

# Examining nurse-patient interactions for strategies nurses use to enable patient engagement with diabetes self-management technology

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# **Background:**

Since 1996 there has been a national UK rise in the number of individuals diagnosed with diabetes from 1.4 million to 3.5 million. Figures are expected to continue to climb to over 5 million by 2025.

To elevate incurred complication pressures arising from uncontrolled diabetes significant emphasis is being placed on supporting Individuals to self-manage, via self-care technology. Patient attitude towards diabetes technology are favourable<sup>[1]</sup>. However, utilisation of technology and effective self-management do not ubiquitously correlate.

At present self-management systems operate through the use of generic formulae to calculate 'correct' insulin dosages. However, their generic nature often means the goal of



maintaining normal blood glucose levels remains elusive. Resultantly a clinical trial, entitled Patient Empowerment through Predictive Personalised Decision Support<sup>[2]</sup> is being conducted to investigate the application of a self-management system that instead uses artificial intelligence to generate bespoke management advice.

# Gap in Our Knowledge:

Patient engagement with technology is still a crucial deciding factor upon successful application, which is further facilitated by healthcare professionals via self-care support (i.e. effective education). Patients receive the majority of their diabetes education via nurses<sup>[3]</sup> however the flexible style required to achieve successful patient communication and education has been signposted as a difficult method to employ for nurses who lack experience<sup>[4]</sup>. Therefore, exploring engagement strategies that successfully enabling patient engagement with diabetes technology are paramount.

### Aim:

To examine interactions between patients with T1D and their nurses as to understand the strategies nurses utilise to encourage patient engagement with self-management technology.

# **Objectives:**

- ➤ Establish level of patient engagement with self-management activities.
- ➤ Establish patient level of understanding regarding self-management device.
- Establish level of patient involvement in decisions regarding their care.
- Explore communicational content for engagement strategies.

Audio Recordings & Field Notes

Conversation Analysis Identify
Engagement
Strategies

## **Summary:**

Conductance of this study will outline a myriad of productive evidence-based engagement strategies nurses can utilise in future practice.

### References:

[1] Nundy, S., Dick, J.J., Solomon, M.C., Peek, M.E. (2013) 'Developing a Behavioural Model for Mobile Phone-Based Diabetes Interventions. Patient Education and Counselling', 90, pp.125-132

[2] (http://www.pepper.eu.com)

[3] MacDonald, L., Stubbe, M., Tester, R., Vernall, S., Dowell, T., Dew, K., Kenealy, T., Sheridan, N., Docherty, B., Gray, L., Raphael, D. (2013) 'Nurse-Patient Communication in Primary Care Diabetes Management: An Exploratory Study. BioMed Central Nursing', 12(20)pp. 1-10.

[4] Funnell, M. Nwankwo, R., Gillard, M., Anderson, R., Tang, T. (2005) Implementing an Empowerment-Based Diabetes Self-Management Education Program. The Diabetes Educator', 31(1)pp.53-61