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ABSTRACTS COLLECTION OPEN

Abstracts from the 11th UK Congress on Obesity (UKCO)

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PROGRAMME LISTING

Award/competition sessions

A1: ASO Best Practice Award
A2: ASO Ken Clare Award
A3: Three-minute early career competition

Member-led symposia

M1: National evaluation insights to shape the future of England's CEW clinics for children and young people: findings from ENHANCE
M2: How are we still getting it wrong? Addressing pitfalls in transdisciplinary obesity research across the life course
M3: Beyond GLP-1 medications: why behavioural and psychological support still matters in weight management
M4: Co-designing dietary guidance for obesity management medications: the evolving role of dietitians and pathway innovations across the devolved nations

Oral sessions

O1: Maternal obesity and reproductive health: advancing evidence from preconception to pregnancy
O2: Exploring specialist weight management and wider stakeholders
O3: Reframing and rethinking our approach to weight management: understanding the wider context and determinants
O4: Exploring the lived experience of obesity and complications during weight management in children
O5: Rethinking how we approach weight management – local authority practice, systems approaches and digital delivery
O6: Exploring the lived experience of obesity and complications during weight management in adults
O7: Understanding the efficacy of and heterogeneity in medication use for weight management

Poster sessions

P01–P80

ASO BEST PRACTICE AWARD

A1 More than weight (2025) report—an independent research study exploring the human, social and economic costs of obesity in West Yorkshire and Humber and North Yorkshire ICB populations

Lisa Buchanan[1], Katie Simpson[2]*

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Obesity extends far beyond body mass; it is a chronic, relapsing medical condition shaped by trauma, stigma, inequality, and systemic barriers. Drawing on lived experience, workforce insight and economic analysis, the More Than Weight report (2025) underscores the human and emotional toll: high levels of social isolation and avoidance, frequent emotional eating, increased mental health and neurodivergent conditions and pervasive feelings of being misunderstood by healthcare professionals. These findings demonstrate how stigma and exclusion shape daily life and participation in community, work and care. Economically, obesity is estimated to cost West Yorkshire and Humber and North Yorkshire regions over £6.1 billion annually, including direct NHS treatment costs, productivity losses, adult social care expenditure and broader economic impacts. Without transformative action, rising rates of obesity will continue to add strain to health and care systems, reduce workforce participation, and worsen health inequalities. This mixed-methods independent study incorporates qualitative online focus groups, surveys of 119 individuals, insights

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from 190 health professionals, and reviews existing economic data. Compassion-led, trauma-informed and person-centred care is recommended, alongside anti-stigma training, early intervention, equitable access and co-production with lived experience. This report calls for a paradigm shift from blame to belonging. Key words: obesity; trauma-informed care; stigma; health inequalities; lived experience; economic burden; human and social costs of obesity; person-centred care.

Disclosures: None.

ASO KEN CLARE AWARD

A2 Lived experiences of GLP1 use by children and young people attending complications of excess weight services

Elysa Ioannou[1], Charlotte Benkowitz[1], Megan Garside[1], Martin Lamb[1], Christopher J Brown[1], Jordan Marwood[2], Veronica Swallow[1], Louisa J Ells[2], Catherine Homer[1], Lucie Nield[3]*

[1]Sheffield Hallam University, Sheffield, UK, [2]Leeds Beckett University, Leeds, UK, [3]University of Sheffield, Sheffield, UK

Complications of Excess Weight services (CEW) were commissioned by the National Health Service in England to address the increasing prevalence of severe paediatric obesity. The ENHANCE (Evaluating the NHSE CEW services for Children and Young People (CYP)) evaluation aims to understand what is working in these services, for who and in what contexts. This paper presents experiences and needs regarding GLP1 use by CYP, families or carers accessing CEW services. A baseline survey (T0) was administered in September 2024 ($N = 68$) for patients who had at most one appointment. A second survey for all active CEW patients regardless of time in service was administered March–December 2025 ($N = 576$). The surveys captured data on patient demographics, experiences in CEW, readiness for discharge, GLP1 use, and were analysed in R, creating Likert's of ranking questions and basic descriptive statistics. Participants who consented to be contacted were invited to interviews at time-point 1 ($n = 35$) and time-point 2 (ongoing, $n = 16$ completed). Reflexive thematic analysis was used. Survey completers were invited to five focus groups ($n = 14$) about GLP1s (Feb 2026, analysis ongoing). Participants included both those who had and had not had access to GLP1s. A Patient and Public Involvement group supported the development of data collection tools and supported sense-making of results. A live scribe was used for visualisation. The following are emerging findings, should this abstract be accepted, finalised survey, interview and focus group data will be presented at UKCO in 2026. Preliminary analysis shows survey data is representative of CEW patients CYP with complex needs, living in areas of high deprivation (~50% in IMD 1, 2 and 3). Generally, participants given GLP1s felt supported to achieve their goals but felt less confident to be discharged and sustain the changes they had made, compared to those who were not given GLP1s. GLP1 use was reported to suppress appetite and support behaviour change when given alongside holistic wrap-around care. Anxiety around weight regain on discharge from clinics following cessation of GLP1s was reported. GLP1 use in CYP living with severe obesity must be provided alongside high-quality wrap-around care, and with ongoing conversations and long-term support.

Disclosures: This study is funded by the NIHR Health and Social Care Delivery Research programme (NIHR 158453). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

THREE-MINUTE EARLY CAREER COMPETITION

A3-01 Predicting adiposity from non-imaging data: a scalable machine learning framework for body composition modelling

Ria Mukherjee[1], Mahmoud Aldraimli[1], Salma Chahed[1], Manuel Corpas[1], Marjola Thanaj[1]*

[1]University Of Westminster, London, UK

Visceral adipose tissue (VAT) is an important imaging derived measure of body composition, but its assessment is limited by the cost and scalability of imaging techniques. This study aims to investigate whether VAT can be accurately predicted using non imaging variables and to develop a scalable modelling framework applicable to broader adiposity related measures. Data were obtained from the UK Biobank, including participants with imaging derived VAT measurements. Feature selection was performed using the Boruta algorithm to identify relevant predictors and reduce dimensionality. Five machine learning models were developed, including Multiple Linear Regression, Decision Tree Regression, Random Forest, Extreme Gradient Boosting, and Support Vector Regression. Model performance was evaluated using five fold cross-validation and a validation set, with metrics including root mean squared error, mean absolute error, mean absolute percentage error, and adjusted coefficient of determination. Across both cohorts, Extreme Gradient Boosting demonstrated the strongest overall predictive performance, achieving the highest adjusted coefficient of determination of 0.779 in the female dataset and 0.781 in the male dataset, with only marginal differences between top performing models. Feature importance was assessed using SHAP values to enhance interpretability, identifying anthropometric variables as consistent predictors across both sexes alongside additional sex specific differences. These findings demonstrate that adiposity related measures can be estimated with good accuracy using non imaging variables, offering a cost effective and scalable alternative to imaging based methods. The proposed framework has the potential to be applied where imaging data are unavailable and may be extended to other body composition compartments such as intermuscular adipose tissue (IMAT), abdominal subcutaneous adipose tissue (ASAT), and total muscle mass.

Disclosure: None.

A3-02 The lived experiences of using weight loss drugs: a qualitative exploration

Clair Hook[1], Keeley Abbott[1], Harvey Regan[1], Helen Egan[1]*

[1]Birmingham City University, Birmingham, UK

Weight loss drugs have been widely described as a breakthrough in obesity treatment due to their potential to produce rapid and significant weight loss. The literature has framed them not only as desirable and accessible but as requiring less active participation than traditional approaches like diet and exercise. The perceived effortless use of weight loss drugs may elicit negative responses from others, shaped by a moral narrative about acceptable methods of weight reduction. Exploring experiences of weight loss drugs provided insight into how they influence behaviour and psychological well-being. Nine semi-structured interviews were conducted, aiming to explore experiences of weight loss drugs. Data were analysed using reflexive thematic analysis within an interpretivist framework. Three themes were generated: the recognition of weight loss drugs as an aid rather than a cure; a sense of control associated with their use and concerns surrounding the sustainability of weight loss without the

continued use of drugs. The analysis highlights that weight loss drugs are used alongside conventional lifestyle changes such as dietary revisions. Uncertainty about long-term weight management is driven by rising costs of weight loss drugs and limited understanding of their potential health implications. The findings demonstrate that the term 'weight loss drugs' is most relevant during periods of weight reduction. However, once weight loss has stopped, this phrasing may no longer accurately reflect individuals' experiences. Future research could usefully explore the term 'weight maintenance drugs' to better represent their use for those maintaining their weight.

Disclosures: None.

A3-03 Food salience and the nutrition transition in Kiribati: implications for obesity prevention in a Pacific small island state

Zhen Ming Jeremy Ng[1], John Paul Cauchi[1]*

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Kiribati is undergoing a nutrition transition in which imported energy-dense foods are increasingly displacing traditional staples, yet the cultural patterning of these changes remains poorly understood. Understanding which foods are most salient in daily life may help identify leverage points for obesity prevention. We analysed 2019 pre-pandemic cross-sectional household survey data from 399 adults responsible for household food preparation across urban and rural Kiribati. Freelisting was used to capture favourite foods, traditional foods and the three foods eaten most often. Smith's salience, cultural consensus analysis and hierarchical clustering were used to identify culturally important foods and compare food repertoires by locality and socioeconomic characteristics. Exploratory regression examined predictors of reliance on imported or processed and traditional foods. Fish, breadfruit and coconut were consistently salient across favourite, traditional and frequently consumed domains, indicating persistence of culturally valued local staples. Imported rice was salient in favourite foods and frequently consumed domains. Urban households displayed a stronger, more consistent preference for imported and processed foods, such as sausage, chicken, and eggs. In contrast, rural households maintained a wider variety of traditional foods, although imported rice was highly prominent in their diets. Heavy dependence on imported or processed foods was linked to spending over 75% of household income on food. Additionally, living in an urban area and having a larger family were both linked to a decreased use of local foods. These findings suggest that foods associated with obesity risk are increasingly available in Kiribati and are embedded within shared everyday food preferences, particularly in urban settings. At the same time, fish, breadfruit and coconut remain culturally meaningful and may provide realistic focal foods for culturally grounded obesity-prevention strategies. In Pacific Island Countries and Territories (PICTs), supporting access to traditional staples, local processing and food environments less dependent on imported refined foods may help align obesity prevention with cultural priorities. This approach offers insights relevant to other PICTs facing similar transitions.

Disclosures: None.

A3-04 Co-creating evidence: integrating lived experience in incretin- based therapy research

Isobel Jacob[1], Ian Thompson[2], Ann Vincent[2]*

[1]Leeds Beckett University, Leeds, UK, [2]PPIE working group members, Leeds, UK

Incretin-based therapies are associated with substantial weight loss, including reductions in adipose tissue and skeletal muscle mass, potentially increasing the risk of sarcopenia. Adults living with obesity are already at elevated risk, particularly for sarcopenic obesity, yet muscle health is rarely addressed within current care pathways. As use of incretin-based therapies rises, there is a growing need for a muscle health screening toolkit tailored to this population. To ensure the lived experiences and voices of those affected were central to our work, a patient and public involvement and engagement (PPIE) group was established to co-design the research and its work packages. Eight PPIE members were recruited, and co-design principles were applied through workshops, enabling participants to draw on lived experience. Creative methods supported inclusive and rich data capture. Following the initial workshop, PPIE members reported limited awareness of sarcopenia and its broader health implications, yet identified a clear need to improve education on muscle health alongside incretin therapies. Discussions highlighted that proposed screening approaches must be feasible and acceptable, but also sensitive to the realities of living with obesity, including stigma, shame, reduced confidence, mobility limitations, and disability. For some individuals, screening may raise issues of dignity, emotional safety, and prior negative healthcare experiences. Feedback further emphasised the need for person-centred, non-stigmatising, and psychologically informed approaches, acknowledging the complex emotional and behavioural contexts in which individuals engage with care. PPIE members also provided perspectives on the acceptability and practicality of specific screening methods, including SARC-F, calf circumference, grip strength, sit-to-stand, and timed up and go tests. Education was viewed as essential for both patients and healthcare professionals to enhance understanding, communication, and implementation, particularly ensuring equitable provision for those not receiving ongoing clinical support to minimise adverse health and functional outcomes. PPIE contributions have directly informed project refinements, ensuring alignment with patient priorities. Ongoing co-design with PPIE members will guide future stages, including implementation, dissemination, and identification of training needs, ensuring the research remains responsive, inclusive, and grounded in lived experience. Future research should embed lived experience throughout to ensure it remains responsive, amplifies patient voices and reduces barriers.

Disclosures: None.

A3-05 Removed (Encore Presentation)

A3-06 A qualitative study of experiences of individuals using GLP-1 receptor agonists for weight management through nhs services in England

Sabrina Keating[1], Jadine Scragg[1], Helen Ashdown[1], Lisa Hinton[1]*

[1]University of Oxford, Oxford, UK

Glucagon-like peptide-1 receptor agonists (GLP-1s) have emerged as an effective treatment option for people living with obesity, but access through NHS primary care remains limited. In England, staggered expansion of primary care prescribing over twelve years is planned to manage demand in the context of limited resources. Currently (May 2026), individuals may access GLP-1s either through specialist services or through primary care prescribing limited to those with the greatest clinical need. Qualitative evidence on experiences of GLP-1 use is growing but remains sparse, and little is currently known about experiences of use through NHS routes. This study aimed to explore how NHS service provision in England shapes experiences of GLP-1 use for weight management. Semi-structured interviews were conducted with

people in England using GLP-1s for weight management through NHS primary care or specialist services ($N = 10$, recruitment ongoing). Participants were recruited through posters in NHS and community settings, social media, and health charities, with purposive sampling used to support diversity in demographic and health backgrounds. Thematic analysis was conducted using inductive coding to create an analytical framework, which was then applied to interview transcripts, followed by the development of themes using the One Sheet of Paper method. Preliminary findings included: challenges accessing services, frustrations with generic wrap-around care, and cessation-related support needs. Participants often described having to actively seek GLP-1s, requiring advocacy from both patients and GPs to enable access or progress referrals. Some found it difficult to remain engaged with services perceived as generic, particularly where there was limited interaction or continuity with healthcare practitioners and little opportunity to build ongoing relationships. Participants described uncertainty and unmet information needs regarding cessation, with weight regain being a common concern. Several participants reported using private GLP-1 prescribing prior to or alongside NHS prescribing, or planning to transition to private prescribing after NHS care ended. Experiences of those using GLP-1s within NHS care highlighted patient priorities relating to ease of access, personalised and flexible care, and additional cessation-related support. The coexistence of NHS and private prescribing pathways may also create additional financial, informational, and care coordination challenges for individuals navigating GLP-1 use.

