Evidence into Practice: evaluating a Childcentred intervention for diabetes medicine management

Submission date Recruitment status [X] Prospectively registered 12/06/2008 No longer recruiting [X] Protocol Statistical analysis plan Registration date Overall study status 23/06/2008 Completed [X] Results [] Individual participant data Last Edited Condition category Nutritional, Metabolic, Endocrine 03/02/2015

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof Anne Williams

Contact details

Nursing, Health and Social Care Research Centre School of Nursing & Midwifery Studies Eastgate House 35-43 Newport Road Cardiff United Kingdom CF24 0AB +44 (0)29 2091 7816 awglanrhyd@aol.com

Additional identifiers

Protocol serial number 0001653

Study information

Scientific Title

Evidence into Practice: evaluating a Child-centred intervention for diabetes medicine management

Acronym

EPIC

Study objectives

Little evidence exists concerning the effectiveness of the types and formats of information that could empower children to make decisions regarding medicines and self-care. For children with type one diabetes, intensive structured education programmes exist, however there is insufficient evidence about the effectiveness of information underpinning these programmes or routine clinical management.

Aim:

To develop and evaluate an individually-tailored, age-appropriate information resource to support decision-making and self-care relating to insulin management and electronic blood glucose monitoring for children aged 6 - 18 years with type one diabetes, compared with available resources (if any) in routine clinical practice.

Objectives:

- 1. Review gold-standard clinical guidelines, currently available information including findings from completed Phase 1 of current SDO/145/2007 to identify best practice, and types/formats of information most likely to assist age-appropriate decision-making and choices concerning blood glucose monitoring and insulin management
- 2. Develop an age-appropriate child-centred information resource for children/young people, to support appropriate use of blood glucose meters to optimise management of and concordance with their insulin regime
- 3. Explore the utility of the resource within different contexts in which children manage their routine diabetes care (home, school, community) with and without support from parents or healthcare professionals, and in alternative settings
- 4. Explore how children with and without their parents, teachers, nurses, doctors use (or not) the information resource to support decision-making; in particular how children/parents 'self-prescribe' the correct (or incorrect) dose of insulin
- 5. Identify similarities and differences between the resource developed for adolescents and those available within adult diabetes services
- 6. Evaluate the resource within the context of routine diabetes care in relation to patient outcomes (diabetes-specific, health-related quality-of-life concordance, acceptability, ease of use, and glycaemic control)
- 7. Identify gaps in knowledge

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics approval pending as of 12/06/2008.

Study design

Pragmatic randomised controlled trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Type one diabetes

Interventions

The investigation is a mixed-method study informed by the 'Promoting Action on Research Implementation in Health Services' (PARIHS) framework which has been widely used to inform design and evaluation of evidence-into-practice initiatives.

To meet our objectives which are aligned with the phases of the Medical Research Council (MRC) framework for randomised controlled trials (RCTs) of complex interventions we have designed a four-stage study:

Stage 1: Review and, where appropriate, undertake further work to identify types/formats of information most likely to assist age-appropriate decision-making/choices related to children /young people with type one diabetes. Duration: April 2008 to October 2008.

Stage 2: Construct an exemplar information resource, piloting for variations as necessary. Duration: November 2008 to October 2009.

Stage 3: Conduct a pragamatic evaluation to assess utility, acceptability effectiveness and cost effectiveness of the information resource. Duration: November 2009 to June 2010.

Stage 4: Undertake data synthesis and comparative analysis. Duration: July 2009 to March 2011.

The intervention lasts for 8 months with a follow-up at 3 months from baseline and 3 months from first follow-up.

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

Choice of outcomes is guided by Health Technology Assessment (HTA) commissioned systematic reviews recommending that HbA1c (glycaemic control measure) is not the appropriate primary outcome on which to assess benefits of an intervention designed to more directly effect behaviour/self-management. Therefore, the primary outcome measure is diabetes self-efficacy and quality-of-life using the Diabetes Pediatric Quality of Life Inventory (PedsQol).

Outcomes will be measured at baseline, 3 months (follow-up 1) and 6 months (follow-up 2).

Key secondary outcome(s))

- 1. HbA1c
- 2. Generic quality of life
- 3. Routinely collected NHS/child-held data costs
- 4. Service use
- 5. Acceptability/utility

Outcomes will be measured at baseline, 3 months (follow-up 1) and 6 months (follow-up 2).

Completion date

01/09/2010

Eligibility

Key inclusion criteria

- 1. Children aged 6 18 years, either sex
- 2. Type one diabetes

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Lower age limit

6 years

Upper age limit

18 years

Sex

All

Key exclusion criteria

- 1. Severe learning difficulties
- 2. Significant social problems
- 3. Needle phobias

Date of first enrolment

01/02/2009

Date of final enrolment

01/09/2010

Locations

Countries of recruitment

United Kingdom

Wales

Study participating centre Nursing, Health and Social Care Research Centre Cardiff

Sponsor information

Organisation

Cardiff University (UK)

ROR

https://ror.org/03kk7td41

Funder(s)

Funder type

Government

Funder Name

National Institute for Health Research (NIHR) (UK) - Service Delivery and Organisation (SDO) Programme (ref: 0001653)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created Date added	Peer reviewed?	Patient-facing?
Results article	results	01/03/2014	Yes	No
Protocol article	protocol	27/09/2010	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/2025	No	Yes