

FACT SHEET ELEVEN

The DAFNE Collaborative is committed to the continued improvement and development of DAFNE through Research and Development. The DAFNE programme provides a unique test-bed to conduct research not only to improve Type 1 diabetes management but also to learn more about educational interventions in diabetes and long-term conditions more generally.

The DAFNE Research group are currently involved in 3 research programmes:

1. National Institute for Health Research Grant

The £1.7 million research grant will fund a varied programme of research (A to F below) over a 5 year period, which will be underpinned by economic analyses to establish its cost effectiveness.

1.A Research Database

Further development of the DAFNE web-based database to examine the relationship between biomedical and psychosocial

outcomes. We will record important health events to calculate cost-effectiveness.

Commenced:	December 2008
Centres involved:	10
No recruited:	1471 at end August 2011
Completion date:	September 2012

Update: Recruitment is ongoing until September 2011. Pre course data has been entered for the 1439 of the 1471 participants recruited to date and one year post course follow up data collection 659 commenced December 2008.

Research investigators are already planning and developing protocols for the utilisation of this data to answer a range of questions regarding the impact of DAFNE.

We are now actively encouraging DAFNE researchers to make use of the valuable data resource held within the DAFNE Research Database. Please contact the DAFNE Project Office (dafne.project@sth.nhs.uk) for more details. It is anticipated that the publications using the data will commence in 2011.

There was an oral presentation on the Research Database at the Diabetes UK Annual Professional Conference 2011.

Title: A research database for structured education (DAFNE)

Description: The development and potential use of a research database to undertake detailed studies of the

effects of structured diabetes education (DAFNE) in people with type 1 diabetes

1.B Mixed methods study

Undertake a combined quantitative and qualitative approach to understand factors which facilitate/impede self-management to help explain patterns and predictors of successful outcomes not only in Type 1 diabetes but will also inform programmes in Type 2 diabetes.

Commenced: June 2008
Centres involved: 11
No recruited: 263
Completion date: August 2010

Update: Recruitment completed. Follow-up data collection at 3, 6 and 12 months post course has been completed. Interim analysis of the 3 and 6 month data has been performed with 12 month analysis currently underway.

A subgroup of 30 patients and 12 educators from 5 of the 11 DAFNE centres took part in an in-depth interview (Qualitative) study. Some findings have already been published (refer to Fact Sheet 2).

1.C Comparison between DAFNE + MDI and DAFNE + CSII

Develop and conduct pilot study comparing DAFNE training plus continuous subcutaneous insulin infusion (CSII) against DAFNE plus multiple daily injections (MDI). DAFNE curriculum and patient resources developed

to use with patients new to insulin pumps and training given to DAFNE educators.

Commenced: December 2009
Centres involved: 3
No recruited: 55
Completion date: September 2010

Update: 5 CSII courses and 4 MDI courses were completed during 2010. All follow up data, at 6 months post course, have been collected. Preliminary analysis of the results is underway. The experiences of this pilot have informed the development of a major RCT now funded by the HTA (refer to section 2. REPOSE for further information).

1.D DAFNE delivered over 5 consecutive days and 1-day / week for 5 weeks

Undertake a trial to establish whether intermittent training is as good as the 5 day course. This has the potential to allow those who cannot attend for 1 week to benefit from training and permit more flexible delivery where educators work part-time.

Commenced: May 2010
Centres involved: 7
No recruited: 181
Courses ran: June 2010 – May 2011
Final results of trial due: September 2012

Update: 5-week course curriculum and resources have been developed. Educator training sessions completed in May/June 2010.

14 5-day (control) and 14 5-week courses have been run. Follow-up data is collected at 6 weeks, 6 months, final 12 months post

course data collection is currently under way and is due to be completed by May 2012.

1.E DAFNE Extra

Intervention: Post DAFNE course designed to support those with continued problems with hypoglycaemia by improving awareness of symptoms and strategies for avoidance. The course will be educator led and will be designed to help patients recognise and modify any unhelpful cognition/behaviours which may impede improvement.

4 courses to run: 2 courses at King's College London and 2 at Sheffield
Curriculum currently under development
Educator training in early 2012
Courses to be run Spring 2012
Results expected Autumn 2012

1.F User involvement

Resource and develop our existing users group, who will contribute to all aspects of this programme.

Commenced: June 2009
Completion date: September 2012

Update: 15 DAFNE Graduates elected by the DAFNE User Group to form an active group - DAFNE User Action Group (DUAG). Training in how Users can be involved with health research was provided in July 2009. Two DUAG representatives sit on each of the research groups.

Work to assess the impact of DUAG involvement in research has commenced with observations of research group meetings attended by DUAG members and interviews with DUAG representatives and researchers.

