BRIDGES Research Net

Testing a new approach to translate research achievements into improved quality of care worldwide

Juan José Gagliardino

Incorporating scientific advancements into daily clinical practice is a logical and practical process by which to improve the quality of care provided to people with diabetes. Yet this potentially beneficial approach remains a largely unresolved issue in contemporary medicine. Significant progress has been made through translational research to bring research benefits ‘from bench to bedside’ or, more accurately in this case, ‘from lab to lifestyle’ to the benefit of people with diabetes and those at risk. However, as the author points out, challenges remain. In this article, Juan José Gagliardino describes a novel approach being taken by the International Diabetes Federation via its BRIDGES programme to optimize and diffuse the public health benefits of the translational approach being applied in research projects underway worldwide.

Strong interest exists in partnerships between the community and academia as a means to improve population health through clinical research,1,2 and the issue has been addressed through translational research, which aims to bridge the gap between research and daily care.3 In order to facilitate this process, in 2006 the US National Institutes of Health put forward the Clinical and Translational Science Award (CTSA) programme.4

At the same time, primary care Practice-Based Research Networks (PBRN) – another strategy to close the gap between scientific achievements and their...
application in daily-care practice – found that less, rather than more, translation is required to apply research to practice when clinicians are involved in deciding what to study, how to study it, and how to evaluate and present their results.

**Translational challenges**
The process of ‘marrying’ research with daily practice is not always a smooth one. It often requires a paradigmatic shift in terms of relationships, conceptual frameworks and even the languages used by different partners in order to communicate. The relationship between PBRN and the CTSA programme is in its ‘getting-to-know-you’ phase, and the participants are currently negotiating their expectations. It is possible, as has been suggested by a number of authors, that PBRN might evolve gradually from clinical laboratories into collaborative learning communities that use both traditional and non-traditional methods to identify, disseminate and integrate new knowledge in order to improve primary care processes and patient outcomes.

In 2007, based on this collaborative principle, the International Diabetes Federation (IDF) and Lilly Diabetes agreed to take up an active role in translational research via IDF’s Building Research in Diabetes Global Environments and Systems (BRIDGES) programme. BRIDGES is managed independently by IDF and supported financially by an educational grant of USD 10 million provided by Lilly Diabetes. The overarching objectives of BRIDGES are to reduce the risk of developing type 2 diabetes and its chronic complications; and ensure improved access to evidence-based practice for people worldwide who have already developed the condition.

The results of BRIDGES activities – completed or still underway – across six continents have demonstrated the efficacy of community-based translational research projects in addressing the diabetes epidemic, as well as in strengthening partnerships within and between local communities and national health authorities. BRIDGES has facilitated the construction of an international scientific network of experts in diabetes, and has been the catalyst behind a process to promote good-quality, evidence-based practices and procedures.

**New strategies were required to enhance the power of translational research.**

The wealth of experience gained during these recent years enabled us to recognize that although the traditional mechanisms of support for projects have been successful, new strategies were required to enhance the power of translational research. With this in mind, IDF has begun testing a new initiative, ‘BRIDGES Research Net’. It should be noted that BRIDGES
Research Net uses unspent funds allocated to the 4th round of BRIDGES funding. The aim of this initiative is to strengthen the sustainability of current projects while replicating effective strategies in further locations – disseminating positive project outcomes and implementing successful interventions worldwide with (from the outset) the participation of local researchers and the direct involvement of local authorities.

A key condition of this initiative will be the involvement of local health authorities, including health ministries, researchers and IDF Member Associations, in order to devolve ownership of all activities and guarantee long-term self-sustainability. Moreover, the participation of these key stakeholders will produce a quantum leap in awareness of diabetes; and significant improvements in primary and secondary prevention.
and treatment – and ultimately, optimized quality both of the care provided to and of the lives of people with diabetes and those at risk.

In order to select successful outcomes to date, BRIDGES Executive Committee and BRIDGES Review Committee will focus on the 38 projects (34 countries) that have already received grant funding, and are dedicated to primary and secondary prevention. The chosen interventions (and methodologies) are then to be replicated in other locations around the world following a call for tender in the current year.

In an attempt to guarantee the success of this initiative, we will use the model developed for D-START, which involves the participation of international experts, the provision of training workshops, and continuous follow-up during the intervention phase. (Visit www.idf.org/d-start for more on D-START.)

**BRIDGES Research Net in action**

BRIDGES Research Net will be tested on a project underway in Alexandria, Egypt, which is evaluating the impact of an educational preventive foot care centre for people with diabetes. With a reasonable financial investment and over a relatively short period, this project achieved impressive results in diabetic foot management in Egypt:

- Providing self-care education for 3,600 people with diabetes and training for 2,700 professionals
- Reducing the prevalence of diabetes-related nail infection from 65% to 27%
- Reducing the prevalence of active diabetic foot ulcers from 11% to 3%
- Initiating diabetes foot care teams in eight Egyptian universities.

A call for tenders is being drawn up based on this successful intervention. In order to ensure future self-sustainability, the active role of local authorities will be stressed in the tender conditions and clearly outlined in the application process.

**Multi-party interaction will contribute to improvements in the quality of care provided to people with diabetes.**

Selected applicants will join a three-to-four-day onsite workshop, managed by the Principal Investigator of the Egyptian project, ensuring that the quality of the original intervention is reproduced. Routine evaluations will take place during the period of implementation to make certain that the intervention is running smoothly, that it is fully adapted to local needs, and that the pre-defined outcomes are measured and remain attainable.

It is our strong belief that BRIDGES Research Net will help to close the gap between basic and clinical research achievements and their incorporation into daily care practice, while strengthening relationships among local researchers, health ministries, academic organizations and IDF. This multi-party interaction will contribute also to improvements in the quality of care provided to people with diabetes, and the incorporation of effective prevention strategies into daily practice at every level. These measures and the overall approach of the initiative will play a key role in preventing the development and progression of chronic complications. Such outcomes will help to reduce the burden of diabetes on society in general, and, above all, contribute to improved quality of life for people with diabetes.

For more information about this new initiative, please contact us at bridges@idf.org.

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**References**


