

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 2 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 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:	585 (as of January 2010)
Completion date:	September 2012

Update: Recruitment is ongoing until September 2011. Pre course data has been entered for the 585 participants recruited to date and one year post course follow up data collection 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. It is anticipated that the publications using the data will commence in 2011.

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 and 6 months post course has been completed. 12 month post course data collection is currently being collected.

A subgroup of 30 patients and 12 educators from 5 of the 11 DAFNE centres are taking part in an in-depth interview (Qualitative) study. Interim results from the Qualitative study were presented as a poster at Diabetes UK Annual Professional Conference 2010.

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).

Commenced: December 2009
Centres involved: 3
No recruited: 54 (Feb 2010).
Recruitment on-going for remaining 3 courses
Completion date: September 2010

Update: 3 CSII courses and 3 MDI courses have been completed. A further 2 CSII and 1 MDI course will be delivered as part of this pilot study. Follow up data to be collected at 6 months, due to commence in June 2010.

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: Due to commence May 2010
Centres involved: 6
No recruited: Not started
Completion date: Due for completion June 2012

Update: The patient 5-week course curriculum and resources have been developed. Piloting of the curriculum will commence February 2010.

The curriculum and resources are under development for a training workshop for educators who will deliver the 5-week curriculum. Educator training will take place April - May 2010. The first patient courses due to be delivered May 2010

1.e Repeaters course

Develop and pilot a psychologically based course, incorporating research described in study 1.b above, for those needing additional input.

Commenced: Due to commence 2011
Completion date: Due 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: Sept 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 will commence in 2010 and be completed in 2012.

2. The Irish DAFNE Study

The Health Research Board in Ireland has funded (250,000 Euro/year) a 3 year cross border study, which commenced in January 2007. If the results are favourable after 3 years there may be an option to extend the study for a further 2 years. The aims of the study are:

- ✓ 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.
- ✓ To undertake in-depth interviews on a subset of DAFNE graduates to explore their understanding and experiences of participating in DAFNE and to explore the factors that facilitate or hinder self-management following DAFNE training and how these might change over time and in light of receiving “usual” versus group.

Commenced: October 2006
 Centres involved: 6
 No recruited: 439
 Completion date: October 2012
 (including 12-month
 no cost extension)

Update: 6 month post course follow-up complete, 12 month follow-up completed for all but two courses, 18 month follow-up due for completion in August 2010.

The study has been granted a 12 month no-cost extension to enable the delivery of an additional study looking at international comparison work looking at the varied outcomes in Ireland, the UK and Austria.

Dissemination of the Irish Study to date

Oral Presentations

O’Hara MC et al. Validating a diabetes specific quality of life measure in an English speaking population: the Irish Dose Adjustment for Normal Eating (DAFNE) Study [abstract]. *Diabetologia* 2009, **52**(Suppl1):S13

O’ Hara MC et al. . Oral presentation, Western Area in Diabetes Colloquium, Bundoran, Co. Donegal, 1st May 2009

Casey, D et al. A model of the factors influencing self management following DAFNE. 2nd International Nursing Conference Building and Promoting Excellence in practice. NUI, Galway, April 2009

Breen C et al (2009). Structured education for people with Type 1 diabetes in Ireland: the Irish DAFNE Study. Oral presentation, Expert Advisory Group on Diabetes Conference, Dublin, 22nd April 2009.

Casey D et al (2009) Structured education and self management of Type 1 diabetes. RCN International Nursing Research Conference. Cardiff 24th-27th March

Murphy K et al (2008) Participant perceptions of the effect of a structured education programme on their management of Type 1 diabetes. Oral presentation, Therapeutic Patient Education Conference Budapest November 2008

Poster Presentation

MC. O’Hara et al. Evaluating self-management support in Type 1 diabetes: design and baseline data from the Irish Dose Adjustment for Normal Eating (DAFNE) Study. The Irish Endocrine Society Meeting, Cork 6-7th November 2009. *Irish Journal of Medical Science* 2009, **178**(Suppl 10): P58