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A3-07 Efficacy, effectiveness, safety and adverse effect of glucagon like peptide-1 based therapy for weight loss in patients with advanced and end stage kidney disease: a systematic review and meta-analysis

Zakary Hobbs-Iskandar[2], Yousef Al hindi[1], Ng Khai Ping[3], Iskandar Idris[1]*

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Increased interest has emerged regarding the safety and effectiveness of Glucagon like peptide-1 (GLP-1) based therapy to induce weight loss in patients with advanced and end-stage kidney disease (ESKD). We performed a systematic search using PubMed, Embase, MEDLINE and Cochrane Central Register of Control Trial from January 2008 to October 2025, to identify Randomised Controlled Trial, case reports and observational studies that examined the effect of GLP-1 therapy on weight loss and its safety in patients with advanced and ESKD. A meta-analysis was undertaken from selected studies to assess weight and HbA1c changes. 21 studies ($N = 2255$) were included. Treatment doses were 0.25–1.0 mg weekly for injectable semaglutide, 0.3–1.8 mg daily for Liraglutide and 5 mg weekly for Tirzepatide. Meta-analysis of eight studies ($N = 413$) showed a mean weight reduction of 3.95 kg (95% CI: 1.72–6.19, $Z = 3.47$, $p = 0.0005$; $I^2 = 0\%$, $p = 0.83$), ~3.9% weight loss. Seven studies ($N = 383$) showed a significant mean HbA1c reduction of 0.88mmol/mol [95% CI 0.70, 1.06], $Z = 9.68$, $P < 0.00001$, $I^2 = 75\%$, $P = 0.0006$). Adverse effect profile is variable and majority were gastro-intestinal in nature with reported discontinuation rate ranged from 21 to 37%, i.e., much higher than reported in non-ESKD trials. No severe hypoglycaemia events were reported. GLP-1 based therapy appears to be safe at conventional doses in patients with ESKD. Its efficacy for weight loss is lower compared to in non-ESKD patients, side effect profile is comparable although withdrawal rate is higher. GLP-1 based therapy could be an important therapeutic option to support weight loss in patients with ESKD under specialist monitoring.

Disclosures: None.

MEMBER-LED SYMPOSIA

M1: NATIONAL EVALUATION INSIGHTS TO SHAPE THE FUTURE OF ENGLAND'S CEW CLINICS FOR CHILDREN AND YOUNG PEOPLE: FINDINGS FROM ENHANCE

M1-01 Evaluating england's cew clinics: a coproduced approach to improving care for children and young people with severe obesity

Catherine Homer[1], Louisa Ells[2], James Nobles[2], Jordan Marwood[2], Rebecca Stone[2], Rhiannon Day[2], Karina Kinsella[2], Lucie Nield[3], Elysa Ioannou[1], Martin Lamb[1], Christopher Brown[1], Veronica Swallow[1], Charlotte Benkowitz[1], Megan Garside[1], Jamie Matu[2], Adam Martin[4], Tayamika Zabula[4], Richard Mattocks[4], Claire Griffiths[2], Karen Coulman[5], Kath Sharman[6], Nivedita Aswani[7], Neil Wright[7], Julian Hamilton-Shield[5], Caroline Steele[8], Claire Woodward[1]*

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Severe obesity (BMI > 99.6th UK90 centile) in children and young people (CYP) represents a growing public health challenge in England. In 2022, 2.9% of 4–5-year-olds ($n = 15{,}800$) and 5.6% of 10–11-year-olds ($n = 33{,}700$) were living with severe obesity. In response, the NHS Long Term Plan committed to expanding provision for CYP with complications related to excess weight, leading to the establishment and piloting of specialist Complications of Excess Weight (CEW) clinics across England. These multidisciplinary, holistic, NHS England–funded services aim to deliver person-centred care for CYP aged 2–18 years and their families. ENHANCE (NIHR 155453) is a coproduced, mixed methods, qualitative, clinical and economic evaluation of the national CEW programme, designed to strengthen the evidence base and inform the development of a framework to support scaleup and commissioning of CEW services. ENHANCE adopts a realist informed design structured across five integrated work packages (WPs). WP1 focuses on coproduction with stakeholders and patient and public involvement. WP2 explores CEW clinic delivery and workforce models through surveys, interviews, and focus groups. WP3 examines the experiences and needs of CYP and families using mixed qualitative and quantitative methods. WP4 undertakes clinical and economic analyses, including demographic profiling, assessment of clinical outcomes, quality of life measures, and cost trajectories. WP5 synthesises findings across the programme to inform best practice and future policy. Collaboration and coproduction have been central to ENHANCE, with active involvement from national and regional NHS England policy teams, data management partners, CEW clinicians and Integrated Care Boards. Conducting a national evaluation across geographically dispersed services has required navigating challenges relating to policy changes, funding shifts, data access and

variation in delivery models. A strong Patient and Public Involvement and Engagement (PPIE) strategy—including the ARROWS (Advocating for Responsible Research Opportunities in Wellbeing Services) group—has ensured meaningful involvement of CYP and families living with severe and complex obesity throughout the study. This presentation will outline how a collaborative, coproduced approach has been implemented, highlighting key challenges, learning, and examples of good practice to inform future real world evaluations of clinical services.

Disclosures: Research relating to this abstract was funded by the NIHR Health and Social Care Delivery Research programme (NIHR 158453). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

M1-02 The complications of excess weight programme: designing and delivering 30 specialist weight management services for children and young people in ENGLAND

Jordan Marwood[1], James Nobles[1], Paige Davies[1], Karina Kinsella[1], Jamie Matu[1], Rebecca Stone[1], Tamara Brown[1], Daisy Forman[2], Kaydee Shepherd[1], Karen Coulman[3], Claire Griffiths[1], Rhiannon Day[1], Kath Sharman[4], Dee Aswani[5], Julian Hamilton-Shield[3], Louisa Ells[1], Catherine Homer[2]*

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In 2021, NHS England commissioned the Complications of Excess Weight (CEW) pilot programme to support children and young people living with severe and complex forms of obesity. Twenty-one CEW services across England were initially established, with a further nine funded in 2023, and nine more in 2024. This paper aims to: (1) illustrate what care is delivered across the CEW services, (2) highlight how the services were designed and delivered at the local level, and (3) present the different workforce models across the CEW services. We used a 52-item adapted STAndardised Reporting of Lifestyle weight management InTErventions (STAR-LITE) template to systematically gather data on: (a) the process of designing the CEW services, (b) referral routes, capacity, and waiting lists, (c) the MDT composition, service delivery, pharmacotherapy, and complication management, (d) discharge criteria and onward referral processes, and e) data management systems. The survey was completed as an online structured interview or independently by CEW service members. Data were analysed descriptively. All 30 services from the first two waves completed the STAR-LITE survey. Services supported CYP aged 2–17 years old, with some spanning 0–18 years. All clinics used BMI SDS as an eligibility criterion, varying between clinics, from 2.5 to 4.5 SDS units or the 98th–99.99th centile. Services were commissioned to support 20–120 patients per year, with waiting lists of up to 200 young people (often 50–100). Most services had a specialist obesity consultant, nurse, psychologist, dietician, physiotherapist, and administration assistant. Service provision typically lasted between 12 and 24 months. Many associated complications were managed by CEW teams including polycystic ovarian syndrome, impaired fasting glucose, and TII diabetes. Services provided a range of dietary-, physical activity-, psychosocial-, and pharmacological- support. All services were heavily tailored to meet individual needs. Specialist weight management services for children and young people can be quickly designed and implemented nationally, and a range of locally appropriate models are used to address patient need.

Disclosures: None.

M1-03 How does a socioecological model of obesity management improve care for children, young people and their families accessing cew clinics?

Lucie Nield[1], Elysa Ioannou[2], Martin Lamb[2], Chris Brown[2], Veronica Swallow[2], Charlotte Benkowitz[2], Megan Garside[2], Kath Sharman[3], Catherine Homer[2], Louisa Ells[4]*

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Complications of Excess Weight (CEW) clinics work in a holistic manner to manage conditions related to obesity in children and young people (CYP; aged 2–18 years). The socioecological model describes how the health and wellbeing of individuals can be determined by intersecting factors from individual characteristics, family and social context, the organisations in which people live and work, community, and the broader policy context. The ARROWS (Advocating for Responsible Research Opportunities in Wellbeing Services) PPIE group informed the development, recruitment and delivery of the questionnaire, interviews and focus groups. Questionnaires were sent (April-June 2025; August-December 2025) to all CYP and families registered with a CEW service across England to explore the views and experiences of CYP, families and carers who have been referred to CEW services. A representative sample of survey participants were followed up with longitudinal interviews (at 6 monthly timepoints) to understand in depth some of the emerging themes and innovations in practice that they had experienced throughout their CEW journey. Focus groups were organised to take a 'deep dive' into specific topics of interest that have been raised consistently across the study. The study is underpinned by a realist methodology. This presentation will report findings from the survey ($n = 250$), interviews ($n = 60$) and focus group ($n = 50$) data which highlights how CEW clinics are addressing factors within each level of the socioecological model. Examples of adaptations include interventions within schools, supporting parents, and adapting services to address the diverse needs of this population group. By working in a cross-sectoral manner across multiple levels of the socioecological model, health inequalities are being prioritized within a chronically underserved population group. Policy implications, considering the NHS 10-year plan will be discussed.

Disclosures: None.

M1-04 Early outcomes from NHS ENGLAND'S complications of excess weight (CEW) clinic: reach, complexity and effectiveness in children and young people living with severe obesity

Tayamika Zabula[1], Richard Mattock[1], Jamie Matu[2], Emma Madeley[1], Claire Griffiths[2], Catherine Homer[3], Louisa Ells[2], Julian Hamilton-Shield[5], Adam Martin[1]*

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Childhood obesity remains a major public health challenge in England, affecting around 15% of children aged 2–15. This study provides the first evidence on the effectiveness and cost-effectiveness of NHS England's Tier 3 Complications of Excess Weight (CEW) clinics. These pilot services deliver a holistic, person-centred model of care and have supported approximately 6000 children and young people (CYP) with severe obesity since 2021. A matched, observational cohort study comparing CYP in CEW with

CYP from a general practice database who met eligibility criteria but did not access CEW services due to lack of local availability. Coarsened exact matching was applied using referral characteristics (age, sex, deprivation, baseline weight, height and calendar year). Multilevel regression (linear mixed models) was used to estimate differences in weight gain trajectories over time between groups and, within the CEW cohort, by individual characteristics (age group, sex, deprivation) and clinic attended. Additional analyses examined trajectories in health-related quality of life (EQ-5D-Y-5L and PedsQL). Long-term outcomes were projected using an individual-level autoregressive simulation model, linking BMI-SDS trajectories to quality of life, healthcare costs and disease risk to estimate lifetime cost-effectiveness (incremental cost per QALY gained). Our regression results show that participation in CEW clinics was associated with a greater reduction in BMI over time compared to a matched comparison group (CEW $n = 4550$; comparison $n = 3517$). Baseline BMI was similar between groups (CEW 36.94 vs comparison 37.38). The treatment effect increased over follow-up, with CEW participants demonstrating progressively larger reductions in BMI relative to the comparison group at 6 months (-1.12 kg/m^2), 12 months (-1.82 kg/m^2), 18 months (-2.52 kg/m^2), and 24 months (-3.22 kg/m^2). These estimates represent differences in BMI change between groups, indicating a sustained and increasing impact of CEW clinics over time. CYP in CEW experienced more favourable weight trajectories than matched controls, suggesting potential benefits of the service. However, long-term cost-effectiveness is sensitive to assumptions regarding post-intervention weight regain trajectories.

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M1-05 Triangulating mixed methods evidence to inform future delivery and commissioning of complications of excess weight (CEW) services for children and young people in England

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In line with the NHS Long Term Plan, specialist weight management services for children and young people (CYP) living with severe obesity are being piloted across England. These 'Complications of Excess Weight' (CEW) services aim to provide holistic, person-centred care to CYP and their families, delivered within a multi-disciplinary team structure. A national mixed methods evaluation (ENHANCE NIHR155453) of the CEW programme sought to develop the evidence base and understanding of optimal models of care. ENHANCE adopts a realist-informed approach comprised of multiple interlinked work-packages (WPs) investigating: how CEW services work from the perspectives of professionals (WP2); experiences of CYP and families who attend CEW services (WP3); and clinical- and cost- effectiveness of CEW services (WP4). Underpinning the project is a focus on stakeholder engagement, patient and public involvement and co-production (WP1) and an innovative approach to triangulating findings throughout the project (WP5) between and within WPs. Drawing on the 'following a thread' approach to triangulation, regular participatory workshops with the research team and clinical and policy partners have considered emerging study findings and identified four 'threads' to focus triangulation: (1) Inequalities in access to, experience and outcomes of CEW services, (2) Complexity of CYP and families and the systems they interact with, (3) Accessing and taking GLP-1 medication, (4) Delivery of CEW services from referral through to discharge including links with the wider system. Matrices supported visualisation of data across WPs, identification of areas of agreement, dissonance or silence, and synthesis across the data set. A series of workshops with wider stakeholders (April 2026) will present triangulated findings, discuss implications, and co-produce recommendations for policy, commissioning and practice, identifying what works (or not), for who, in what circumstances to support future delivery of CEW services. The findings will be used to develop co-produced guidance (ready for September 2026) to support policy makers, commissioners and clinicians to deliver person centred, holistic and effective CEW clinics. The guidance will sit alongside the NHS England service framework to inform commissioning of CEW services from 2027 onwards.

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M2: HOW ARE WE STILL GETTING IT WRONG? ADDRESSING PITFALLS IN TRANSDISCIPLINARY OBESITY RESEARCH ACROSS THE LIFE COURSE

M2-01 Why are so many voices missing? Ignored, forgotten and tokenistic inclusion in obesity and weight management

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Despite the increased popularity of patient and public involvement and engagement (PPIE) and co-production, many communities are still ignored, forgotten or only shown tokenistic inclusion. Whilst many 'minority' groups experience disproportionate burdens of diet-related chronic disease, the typical demographic profile within obesity research is still heavily skewed to those who are young, white, middle-class, well-educated, and women. Through a series of interviews and focus groups with populations representing diverse age, gender, sexuality and ethnicity ($n = 75$), this work elucidates what it means to be considered a 'minority' in the UK, how this shapes experiences of and engagement with research, healthcare and public health approaches focussed on weight, and what this means for supporting people to lead healthier lives. While there are many intricacies to experiences of weight and health within and between diverse communities, the overriding message is clear – "I didn't see people that look like me…" and as a result "…you almost don't feel like that space is a space for you to be in…". This is evident in both research and healthcare settings, with the additional complexity of participants reporting professionals "… are making sort of quick judgements about you and your lifestyle without actually asking you about what you do", leading to attrition and disengagement thus further complicating inclusion. While we are collectively moving towards more inclusive practice, it is important that we engage in reflexivity to ensure value-aware science, which represents the whole of the society in which we live.

Disclosures: None.

M2-02 Heard, empowered and valued: climbing the ladder of young people's participation

Lucie Nield[1], Elysa Ioannou, Charlotte Benkowitz, Catherine Homer, Louisa Ells, Kath Sharman*

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The ENHANCE (Evaluating the NHs engLANd Complications of Excess Weight Services for Children and Young People) study is a national evaluation of the Tier 3 complications of excess weight (CEW) services for children and young people living with obesity. Living with obesity can be linked to wider complex physical and mental health challenges, so it is crucial to incorporate the voice of those with lived experience to inform the evaluation. Our Patient and Public Involvement group, self-titled the 'ARROWS' (Advocating for Responsible Research Opportunities in Wellbeing Services) have been involved in the project since project inception. The value of involving patients and members of the public in research is recognised, however there are limited resources around how to meaningfully involve children and young people living with obesity in research, as well as a lack of practical guidance around delivery and impact. This presentation will describe the innovative practices that have been used within the ENHANCE project including a research residential trip, to enable the ARROWS to feel heard, empowered and valued throughout the course of the project. We will share lessons learnt and discuss the use of Hart's ladder of participation (1992) as a useful aid to assess project involvement with children, young people and their families.

Disclosures: None.

