

# New standards in the prevention of type 2 diabetes: the IMAGE project

**Type 2 diabetes can be delayed or prevented among people who have impaired glucose tolerance by use of lifestyle interventions or medication – as shown by major clinical trials of diabetes prevention. However, it is a completely different issue to translate this message, derived from the lifestyle trials, to clinical practice.<sup>1</sup> We are still learning how this challenge may be achieved at a population level. Optimally, every person with diabetes risk has the chance of having access to any kind of diabetes preventative initiative.<sup>2</sup>**

**Two European funded projects, DE-PLAN<sup>3</sup> and IMAGE,<sup>4</sup> have been addressing the implementation process. In particular, the IMAGE project was able to take a step ahead and to collate available information in a systematic manner, and developed practical, relevant standards for diabetes prevention.**

A group of about 100 European experts in this field has worked for 2.5 years to prepare the main deliverables of the projects; these are the evidence-based guideline on type 2 diabetes prevention,<sup>5</sup> a toolkit for diabetes prevention,<sup>6</sup> and a guideline for evaluation and quality indicators and management in type 2 diabetes prevention.<sup>7</sup> Furthermore, a European training curriculum for prevention managers to perform diabetes prevention intervention programmes was developed.<sup>8</sup>

## **Toolkit for the prevention of type 2 diabetes**

The major output of the IMAGE project – relevant for prevention practice – is the practical guideline called ‘Toolkit for the prevention of

type 2 diabetes’. This toolkit is meant for all people involved with diabetes prevention: not only those working in primary and specialised health care services – physicians, physical activity experts, dietitians, nurses and teachers – but also stakeholders and politicians.

The toolkit<sup>6</sup> includes, in a condensed form, the essence of what is necessary to build up a diabetes prevention programme covering management, financial, intervention and quality assurance aspects. It refers to the latest evidence in the science of diabetes prevention and allows translation of this knowledge into practice.

The toolkit addresses issues such as how to budget and finance a prevention programme, and how to identify people at risk.<sup>9</sup> The core of the toolkit describes elements of an effective lifestyle intervention programme. A process model for supporting lifestyle behaviour change is presented and described in its phases (motivation, action and maintenance).<sup>10</sup> The toolkit gives the core goals of lifestyles (physical activity and diet) and provides practical instructions about how to address these with the client. Other behaviours to consider in diabetes prevention are, for example, smoking, stress/depression and sleeping patterns.

The toolkit finishes with an overview on how to evaluate intervention programmes and how to establish quality assurance.<sup>7</sup> It provides several recommendations that may help in planning type 2 diabetes prevention programmes.

The toolkit aimed to provide a good balance between clear, accurate information and practical

guidance. It is not intended to be a comprehensive source of information. Specifically, detailed instructions about how to achieve and maintain weight reduction, which evidently is one of the main issues in diabetes prevention, are not given because local and national guidelines as well as other information are abundantly available elsewhere. Furthermore, intervention delivery staff are assumed to have basic knowledge about, for example, diet and physical activity and their health effects, and about supporting behaviour change.

Finally, the toolkit is not designed to be used as intervention materials to be delivered directly to those participating in prevention interventions, although it does contain some examples of information sheets and materials which might be used with participants.

## **Prevention manager**

As part of the IMAGE project, a curriculum for the training of prevention managers was also developed.<sup>8</sup> The rationale behind this was to propose common European learning goals, teaching methods and content, as well as teaching materials for the training of health care professionals who want to carry out lifestyle interventions for diabetes prevention (prevention managers).

With this curriculum, for the first time a standardised state-of-the-art training for health care professionals interested in offering preventive intervention can be performed Europe-wide in a comparable way. This is particularly useful because a standardised method to train the trainers for diabetes prevention can also pilot

the same strategies for the prevention of other chronic diseases. All materials needed to train a prevention manager will be freely available at [www.virtualpreventioncenter.com](http://www.virtualpreventioncenter.com). National institutions, such as universities or associations interested in the training of eligible health care professionals, are encouraged to download the specific teaching material and follow the curriculum for the training of prevention managers.

The idea behind the curriculum for the training of diabetes prevention managers was to develop a standardised training curriculum for people coming from different professional disciplines, but who, together, want to deliver coordinated interventions for the prevention of type 2 diabetes.

It was a challenge to bring together the essence of what is really needed to educate a trainer to perform interventions for people at risk, which aim for sustained behaviour change and measurable prevention of diabetes. The curriculum consists of seven modules, mostly focusing on skills training to support sustained behavioural change, and training in management issues around the delivery and organisation of preventive interventions. We encourage health professionals and others interested in diabetes prevention to use and modify this curriculum and feed back their experiences to us.<sup>8</sup>

### Network: 'Who is active in diabetes prevention'

An important current new initiative is the start of an international network: 'Who is active in diabetes prevention'. The aim of this network is that people who are interested in the prevention of diabetes, and those who want to start being active in the field, meet in one professional network. The network itself encourages exchanging knowledge and

recent intervention material, as well as educational standards, but the most important focus of the network is the exchange of experiences in diabetes prevention practice. It is also perceived as a platform to exchange scientific information or up-to-date study information between research groups and people active in diabetes prevention. People from more than 147 countries are already part of the network and, of note, many participants come from low- and middle-income countries – thus spreading the information about diabetes prevention practice and new prevention programmes already initiated, and this will increase the intervention quality.

**All those who are interested in the prevention of diabetes are invited to register for free and benefit from this global network: [www.activeindiabetesprevention.com](http://www.activeindiabetesprevention.com).**

### The outlook

As estimated by the International Diabetes Federation, the number of type 2 diabetes patients is likely to increase during the forthcoming years. The implementation of the IMAGE recommendations might facilitate the control of the type 2 diabetes epidemic and eventually diminish the burden of diabetes. There will be a lot of work in implementing these recommendations in the future. Also, there is a need to continue systematic research into the aetiology, prevention and care management of type 2 diabetes. In particular, translational research regarding the implementation of existing knowledge into public health and clinical practice must be carried out. This is not possible without proper research funding that should become available through various national and international funding sources.

Whatever the event, the future of type 2 diabetes prevention has

never been as bright as it is today – the time to act is now.

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