resulting in very early onset of arterial damage and narrowing, and in extreme cases, affected individuals may have heart attacks in their teens or twenties. Although rare, those who inherit the gene from both parents may die in childhood.

If treated, these early deaths and heart attacks can be prevented. Remarkably, for those patients treated effectively in specialist clinics, life expectancy is normal. Sadly, at present, and this is true of the UK as a whole, we know of less than 15% of patients with FH, so that for the majority, treatment is not being provided or may not be sufficient.

We are encouraging GPs, Practice Nurses and hospital colleagues to refer all patients suspected of FH to the new joint University Hospital, Coventry and Warwick Hospital FH Clinic. Thanks to generous funding from the private and public sectors, we are establishing a nurse-supported screening programme to find and the treat affected family members of known FH patients and to help with counselling and genetic testing.

For further information about the Familial Hypercholesterolaemia Clinic, please contact [michael.khan@warwick.ac.uk](mailto:michael.khan@warwick.ac.uk)



**Dr Mike Khan, Head of Molecular Medicine, Warwick Medical School and Director of Lipid and Cardiovascular Risk Clinic, WISDEM, UHCW NHS Trust**

## Paediatrics

There are a number of research studies ongoing within the Department of Paediatrics. Data is being collected relating to 'Fear of hypoglycaemia in children with Type 1 diabetes and their parents' – a study funded by Diabetes UK. Participants have been involved from University Hospitals Coventry and Warwickshire NHS Trust, Birmingham Heartlands Hospital, Warwick Hospital and the George Eliot Hospital, Nuneaton. Future recruitment is also set to include hospitals in Leicester. Another study looking into the feelings of teachers regarding looking after children with diabetes in primary schools has been completed, and data analysis is underway. Funding from Novo Nordisk and Warwick Alumni has supported this project, which has been extended to include secondary schools. Paediatric Diabetes Specialist Nurses from University Hospital, Coventry and the George Eliot Hospital, Nuneaton, have also been involved in the provision of structured education to teenagers with diabetes and their parents, through the Families and Adolescent Communication and Teamwork Study (FACTS) – funded by Diabetes UK.

Another British Heart Foundation study is ongoing among primary schools in Coventry, looking into the patterns of physical activity in children from different ethnic backgrounds. Recruitment has been highly successful and future studies are being planned.

For more information about paediatric diabetes, contact [k.a.matyka@warwick.ac.uk](mailto:k.a.matyka@warwick.ac.uk)





### Coventry and Warwickshire Diabetes Education Club

Through generous support of educational grants from Takeda UK, Novo Nordisk and Astra Zeneca, led by Dr Roger Gadsby and Professor Sudhesh Kumar, WISDEM has implemented the Coventry and Warwickshire Diabetes Education Club. This is a non-promotional community meeting held every other month at Oak Tree Court, Binley Business Park in Coventry, with a focus on building strong relationships between primary and secondary healthcare professionals providing diabetes care – thus providing a more collaborative approach to developing integrated care pathways - and particularly to address practical issues in the delivery of diabetes care within primary care. Dr Roger Gadsby of Warwick Medical School - also a very recently retired local Warwickshire GP - leads the Club meetings. Topics for discussion are determined by the audience and take the format of one or two short presentations followed by several short case study examinations and discussion. The Club has covered topics including New Guidelines for Type 2 diabetes, Self-Monitoring of Blood Glucose and Glucose Lowering and Renal Function. Please contact [virginia.brown@warwick.ac.uk](mailto:virginia.brown@warwick.ac.uk) if you have not received an invite and would like to attend. All are welcome.



**Harpal Randeva,**  
Clinical Director

### *WISDEM's Clinical Services and Other Information*

- **Weekly joint Antenatal Clinic** where patients with diabetes (Types 1, Type 2 and gestational diabetes) are reviewed by the diabetes and endocrine and/or obstetric teams. WISDEM also runs a Preconception Clinic where people with diabetes who are considering starting a family, can be offered advice and help to improve control beforehand.
- **Weekly dedicated Lipid and Cardiovascular Risk Clinic** for patients with diabetes, hypertension and complex cholesterol problems (lipid disorders and hypercholesterolaemia)