M2-03 You are what (people see) you eat: the intersection between internalised weight stigma and food shame

Beverley O'Hara[1], Jordan Beaumont[2]*

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The lexicon of nutrition is saturated with moral judgements about food, whilst messages around 'good' and 'bad' food are grounded in anti-fat bias. Since food is widely understood to be a primary driver of health, individuals are susceptible to moralised expectations about their food choices. Deviation from societal expectations may lead to shame, particularly in individuals with internalised weight stigma. Patient and Public Involvement and Engagement groups were conducted with adults ($n = 10$, aged 44 ± 13 years, 60% English, Welsh, Scottish, Northern Irish or British; 40% Indian, African or Chinese) to explore experiences of judgement, shame and stigma around food and eating. Food choices were linked to social class, nostalgia, enjoyment, de-stressing and enjoying treats, but these framings were consistently accompanied by themes of guilt and shame. Participants described the 'healthiness' of food predominantly through the lens of calorie content and body weight. Participants described reducing portion size or pretending to enjoy 'acceptable' but disliked foods in public and hiding certain foods from others. Food shame appears to operate across at least three domains: perceived judgement, actual judgement from others, and self-judgement. Internalised food shame appears to intersect with body shame and is profoundly gendered: "I certainly I don't know if it's just a woman thing...but I think you're going to always feel sort of being judged either way. If it's like eating too much, it's like, oh, weight or whatever. If it's eating too little, it's also like, you know, oh, do you have... is there some sort of eating disorder?" Value-aware research and practice acknowledges that class position, personal food values, and wider society shape conceptions of and discourse around healthy eating. To support patients' and participants' psychological safety, practitioners and researchers should avoid framing food as inherently 'good' or 'bad' and even interrogate use of the term 'healthy food', since these terms mirror the stigmatising discourse individuals are already subjected to. Shame arises from fear of judgement and personal beliefs about food, and may be exacerbated in individuals who experience internalised weight stigma.

Disclosures: None.

M2-04 Unpacking the gaps: what our food environment research isn't capturing

Helen Moore[1]*

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Current approaches to food environment and obesity research often highlight what is visible: the density of fast-food outlets, the price differential of healthier/less healthy options, the absence of green space, while overlooking what is experiential, structural, and embedded in people's everyday lives. This presentation will explore the idea that we continue to "get it wrong" not because we lack data, but because we underuse the knowledge that communities hold about how food environments really function, including emergent and less well-known dynamics such as the rise of the dark kitchen phenomenon and the growing influence of food delivery digital platforms. Drawing on evidence from co-production and patient and public involvement and engagement (PPIE), the session explores how conventional research methods routinely underestimate the amount of time that meaningful participatory practices actually take to yield results, and how these practices often miss critical dimensions such as stigma, the emotional and cognitive burden of navigating food insecurity, the role of social infrastructure, and the cumulative impact of local planning decisions. The session will examine common pitfalls, "box-ticking" participant engagement, narrow recruitment, and top-down framing, and demonstrate how these pitfalls lead to interventions that fail to resonate with or will not benefit those most affected. Practical ways forward will be shared, showing how meaningful co-production can reshape research questions, enhance validity, and generate solutions that are contextually grounded and community-owned. Overall, the presentation makes the case for reframing food environment research through lived experience to build more equitable, actionable, and impactful approaches.

Disclosures: None.

M3: BEYOND GLP-1 MEDICATIONS: WHY BEHAVIOURAL AND PSYCHOLOGICAL SUPPORT STILL MATTERS IN WEIGHT MANAGEMENT

M3-01 Beyond weight loss: lived experiences of next-generation incretin-based therapies and the continued need for behavioural support

Marie Spreckley[1]*

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Next-generation incretin-based therapies such as semaglutide and tirzepatide have rapidly transformed obesity treatment, producing levels of weight loss previously seen primarily with metabolic surgery. As these medicines become more widely used, an important question is whether psychological and behavioural support for weight management remains relevant in the GLP-1 receptor agonist era. The AMPLIFY study (Amplifying Meaningful Perspectives and Lived experiences of Incretin therapy use From diverse communitY voices) explored the lived experiences of

adults in the UK who were currently using, or had previously used, incretin-based therapies for weight management. Participants first completed a structured questionnaire capturing demographic characteristics, treatment context, food-related thoughts, appetite changes, nutrition, gastrointestinal symptoms, physical activity and support needs. A purposive sample then participated in online focus groups and in-depth interviews exploring how these medicines affected appetite, eating behaviour, wellbeing and everyday life. Participants reported substantial changes in hunger, food-related thoughts and eating patterns during treatment. However, many also described challenges including managing reduced appetite while maintaining adequate nutrition, navigating social eating, and uncertainty about long-term weight maintenance after treatment. These findings suggest that while incretin therapies alter physiological drivers of eating, psychological and behavioural support remains highly relevant for supporting sustainable and equitable weight management.

Disclosures: This project is funded by NIHR (SWiM Study) Public Engagement Starter Fund, University of Cambridge (AMPLIFY Study).

M3-02 Efficacy, safety and unmet needs with obesity pharmacotherapy

Alex Miras[1]*

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The aim of this presentation is to cover the efficacy and safety of modern pharmacotherapy and determine the unmet needs that could be addressed through non-pharmacological support. The vast majority of the presentation will be based on the best available RCTs in the field, which are randomised placebo controlled double blinded trials. Non-RCTs will be used selectively to demonstrate important points for further discussion. The presentation will include a number of outcomes, including % weight loss, hard outcomes, quality of life, side effects, micronutrient deficiencies, effects on eating behaviour and mental health, including addiction shift and suicidality. During the presentation we will be discussing the mode of action of modern obesity pharmacotherapy and how they address the biological drivers of obesity. We will be going through the efficacy but also safety of currently available (i.e. liraglutide, semaglutide, tirzepatide, naltrexone/bupropion), with a focus on what the unmet needs of patients are. We will be discussing what the wrap around care can do to meet these unmet needs and how this can be provided to provide good value for money, which can be the limiting factor for their wider use.

Disclosures: None.

M3-03 Evaluating AI-delivered behavioural and psychological support for weight management in the GLP-1-RA era: developing a competency framework for digital health coaching

Victoria Rogers[1], Martha Neary[1], Zoe Griffiths[1], Rebecca Jones[1]*

[1]Numan, London, UK

GLP-1-RA medications substantially reduce appetite and improve weight outcomes, but behavioural and psychological support remains critical for addressing lifestyle change, medication adherence, side-effect management, and broader psychosocial dimensions of obesity. Scaling access to high-quality psychological support, however, remains a major challenge. Conversational AI agents are increasingly deployed within weight management to deliver behavioural and motivational support at scale. Yet evaluation approaches often rely on competency frameworks developed for human practitioners — frameworks that assume professional intent, empathic capacity, relational accountability, and ethical responsibility. These attributes cannot be meaningfully attributed to AI systems. Applying human-centric standards risks mischaracterising AI performance, masking safety vulnerabilities, and overestimating behavioural competence. As AI becomes integrated into obesity care pathways, AI-appropriate evaluation frameworks are needed. We describe the development of an AI-specific competency framework for evaluating asynchronous conversational AI delivering behaviour-change support within a digital obesity programme. A multi-stage design methodology integrates behavioural science, digital clinical safety, and responsible AI evaluation principles. The framework operationalises competency domains relevant to AI systems using structured behavioural descriptors, with safeguards preventing inappropriate transfer of human-centric competencies. Key domains include: Transparency and Boundaries; Communication Quality; Personalisation and Adaptation; and Clinical Safety. The framework incorporates applicability checks, a clinical safety gate, and standardised scoring. It is designed with a dual-use architecture enabling both expert human evaluation and LLM-based automated assessment. A validation programme is underway using a stratified sample of patient–AI conversations. Subject matter experts apply the framework to assess reliability and domain-level performance, with a subset double-coded to evaluate inter-rater agreement. Concurrently, conversations are assessed using an LLM-based evaluator aligned to the framework. Data collection and analysis are ongoing. Findings will be presented at the meeting if accepted. Pharmacological advances such as GLP-1-RAs are transforming obesity treatment but do not remove the need for behavioural and psychological support. As digital systems increasingly deliver this support at scale, robust evaluation is essential. This work proposes an AI-appropriate competency framework enabling assessment of whether AI-delivered behavioural support operates safely, within scope, and as intended - a critical step toward responsibly integrating AI into modern obesity care pathways.

Disclosures: VR, ZG, and RJ are employed by Numan. MN is a prior employee of Numan, and currently a paid consultant for Numan. This work was funded by Numan.

M3-04 Who gets left behind? Investigating mental health support needs and gaps in weight management service

Julia Mueller[1], Marie Spreckley[1], Rebecca Jones[2], Amy Ahern[1]*

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Mental wellbeing and obesity are closely linked: higher weight is associated with poorer mental health and vice versa. Many people with obesity experience co-occurring mental health issues such as depression and binge eating. Poor mental health is also associated with lower uptake and engagement in weight management programmes and higher weight regain after completing programmes. Despite this, standard behavioural programmes for weight management – whether offered as stand-alone or alongside obesity medications such as Glucagon-Like Peptide-1 Receptor Agonists (GLP1-RAs) - rarely address the psychosocial drivers of obesity or the barriers faced by people with poor mental wellbeing in accessing support. As part of the MIND-GAP study (Mental health INvestigation of Disparities in obesity care – Gaps in Access and Provision) we conducted extensive stakeholder consultations to explore the current provision of mental health support within existing weight management services and to identify gaps and inequalities in provision. We conducted focus groups and, where preferred, one-to-one meetings with 10 people

with lived experience of obesity and mental health challenges. We also consulted other relevant stakeholders including Tier 2 and Tier 3 service providers, intervention deliverers (e.g., health coaches), commissioners, and relevant healthcare professionals (e.g., clinical psychologists, dieticians). In the symposium, we will summarise and discuss insights gained from our PPIE and stakeholder consultations for improving mental wellbeing support within weight management services, and what this means for the future of integrated weight management care. Stakeholders expressed unanimous and strong support for strengthening psychological support within weight management services. People with lived experience emphasised the value of offering psychological support alongside effective weight loss treatments such as GLP-1 receptor agonists or bariatric surgery, noting that poor mental wellbeing was often perceived as a root cause of weight gain. They also described how failing to address underlying psychological drivers frequently contributed to weight regain and reduced treatment effectiveness. Consultations identified several potentially scalable approaches to improve support, including enhanced screening and referral pathways, brief training for service staff, stronger links with existing community resources, and the development of peer support schemes.

Disclosures: JM is a member of the Operations Committee for the Association of the Study of Obesity (unpaid role). RJ is employed by Numan. ALA is a member of the Scientific Advisory Board for WW (payment to institution).

M4: CO-DESIGNING DIETARY GUIDANCE FOR OBESITY MANAGEMENT MEDICATIONS: THE EVOLVING ROLE OF DIETITIANS AND PATHWAY INNOVATIONS ACROSS THE DEVOLVED NATIONS

M4-01 Developing dietary resources for people using obesity management medications: addressing an urgent national need

Adrian Brown[1,2,3]*

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Access to and use of obesity management medications (OMMs) is rising rapidly across both NHS and private healthcare pathways. Current NICE estimates suggest that approximately 3.4 million adults in England are eligible for OMM treatment, yet there remains a notable absence of credible, evidence-based dietary resources to support people using these medications. This lack of guidance presents significant challenges for delivering safe, effective, and equitable care. Dietitians across primary, community, and secondary care, represented by the British Dietetic Association (BDA) Obesity Specialist Group (OSG), the BDA First Contact Dietitian Specialist Group, and the BDA Diabetes Specialist Group reported increasing numbers of requests for practical, trustworthy dietary advice for people living with obesity who are prescribed OMMs. In the absence of national resources, clinicians have been producing their own patient materials, resulting in duplication of effort, inconsistent messaging, variable patient experience, and increased clinical time pressure. This variability also heightens the risk of providing inadequate or unsafe nutritional guidance. In response to this urgent need, the BDA OSG initiated a collaborative project to develop unified, evidence-based dietary resources specifically tailored for individuals using OMMs. This work has been supported through educational grants from Novo Nordisk and Eli Lilly. This presentation will outline the rationale for developing of these freely available dietary resources for people living with obesity who are using OMMs to healthcare professionals, patients, and carers across the UK.

Disclosures: Novo Nordisk provided a grant and Eli Lilly and Company Limited provided sponsorship to the BDA to support costs of the development and production of this obesity management resource material. Novo Nordisk and Eli Lilly and Company have had no input into or influence over the creation, development or content contained in this material. AB is on the Medical Advisory Board and shareholder of Reset Health Clinics Ltd.

M4-02 Development of dietary resources for people living with obesity receiving treatment of obesity management medications

Laura Stewart[1], Thomas Stewart[1], Clare Neilson[1], Louise Galloway[1]*

[1]Appletree Healthy Lifestyle Consultancy, United Kingdom

The increasing use of medications for obesity in the UK has been observed across both NHS and private sectors. In 2025, the Obesity Specialist Group (OSG) of the British Dietetic Association (BDA) identified a noticeable lack of credible and reliable dietary guidance for individuals utilising these medications. The OSG commissioned the development of co-created dietary resources to support people taking medications for obesity. The project's primary aim was to produce a generic diet and lifestyle resource, supplemented by four additional resources. The development period was October 2025 to April 2026. The initial stage involved conducting a rapid review of the evidence regarding dietary advice. Findings informed discussions in the first series of focus groups, which included both patient advocates and dietitians. A first draft of the generic resource was produced and distributed for peer and patient review. Feedback from these was incorporated, and a second draft was developed. This revised version was sense checked through a further round of focus groups and subjected to wider peer and patient review. Simultaneously, collaboration with the renal, oncology and mental health specialist groups of the BDA was initiated to develop additional condition-specific resources. Data was extracted from fifteen published papers. Key areas emerged of optimal protein intake, the role of resistance exercise, nutrient-dense dietary choices, guidance to counteract gastrointestinal side effects, vitamin and mineral supplementation. Twenty-two dietitians and 15 patient advocates attended the first-round focus groups. Following these discussions, the first draft of the resource was distributed via email to 49 identified potential reviewers. Responses were received from 36 individuals or organisations, which shaped the subsequent draft. Twenty dietitians and six patient advocates attended the second focus groups, to further refine the resource. This revised draft was then sent to 60 potential reviewers for wider consultation. Twenty individuals and organisations responded. The collaborative co-creation process produced a generic diet and lifestyle resource, freely accessible to the public and healthcare professionals via the BDA's website. Plus, a supplementary behavioural change resource. Specific resources for renal, oncology and mental health conditions are available to health professionals, for patient support.

Disclosures: The authors were paid for this work via the British Dietetic Association. Novo Nordisk provided a grant and Eli Lilly and Company Limited provided sponsorship to the BDA to support costs of the development and production of this obesity management resource material. Novo Nordisk and Eli Lilly and Company have had no input into or influence over the creation, development or content contained in this material.

M4-03 An overview of the development and implementation of obesity management medication pathways in NHS Scotland

Angela Carvalho[1*]

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Approximately one third of adults are living with obesity in Scotland, a prevalence higher than other UK nations and among the highest in Europe. Obesity management medications (OMMs) have the potential to reshape weight management services; however, variation is emerging in how pathways are implemented across Scottish health boards. This presentation provides a Scottish case study, with a primary focus on NHS Lothian, to explore how local services are interpreting national policy, navigating prescribing capacity, and adapting workforce models to widen access to OMMs. It aims to highlight key barriers and service innovations, while demonstrating the evolving and often under-recognised role of the dietitian within multidisciplinary OMM pathways. The presentation will outline variation in access, workforce constraints and local challenges, with brief comparison to approaches across other Scottish health boards. It will also describe the clinical pathways being developed, including prescribing models, exploring the integration of dietetic supplementary prescribing, and the structured, behaviour change education. This case study contributes to cross-nation learning by illustrating how innovative workforce models and strengthened dietetic roles can improve access, enhance safety and support person-centred OMM care.

