Conference sub theme 1: Practical Implementation

Conference sub theme 2: Health Systems

Abstract title: Working in partnership throughout the Colne Valley PCN to increase the access and uptake of a low carbohydrate diet – a summary of the engagement process and key outcomes

Abstract sub title: A case study

Author Name: Emily Fallon<sup>1</sup>, David Oliver<sup>2</sup>, Kim Andrews<sup>3</sup>, Daniel Doherty<sup>4</sup>

- 1. Transformation and Engagement Manager, Mid and South Essex Integrated Care Board, United Kingdom
- 2. GP Partner, Freshwell Health Centre, United Kingdom
- 3. GP Partner, Freshwell Health Centre, United Kingdom
- 4. Alliance Director, Mid and South Essex Integrated Care Board, United Kingdom

Body: 300 words, excluding sub headings

**Background** There is some evidence indicating that a low carbohydrate diet can improve health and wellbeing. However, a low carbohydrate diet is sometimes perceived as too expensive and carnivore based, hence it can be viewed as inaccessible to many.

**Objectives** To strengthen engagement with underserved communities and to improve health and wellbeing by co-producing two new low carbohydrate meal planners (one low budget and one vegetarian), with local people and community groups.

**Methods** Community engagement methodology was informed by Healthwatch Essex and comprised of a focus group with community representatives (11 organisations) and an online survey (23 responses). Insight, including recommendations of language, format, and content, was utilised to develop the new meal planners. Community partners (15 organisations) supported targeted dissemination of the planners. An online survey was developed to evaluate project outcomes (46 responses).

**Results** Within two months of launch, 28,000 people accessed the new meal planners, via app, website, printed copies in community venues, and/or mail order. Of the survey respondents, most reported having a long-term condition (57%) and 33% reported to have minimal income. Following use of the new planners, many reported increased knowledge about nutrition (73%) and 50% reported to have eaten more vegetables, with 33% reporting reduced intake of ultra-processed foods. Many users (60%) lost weight, with an average weight loss of 11kg per person, and self-reported improvements in their long-term conditions (50%).

**Conclusions** Working in partnership with diverse local communities and organisations to co-produce and deliver a public health intervention is key to increase access, uptake, and outcomes, particularly when targeting underrepresented groups. The use of self-serving, tailored low carbohydrate meal planners can support individuals within underserved communities to lose weight and improve their health and wellbeing knowledge, attitudes, behaviour, and outcomes. Future work could develop and evaluate additional bespoke meal planners to address unmet needs in other communities.