2. REPOSE: Relative Effectiveness of Pumps over MDI and Structured Education

An NIHR Health Technology Assessment (HTA) funded trial comparing optimised multiple insulin injection therapy (using rapid and twice daily long-acting insulin analogues) with continuous subcutaneous insulin infusion (CSII) in adult type-1 diabetic patients provided with high quality structured DAFNE. Patient course curriculum and resources development is complete. Educator training started, due for completion in January 2012.

Commencement: Starting recruitment on 1 November 2011
Centres involved: 7
No to be recruited: 280 (140 MDI and 140 CSII)

3. The Irish DAFNE Study

3.A Ongoing care post DAFNE

Commenced:	October 2006
Centres involved:	6
No recruited:	437
Completion date:	October 2012 (5 year grant + 12 months no-cost extension)

In 2005 the Health Research Board in Ireland awarded the Irish DAFNE Study Group a five year programme grant under their Health Services R&D award.

Randomised controlled trial evaluating 2 methods of follow-up care post-DAFNE training, comparing structured group follow-up care with a return to usual clinical care.

- ✓ To develop a new model of ongoing care for DAFNE graduates based on group follow-up and peer support.
- ✓ To undertake an exploratory trial comparing this new model of care (group follow-up of DAFNE graduates) with “usual care”, i.e. a return to one-to-one clinic visits following DAFNE training
- ✓ To incorporate a health economic analysis to inform future policy making
- ✓ A qualitative sub-study will also further inform patient experiences of group follow-up versus traditional one-to-one clinic visits
- ✓ Current Controlled Trials Ltd registration: <http://www.controlled-trials.com/ISRCTN79759174>

Update:

- ✓ All baseline, 6, 12 and 18 month follow-up data has now been collected. Main results manuscript currently (24/10/2011) currently for peer-review with the *British Medical Journal*.
- Dinneen SF, O’Hara MC, Newell J, Coffey N, Byrne M, O’ Shea D, Smith D, Courtney H, McGurk C, O’ Scannáil M, Breen C, for the Irish DAFNE Study Group. Group follow-up compared to individual follow-up after structured education for type 1 diabetes: the Irish DAFNE Study. Abstract accepted for oral presentation at the 47th European Association for the Study of Diabetes Annual Meeting, Lisbon, Portugal, 12-16 September 2011. *Diabetologia*, 2011, 54(Suppl 1):S33
- O’ Hara MC, Dinneen SF, Newell J, Coffey N, Byrne M, for the Irish DAFNE Study Group. Comparing the effect of 2 different methods of follow-up after structured group education on psychosocial measures in patients with type 1 diabetes: the Irish DAFNE Study. Abstract accepted for oral presentation at the 47th European Association for the Study of Diabetes Annual Meeting, Lisbon, Portugal, 12-16 September 2011. *Diabetologia*, 2011, 54(Suppl 1):S97
- Qualitative and other psychosocial results have been presented at Diabetes UK Annual Professional Conference 2011, the European Health Psychology Conference, Crete, Greece, Sept 20 – 24, 2011, the 31st

Conference on Applied Statistics in Ireland, 18-21st May 2011 and 17th Qualitative Health Research (QHR) Conference Vancouver, British Columbia, Canada October 25-27, 2011.

DAFNE/ ITTP with repeat interviews within 6 months following the course to explore their experiences, behaviours and opinions. Courses in all three countries will also be observed in their entirety with in-depth field notes accompanying the observations.

International Comparison Study

Commenced : February 2010
Completion date: October 2012

Comparative exploration of patient behaviours and outcomes following structured education programmes for people with Type 1 diabetes: Ireland, UK and Germany. This Ph.D study aims to explore differences in type 1 diabetes outcomes in 3 separate cohorts of people from Ireland, the UK and Germany who have all participated in a SEP. An important component of the work will be to contextualise and evaluate healthcare and cultural organisation and structure in the 3 countries.

Quantitative study

A common dataset is being collected across ten centres in Germany who deliver the precursor of DAFNE, the Insulin Training and Teaching Programme (ITTP), ten DAFNE research centres in the UK and seven DAFNE centres in Ireland. Follow up data to be collected at 12 months post-DAFNE/ -ITTP training.

Qualitative study

Interviews will be conducted with 16 patients and 4 educators from each country before

Future Research

We are now actively encouraging DAFNE researchers to make use of the valuable data resource held within the DAFNE Research Database. Please contact the DAFNE Project office dafne.project@sth.nhs.uk for more details.

For the latest information about DAFNE please check the website or email: dafne@northumbria-healthcare.nhs.uk

www.DAFNE.uk.com