Disclosures: None.

M4-04 Evolving dietetic pathways for obesity management medications in Wales: a ctmuhb case study

Enzo Battista-Dowds[1*]

[1]*Cwm Taf Morgannwg University Health Board, Merthyr Tydfil, UK*

Access to obesity management medications in Wales is currently concentrated within specialist weight management services, with structured dietetic involvement less consistently available in primary and community care. This case study describes the development of a dietetic pathway for glucagon-like peptide-1 receptor agonist therapy within Cwm Taf Morgannwg University Health Board and outlines transferable learning to inform emerging UK-wide dietary resources for obesity management medications. Following multidisciplinary biopsychosocial assessment and formulation, people are clinically phased using a risk management approach aligned with the joint position statement from the Society for Endocrinology and Obesity Management Collaborative UK on the phased introduction of medical therapies for weight management, with decisions tailored to individual capability, clinical complexity and support needs. In accordance with NICE NG246 guidance, people are then offered a multicomponent intervention, which aims to support regular eating patterns, adequate protein intake of 1.0–1.5 g/kg ideal body weight, enhanced dietary fibre and fluid intake. The programme promotes internal regulation of hunger and satiety rather than prescriptive caloric restriction. All individuals completing Headstart, prior to commencing pharmacotherapy, receive a one-to-one review that applies person-centred, weight-inclusive practice and co-produces goals across eating patterns, physical activity and wider determinants of health. Where multicomponent group intervention is not appropriate, individual dietetic reviews enable detailed dietary assessment and micronutrient risk screening, with particular focus on vitamin B12, iron, vitamin D, and other micronutrients. Dietetic expertise within this pathway is currently front-loaded around assessment and pre-pharmacotherapy preparation, with no formalised schedule for routine follow-up once obesity management medication is established, although additional contacts are available where clinically indicated. This structure supports safe initiation of pharmacotherapy but may miss opportunities to address evolving nutritional risks, plateaus in weight and functional outcomes, or changing goals as treatment progresses. Lessons from this Wales case study have directly informed the co-design of new national dietary resources for people using obesity management medications, highlighting the need to embed dietitians across primary, community and specialist pathways, to extend support beyond initiation, and to ensure that person-first, evidence-based nutritional care is a core component of obesity medication services across the UK.

Disclosures: None.

M4-05 The emerging role of the dietitian as a supplementary prescriber in a specialist weight management service pathway

Lucy Perrow[1*]

[1]*British Dietetic Association, Birmingham, UK*

The use of obesity management medications (OMMs) is expanding rapidly across the UK, driven by increasing clinical need and widening eligibility under current NICE recommendations. With approximately 3.4 million adults in England alone meeting criteria for treatment this highlights the need for innovative and efficient models of care delivery. This has led to looking at the role of dietitians as supplementary prescribers within the weight management pathway. Supplementary prescribing allows dietitians to prescribe medications within an agreed clinical management plan in partnership with an independent prescriber. By incorporating prescribing into their scope of practice, dietitians can deliver holistic care that combines dietary intervention, behavioural support, and timely pharmacotherapy alongside the rest of the MDT, without the need for multiple appointments or fragmented service delivery. Emerging evidence suggests that dietitian supplementary prescribers improve patient access to treatment, reduce delays in medication initiation, and enhance continuity of care. This integrated model supports better patient engagement and adherence, as individuals receive consistent messaging and support from a single clinician. Furthermore, it optimises workforce capacity by reducing the burden on medical prescribers such as primary care and allowing services to operate more efficiently. This symposium presentation will explore the practical implementation of dietitian supplementary prescribing within weight management services and the challenges this presents.

Disclosures: None.

ORAL SESSIONS

O1: MATERNAL OBESITY AND REPRODUCTIVE HEALTH: ADVANCING EVIDENCE FROM PRECONCEPTION TO PREGNANCY

O1-01 Reframing maternal obesity: a life-course, system-level call to action working with royal college of physicians

Anita Banerjee[*], *Kath McCullough*

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Maternal obesity is a modifiable contributor to adverse pregnancy outcomes and a persistent driver of health inequalities; however, the factors shaping risk extend far beyond individual behaviour.

Recognising this gap, the Royal College of Physicians (RCP) convened a multidisciplinary task and finish group to develop a coordinated, system wide strategic perspective, published in February 2026, offering one of the most contemporary and comprehensive national frameworks for addressing maternal obesity. This work responds to the urgent need for a life course approach that integrates public health, clinical care, and wider societal determinants. Using evidence synthesis, expert consensus and stakeholder engagement and including voices of women and community partners, the group identified seven priority domains for action: tackling the wider social and environmental determinants of obesity; establishing universal, accessible pre pregnancy education; strengthening training for all professionals involved in reproductive, antenatal and postnatal care; ensuring services are integrated, culturally competent and adaptable to local need; developing targeted interventions that reduce inequalities rather than widen them; improving data quality, linkage and surveillance across the reproductive life course; and expanding research that meaningfully includes pregnant women and pregnant people, addressing long standing exclusion from clinical studies. These priorities are anchored in guiding principles that emphasise non stigmatising, personalised care; equity, inclusion and cultural humility; system readiness and cross-sector alignment; actionable, evidence based policy; co production with women and families; and broad educational initiatives spanning communities, services and professional groups. Together, these elements form a coordinated, upstream strategy aimed at preventing maternal obesity, mitigating its consequences, and improving outcomes for women, babies and health systems. This novel, timely framework provides clear, practical direction for policymakers, clinicians and public health leaders, positioning maternal obesity as a population-level priority requiring coherent, multi level action rather than individual responsibility alone. By reframing maternal obesity through a systems lens, the RCP underscores that meaningful improvement will depend on sustained, collaborative action across the life course.

Disclosures: None.

O1-02 Pregnancy planning and metabolic optimisation in women living with obesity — a novel pilot pathway

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Obesity is one of the most common risk factors in obstetric practice. Pregnant women with obesity are at greater risk of complications compared with women of normal BMI, including hypertension, pre-eclampsia, and gestational diabetes. There are significant inequalities in women who are most at risk of having obesity during pregnancy. Women also report experiences of obesity stigma during pregnancy. The preconception stage offers opportunity for metabolic optimisation and a deeper understanding of women at higher risk. Given the recognised local impact of obesity, we designed a novel joint pathway incorporating obesity and maternal medicine expertise. The aims include: Improve metabolic status of women aiming to conceive; Reduce risk through a range of personalised, evidence-based measures; Promote awareness of obesity as a risk factor in maternal and fetal medicine; Work with a range of stakeholders including women living with obesity to integrate obesity care and share system learning and resource; Use data and improvement methodology to support learning and effective, sustainable care. The pilot has considered the evidence base, expert opinion as well as local context and challenges to present a proposal for implementation. This will be carefully evaluated and further refined using feedback from colleagues and service users. A joint clinic has been established with maternal and multidisciplinary obesity expertise. A database has been developed to capture a joint maternal medicine/obesity consult. Following review, women are then able to fast-track access to evidence-based treatments including medical, dietary and psychological interventions. A detailed metabolic profile is developed to further understanding. Digital therapeutics are incorporated. To date, 68 participants have been enrolled (age range 25–45 years), with 21 on the waiting list. Mean BMI is 44 kg/m^2; 58.5% have Class III obesity and 22.6% severe obesity. Of those enrolled, 45 chose the medicated pathway and 2 total diet replacement. Referrals reflect wide stakeholder engagement: 64% internal, 32.8% from maternal medicine and fertility services. Combining preconception counselling with metabolic profiling and obesity assessment is feasible to conduct in the real-world setting. The approach minimises duplication and offers a preventative strategy to improve maternal and fetal outcomes in women living with obesity.

Disclosures: None.

O1-03 Incretin-based medications in women and reproduction: a systematic scoping review and consensus guidelines for clinical practice

Kate Maslin[1,2], Jill Shawe[1,2,3], Sinead Blowers[3], Michael Ceulemans[2,4], Kathryn Hart[5], Sam Schoenmakers[6], Amihai Rottenstreich[7,8], Heather Hopper[1,2,9], Mojca Jensterle[10,11], Angela C Flynn[12], Sarah Siegelaar[13], Annick Bogaerts[1,2], Isy Douek[14], Nicola Heslehurst[15], Dries Ceulemans[2,16], Tricia Tan[17], Johnathan Pinkney[1,9], Martin Whyte[5], Shahrad Taheri[18], Roland Devlieger[2,16]*

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Pregnancy occurring during or soon after treatment with incretin-based therapy is currently not recommended due to potential teratogenicity, based on animal studies. It remains unclear whether preconceptional use of incretin-based therapy is beneficial for pregnancy and offspring outcomes in women living with obesity. The aim of this systematic scoping review was to investigate potential risks and benefits of incretin-based medications in relation to preconception, pregnancy and postnatal health, and to propose expert guidelines for clinical practice. An international expert multidisciplinary group was formed. Research questions relevant to women's reproductive health and incretin-based medications were refined collaboratively, utilizing a life-course approach. Of the 32 research questions included, nine pertained to preconception/fertility aspects. A systematic search was undertaken on 23rd July 2025 across several databases and grey literature sources. Primary data from human studies were prioritised, above animal studies. Titles, abstracts and full text articles were screened independently by two authors. Data were extracted by two authors independently using a pre-defined proforma and synthesized narratively. Consensus recommendations were made. Overall, 34 articles were included in the evidence synthesis: 11 randomised trials, nine observational studies, two pharmacovigilance reviews, nine case reports/series,

two animal studies and one ex-vivo study. No qualitative studies were identified. In total, evidence was found for 18/32 (56.3%) research questions and 6/9 (66.6%) of those specific to preconception/fertility aspects. Most of the current available evidence examining preconception use of incretin-based therapies on fertility outcomes is in women with polycystic ovarian syndrome. The sample size of exposed pregnancies ranged from 1 to 4267. One (animal) study had offspring data beyond birth. No studies reported an increase in congenital anomalies. Clinical practice guidelines were made based on current available evidence. Specifically, proactive counselling should be provided on an individual basis to all women regarding the risk of conceiving while using incretin-based medications. Women of reproductive potential using incretin-based medications should receive dietary counselling to optimise nutritional intake and reduce the risk of nutrient deficiencies. Research recommendations were proposed to address evidence gaps, including investigation of the effect of discontinuation of incretin-based medications prior to conception on rebound weight gain and glycemia.

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O1-04 Improving gestational diabetes risk prediction in early pregnancy: insights from the international study of how adiposity in pregnancy has an effect on outcomes (SHAPES) cohort

Moha Shojaei[1], Raya Vinogradov[1,2], Giang Nguyen[1], Susan Lennie[1], Andy Bryant[1], Dawn Teare[1], Jeremie Nsengimana[1], John Allotey[3], Janine Smith[4], Nicola Heslehurst[1]*

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Body Mass Index (BMI) is used in routine practice to identify women at risk of gestational diabetes (GDM). However, BMI performs poorly at the individual level. The SHAPES prospective cohort (ISRCTN82185177) investigated whether alternative early-pregnancy adiposity measures can improve GDM risk prediction. In 1411 participants with singleton pregnancies and validated GDM (prevalence 16.7%), 30 continuous adiposity measures were examined, including ultrasound ($n = 6$), anthropometry ($n = 11$), and derived indicators ($n = 13$). Each measure was evaluated alone using univariate logistic regression and in combination with continuous BMI using bivariate logistic regression to assess potential improvements over current guidelines (BMI ≥ 30kg/m^2), with discrimination quantified by the area under the receiver operating characteristic curve (AUROC). A staged, stability-driven approach was then applied to select parsimonious and clinically interpretable predictors. Penalised logistic regression with ten-fold cross-validation and 1000 bootstrap resamples calculated Bootstrap Inclusion Frequencies (BIF), retaining variables with BIF ≥ 60%, capped at seven predictors per model. Non-linear relationships were explored using multivariable fractional polynomials. Candidate models ranging from univariate to multivariable linear and non-linear, were selected for internal validation and future external validation through individual participant data meta-analysis and decision curve analysis. BMI ≥ 30 kg/m^2 performed poorly for GDM risk prediction (AUROC 0.627, sensitivity 0.50, specificity 0.76), while continuous BMI ranked 10th among adiposity measures in univariate analyses. On their own, Relative Fat Mass and Waist-to-Height Ratio were the best single predictors, both with an AUROC above 0.7. Among all bivariate models, combining continuous BMI with Weight-Adjusted Waist Index performed best, with an AUROC of 0.715. Multivariable models incorporating Abdominal Visceral and Abdominal Subcutaneous Fat and Neck Circumference achieved modest gains while remaining interpretable. Non-linear modelling altered the selection frequency of stable predictors, including Abdominal Visceral Fat, Abdominal Subcutaneous Fat, Neck Circumference, Estimated Total Body Fat, and Iliac Crest Skinfold, alongside transformed terms for Total Abdominal Adipose Tissue, Pre-Peritoneal Subcutaneous Adipose Tissue, and the Subscapular-to-Tricep Ratio. Continuous and dichotomised BMI (≥30 kg/m^2) were considered but not selected. These findings demonstrate that early-pregnancy adiposity measures outperform BMI for GDM risk prediction. Stability-driven modelling enables robust selection of clinically meaningful predictors which, if validated, could significantly improve antenatal maternal care practice.

Disclosures: None.

O1-05 External validation of maternal obesity risk prediction models for gestational diabetes: the international study of how adiposity in pregnancy has an effect on outcomes individual participant data (SHAPES-IPD) meta-analysis

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Guidelines use body mass index (BMI) to identify women at increased risk of gestational diabetes (GDM) and guide care pathways. However, BMI does not capture variation in body fat distribution or metabolic risk, limiting ability to accurately identify individuals at highest risk of GDM. Risk prediction models using additional adiposity measures may improve risk identification but require validation in independent populations before clinical use. This study aims to externally validate maternal adiposity risk prediction models for GDM developed using the SHAPES Cohort by applying them to international datasets within an IPD meta-analysis framework. IPD were identified through systematic searches of six electronic databases, grey literature sources, citation chaining and contact with study authors between 02/2021–07/2022. Ninety-three sources of maternal adiposity and pregnancy outcome data were identified, and study investigators were invited to join the SHAPES-IPD Collaborative Group in 2022–2025. Twenty studies contributed 25 datasets from 16 countries, comprising 41,954 pregnancies. Across studies, a range of adiposity measures were collected, including waist circumference ($n = 16$ studies), hip circumference ($n = 13$), skinfold thickness ($n = 11$), mid-upper arm circumference ($n = 10$), visceral fat thickness ($n = 2$), and subcutaneous fat thickness ($n = 2$). Sixteen studies reported GDM outcomes, contributing to this meta-analysis. A two-stage IPD meta-analysis will be conducted following PRISMA-IPD guidance. In stage 1, regression analyses evaluated model performance in each dataset using calibration and discrimination statistics. In stage two, results will be pooled using random-effects meta-analysis and heterogeneity assessed using the I^2 statistic. Stage 1 meta-analysis results show AUROCs in a similar range to the SHAPES Cohort (e.g., between 0.605 and 0.880 for waist circumference, $n = 15$). Stage 2 meta-analysis to estimate pooled AUROCs is ongoing, these Stage 1 results from heterogeneous external cohorts are largely robust to the SHAPES Cohort analyses. Final analysis will be available by September

2026. This study will provide robust evidence on the generalisability and predictive performance of maternal adiposity measurements beyond BMI for identifying women at risk of GDM. The findings will assess how well these models perform across diverse populations and adiposity measures, informing their potential utility for improving risk identification and supporting evidence-based approaches to obesity-related screening and prevention of GDM.