- **Fortnightly dedicated Adolescent/Young Persons Diabetic Clinic** - a joint service carried out by the Paediatric and Adult Diabetes Specialists.
- **Weekly joint Diabetes Foot Clinic** where patients who have complications of diabetes affecting their feet are reviewed by a team of specialists including a vascular surgeon, senior podiatrist and diabetes specialist team.
- **Fortnightly Diabetes Renal Service** for patients with complications affecting the kidneys because of their diabetes and blood pressure.
- **Fortnightly Insulin Pump Service** provided at the Diabetes Centre, Hospital of St Cross, Rugby
- **Carbohydrate Counting Group** session and individual sessions for people with Type 1 diabetes
- **Continuous Glucose Monitoring Service** - WISDEM also offers the most recent technology to monitor blood glucose profiles over 72 hours. Results are evaluated on a computer programme to look at any unexplained fluctuation. Appropriate advice and treatment are then provided to both paediatric/young persons and adults.
- **Weight Management Service** for patients with and without diabetes. A team of specialist Dietician, Psychologist and Obesity experts run this service and closely work with surgeons who specialize in weight reduction operations.
- **Patient Support Group for Bariatric Patients and Patient Walking Group** – contact [louise.halder@uhcw.nhs.uk](mailto:louise.halder@uhcw.nhs.uk)
- **Dietetic Support** for patients with diabetes, and Diabetes Specialist Nurse input for patients with newly diagnosed and established diabetes. WISDEM also offers insulin start and supports the Community Diabetes Team and local GPs to initiate insulin. The team at WISDEM also conducts regular teaching and training for inpatient and community nurses.
- **The Coventry and Warwickshire Retinal Screening Service** is one of the oldest digital retinal screening programmes, and is operated by the WISDEM team based at the Hospital of St Cross in Rugby. This is a community-based retinal screening programme offering on-going annual screening for early detection of diabetes complications. The service also offers screening in outpatients and a catch-up service in the centre of Coventry.

In addition to diabetes services, WISDEM also offers various services that deal with other hormonal (endocrine) problems. These are as follows:

- **Weekly Thyroid Clinic**, and the only service in the region to run a fortnightly one-stop Thyroid Clinic with surgeons and an Oncologist. Patients may be offered an ultrasound scan with biopsy where results can be available on the same day.
- **Monthly joint Pituitary Service** with Neurosurgeons for patients with pituitary hormonal problems and pituitary growths.
- **Monthly joint Reproductive Endocrine Clinic** with the Obstetric and Fertility Team
- **Monthly joint Paediatric and Growth Clinic** for children and teenagers with complex endocrine and hormone problems
- **Other clinical services** include Polycystic Ovary Syndrome Clinic, Male Hormone Replacement Clinic, Neuro-endocrine Tumour Clinic, Bone and Calcium Disorders and Osteoporosis.



## Clinical Feature Focus

### WISDEM Acute Diabetes Foot Clinic

Nearly a quarter of all people with diabetes develop foot problems and many of these conditions can lead to limb amputation. Clinicians at the WISDEM Centre at University Hospital, Coventry are working to try and reduce the impact of foot problems on patients' lives and help prevent the problems recurring in the future.

The WISDEM Centre hosts the Acute Diabetes Foot Clinic led by Dr Aresh Anwar and Mr Gurdev Deogon, where the primary objective is to provide a comprehensive tertiary level acute diabetes foot service. In Coventry, patients with diabetes are classified according to NICE guidelines [CG10 on the prevention and management of foot problems]. The acute foot clinic treats those patients often with end-stage disease and complex co-morbidities.

The ongoing care of people with foot pathology is assisted by a high-quality, multidisciplinary foot care team. The team is well supported by physicians with expertise in lower limb complications, specialist Orthotists, nurses and healthcare assistants with training in management of diabetic foot wounds, and a highly experienced clinical specialist podiatrist.

In cases of an acute foot care emergency the team aims to investigate and treat vascular insufficiency, initiate and supervise wound management including debridement, and utilise systemic antibiotic therapy for cellulitis or bone infection. It is also necessary to address effective means of distributing foot pressures, including specialist footwear incorporating advanced offloading devices, and trying to achieve optimal glucose levels and control of risk factors for cardiovascular disease.