Dinneen SF, et al. Evaluating self-management support in Type 1 diabetes: design and baseline data from the Irish Dose Adjustment for Normal Eating (DAFNE) Study. Submitted to European Association for the Study of Diabetes. *Diabetologia* 2009, **52**(Suppl 1):S389

Dinneen SF et al. (2009). A) Update on the Irish DAFNE Study. B) Profile of participants at baseline. C) Comparing ADDQoL and DSQoL quality of life tools. Seminar, Centre for Clinical Health Services Research and Development, 31st March 2009

McGowan A et al. The Dose Adjustment for Normal Eating (DAFNE) education programme decreases frequency of severe hypoglycaemic episodes, doses of basal insulin and reported hypoglycaemia unawareness. Poster at Irish Endocrine Society Meeting, Kildare, 7th November 2008

C. Breen et al (2008). Biomedical and Psychosocial outcomes 12 months following dose adjustment for normal eating (DAFNE) training in routine clinical practice in Ireland. Accepted for poster presentation, Therapeutic Patient Education Conference, Budapest, 5th Nov 2008 - 8th Nov 2008 www.kenes.com/tpe/posters/304.htm

Daly L et al. Initial experience with Dose Adjustment for Normal Eating (DAFNE) training in routine clinical practice in Ireland: biomedical and psychosocial outcomes at 12 months. Poster presentation, European Association for the Study of Diabetes Annual Meeting, Rome, September 2008

Murphy K et al. (2008) Qualitative research outcomes: DAFNE Collaborative Conference: Manchester: July 2008

Breen C, for the Irish DAFNE Study Group. Irish DAFNE Study: delivering structured follow-up. Presented to the DAFNE Collaborative Meeting, July 2008

Hyland, L.A. DAFNE Ireland: Baseline and Prospective Data. Oral presentation on the findings of the preliminary analysis of the Dose Adjustment for Normal Eating (DAFNE) Ireland Data. Paper presented at the Health Psychology Seminar Series, Centre for Outcomes Research and Effectiveness, University College London, 16th November 2007

Hyland, L.A. & Clark, M. Preliminary Analysis of Psychological and Physiological Data from the DAFNE (Ireland) Programme. Paper presented at the Irish DAFNE (Dose Adjustment for Normal Eating) Study Conference, Galway, Ireland, 1st December 2007

The Irish DAFNE Study Group. Implementing and evaluating a structured education programme and a new model of ongoing care for Type 1 diabetes: the Irish DAFNE Study. Presented at the 31st Annual Meeting of the Irish Endocrine Society, Galway, November 2006. *Ir J Med Sci* 2006;175(Suppl 2): 30.

Peer-reviewed Journal Articles

Dinneen SF et al. . The Irish DAFNE Study Protocol: A cluster randomised trial of group versus individual follow-up after structured education for Type 1 diabetes. *Trials* 2009, **10**:88

Currently with Journal/ Conference Editorial Team

Murphy K et al [manuscript submitted Nov 2009]. Factors that influence participants' implementation of DAFNE: a qualitative investigation. *Journal of Clinical Nursing*.

Breen C et al. [abstract submitted to ADA in Jan 2010]. Achieving quality control in a randomized controlled trial of an educational intervention: experiences from the Irish Dose Adjustment for Normal Eating (DAFNE) Study. *70th Scientific Sessions of American Association of Diabetes*.

Future Research

The DAFNE Research Group have applied for funding to conduct a full RCT comparing outcomes of DAFNE + MDI and DAFNE + CSII, building on the pilot work discussed in 1C above. It is hoped that the funding will be secured early 2010 to enable the study to commence late 2010/early 2011.

DAFNE Online is an independent community of DAFNE Graduates, Health Care Professionals, Management and friends and family of those with Type 1 diabetes. Please visit the website to find out more.

www.DAFNEonline.co.uk

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

www.DAFNE.uk.com