Disclosures: Research relating to this abstract was funded by the NIHR Academy (CDF-2018-11-ST2-011) through an Advanced/Career Development Fellowship.

O1-06 Early economic evaluation to inform investment in risk prediction strategies in maternity care within the national health service: a case study of gestational diabetes mellitus from the SHAPES study

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Current UK guidelines use body mass index (BMI) ≥ 30 kg/m^2 as an independent risk factor for gestational diabetes mellitus (GDM). However, BMI does not accurately predict risk of GDM. Adiposity measures that more precisely characterise body fat type, distribution, and amount may offer a more accurate basis for risk stratification and targeted care. This early economic evaluation aimed to establish the diagnostic performance and cost thresholds that any alternative approach must meet to be cost-effective compared with using BMI alone to triage GDM screening. A decision tree model was built from the National Health Service and Personal Social Services perspective. Model inputs including GDM prevalence, diagnostic accuracy, and costs were sourced from the SHAPES cohort study, expert opinion, and published literature. A willingness-to-pay threshold of £100 per additional correct diagnosis was derived from patient and public involvement and engagement. Net monetary benefit (NMB) per additional correct diagnosis was used to explore scenarios under which a potential alternative risk prediction strategy becomes cost-effective (where NMB > 0). A two-way sensitivity analysis (SA) varied combinations of sensitivity and specificity from 40 to 100%, holding the costs of potential strategies equal to BMI measurement costs, to identify the diagnostic performance thresholds required for cost-effectiveness. A three-way SA explored the joint impact of diagnostic performance and cost, varying the cost of the candidate alternative measures from 0.5 to 20x the current cost of using BMI. The two-way SA showed that a candidate adiposity measure(s) or model(s) become cost-effective when specificity is ≥75% and sensitivity is ≥65%, or when specificity is ≥80% regardless of sensitivity. The three-way SA demonstrated that when the costs of alternative measurement(s) is half of BMI costs, cost-effectiveness requires specificity ≥75% at any sensitivity level. At equal cost, cost-effectiveness requires specificity ≥80%. Beyond 5x the cost of BMI, no combination of specificity and sensitivity achieves a positive NMB. This study equips policymakers with a practical decision-support framework to inform strategic choices of candidate adiposity measures that could replace current practice using BMI by identifying diagnostic performance and cost combinations that deliver the greatest value for money for GDM risk prediction within the NHS.

Disclosures: **None.**

O1-07 Using biomarkers alongside adiposity measurements for obesity risk prediction: the study of how adiposity in pregnancy has an effect on outcomes – biomarkers (SHAPES-BIO)

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BMI is currently used to stratify maternal obesity risk. However, it poorly predicts individual outcomes and is often viewed as inaccurate and stigmatising by pregnant women. The SHAPES Cohort study in Newcastle, UK, recruited 1411 women in their first trimester and identified that current practice for gestational diabetes (GDM) risk assessment using BMI ≥ 30kg/m^2 performed poorly for risk prediction (AUROC 0.627, sensitivity 0.50, specificity 0.76). Although multiple adiposity measures (e.g. waist-to-height ratio) did improve GDM prediction to the fair range (AUROC > 0.7), the data suggest that further improvements are possible. SHAPES-Bio aims to determine whether adding blood-based biomarkers could improve performance of adiposity-related risk prediction models compared to current BMI-based approaches for obesity-related pregnancy outcomes. Plasma samples of 885 SHAPES Cohort participants were collected during the first trimester. Biomarker selection was based on literature review suggesting that they may improve prediction beyond adiposity measures, and on the feasibility of their future implementation in routine NHS maternity services. Selected biomarkers include a lipid panel, adiponectin, NT-proBNP, gamma-glutamyl transferase, sex-hormone binding globulin, and ferritin. These biomarkers reflect early, established changes in obesity-relevant pathophysiology (insulin resistance, cardiometabolic stress and iron homeostasis) and represent adipose tissue, cardiovascular and hepatic function and status. Risk prediction models developed using biomarkers in combination with adiposity measures in the SHAPES Cohort study will be compared with routine practice using BMI, and with the risk prediction models based on adiposity measures alone. Decision curve analysis will be conducted to assess clinical usefulness compared with the current BMI-based practice. Analysis is underway with results expected by September 2026. This study provides evidence as to whether integrating metabolic biomarkers with a wide range of adiposity measures enhances prediction of obesity-related pregnancy complications. These findings will inform more accurate and acceptable risk-stratification approaches in maternity care.

Disclosures: None.

O2: EXPLORING SPECIALIST WEIGHT MANAGEMENT AND WIDER STAKEHOLDERS

O2-01 Removed (Encore Presentation)

O2-02 Outcomes of a 3-year tier 3 weight management service pilot incorporating a novel holistic model of care and provision of new obesity pharmacotherapies in Leicester, Leicestershire and Rutland

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Background: One in four people in England live with obesity, and the approval of novel injectable obesity pharmacotherapies

presents an opportunity to evaluate new models of care. In this evolving landscape, funding was provided by the local Integrated Care Board to pilot a 3-year Tier 3 weight management service in Leicester, Leicestershire and Rutland. Methods: The service incorporated a multidisciplinary model including physician-led care, dietetic, psychological and exercise physiology support, alongside self-management options such as Steps4Health (physical activity support) and LENA (a digitally supported low-energy diet programme). Wegovy (semaglutide) and Mounjaro (tirzepatide; for patients with type 2 diabetes) were offered as obesity pharmacotherapies. Service capacity for the 3-year pilot was reached within 16 weeks, reflecting substantial unmet local need. Access to obesity pharmacotherapies expanded progressively during the pilot. Results and Conclusions: This presentation will describe the baseline characteristics of the 592 referred patients, including sex, age, ethnicity, anthropometric measures and obesity-related co-morbidities, as well as treatment choices and weight-loss trajectories during 24-months of follow-up. The pilot demonstrated robust and sustained weight loss outcomes at 2 years (14.8 ± 13.3 kg; 11.6 ± 10.3%), alongside lower-than-expected dropout and non-engagement rates (108/592, 18.2%). These findings suggest that large-scale, multidisciplinary obesity services incorporating pharmacotherapy can achieve meaningful long-term outcomes and may help inform future models of obesity care.

Disclosures: None.

O2-03 Removed (Encore Presentation)

O2-04 A remotely delivered specialist weight management service supporting nhs obesity pathways: a 12-month service evaluation of real-world weight, mental health and quality-of-life outcomes

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Specialist weight management services (SWMSs) within the UK National Health Service (NHS) face rising demand, long waiting lists, and limited resources. Remotely delivered SWMSs may expand access for adults living with obesity, yet evidence supporting their integration within NHS pathways remains limited. We evaluated such a service's effectiveness and feasibility at 12 months. This 12-month service evaluation included adults referred from an NHS SWMS between April and October 2025. The service is delivered digitally or in person; all participants analysed received it remotely. A multidisciplinary team allocated participants to a dietetic or psychological pathway, with medication eligibility assessed at week 6. The programme comprised intensive (weeks 1–12) and maintenance (weeks 12–52) phases, with eligible participants additionally receiving pharmacotherapy. Body weight came from Bluetooth weighing scales, patient-reported outcomes from a questionnaire sent after 12 months, and side effects, adherence and attendance from programme records. This analysis reports the medicated cohort: 59 had a 12-month weight and 11 completed questionnaires; a larger sample is expected before presentation. The 59 medicated patients with a 12-month weight had a mean age of 48 years (SD 13); 58% were female, 8% from an ethnic minority, mean baseline body mass index 48 kg/m^2, and 32% had a recorded disability, most commonly affecting mobility. At 12 months, mean weight loss was 17.1 kg (SD 10.4; $n = 59$), an 11.9% reduction; 81% lost ≥5% of baseline body weight and 54% ≥10%. Among the 11 participants who completed 12-month questionnaires, psychological distress fell 5.5 points on the Patient Health Questionnaire-9, health-related quality of life rose 19 points on the EQ-5D-5L visual analogue scale and 0.12 on its index, and emotional eating fell 4.2 points on the Emotional Eating Questionnaire. Engagement was high: 96% of intensive-phase sessions were attended and 97% of check-ins confirmed medication taken as scheduled. Side effects, predominantly gastrointestinal, were reported at 50% of check-ins but rated intolerable in only 1%. A remotely delivered SWMS integrated within NHS pathways is therefore a feasible, effective approach for adults living with obesity. Clinically meaningful improvements at 12 months support effectiveness in NHS settings; larger-sample evaluation is needed for confirmation.

Disclosures: RH, GS, RR and MW are employees of Second Nature Healthy Habits Ltd. Second Nature was the commercial partner on GMW's PhD studentship (MR/R015708/1). GMW currently provides ad hoc independent consultancy for Second Nature.

O2-05 PEACETIME obesity management programme

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Obesity care remains a critical unmet need across the island of Ireland, with no specialist multidisciplinary obesity services in Northern Ireland and limited provision in the Republic of Ireland. This lack of accessible, comprehensive care contributes to widening health inequalities, delayed intervention, and an escalating clinical and economic burden. The PEACETIME project is an EU PEACEPLUS-funded initiative designed to address this gap through the implementation and evaluation of a novel, large-scale, cross-border model of obesity care. It represents a landmark shift in service delivery as the first programme in Europe to implement large-scale, interdisciplinary obesity management at primary care/community level. Delivered through a network of clinical, academic, patient, and policy partners, and supported by an international strategic steering group, PEACETIME aligns with global best practice while enabling real-world translation. Up to 9000 adults living with obesity and related complications will participate in a structured 52-week intervention delivered by an integrated interdisciplinary team, including dietitians, psychologists, physical activity specialists/physiotherapists, nurses, and health coaches. Care is delivered through four flexible pathways, combining group-based delivery, personalised support, and an embedded digital platform for education, monitoring, and clinical coordination. The primary outcome is change in health-related quality of life, with secondary outcomes including clinical markers, psychosocial measures, patient engagement, and cost-effectiveness. A mixed-methods evaluation will assess impact, acceptability, and scalability. This presentation will outline key learnings from programme set-up, including service design, cross-border implementation, workforce development, digital integration, and patient and public involvement, alongside an overview of clinical pathways and early insights into delivery.

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O3: REFRAMING AND RETHINKING OUR APPROACH TO WEIGHT MANAGEMENT: UNDERSTANDING THE WIDER CONTEXT AND DETERMINANTS

O3-01 Maternal obesity across the United Kingdom: assessing maternal obesity trends and key health behaviours using national maternity data from Northern Ireland 2011–2021

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Rising rates of maternal obesity present significant public health challenges and can impact the health of future generations. Folic acid supplement use is an important preconception health behaviour particularly for women with obesity, yet rates remain low. This study examined: (1) trends in maternal Body Mass Index (BMI) from 2011 to 2021; (2) longitudinal BMI changes across subsequent pregnancies; and (3) patterns of folic acid supplement use, including differences by BMI categories. The Northern Ireland Maternity System (NIMATS) provided national, anonymised data. Descriptive statistics explored BMI distribution, gravida, folic acid supplement use and BMI change between pregnancies. Between 2011 and 2021, 155,843 mothers contributed 243,762 pregnancies. The proportion of women with a healthy BMI at antenatal booking appointment (8–12 weeks gestation) declined from 50.27% ($n = 12{,}148$) in 2011 to 39.86% ($n = 4316$) in 2021, while those living with overweight or with obesity (classes I–III) increased from 47.70% ($n = 11{,}526$) to 58.64% ($n = 6349$). Patterns were similar for women with first-time pregnancies. Among women moving from their first to second pregnancy, 66.41% ($n = 45{,}312$) remained in the same BMI category, 23.50% ($n = 16{,}018$) moved to a higher BMI category and 7.00% ($n = 4774$) shifted to a lower BMI category at booking appointment. Comparable trends were observed for later transitions. Folic acid supplement use indicated among first pregnancies (data spanning 2015–2021), 57.41% ($n = 42{,}247$) initiated folic acid post-conception, while 34.75% ($n = 25{,}572$) used 400 mcg and 4.47% ($n = 3292$) used 5 mg preconception. Folic acid supplement use varied markedly by BMI. Among women with overweight or obesity who remained in the same or a higher BMI category between their first and second pregnancies, preconception 5 mg folic acid use remained low (6.63%, $n = 1424$), while nearly half used 400 mcg post-conception. Findings underscore the importance of striving for a healthy BMI preconception given most women are entering pregnancy with an elevated BMI and highlight that almost one-quarter of women will increase in BMI category over subsequent pregnancies. Suboptimal preconception folic acid supplementation use is also concerning particularly for women with obesity given specific dosage recommendations at that time. Findings highlight need for enhanced preconception and interconception interventions to optimize maternal health and reduce inequalities.

Disclosures: None.

O3-02 Has maternal BMI run its course? Insights from the study of how adiposity in pregnancy has an effect on outcomes (SHAPES) cohort

Raya Vinogradov[1], Moha Shojaei[1], Giang Nguyen[1], Andy Bryant[1], Dawn Teare[1], Jeremie Nsengimana[1], John Allotey[2], Janine Smith[3], Susan Lennie[1], Nicola Heslehurst[1]*

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Maternity guidelines use Body Mass Index (BMI) to stratify maternity care. However, BMI does not reliably predict risks at the individual level and performs inconsistently across ethnic groups. The SHAPES prospective cohort study (ISRCTN82185177) investigated whether early-pregnancy adiposity measures could better predict adverse pregnancy outcomes. 1450 women aged ≥18 years with singleton pregnancies were recruited during their first-trimester scan at a tertiary maternity unit in the North East of England. Measures of adiposity included: ultrasound-derived abdominal, preperitoneal visceral, and subcutaneous fat; anthropometric measurements of waist, hip, mid-upper-arm, and neck circumferences, skinfold thicknesses, height, and weight were collected using the International Society for the Advancement of Kinanthropometry (ISAK) approach. These measurements were used to derive adiposity indicators ($n = 14$), such as waist-to-height ratio. Pregnancy outcomes commonly associated with maternal obesity and informed by Patient Public Involvement and Engagement group priorities were selected, including gestational diabetes (GDM), pregnancy-induced hypertension, pre-eclampsia, induction of labour, caesarean section, instrumental delivery, retained placenta, pre-term and post-term delivery, small-for-gestation, large-for-gestation, Apgar scores and admission to neonatal specialist care. Predictive performance of adiposity measures was evaluated using the area under the receiver operating characteristic curve (AUROC) after logistic regression. Performance of each measure was compared to performance of BMI (continuous) for each outcome. Measures that outperformed BMI in predicting seven or more outcomes were considered promising. Performance of 31 adiposity measures was assessed for 14 outcomes. Continuous BMI performed poorly across all outcomes with best performance observed for GDM (AUROC 0.688) and worst for pre-term delivery (AUROC 0.46). Twelve measures, including hip, mid-upper-arm and neck circumferences, subscapular, supraspinale and sum of skinfolds, body fat percentage, body roundness index, CUN-BAE, relative fat mass and waist-to-hip ratio consistently performed better then BMI in seven or more outcomes. However, none of the measures reached "good" performance, with all AUROC values remaining below 0.8 across outcomes. In conclusion, in this large dataset several measures of adiposity outperform BMI in risk stratification; however, predictive performance using any one measure alone is limited, highlighting the need for multifactorial approaches to risk prediction.

Disclosures: None.