**Dr Aresh Anwar,**  
WISDEM Consultant  
Diabetologist and  
Divisional Director of  
Medicine, UHCW  
NHS Trust



**Mr Gurdev Singh Deogon,**  
WISDEM Podiatric  
Clinical Specialist,  
UHCW NHS Trust &  
Coventry Community  
Healthcare Services



#### Other work in progress:

- A multi-centre prospective, randomised, double blinded, placebo-controlled trial to evaluate the efficacy and safety of a low-molecular weight Heparin in the treatment of chronic neuro-ischaemic foot ulcers in diabetic patients.
- Alliance with the Surgical Appliance Unit and Orthotists accessed from our sister Vascular Orthology clinic has consolidated around 15 load transfer techniques offered to our patients. This work is contributing towards achieving a consensus on appropriate levels of integrated provision from these valuable services.
- Collaboration with the county vascular team at UHCW and the Lower Limb Vascular Orthology clinic to further strengthen the delivery of evidence-based clinical care for patients with diabetes foot pathology. For example to consider the role of an integrated Vascular Nurse Specialist in the foot clinic, benefiting patients a complete vascular work-up, including exercise ABPI and early duplex imaging, enabling provision of a combination of specialist interventions at a single hospital visit.
- Discussion on how best to utilise a hyperbaric oxygen chamber in Rugby to benefit our patients initially with recalcitrant chronic wounds and ulcerations
- Exploration of a Joint Renal Diabetes Foot Team at UHCW. The foot clinic already has the basis for cross opinion from a Consultant led Renal-Diabetes clinic at the WISDEM Centre.
- The most recent member of the multidisciplinary team (MDT) is an Associate Professor in Social & Behavioural Sciences from Warwick Medical School who is providing much needed psychological support. This includes utilising specialised support skills to find ways for patients to cope better with living with their diabetes and debilitating foot conditions.





## Diabetes and Obesity at Warwick Medical School

It is estimated that one in every five adults in the UK is overweight, and one in every 15 is obese. These figures are climbing steadily. Warwick Medical School is leading the way in tackling the obesity epidemic and the often related condition of diabetes.

## Our Research Expertise

### Obesity

Obesity is one of the major harbingers of metabolic disease, because it is associated with the development of Type 2 diabetes and increased risk of cardiovascular disease. Research at Warwick Medical School looks at the effects of certain foods on insulin levels and on the brain, which controls appetite and determines how the body deals with food.

Understanding how the brain regulates body weight and controls human metabolism with respect to diabetes is an area in which we have significant strengths. We are now extending this research to improve our understanding of how fat cell and gut-secreted factors signal nutritional status to the brain and how this system can go wrong.

We have one of the leading research programmes on human fat cell behaviour and how defects in the fat cell can lead to diabetes, high blood pressure and other diseases. Overweight people also have problems with excess fat in the liver and heart: our research investigates underlying problems and new ways of treating this major public health problem that could otherwise lead to increased heart and liver disease in the future.

As well as laboratory-based studies, we run research programmes that seek to discover new ways of treating obesity, in particular looking at exercise and lifestyle-based interventions. We are one of the UK's leading centres for the treatment of obesity and we run clinical trials of emerging new treatments for obesity both in adults and children.

Our neuroscience team explores specific aspects of the brain, spinal cord and peripheral nerve cells responsible for the control of bodyweight, energy metabolism and blood pressure. We aim to gain an insight into the mechanisms by which obesity and hypertension are manifested and to identify potential new sites for therapeutic intervention into these debilitating conditions. Our approach is multidisciplinary, combining state-of-the-art imaging, molecular, genetic, biochemical, electrophysiological and behavioural basic science technologies with clinical research.

## Diabetes

We examine the interaction between hormones released from fatty tissue and processes that use up fat and glucose in other tissues. One of our key strengths is the way our research spans biomedical research and patient-population-based studies.

There are close links between researchers working on molecules, through to those working with populations. Enhancing the ability of patients who have diabetes to look after themselves is an important area of Warwick's expertise.

Our innovative work to help people with diabetes look after themselves has been recognised nationally and internationally. This has included large research trials of innovative interventions, such as the Diabetes Manual, which is a guide to help people master the knowledge and skills required to successfully live with diabetes.

Other interventions that we are researching include the effectiveness of peer-led telecare support and the development of an online Virtual Clinic for young people with diabetes and their families. We have also run the UK Asian Diabetes Study that investigated novel approaches to delivering care for Indo-Asian people with diabetes, and have been testing new ways to enhance the ways GPs identify and care for people with diabetes. We also support and manage the Specialist Library for Diabetes.



