

Institution: University of Bedfordshire

Unit of Assessment: 3 – Allied Health Professions, Dentistry, Nursing and Pharmacy

Title of case study: Improved Care and Support for Older People with Diabetes

1. Summary of the impact

The work of IDOP has resulted in:

- Improved awareness of challenges posed by diabetes in older people among NHS commissioners and service providers
- Greater recognition at national and international level of the importance of frailty in diabetes
- Developing the growing national community network for practice and learning (ODN)
- Publication of UK and European Guidelines for clinicians outlining better standards of diabetes care and best clinical practice
- Improved service commissioning by creation and dissemination of specific guidance
- Initiating major new national, European and global projects being initiated, attracting considerable funds, and providing the platform for enhanced diabetes care in older people (see www.instituteofdiabetes.org).

2. Underpinning research

Professor Alan Sinclair – The Institute of Diabetes For Older People (launched May 2008) www.instituteofdiabetes.org – systematic investigation of 4 key areas in diabetes:

(1) British Care Homes

- First detailed prevalence study (27% Sinclair AJ et al, *Diabetes Care 2001*) including:
 - Polypharmacy, high medication costs, inappropriate prescribing, disability, functional loss, fragmented diabetes care, high mortality
 - End of life care scenario among residents/risk for harmful adverse drug reactions insulin and oral glucose-lowering agents.
- With Royal Holloway College, London, validated first quality of life measure (ADDQoL Senior, Diabet Med 2012) for aged subjects with diabetes.
- Coventry Nursing Home study (Sinclair AJ et al, Br J Diab Vasc Dis 2012): first world-wide study to demonstrate patient-centred benefits (quality of life, mood level, knowledge of diabetes) from a multimodal intervention
- With IDDT, established a patient passport in care homes (iddt.org/news/passport-for-diabetesin-care-settings)

(2) Diabetes and Disability

Demonstrated:

- Excess physical disability/reduced health status in older people with diabetes; used predictive tool to evaluate mobility limitation (Sinclair AJ et al, *Diabetes Care 2008*).
- Slower rate of cognitive decline in Alzheimer's Disease (AD) with diabetes (Sanz C, Sinclair AJ et al 2009).
- That diabetes worsens functional status in those with a recent diagnosis only (<1 year) of AD (Sanz C, Sinclair AJ et al, 2012).
- Reduced physical/mental health status in older people with diabetes (Bourdel-Marchasson I, Sinclair AJ et al, *Diab Res Clin Pract 2013*; 101(2):226-35.

First UK key paper series on diabetes and frailty: Sinclair et al, Atienzar P, *Br J Diab Vasc Dis* 2012. Complements work from DH-funded **AWARE** Study in Wales: in this area: **visual loss**, Sinclair AJ et al, *Age Ageing.* 2000 *Jul*; 29(4):335-9; **cognitive dysfunction**, Sinclair AJ et al, *Diabetes Res Clin Pract.* 2000 *Dec*; 50(3): 203-12.

(3) Diabetes and Medication Issues

Provided evidence of:

- inappropriate reasons by GPs for delaying treatment in type 2 diabetes
- significant delays in treatment in newly diagnosed older people with diabetes (vs younger counterparts): UK GP database
- elevated HbA1c as the strongest factor associated with initiating antihyperglycaemic medication
- education and counselling by community pharmacists can result in improvements in the cardiovascular risk profile in type 2 diabetes (Ali M et al. *Diabet Med. 2012 Sep*;29(9): e326–33)

Impact case study (REF3b)



See (1) above: (polypharmacy): awarded NIHR (RfPB) grant (2012) to research medication issues in care home residents with diabetes.

(4) Work of IDOP-NHS Network to enhance Diabetes Care in England

2011 – established England-wide Network: Alan Sinclair appointed National Clinical Lead for Diabetes in Older People: established 4 regional clinical champions/steering groups addressing 6 key priorities per year/4 regional conferences (2012), national conference (2012 & 2013):

- Emphasised key roles of carers Sinclair AJ et al, Diabet Med. 2010 Sep;27(9): 1055–9
- Led first National Care Home Diabetes Audit (with Royal Colleges, Age UK, ABCD, DH, Diabetes UK pre-launched in October 2013
- Established in 2012/13 series of focus groups/workshops diabetes education for care homes (East of England/Northamptonshire) (in press: Br J Diab and Vasc Disease, 2013)

(5) Provided Platform for successful project applications:

National (a) DH grant (2010–current) – older people's diabetes initiative/establish England-wide Network– approx £350k (b) NIHR award (2012) – investigate hypoglycaemia in care homes – £207k ; (c) Scleroderma Society – vasculitis/relationship to disorders including diabetes – 2011 onwards – £125k.

International (a) multicentre EU (FP7):Co–Lead with Madrid (2011–16) – *MID-Frail Study*–Diabetes/Frailty – 6 million euros; (b) multicentre EU (FP7) (IDOP,work package lead (validating frailty markers in diabetes) and AJS (Steering Group) – **FRAILOMIC** (2012) – 12 million euros;

Major Pharma (a) Global Project – disseminate good clinical practice in diabetes – £85k (b) Educational DVD: Patient Safety: Diabetes/Cardiovascular Disease (JWA £30k) (c) DPP4-I audit in Primary Care – £45k.