O3-03 Communication of advice about pregnancy and contraception in relation to injectable obesity medications: a survey from the health and reproduction obesity medication (HERA) study

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Use of injectable obesity medications in the preconception phase could improve obstetric outcomes in women with obesity. They are contraindicated during pregnancy due to potential teratogenicity, with current advice recommending concurrent use of contraception. The aim of this study was to explore the information needs and experiences of women in relation to injectable obesity medications, pregnancy and contraception. A cross-sectional online survey was developed with public and

patient input. Women aged 18–45 years in the UK who used, or considered using, injectable obesity medications were recruited via targeted social media advertising between December 2025–March 2026. Descriptive statistics and frequencies are reported, along with thematic analysis of free text responses about contraceptive advice received. Of the 335 respondents, 28.6% were 31–35 years, 49.2% lived in England and 73.4% identified as White ethnicity. Current mean BMI was 36.7 kg/m^2 ± 8.8 (range 20.8–66.8), and 23.5% had polycystic ovary syndrome. 54.6% of respondents were currently using injectable obesity medications ($n = 129$ tirzepatide, $n = 53$ semaglutide); 22.6% had previously used them; and 25.1% had considered but never used them. Only 18 respondents had medications prescribed via the NHS, the rest were self-funded. 31.9% reported a history of difficulty conceiving; 20.6% were specifically motivated to lose weight to conceive. Eight respondents had conceived whilst using the medication. Overall, 45.9% had received contraceptive advice. Analysis of free text comments ($n = 156$) showed most respondents reported receiving advice that pregnancy was contraindicated, and that medication should be stopped immediately if pregnancy occurred during use. Some received information that trying to conceive should be delayed after ceasing medication, but advice about the length of time to wait varied from 3 to 24 weeks. Respondents reported that some online providers recommended using contraception and explained the effectiveness of oral contraceptives might be compromised. Some provided advice that additional barrier methods were particularly important during dose increases. In summary, contraceptive advice was received by approximately half of respondents. Information received was inconsistent, specifically regarding timeframes of medication cessation in relation to conception. Improving fertility is a common motivator for weight loss in women with obesity, therefore reproductive health needs should be assessed as part of obesity medication pathways.

Disclosures: This study is funded by the NIHR Research for Patient Benefit Programme.

O3-04 Furthering our understanding of eating disorder risk during obesity treatment: findings from the edit collaboration

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Behavioural weight management interventions are widely used to support adolescents and adults with overweight or obesity and as an adjunctive therapy for obesity medications and bariatric surgery. Concerns regarding the potential for these interventions to inadvertently increase eating disorder risk have been recognised for some time. The EDIT (Eating Disorders In weight-related Therapy) Collaboration was formed to examine individual participant factors and intervention components that contribute to eating disorder risk. A systematic search of databases and clinical trial registries was conducted to identify randomised-controlled trials of behavioural weight management interventions in adolescents or adults with overweight or obesity (aged ≥ 10 years) assessing eating disorder outcomes. Eligible trials were invited to join EDIT and share individual participant data (IPD). Trials were coded into their intervention components and a series of IPD meta-analyses were conducted to understand: (1) the influence of intervention intensity and compared to control on eating disorder symptoms; (2) individual variability for change in eating disorder symptoms; and (3) individual predictors of increased and decreased eating disorder symptoms. IPD from 40 ($n = 5024$) randomised-controlled trials were included. Behavioural weight management interventions did not increase, and may reduce, global eating disorder symptoms compared to no-treatment control. High intensity interventions (frequent contact, behavioural change strategies across several domains) showed a greater reduction in eating disorder symptoms compared to control. Most participants had scores on the Eating Disorder Examination Questionnaire and Binge Eating Scale that remained below risk thresholds between baseline and the latest timepoint. Though some participants had a reliable reduction or increase in scores on these measures. No individual baseline factor (sex, demographics, psychosocial health, etc) predicted an increase in eating disorder symptoms. Multiple factors, including higher baseline eating disorder score, female sex and depression symptoms were predictive of a smaller decrease in eating disorder symptoms after weight management interventions. To minimise eating disorder risk during weight management, access to supported interventions that align with clinical research is important, combined with individual assessment and monitoring of eating disorder symptoms. Early identification of those with increasing eating disorder symptoms may enable provision of additional support and prevent development of a full-syndrome eating disorder.

Disclosures: AA is a member of the Scientific Advisory Board for WW. All other authors declare no conflict of interest.

O3-05 Weight stigma among midwifery and dental students: findings from two experimental studies

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Weight stigma refers to prejudice and discrimination based on body weight and has been associated with poorer healthcare experiences and outcomes. Although weight stigma has been widely studied among healthcare professionals, less is known about attitudes among midwifery and dental students. This research compared whether student midwives' and dentists' attitudes towards patients differed depending on the patient's weight status. Two online experimental studies using patient scenarios were conducted. In Study 1, midwifery students ($n = 281$) were randomly allocated to read a scenario describing a patient classified with either a: (i) healthy weight; (ii) overweight; or (iii) obesity. Midwifery students then reported their attitudes toward the patient and the time they expected to spend with the patient. Study 2 used the same design with dental and non-dental students ($n = 528$) and assessed advice that would be provided to the patient. Data were analysed using analysis of variance and logistic regression. Patient advice was coded based on whether it focused on lifestyle factors, such as diet and physical activity (stigmatising) or non-lifestyle factors, such as dental hygiene advice (non-stigmatising). In Study 1, midwifery students reported significantly more stigmatising attitudes towards patients classified with overweight compared to healthy weight. Attitudes did not significantly differ towards patients with healthy weight or obesity. In Study 2, dental and non-dental students reported significantly more stigmatising attitudes and were more likely to provide lifestyle-related advice (considered stigmatising) to patients with overweight and obesity than patients with a healthy weight. Across both studies, predicted time spent with patients did not differ significantly between weight statuses. These findings demonstrate that weight stigma is evident among

student midwives and dentists. Strategies to increase awareness about potential weight-related biases should be integrated into healthcare professionals' training to support equitable and non-stigmatising healthcare delivery.

Disclosures: None.

O4: EXPLORING THE LIVED EXPERIENCE OF OBESITY AND COMPLICATIONS DURING WEIGHT MANAGEMENT IN CHILDREN

O4-01 "It's the biggest not one-size-fits-all service I've ever worked in": the realities of delivering a "complications of excess weight" service for children and young people in England from a multidisciplinary team perspective

Rebecca Stone[1], Jordan Marwood[1], Paige Davies[1], James Nobles[1], Karen Coulman[3], Elysa Ioannou[2], Adam Martin[4], Veronica Swallow[2], Lucie Nield[5], Louisa Ells[1], Catherine Homer[2]*

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In line with the ambitions of the NHS Long Term Plan, novel specialist weight management services for children and young people (CYP) living with severe obesity have been piloted across England since 2021/22. These 'Complications of Excess Weight' (CEW) services provide holistic, person-centred care to CYP, delivered by a multi-disciplinary team (MDT). The ENHANCE project (ENHANCE NIHR 158453) is the first to provide a national evaluation of the CEW programme and sought to develop the evidence base and understanding of optimal models of care for this patient group. This qualitative study aimed to explore the realities of delivering a CEW service from the perspective of MDT members. Online semi-structured one-to-one interviews (N = 28 staff members) were conducted across seven purposefully sampled CEW services between April-June 2025. Interviews explored barriers and facilitators to delivery, perceptions of patient cohort, service demand, and how CEW fits within wider weight management systems. Data were transcribed and analysed using Framework Analysis. Three overarching themes were identified: (1) Achieving person-centred care in CEW services; (2) Navigating complexity in the CEW patient journey; and (3) The challenges of designing and delivering a pilot. Participants described a complex patient group who required holistic, innovative approaches to care. Challenges included high service demand, a lack of appropriate transitional care pathways into adult weight management for 16–18-year-olds, and uncertainty about sustainable funding and staffing in the context of a pilot programme. Findings highlight the need for a long-term commissioning plan to ensure stability and appropriate care for CEW services and the families they support. MDTs must be equipped with the skills to respond effectively to high levels of patient complexity, and gaps in the availability of step-down and transitional care into adult weight management require urgent attention to ensure any positive medical and psychosocial improvements yielded from CEW are not lost.

Disclosures: None.

O4-02 Identifying and supporting eating difficulties within complications of excess weight clinics: healthcare professional perspectives

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Children and young people living with severe obesity frequently experience eating difficulties, such as emotional eating and binge eating disorder. Globally, eating difficulties are reported in over 80% of children and young people living with higher body weight and are associated with increased risk of self-harm, reduced quality of life, and adverse health outcomes. Despite this overlap, services for weight management and eating difficulties are typically delivered separately. Delivering support for weight management without addressing eating difficulties may reinforce disordered eating behaviours, risking the wellbeing of the individual and undermining weight management intervention outcomes. The NHS England Complications of Excess Weight (CEW) pilot programme was established to provide specialist multidisciplinary care for children and young people living with severe obesity and complications. Within the ENHANCE evaluation of the CEW programme, this research examines two CEW clinics offering novel support for eating difficulties alongside weight management. The study aimed to explore experiences of healthcare professionals in identifying and addressing eating difficulties within CEW weight management services. To date, six interviews have been conducted across two sites, with a target sample of 12 healthcare professionals recruited via purposive sampling. Participants include professionals from medical, psychological, and health and social care backgrounds who are involved in eating support delivery. Interviews focus on how eating difficulties are recognised, assessed, and addressed within CEW services. Data will be analysed using reflexive thematic analysis. Early data suggest significant systemic gaps exist, including lack of relevant assessment tools, an absence of alternative services for young people with higher weight and eating difficulties, and lack of confidence with eating difficulties across wider services. Highly complex family and psychosocial needs, including neurodivergence and prior healthcare stigma, are noted as key challenges in supporting this population. This study will provide the first qualitative evidence on how healthcare professionals navigate eating difficulties within specialist paediatric weight management settings, with direct implications for integrated care model development.

Disclosures: This project was funded by the NIHR Health and Social Care Delivery Research programme (NIHR 158453). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

O4-03 Exploring retrospective experiences of living with childhood obesity and weight-based stigma

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Children who live with obesity often face bias, discrimination and stigma across all aspects of their lives which can deleteriously impact their health into adulthood. This retrospective, qualitative study captured the lived experiences of individuals who experienced obesity and weight-based stigmatisation during childhood. Semi-structured interviews were conducted with 18 adults living in the UK who had lived with severe or complex obesity during childhood. Questions explored family, community, school and clinical contexts with additional focus on long term impacts, physical and mental health. A thematic analytic framework was used to identify areas of salience and give meaning to the lived experiences, with findings used to provide recommendations for supportive practices for those working with children living with obesity. Key themes were: (i) Attitudes of others, (ii) Self-perception, (iii) Relationship with physical activity, (iv) Relationship with food, (v) Adverse Childhood Experiences and (vi) Healthcare. Daily weight-based microaggressions, stereotypical assumptions of laziness or

incapability, physical abuse and verbal abuse from family members, peers, strangers, teachers or healthcare practitioners, negatively impacted the self-perceptions and self-esteem of the participants during their childhood. Pre-existing health conditions and bullying by teachers/peers hindered physical activity for some. Participants experienced shame and negative perceptions from others about their eating which triggered frequent comfort and secret eating. As children they made severe but unsustainable attempts to lose weight with self-imposed starvation regimes, multiple diet plans or prescription amphetamines. Many of the participants had adverse childhood experiences which led them to developing maladaptive coping strategies such as substance abuse, eating disorders, social self-isolation, negative self-talk, self-harm and suicidal ideation. The design and size of items in schools or public spaces, such as clothing and seating, were inappropriate for those living with obesity and drew judgmental attention from others. Participants recounted experiences of diagnostic overshadowing where medical symptoms were habitually attributed to their weight, sometimes with immediate or delayed serious health outcomes. Recommendations are required to address widespread institutional, societal and personal weight-based biases: identify underlying causes of weight gain or disordered eating, and obesity-informed education in institutions, businesses and schools to build a robust culture of body acceptance.

Disclosures: None.

O4-04 Communication across the care pathway in specialist paediatric weight management services: a health literacy perspective

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Communication plays a central role in the delivery and effectiveness of paediatric obesity services. Specialist weight management programmes, such as the Complications of Excess Weight (CEW) clinics provide multidisciplinary support for children and young people (CYP) living with complex obesity. Families accessing these services can have a range of communication needs relating to neurodiversity and learning difficulties, and for many, English is a second language. Previous research has found engagement with weight management services can be inconsistent, with high non-attendance rates, early dropout and variable levels of self-management, particularly from those with complex needs. This project explores communication across CEW clinics through a relational health literacy lens, examining how understanding, trust and engagement are shaped through interactions between families, healthcare professionals and the wider service environment. As part of the ENHANCE (Evaluating the NHSE CEW services for CYP) study, longitudinal semi-structured interviews and focus groups were conducted to explore families' experiences of accessing CEW clinics. Framework analysis was used to analyse data, focussing on communication between the families and healthcare professionals at referral, throughout the service, and at discharge. A patient and public involvement group advised on the development of topic guides. Fifty-one interviews and 15 focus groups ($n = 50$) were completed with CYP and their parents/carers. At referral, the information received prior to appointment, and the clarity of this information influenced a family's expectations of the service. During the service, effective communication strategies involved adapting communication practices to meet a range of needs, and discussion of holistic needs to provide person-centred care. Preferences varied around the use of digital communication tools, such as online meetings, self-monitoring tools, and phone messaging. There was limited discussion with families around the length of care plans and discharge processes. Findings highlight the importance of the relational experience of care and how communication can support shared understanding, participation and engagement with the service. This is particularly important for this population, where families commonly had previous negative experiences of weight stigma in healthcare settings. These findings will inform recommendations to ensure CEW clinics acknowledge the relational aspect of healthcare, beyond just the accessibility of communication strategies.

Disclosures: None.

O4-05 Visualising obesity's impact from childhood experiences (voice): a qualitative study

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Childhood obesity is increasing globally. While physical consequences are well-documented, the longitudinal psychosocial impacts on affected individuals and extending into adulthood remain understudied. Strategies to support sustainable weight management in children need to be both physically and psychologically safe. This study explores the lived experiences of young adults who grew up with childhood obesity to uncover the multifaceted physical and mental health impacts and inform future risk mitigation strategies. This qualitative study utilised purposive sampling to recruit young adults (aged 21–29) educated in Singapore and were identified as obese while growing up. Data were collected via cohorts participating in three consecutive 90-min semi-structured, participatory focus group workshops. Art-based methodologies like "Draw-A-Child" exercises and Photovoice, were utilised alongside independent reflecting journaling between sessions to assess co-design principles and monitor well-being. Transcripts were inductively and iteratively coded in NVivo. Emergent themes were subsequently mapped onto a risk perception model encompassing exposure, susceptibility, severity, consequences, and affect. Interim analysis ($n = 27$) revealed pervasive themes across people, places, and processes. Participants reported experiences of stigma, exclusion, misguided advice from adults and peers, all of which heavily influenced identify formation. Lingering psychological impacts included mental health challenges, body image insecurities and persistent fears of weight regain. Coping mechanisms varied, including utilising humour, emotional eating, active weight concealment and withdrawal. Gender differences emerged, with females highlighting societal pressures around beauty standards, and males emphasising physical exclusion from sports. Despite these challenges, participants demonstrated resilience, self-acceptance, and autonomy in adulthood. Childhood obesity carries lasting psychosocial impacts that persist into adulthood. Combining focus groups, art-based methodologies, and participant journaling provides a safe, effective medium for seldom-heard groups to articulate complex, sensitive experiences. These lived experiences and findings underscore the need for empathetic, stigma-reducing interventions and support sustainable weight loss that is physically and psychologically safe.

Disclosures: None.