## Diabetes Education at Warwick Medical School

Warwick Medical School offers prestigious education courses in diabetes for healthcare professionals and people with diabetes, and for pharmaceutical personnel. Our programmes benefit from being closely linked to current research at Warwick Medical School ensuring they are relevant and of high quality. Our courses adhere to current NICE guidelines and our teaching faculty combines its work for Warwick Medical School clinical roles in primary and secondary diabetes care. Our students are extremely satisfied with their completed courses and a high proportion of them return for further qualifications within this field. Warwick Medical School collaborated with the NHS Institute to design the educational component of the 'Think Glucose' campaign.



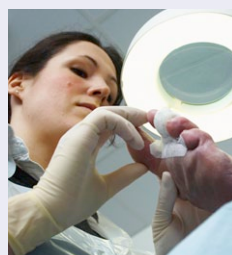
**Louise Skelton,**  
Diabetes Education  
Programme Leader and  
Acting Deputy Director  
of Masters Programmes  
& CPD



*Courses include:*

### **Certificate in Diabetes Care (CIDC)**

An internationally gold standard course that offers a foundation course in diabetes to healthcare professionals. Over 8000 healthcare practitioners from the UK and overseas have enrolled on the course, including GPs, nurses, diabetes nurse specialists, pharmacists, optometrists and chiropodists. Students are equipped with the practical knowledge and the skills necessary to provide an effective and efficient service for people with diabetes.



### **Management of Diabetes in Hospital Clinical Areas**

A new course designed to support hospitals to implement national health policy and enable hospital staff to feel confident caring for patients with diabetes, reduce inappropriate admissions, and potentially length of stay for patients. The course has been designed so that two members of a diabetes specialist team from an Acute Trust are trained to facilitate the course locally. This tried and tested cascade approach, which utilises in-house expertise, ensures that the course is tailored to local needs. In addition, local networking and relationship building can take place.

### **Trainers Accreditation Programme**

This programme is designed to teach healthcare professionals with expertise in diabetes to facilitate and teach the 'Intensive Management Type 2 Diabetes' workshops in their local area. Over 600 workshops have been taught since 2003, with over 1700 healthcare professionals receiving a Statement of Extended Practice.







### **Diabetes Manual**

The Diabetes Manual is a 1:1 structured education programme for people with diagnosis of Type 2 diabetes, and who would benefit from assistance with self-management. It is a 12-week patient-led programme supported by a trained facilitator through a single face-to-face meeting and three telephone support calls. The Diabetes Manual incorporates all aspects of diabetes self-management, including: smoking cessation, nutrition, stress, anxiety and depression, and blood glucose monitoring. Healthcare professionals experienced in providing routine diabetes care can deliver the programme in primary and secondary care. The manual enhances both the skills of the healthcare professionals and of their patients.

### **Postgraduate Education**

A range of flexible, multidisciplinary Masters level programmes are available from Warwick Medical School and there are currently four MSc programmes, and over 15 individual modules available:

- MSc in Diabetes
- MSc In Diabetes (Paediatrics)
- MSc Health Sciences (Diabetes)
- MSc Health Sciences (Retinal Screening – Diabetes)

### **Postgraduate Modules**

The large portfolio of diabetes postgraduate modules includes Diabetes and Pregnancy, Diabetes and the Foot, Obesity and Eating Disorders in Diabetes, Diabetes and Retinopathy, Type 1 Diabetes in Children, and Theory and Practice of Insulin Initiation. All modules are regularly reviewed to ensure they fit with NHS policies and NICE guidelines, and so can be taken as stand-alone courses or as part of an MSc programme.

WISDEM staff and Diabetes Teaching Fellows at Warwick are currently collaborating on the possibility of the development and implementation of further courses to expand this comprehensive portfolio.

For more information on diabetes education at Warwick, see the diabetes CPD website:

**[www.warwick.ac.uk/go/diabetes](http://www.warwick.ac.uk/go/diabetes)**



## **WISDEM**

Warwick Medical School and University Hospitals Coventry  
and Warwickshire Hospitals NHS Trust

[www.warwick.ac.uk](http://www.warwick.ac.uk)

[www.wisdem.co.uk](http://www.wisdem.co.uk)

<http://go.warwick.ac.uk/wisdem>

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