Key researchers at IDOP:

Professor Alan Sinclair: 0.5 fte (10/2005-12/2011), 0.8 fte (1/2012 onwards)

Fractional appointments: Profs Roger Gadsby, Andrew Krentz, Mike Kirby, Peter Scanlon, K Chakravarty; Stephan Anker, Leo R Manas; Jochen Springer, Stephan von Haehling, Wolfram Doehner.

3. References to the research

- 3.1 Sinclair AJ, Conroy SP, Bayer AJ. Impact of diabetes on physical function in older people. Diabetes Care. 2008 Feb; 31(2):233-5. Epub 2007 Nov 16 (Impact factor: 6.7)
- 3.2 Sanz C, Andrieu S, Sinclair A, Hanaire H, Vellas B; REAL.FR Study Group. Diabetes is associated with a slower rate of cognitive decline in Alzheimer disease. Neurology. 2009 Oct 27:73(17):1359-66 (Impact factor: 8.7)
- 3.3 Milligan FJ, Krentz AJ, Sinclair AJ. Diabetes medication patient safety incident reports to the National Reporting and Learning Service the care home setting. Diabet Med. 2011; 28 (12): 1537-40 (Impact factor: 2.9)
- 3.4 Zhang Q, Marrett E, Jameson K, Meiler S, Davies MJ, Radican L, Sinclair AJ. Reasons given by general practitioners for non-treatment decisions in younger and older patients with newly diagnosed type 2 diabetes mellitus in the United Kingdom: A survey study. BMC Endocr Disord. 2011 Oct 28; 11(1):17. (impact factor: 2.2)
- 3.5 Sanz CM, Hanaire H, Vellas BJ, Sinclair AJ, Andrieu S; REAL.FR Study Group. Diabetes mellitus as a modulator of functional impairment and decline in Alzheimer's disease. The Real.FR cohort. Diabet Med. 2012 Apr; 29(4):541-8. (Impact factor: 2.9)
- 3.6 6. Gadsby R, Galloway M, Barker P, Sinclair A. Prescribed medicines for elderly frail people with diabetes resident in nursing homes-issues of polypharmacy and medication costs. Diabet Med. 2012 Jan; 29(1):136-9. (Impact factor: 2.9)

4. Details of the impact

1. Greatly improved awareness of the challenge and change in culture at local, regional and national levels posed by diabetes in older people

- increases in web traffic; significant interest/attendance at IDOP/OPDN national conferences, invited contributions by DH and Diabetes UK, membership of *Parliamentary All Party Diabetes Think Tank*, published evidence of collaborative working (see section 3 below) and participation in international scientific conferences.



2. A growing community of practice and learning

OPDN has > 500 members, features regular blogs/newsletters, is vibrant, proactive and contributed to: Lancashire Social Services - add only care homes with good diabetes care to approved list; validated national screening tool for cognitive impairment in diabetes (Mini-Cog) -Sinclair AJ et al. Diab Res Clin Pract 2013); Bexley network – Pharmacists, service users, key clinicians enhanced medication reviews - reduced dangerous and expensive over-prescribing; Diabetes website: OPDN created а suite of information/ resources on NHS www.diabetes.nhs.uk/networks/older people network/?#sg anchor further information on the work of the network is summarised at

www.diabetes.nhs.uk/our publications/programme logic models/#.

3. Creation of UK and European Guidelines providing better standards of diabetes care and contributing to better practice.

Producing National Guidance in End of Life Diabetes Care (within Diabetes UK, ABCD, TREND–UK, NHS Diabetes (available at www.diabetes.org.uk/About_us/Position-statements-recommendations/Position-statements/End-of-Life-Care- /this was promoted & disseminated at the national Palliative Care Conference (April 2013).

2013: National Best Clinical Practice Statement on Diabetes and Dementia with NHS Diabetes /TREND-UK, endorsed by Diabetes UK, ABCD, Alzheimers Disease Society (available at www.instituteofdiabetes.org).

2011: European Diabetes Working Party on Older People (EDWPOP) guidelines and Position Statement on diabetes care in older people promoted across Europe: Diabetes Metab. 2011 Nov;37 Suppl 3:S27-38 (Impact factor: **2.43**) J Am MedDir Assoc. 2012 Jul;13(6):497-502 (IF: **4.7**). **2010**: Development of national guidance on diabetes in care homes (Good Clinical Practice Guidelines – Diabetes UK 2010 – published: Diab Medicine 201128(7):772-7 (IF: 2.9).

- **4.** Improved service commissioning 2010/11 with NHS Diabetes published a Commissioning Document 2000 hard copies printed and disseminated, hundreds of online hits/downloads.
- **5. Major new national, European and global projects being initiated and attracting considerable funds:** led to enhanced reputation and partnership working with DH, Diabetes UK, EU, and major pharma.
- **6. Dissemination of key findings (with recommendations)**: evidenced by inclusion in guidance/publications: NHS Department of Health/NHS Diabetes, Diabetes UK, ABCD, TREND-UK, Royal Colleges, BGS, RCN, Social care organisations including Age UK, European and International Diabetes Societies and Geriatrics Societies, Insulin Dependent Diabetes Trust, English Community Care Association.