O5: RETHINKING HOW WE APPROACH WEIGHT MANAGEMENT – LOCAL AUTHORITY PRACTICE, SYSTEMS APPROACHES AND DIGITAL DELIVERY

O5-01 A qualitative exploration of local authority approaches to address obesity in the North East and Yorkshire region

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Obesity is a complex, chronic disease which can have a multitude of negative influences on an individual's health and wellbeing. There is no mandated responsibility for English local authorities to commission services to support people living with obesity, resulting in a variety of approaches being implemented. This study aimed to explore what approaches local authorities across the North East and Yorkshire region take and understand what impact these approaches have on communities and residents living with obesity. The PhD study uses a realist informed methodology. Surface level mapping and semi-structured interviews ($n = 21$) with local authority public health obesity leads identified what approaches were implemented across the North East and Yorkshire region (phase 1). A realist review explored the lived experience of engaging with the identified approaches (phase 2). Focus groups and semi-structured interviews with key players in areas sampled from phase 1 as using different approaches to address obesity ($n = 6$) were used to create illustrative case studies, to gain a greater understanding of each area's approach and outcomes for both residents and key stakeholders (phase 3). Findings were then synthesised to develop a programme theory and recommendations to inform local authority obesity strategy (phase 4). This abstract reports phases 1–3. Three main approaches to addressing obesity were identified: weight centric services, weight neutral and whole systems approaches. Findings indicate that local authorities are shifting away from solely providing weight centric services to providing person-centred models of support and system wide changes to adapt the wider environment. The realist review identified lived experience barriers to engagement of services include experiences of weight stigma and unclear referral pathways and that co-design with residents may support better engagement in obesity approaches. Findings from this study identify a whole systems approach and interventions focused on children and young people as effective strategies for future obesity prevention. This study has mapped obesity approaches taken by local authorities in the North East and Yorkshire region and the decision making to inform the direction of the approaches. The insights from this study will provide recommendations for future local authority obesity strategies and inform future policy and practice.

Disclosures: None.

O5-02 Weight stigma and engagement in physical health behaviour: a qualitative meta-synthesis

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Weight stigma - bias, prejudice, and discrimination based on body weight - negatively affects engagement in physical health behaviours. While qualitative research offers a deep understanding of weight-stigma experiences, there is currently no systematic synthesis of qualitative research that provides insight into the lived experiences of weight stigma and how they affect engagement in physical health behaviours. This was the purpose of the current systematic review with qualitative meta-synthesis. A systematic literature search was conducted across eight databases, yielding 86 studies ($n = 2762$) that met the inclusion criteria and were included in the final synthesis. An inductive thematic analysis was used to synthesise qualitative findings. Three overarching themes were developed. The first theme captured experiences of weight stigma, including internalisation of stigma and the key characteristics of stigmatising encounters, such as their sources (e.g., parents, health care professionals, teachers/coaches) and settings (e.g., chairs, healthcare equipment). The second theme highlighted how weight stigma acted as a barrier to engagement in physical health behaviours. The third theme identified factors that enabled individuals to engage in health behaviours despite experiencing weight stigma. Based on people's lived experiences, this review demonstrates that weight stigma plays a substantial role in shaping engagement in physical health behaviours. Addressing weight stigma and incorporating stigma-reducing approaches is essential for supporting engagement in health-promoting behaviours.

Disclosures: None.

O5-03 Digital programme engagement delivers equitable weight loss outcomes across socioeconomic deprivation quintiles in adults using incretin-based therapy: a retrospective analysis of 196,056 participants from a UK digital weight loss service

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Socioeconomic deprivation is associated with higher prevalence of obesity and poorer treatment outcomes, and whether digital health interventions can deliver equitable outcomes across deprivation levels remains unclear. This retrospective analysis included 196,056 adults prescribed subcutaneous incretin-based therapy (tirzepatide or semaglutide) within a UK digital weight management service between February 2023 and December 2025. Area-level deprivation was derived from Lower Layer Super Output Area postcodes mapped to the UK Index of Multiple Deprivation (IMD), categorised into quintiles (Q1 = most deprived to Q5 = least deprived). Engagement was defined as at least one coaching session, four or more weekly weight logs, and at least one app login. Mixed-model repeated measures analysis estimated adjusted weight change over 12 months, with IMD by engagement interaction testing. Models adjusted for age, sex, baseline weight and comorbidities. Distribution across quintiles was Q1 $n = 29{,}896$ (15.3%), Q2 $n = 38{,}793$, Q3 $n = 42{,}645$, Q4 $n = 44{,}548$, Q5 $n = 40{,}174$ (20.5%). Mean age was 43.3 (SD 12.6) years, 80.2% were female and mean BMI was 34.8 (SD 6.1) kg/m^2. Participants from the most deprived areas had higher baseline BMI (Q1: 35.8 versus Q5: 34.1 kg/m^2) and lower engagement rates (Q1: 7.5% versus Q5: 11.8%; ratio 1:1.6). At month 12, overall weight loss showed minimal deprivation gradient (Q1: −17.2% versus Q5: −17.6%). When stratified by engagement, engaged participants achieved equivalent outcomes regardless of deprivation: Q1 engaged −22.4% (95% CI −23.2 to −21.6) versus Q5 engaged −21.9% (95% CI −22.4 to −21.4). Among non-engaged participants, outcomes were similarly uniform (Q1: −15.5% versus Q5: −15.7%). The IMD by engagement interaction was non-significant ($p = 0.216$), confirming engagement benefits were equitable across all deprivation levels. Kaplan-Meier analysis showed no deprivation gradient in achieving clinically meaningful weight loss thresholds (≥15% log-rank $p = 0.264$; ≥20% log-rank $p = 0.254$). Programme completion rates were 1.7-fold higher in the least deprived versus the most deprived quintiles. Despite lower baseline engagement rates and higher disease burden in deprived

areas, active digital programme participation delivers equivalent weight loss outcomes across all socioeconomic strata. These findings demonstrate that digital weight management services can achieve health equity when participants engage, though targeted strategies may be needed to improve engagement uptake in more deprived communities.

Disclosures: HJ, KH, DR and DH are employees of Menwell TLD, which operates the digital weight loss service from which the data were drawn. This study received no external grant funding; it was conducted as part of the internal research and development activities of Menwell TLD.

O5-04 Obesity prevention in action: insights from a 5 nations systems network

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Obesity prevention across the UK and Ireland is increasingly framed as a complex systems challenge requiring coordinated, multi-sector action. The 5 Nations Whole Systems Approach (WSA) Learning Network was established in 2023 to connect senior public health and government professionals leading systems working obesity prevention efforts across England, Scotland, Wales, Northern Ireland and the Republic of Ireland. The network aims to bring together these leaders and facilitate shared learning among these countries implementing WSA. This presentation draws on a three-year practice-based learning approach, capturing insights from regular network meetings, shared reflections, and cross-nation collaboration. Network members have explored structures and contexts, considered patterns and identified learning. Through the network meetings, members have discussed each country's approach and progress, focusing on implementation enablers, capacity building, and system-level challenges in obesity prevention. Whilst all 5 nations are at different stages of delivering obesity prevention through systems working, common themes have arisen across the countries. The network has found that there are some clear key enablers and challenges to delivery of a whole systems approach and these will be discussed at this presentation. In conclusion, the 5 Nations Learning Network has been a valuable tool for promoting continuous improvement and growth, supporting senior public health, government and research practitioners in exploring promising solutions to complex public health issues. Current reflection highlights the value of some key cultural behaviours to advance obesity prevention. The learnings so far emphasise the importance of some key structures and ways of working to achieve real transformation, alongside the need for simple, practitioner level evaluation approaches that capture systems change over time.

Disclosures: None.

O5-05 Strengthening obesity prevention through systems working: our experience in Wales

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Obesity in Wales affects approximately two-thirds of adults and one in four children, representing a complex public health challenge. Healthy Weight: Healthy Wales (2019–2029) sets out a national, evidence-informed strategy by the Welsh Government which incorporates a Whole Systems Approach (WSA). This explicitly recognises the interconnected social, environmental and economic determinants of health. This abstract presents learning from the implementation of our WSA across national, regional and local systems. A practice-based case study approach was undertaken, drawing on programme documentation, cross-sector stakeholder engagement, and implementation learning from national and local delivery structures. The WSA model integrates policy, service delivery and community action across Welsh Government, NHS Health Boards, Public Service Boards, Local Authorities, and communities. This presentation will provide an overview of our experiences and learning from operationalising WSA across the nation. Through revising and strengthening governance, developing shared frameworks, and cross-sector collaboration, we have seen the system strengthening. Key enablers and challenges will be highlighted, including the need to balance national direction with local flexibility building on the local context, and sustaining stakeholder engagement and capacity for long-term systems change. The experience in Wales provides a practical example of embedding systems thinking within a national obesity strategy. Early learning highlights the importance of multi-level leadership, infrastructure for collaboration, and iterative development informed by practice-based evidence. These insights are relevant to researchers, policymakers and practitioners seeking to design, implement and evaluate whole systems approaches to obesity prevention in complex, real-world settings.

Disclosures: None.

O6: EXPLORING THE LIVED EXPERIENCE OF OBESITY AND COMPLICATIONS DURING WEIGHT MANAGEMENT IN ADULTS

O6-01 Removed (Withdrawn from Publication)

O6-02 A qualitative and co-design study of people's experiences and needs after re-gaining weight and how current services address weight regain: the share study

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Behavioural weight management programmes (BWMPs) are a cornerstone of England's national obesity strategy; however, long-term weight loss maintenance (WLM) remains a significant challenge. Systemic constraints, including short commissioning cycles, fixed 12-week delivery models, and weight-centric performance metrics often prioritise immediate results over sustained health outcomes. This study aimed to understand stakeholder perspectives on BWMP provision and to co-design evidence-based policy and commissioning recommendations to facilitate long-term WLM.A multi-stage mixed-methods and co-design study was conducted. Initial data collection involved an e-survey of providers ($n = 20$) and 96 qualitative interviews/focus groups with service users, commissioners, referrers (i.e. GP's), and providers to identify barriers to maintenance. These findings informed subsequent co-design workshops, including an online session using Padlet and two in-person workshops. Data comprising written responses, rankings, and audio recordings underwent reflective thematic analysis. This process was inductive for the initial exploration and deductive for subsequent stages, mapping feedback onto policy themes to iteratively refine 10 final recommendations. Stakeholders identified four primary themes impacting WLM: a narrow delivery focus on initial weight loss, insufficient programme duration, a lack of maintenance-specific skills, and unaddressed complex needs. To address these, 33 stakeholders demonstrated strong convergence around four policy priorities: (1) implementing longer commissioning cycles (approximately five years) with protected implementation phases;

(2) adopting flexible, tapered delivery models that extend beyond 12 weeks; (3) establishing centralised "Hub" models to streamline referral pathways and follow-up; and (4) creating structured mechanisms for service re-access without full re-referral. Participants widely critiqued short-term weight-based KPIs, advocating for new metrics that incorporate maintenance and wellbeing indicators. While convergence was high, divergence remained regarding funding feasibility and data collection responsibilities. Improving WLM in England requires fundamental shifts in commissioning duration, performance metrics, and referral infrastructure. Moving from fixed, short-term interventions to flexible, integrated support models is essential for sustained success. Policymakers should pilot five-year commissioning cycles, maintenance-focused KPIs and the development of a central hub to improve access and follow-up for weight management support. Researchers must evaluate the cost-effectiveness of these system-level reforms to catalyse meaningful improvements in population health and service delivery.

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O6-03 "It stays with you": weight stigma and the regulation of women's bodies across the life course

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Weight stigma, comprising pervasive societal and internalised negative stereotypes, is widely recognised as a social determinant of health that disproportionately affects women. It contributes to poor mental wellbeing, disordered eating, social withdrawal and widening health inequalities. Research has tended to foreground the perspectives of more privileged (white, middle class, heterosexual, able-bodied) women, rather than those with marginalised identities. There is also limited research assessing implications of weight stigma across the life course. This study addresses these gaps by examining the lived experiences of diverse women within three countries, exploring how weight operates as a form of social surveillance and control across key life stages. In-depth interviews were conducted with women in Canada ($n = 35$), Germany ($n = 30$) and the UK ($n = 30$) who reported experience of weight stigma at any point during their lives. Participants were purposively recruited to capture diverse experiences across migrant, minority ethnic, disabled, LGBTQ+ and low-income groups. Although weight was not formally recorded, participants represented a range of body sizes. Biographical timelines were used to elicit reflections on experiences of weight, health, relationships and stigma across women's lives. Interviews were audio-recorded, transcribed and analysed using reflexive thematic analysis informed by intersectionality. Findings show that weight-related scrutiny begins early, with women describing childhood as a critical period in which bodily norms start to become internalised through family, schooling and peer interactions. Across the life course, weight functioned as a constant site of surveillance, reinforced through healthcare encounters, media representations and interpersonal relationships. Key reproductive transitions intensified this monitoring, often accompanied by moralised expectations around self-discipline, health and femininity. Experiences were shaped by intersecting axes of inequality, highlighting the cumulative effects of weight stigma alongside racism, ableism, heteronormativity, and gender- and age-based discrimination. Cross-country variation revealed how national contexts mediate these processes, with menopause, for example, differently framed and experienced. These findings position weight stigma as a structural and life course process through which women's bodies are governed. Addressing its impacts requires interventions and policies that recognise stigma as a public health issue embedded in gendered, cultural and institutional practices.

Disclosures: None.

O6-04 Exploring the experiences of obesity and weight management in 'minority' groups living in the UK

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Weight management often applies a 'one-size-fits-all' approach, focusing heavily on individual behaviour change. Despite an attempt to move towards personalised and more holistic support, this often ignores the heterogeneity in causes and consequences of obesity. Additionally, the voices and experiences of individuals who fall into 'minority' groups are often missing from the evidence that supports weight management approaches. To understand the impact of this, the present study explored the experiences of obesity and weight management in those who fall into 'minority' groups within the UK (focussing on, but not exclusive to, ethnicity, sexuality and gender) through a phenomenological qualitative design. Participants completed two online semi-structured interviews to explore their experiences of living with obesity and their engagement with weight management, particularly within the context of their identity within a 'minority' group. The second interview used photo elicitation to capture elements of their daily lives which participants felt epitomised their experiences. Interviews were transcribed and analysed using reflexive thematic analysis. Participants commonly reported a compounding effect of their 'minority' and weight statuses, resulting in them "…dealing with two different types of stigma or discrimination from the outside world." This discrimination arose from both wider society, but also those within the same 'minority' group (e.g., as a result of cultural preference or societal expectations for body weight/shape). As a result, participants felt a sense of 'othering', with one reporting "I definitely feel like I stick out." While participants were often attempting to manage their own weight, many reported issues resulting from the way in which wider society engaged with them (e.g., feelings of exclusion from a gym or fitness class due to racism or transphobia). The heightened stigma and discrimination faced by individuals living with obesity who fall into a 'minority' group are concerning and need to must be addressed to ensure they are included and supported in weight management. More broadly, the lack of representation for diverse communities within current obesity research and practice impacts access to, engagement with, and perceived success of weight management. Person-centred support must account for how social, cultural and psychological contexts shape weight.

Disclosures: None.

