Reducing Variability and Improving Diabetes Care in General Practices in deprived and ethnic areas (ECLIPSE Project):

A Qualitative Evaluation of Consultant-led Diabetes Virtual Community Clinics in Coventry (QUAL-ECLIPSE)

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1.0 Executive Summary

Background

Managing diabetes within healthcare budgets in an ageing and multimorbid population is challenging providers across the world. Deprivation and multi-cultural communities in inner city practices add to these issues for primary care teams. Coventry is a medium-sized industrial and ethnically-diverse UK city where low health literacy and language barriers hamper access to diabetes care for people living in deprived and ethnic areas, leading to poorer self-management. There is a paucity of evaluation studies on diabetes consultant-led specialists virtual clinics, supporting primary care teams.

Aim

The aim of this study, QUAL-ECLIPSE, was to evaluate the operational activities of primary care Diabetes Specialist Consultant-led Virtual Clinics (the intervention) in deprived inner-city areas of Coventry. The feasibility of this service and identification of innovative approaches to managing people with diabetes at high risk of developing complications, were also studied.

Methods

A qualitative evaluation was undertaken in seven general practices in inner-city deprived areas participating in the intervention (weekly - diabetes specialist consultant, diabetes specialist nurse and diabetes specialist dietitian - consultations) between November 2016 and October 2017, using weekly participant observations during the intervention, observations at monthly interventionists' team meetings and one-to-one post-intervention semi-structured interview with nineteen participants (patients, primary care clinicians and diabetes specialist interventionists). Data were analysed using thematic analysis.

Findings

Over the ten months observing the intervention, 28 'Diabetes Virtual Clinic' sessions (comprising 154 consultations) and five interventionists' team meetings were observed. Nineteen participants [eight patients; eight primary care clinicians, comprising of five GPs and three senior practice nurses; and three interventionists (a Diabetes Specialist Consultant, Diabetes Specialist Nurse and a Diabetes Specialist Dietitian)] - participated in the post-intervention semi-structured interviews. There was intra and inter-group variation on the perceptions of the operational activities of the Diabetes Specialist Consultant-led Virtual Clinics, involving primary care clinicians, interventionists and patients, brought together by the first-rate value of the virtual clinics and to put this model of care into practice. The Diabetes

Specialist Consultant-led Virtual Clinics were feasible: It was evident from the participant observation and primary care clinicians' interviews that 'high-risk' patients with low health literacy skills found it difficult to self-manage their diabetes and reported less concordance with taking medication and developed confidence with the intervention. The ethnicity of the interventionists contributed to successful change of traditional diet, adherence to medication for the majority of the patients from ethnic minority groups. The majority (75%) of patients interviewed, experienced practical difficulties with using the NHS Prescription Ordering Direct service, a system for repeat prescriptions; this was addressed by the specialist team. A range of innovative approaches of managing complex patients with diabetes were identified including having monthly diabetes specialist consultant-led sessions which were found to upskill primary care clinicians (GPs and senior practice nurses) in managing complex cases.

Fifteen (94%) of the primary care clinicians and patients who were interviewed, highly valued the diabetes specialist consultants and dietitians' contributions, with 100% (n=8) of the primary care clinicians stating that the consultant-led clinic sessions helped their understanding of complex cases; enhancing their knowledge and skills. All eight patients interviewed reported enhanced self-management following the intervention, with seven stating they would like the intervention to become part of their routine diabetes care in their local GP practice. Furthermore, three of the eight patients felt that joint diabetes sessions involving them, their primary care provider and the Diabetes Specialists helped decision-making. Psychological and peer support were suggested by the patients as areas of service improvement.

Seven of eight primary care clinicians stated they would like the intervention to be implemented at practice-level compared to referring complex diabetes cases into the hospital settings. Furthermore, the majority of primary care clinicians valued the ECLIPSE database (a system to identify patients at high risk of diabetes complications) and sought integration of this database into the EMIS system currently used by general practices. All primary care clinicians who were interviewed reported the development of an effective working relationship with the interventionists, in particular the two diabetes specialist consultants. The primary care clinicians felt highly appreciative of the interventionists' effort, time and expertise in making a positive impact in their service.

The Diabetes Specialist Nurse (DSN) service was predominantly used by one practice, mostly due to lack of engagement from the other practices. Joint diabetes clinic sessions involving the DSN and practice nurse were not often valued by the primary care clinicians; the DSN therefore often worked independently and not with the practice nurse due to a lack of nursing manpower in the practice.

The interventionists had passion for their work and built positive relationships with the primary care teams. Two diabetes specialist consultants reported that although the initial engagement with GP practices was sometimes challenging, excellent working relationships with the primary care clinicians developed over time. The interventionists received complimentary feedback from their patients and in general, from the primary care clinicians. They worked well together, upskilled the primary care staff and most importantly, made a difference to the lives of patients with diabetes at high risk of complications.

Conclusions

A Diabetes Specialist Consultant-led Virtual Community Clinic to support, stimulate and upskill primary care clinicians and empower patients to self-manage their diabetes, is feasible. Involvement of a broad group of stakeholders in the Consultant-led clinic was perceived by the majority of primary care clinicians to improve primary care clinicians' knowledge and skills striving for improved patient care. In order to promote innovative working approaches to minimise the delay in the treatment of diabetes patients at high risk of developing complications and to ensure prompt and effective implementation of care, a Diabetes Specialist Consultant-led Virtual Community Service is recommended. This would improve individualised patient care and support primary care clinicians. Futher research with a cost-effectiveness analysis of this service is also warranted.

2.0 Acknowledgements, Contributors, Conflict of Interest, Funding, Sponsorship and Ethical Approval

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Contributors:

PJO and PZ conceived the study design, PZ directed the implementation of the qualitative study design, collected and analysed data and wrote up the report. HR, NG, and VDS participated in the study design and implementation of the study. AY participated in the data analysis and in writing of the report.

Conflict of Interest:

The authors have declared no competing interests with respect to this research and / or report or authorship that could inappropriately influence their work.

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The views and opinions expressed in this report are those of the authors and do not necessarily reflect those of the funder /sponsor, NHS, or the Department of Health and Social Care. If there are verbatim quotations included in this report the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, the funders/sponsor, those of the NHS, or the Department of Health and Social Care.

Ethical approval:

Full Ethics approval was obtained from National Research Ethics Service (NRES) Committee West Midlands – Solihull with reference number 16/WM/0074 in April 2016).