5. Sources to corroborate the impact

5.1 carehome.co.uk, October 2013 – National diabetes care home survey highlights 'concerning' results

The first ever National Care Home Diabetes Audit revealed that over 60% of the 2,043 premises surveyed did not have a designated member of staff with responsibility for diabetes management.

The audit was carried out by the Institute of Diabetes for Older People (IDOP) in partnership with ABCD (Association of British Clinical Diabetologists) and a group of other key collaborators.

www.carehome.co.uk/news/article.cfm/id/1561234/national diabetes care home survey

5.2 diabetes.co.uk, May 2013 – First clinical guidelines for elderly diabetic care launched New guidelines for doctors, nurses and care home managers who work with or care for older people with type 2 diabetes have been released to ensure older diabetic patients receive better care. The clinical European guidelines the first for elderly diabetics – have been put together by the Institute of Diabetes for Older People (IDOP) in an effort to address current care issues, which include the high number of elderly diabetics needlessly suffering serious complications due to a lack of proper care and preventive treatment.

<u>www.diabetes.co.uk/news/2013/Mar/first-clinical-guidelines-for-elderly-diabetic-care-launched-98119885.html</u>

5.3 diabetesonthenet.com, March 2013 - Leading diabetes expert receives international award

Impact case study (REF3b)



The Director of the Institute of Diabetes for Older People, Professor Alan Sinclair, has been awarded the International Association of Geriatrics and Gerontology Presidential Award for his work in improving the care given to older people with diabetes. The award is the highest honour in the field.

www.diabetesonthenet.com/news/view/leading-diabetes-expert-receives-international-award

5.4 PR Newswire, March 2013 – Millions of Older People With Diabetes Denied Proper Care

Older people with diabetes are needlessly developing devastating complications because they are being denied proper care and aggressive treatment. Professor Alan Sinclair, Director at Institute of Diabetes for Older People (IDOP), said it was wrong that younger people were routinely being given treatments that were denied to those who are older.

www.prnewswire.co.uk/news-releases/millions-of-older-people-with-diabetes-denied-proper-care-195462521.html

5.5 GP magazine, March 2013 – GPs urged to make diabetes 'ward rounds' in care homes GPs should visit local care homes each week to check for signs of complications in elderly people with diabetes, according to the academic behind the first guideline on care for older people with the disease. Professor Alan Sinclair from the Institute of Diabetes for Older People (IDOP) said weekly visits could pick up complications such as infections and help to avoid hospital admissions.

www.gponline.com/News/article/1173492/GPs-urged-diabetes-ward-rounds-care-homes/

5.6 Daily Mail online, March 2013

Older people with diabetes are suffering needless life-changing complications, including amputations and blindness, because of discrimination in favour of younger patients, a new report has warned. www.dailymail.co.uk/health/article-2288583/Older-diabetics-suffering-needless-amputations-blindness-worst-care.html?ito=feeds-newsxml

5.7 NHS Diabetes, July 2012 – Professor Alan Sinclair, National Clinical Lead for Diabetes in Older People

Professor Alan Sinclair is our National Clinical Lead for Diabetes in Older People and he has just started a new blog. In his monthly postings, Alan will offer helpful suggestions about improving diabetes care for older people which you will be able to take back to your teams.

webarchive.nationalarchives.gov.uk/20130513172055/http://www.diabetes.nhs.uk/blog_professor_alan_sinclair/#

5.8 Diabetes, January 2010 – A revision document prepared by a Task and Finish Group of Diabetes UK

Good clinical practice guidelines for care home residents with diabetes: www.diabetes.org.uk/Documents/About%20Us/Our%20views/Care%20recs/Care-homes-0110.pdf

5.9 IDOP website, June 2012 – Older people network showcased at parliament

A commitment to "prevent diabetes from becoming a barrier to successful aging" was made at the parliamentary launch of the Older People Diabetes Network. More than 60 people, including politicians, doctors and senior managers, from as far afield as Spain and Scotland came to hear about the network, launched by the Institute of Diabetes for Older People (IDOP) and NHS Diabetes, on 18th June. Professor Alan Sinclair, Director of IDOP and National Clinical Lead for Diabetes in Older People, said the network had so far received "overwhelming support". Addressing delegates, he said: "With focussed high-quality care being delivered across the country in health and social care sectors we can prevent diabetes from becoming a barrier to successful aging, which I hope all of us have as an ultimate goal."

instituteofdiabetes.org/news/older-people-network-showcased-at-parliament-2

5.10 NHS Diabetes, June 2011, Commissioning Diabetes Services for Older People

High-quality diabetes care for older people is provided by services which actively identify and manage those individuals with diabetes who have special needs as a result of extreme frailty, advanced age (>80y) or residency within a care home.

webarchive.nationalarchives.gov.uk/20130513172055/http://www.diabetes.nhs.uk/document.php?o =25