O6-05 Exploring experiences of weight-based stigma across cultural and social contexts: the role of food and disordered eating

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Weight stigma is prevalent across a range of settings and is often fuelled by cultural and societal views and norms around body weight and shape. Experiencing weight-based stigma can affect physical and mental health, and may contribute to disordered eating and poor body image. In the present study, participants completed a brief online survey ($n = 207$) and follow-up semi-structured interview ($n = 16$) which explored their experiences of weight stigma and disordered eating in different cultural and social contexts. Data were analysed using reflexive thematic analysis. Participants reported common tensions between traditional and modern cultural standards and expectations. This created a conflict between 'appropriate' and 'correct' behaviour, with pressure to confirm with these conflicting ideals and wider societal norms. Much of the focus was on food, particularly within different cultural contexts – food was seen as symbolic of the individual. Food choice was an indicator of social and cultural identity, with participants reporting perceived judgement for certain food choices (e.g., where these were deemed to go against cultural norms, or were considered 'unhealthy' or contributing to obesity). Food-based judgement was more often reported where this was linked with higher body weight. This led to disordered eating patterns and weight cycling fuelled by heightened poor body image, self-judgement and feelings of shame, anxiety and reduced confidence. These behaviours (e.g., rigid food and calorie restriction) were seen as 'self-soothing' and reinforced as normal behaviour where used to support weight loss and as a response to stigma. These data highlight the wider impacts of weight-based stigma on disordered eating within the context of cultural identity. Significance is placed on food as an indicator of oneself – our culture, our identity, our health, our weight, and our success – where someone fails to meet conflicting ideals, this leads to heightened stigma and contributed to poor health outcomes in the individual such as the normalisation of disordered eating behaviour.

Disclosures: None.

O7: UNDERSTANDING THE EFFICACY OF AND HETEROGENEITY IN MEDICATION USE FOR WEIGHT MANAGEMENT

O7-01 Clinical efficacy and holistic health outcomes of a glucagon-like peptide-1 receptor agonist supported tier-3 digital weight management programme

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While glucagon-like peptide-1 receptor agonists are effective for weight reduction, sustainable obesity care requires comprehensive improvements in well-being, dietary habits, and health education. This real-world evidence study assesses the 12-month clinical outcomes and health changes of people living with obesity prescribed semaglutide alongside a digital weight management programme. A retrospective analysis of 1992 people was conducted over 12 months where primary outcomes included absolute and percentage weight loss, and secondary outcomes evaluated holistic health using patient-reported outcome measures (PROMIS-10, FFQ, NHLS). Categorical shifts in quality of life, mental health, dietary habits, and nutritional literacy were evaluated using Wilcoxon signed-rank tests. At 12 months, 1909 participants achieved a mean weight loss of 20.3 kg, representing a 16.6% mean weight reduction. Paired analysis demonstrated highly significant improvements across all psychosocial and behavioural domains (all $p < 0.001$). Subjective health markers shifted dramatically: the proportion of participants reporting "poor" physical health fell from 56.7% to 17.2%, while those reporting "excellent" or "very good" quality of life increased from 7.3% to 38.9%. "Poor" mental health ratings decreased from 17.0% to 5.7%. Behavioural modifications were marked by a substantial reduction in maladaptive eating; participants "always" engaging in emotional eating dropped from 19.0% to 3.3%. Dietary quality improved significantly, with the proportion of participants consuming sweets or junk food "once a week or less" increasing from 17.1% to 42.1%, while high-frequency consumption (twice daily or more) fell from 25.8% to 3.1%. Vegetable intake rose, with 25.7% eating them twice daily or more (up from 15.7%). Additionally, the intervention bolstered nutritional literacy: confidence in explaining a healthy diet to others ("easy/very easy") rose from 50.5% to 75.2%, and the ability to judge the trustworthiness of online information increased from 36.1% to 55.6%. The combination of semaglutide and a digital specialist behavioural pathway fosters substantial weight loss accompanied by broad psychological and behavioural benefits. This integrated approach improves holistic health by addressing emotional eating cycles and supporting gains in nutritional literacy essential for weight management.

Disclosures: All researchers are employees of Oviva UK Limited. This project was funded by Oviva UK Limited.

O7-02 Life-stage differences in patient-reported response to glp-1 treatment for obesity: psychological gains are uniform but physical and dietary gains attenuate with age

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Glucagon like peptide-1 (GLP-1) receptor agonists deliver substantial weight reduction in adults living with obesity, but real-world evidence on whether the wider biopsychosocial experience of treatment, including physical functioning, mental wellbeing, dietary behaviour, sleep and body image, differs across adult life stages remains limited. We analysed responses from 1604 adults receiving GLP-1 treatment for obesity through a UK online pharmacy, who completed a patient-reported outcome measures (PROMs) survey at baseline and again at least 30 days later. Within-person change was tested using paired t-tests with non-parametric Wilcoxon sensitivity checks. Age effects across six bands ranging from 18–24 years to 65+ years were assessed using baseline-adjusted regression with HC3 robust standard errors and a joint F-test, and all p-values were corrected together using the Benjamini-Hochberg false discovery rate at 0.05. Age-band sizes were uneven, with small numbers in the 18–24 group, and inference therefore focused on overall age effects rather than isolated comparisons involving the youngest band. Across the cohort, all outcomes improved significantly between time points except worry about everyday living expenses. The largest within-person changes were observed for food noise ($d = -0.78$), body acceptance ($d = +0.69$), ultra-processed food (UPF) intake ($d = -0.62$), and social comfort ($d = +0.57$). Improvement varied by age in some outcomes but not others. Gains in quality of life, negative feelings, food noise, sleep and concentration were consistent across age groups. In contrast, gains in physical pain,

ease of everyday activities and reductions in UPF intake attenuated with age, where adults aged 65+ reported the smallest improvements. Body acceptance gains peaked in adults aged 55–64 years. Overall, adults reported broad, multi-domain benefits from GLP-1 treatment regardless of age. However, while improvements in mood, sleep, food noise and concentration were consistent across age groups, physical and dietary gains attenuated in older adults. These findings suggest that maximising physical and dietary benefit later in life may require additional support around pain, mobility and the food environment. Capturing PROMs alongside weight change is essential for delivering life-stage-appropriate obesity care.

Disclosures: All authors were employees of HeliosX during the study period. HeliosX has commercial relationships with both Eli Lilly and Novo Nordisk and sell Mounjaro and Wegovy globally.

O7-03 Real-world weight loss outcomes and predictors of differential response to weight management medications in a large UK digital cohort receiving GLP-1 receptor agonist therapy

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Weight Management Medications (WMM) have transformed obesity management, yet real-world outcomes vary across patient subgroups; understanding predictors of differential response in WMM has significant implications. A retrospective analysis of 121,127 adults enrolled in a UK digital weight management service receiving WMM (tirzepatide or semaglutide) estimated weight trajectories across treatment subgroups. Multivariable logistic regression identified predictors of reaching ≥15% weight loss at month 3. The cohort was predominantly female (67.2%), with baseline mean age 44.3 years (SD = 11.8) and BMI 33.9 kg/m^2 (SD = 5.4); most patients initiated tirzepatide (92.2%). Common comorbidities included joint pain (26.4%), depression (13.1%), high cholesterol (9.9%), type 2 diabetes (5.2%), and metabolic dysfunction-associated steatotic liver disease (2.2%). Mean weight loss at 3 months was 9.6% (SD = 6.3) overall, increasing to 13.6% (SD = 8.0) by month 6, broadly consistent with trial benchmarks. Some subgroups demonstrated meaningfully lower weight-loss trajectories than the full cohort across follow-up, including patients with no health coaching engagement and patients with any prior GLP-1-based WMM exposure (22.5%). Type of medication at initiation was the strongest positive predictor of ≥15% weight loss at month 3 (OR = 4.23, 95% CI 3.65–4.91), followed by female sex (OR = 1.23, 95% CI 1.17–1.29). Negative predictors included older age (OR = 0.99/year, 95% CI 0.98–0.99), higher baseline BMI (OR = 0.99/kg/m^2, 95% CI 0.98–0.99), prior GLP-1 use (OR = 0.34–0.51 agent-dependent), previous bariatric surgery (OR = 0.65, 95% CI 0.52–0.82), Asian ethnicity (OR = 0.66, 95% CI 0.59–0.75), and Black ethnicity (OR = 0.62, 95% CI 0.52–0.73). Health coaching engagement was independently associated with improved outcomes, after adjusting for key baseline characteristics (OR = 1.20, 95% CI 1.14–1.25, $p < 0.001$). In this large UK real-world cohort, weight loss outcomes were clinically meaningful but highly variable; identifiable subgroups faced meaningfully lower odds of reaching expected weight outcomes, supporting stratified approaches to clinical management and highlighting the augmentative role of behavioural support.

Disclosures: RAJ, WC, SB, JHK and ZG are employees and/or option holders at Numan (Vir Health). JA, KG and GF employees of Boehringer Ingelheim Limited UK.

O7-04 Cost-effectiveness of a digitally-enabled weight loss service with tirzepatide: an individual-level microsimulation of productivity and healthcare utilisation

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Obesity is associated with reduced workplace productivity and increased NHS utilisation, yet the cost-effectiveness of combining anti-obesity pharmacotherapy with structured patient support has not been quantified in a UK real-world setting. This study estimated the 12-month cost-effectiveness of a digitally-enabled weight loss service (DWLS) integrating tirzepatide with a structured patient support pathway, versus tirzepatide alone and usual care, from societal/employer and NHS perspectives. An individual-level microsimulation modelled 10,000 persons per arm over 12 monthly cycles, with probabilistic monthly discontinuation by arm. The baseline cohort was drawn from a UK digital weight management service ($N = 170{,}227$; mean age 43.6 years; 80.5% female; mean BMI 34.9). Weight trajectories were derived from mixed-model repeated measures analysis: adjusted 12-month weight loss was 22.3% in maximally engaged versus 17.8% in non-engaged participants (difference 4.5 percentage points; $p < 0.001$). BMI reductions were mapped to absenteeism, GP contacts, outpatient appointments, emergency department attendances and hospital admissions using UK datasets ($n > 650{,}000$); unit costs from PSSRU 2024/25 and NHS Reference Costs, productivity monetised via ONS ASHE wages, utilities from a published EQ-5D BMI mapping. DWLS achieved a mean BMI reduction of 8.33 kg/m^2 versus 6.52 for tirzepatide alone and +0.18 for usual care. At 12 months, 70.7% of DWLS participants reached BMI below 30 versus 59.7% for tirzepatide alone (number needed to treat 2.0 vs 2.6). Annual sick days fell from 9.0 (usual care) to 6.5 (DWLS). The incremental cost-effectiveness ratio for DWLS versus usual care was £26,075 per quality-adjusted life year from the NHS perspective and £21,555 from the societal perspective, both below the £30,000 threshold. Cost per sick day averted was £854. Net monetary benefit became positive at £25,000 willingness-to-pay on the societal perspective (NMB £282) and £30,000 on the NHS perspective (NMB £321). Probabilistic sensitivity analysis (1000 iterations) confirmed greater than 90% probability of cost-effectiveness at £30,000 per QALY from the societal perspective. Subgroup analyses showed consistent cost-effectiveness across obesity classes I, II and III (ICER range £21,927–£23,363). A digitally-enabled weight loss service combining tirzepatide with structured patient support is cost-effective over 12 months from both NHS and societal perspectives for adults living with obesity.

Disclosures: HJ, KH, DR and DH are employees of Menwell TLD, which operates the digital weight loss service evaluated in this study. AC has received consultancy fees from Menwell TLD for advisory work related to this research. This study received no external grant funding; it was conducted as part of the internal research and development activities of Menwell TLD.

O7-05 Twelve-month medication persistence, clinical efficacy, and dosing behaviour in self-pay versus NHS-funded incretin-based therapy (IBT) Pathways within the same high-engagement digital service: a comparative analysis

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Twelve-month IBT persistence in real-world practice commonly falls below 50%. How self-pay vs state-funding may affect IBT persistence has not been fully characterised. Roczen, a digital specialist weight management clinic, manages patients across NHS and self-pay routes using the same specialist clinical workforce and digital infrastructure, partially controlling for the effect of funding on outcomes. This study evaluates IBT persistence, programme retention, and efficacy between self-pay and NHS cohorts up to 48 weeks. IBT persistence was assessed in a cohort of consecutively enrolled patients reaching 48-week programme maturity ($n = 180$; NHS $n = 80$, self-pay $n = 100$). Retention was defined as active enrolment without formal withdrawal, and IBT persistence as a dispensing record within 8 weeks of a 48-week milestone. Efficacy and dosing were assessed in IBT-naive patients reaching 48 weeks ($n = 153$; NHS $n = 74$, self-pay $n = 79$). IBT usage was assigned on the last prescription. The NHS cohort (80.0% female, age 52.9 ± 13.8 years) had greater baseline complexity compared to self-pay (67.0% female, age 52.5 ± 10.6 years), with significantly higher BMI (46.39 ± 9.28 vs 35.57 ± 6.8 kg/m^2; $p < 0.001$), osteoarthritis (37.5% vs 15.0%; $p < 0.001$), and hypothyroidism (15.0% vs 5.0%; $p = 0.043$); type 2 diabetes prevalence was not significantly different (8.8% vs 10.0%; $p = 0.977$). NHS patients had higher retention (90.0% vs 72.0%; $p = 0.005$) and IBT persistence (83.8% vs 65.0%; $p = 0.008$). Tirzepatide use was greater in the self-pay group (91.7% vs 58.1%; $p < 0.001$), with NHS tirzepatide patients more likely to reach higher doses (≥10 mg: 67.4% vs 43.2%; $p = 0.035$). Documented weight loss was greater in self-pay patients at both 24 weeks (−14.6%, n = 74 vs −11.6%, $n = 60$; $p = 0.007$) and 48 weeks (−19.3%, $n = 53$ vs −16.7%, $n = 39$; $p = 0.03$). Clinically meaningful weight loss and high IBT persistence were observed for both funding cohorts versus real-world benchmarks, with the NHS cohort achieving greater retention on treatment. Therefore, this high-engagement digital care model, in addition to funding-source, may be a key driver of IBT persistence.

Disclosures: AB, DP, JK, SS, BM are on the medical advisory board and are shareholders in Reset Health. LF, TC and CA are employed at Reset Health Ltd.

POSTER SESSIONS

P01 Removed (Encore Presentation)

P02 Removed (Withdrawn from Publication)

P03 B-FAM: a family-based weight loss intervention for breast cancer risk reduction —a feasibility study

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In the United Kingdom, 1 in 10 women will develop breast cancer before the age of 75 years and 1.5% will die from the disease. Up to one third of postmenopausal breast cancer cases are attributed to preventable lifestyle factors, with excess body weight a key driver. Women with childcare responsibilities face additional barriers to achieving and maintaining a healthy weight, including time constraints and competing priorities. Current family-based weight loss interventions predominantly target children, where mothers as agents of change rather than the primary target. The B-FAM (BREAST cancer risk reduction through FAMily-based lifestyle change) study addresses this gap by delivering a family-based dietitian-led intervention targeting the mother as the index case while leveraging the family to support behaviour change within women attending three NHS Family History clinics. This single-arm feasibility trial will evaluate a 12-week behavioural weight loss intervention in mothers with overweight or obesity and increased breast cancer risk identified via Family History clinics, with dependent children aged ≤17 years. The programme comprises seven remotely delivered fortnightly dietitian-led sessions across three phases: skill acquisition, behaviour consolidation, and maintenance. The intervention includes personalised maternal energy-restricted Mediterranean-style diet and physical activity guidance, using behaviour change techniques e.g. goal setting, self-monitoring, and environmental restructuring. The programme is underpinned by family-based behavioural treatment and Family Systems Theory to modify the home environment and optimise family support for behaviour change. Primary study aims are feasibility of recruitment, retention, intervention delivery, and acceptability of the programme, and preliminary changes in maternal weight and health behaviours and family dynamics. Recruitment of the target 15–20 participants will commence May 2026 across Manchester University NHS Foundation Trust family history clinics. Recruitment feasibility, retention, engagement, and preliminary weight and behavioural outcomes will be reported at ASO-UKCO 2026 presentation. This study will establish feasibility of delivering a dietitian-led family-based weight loss intervention within cancer prevention services, with potential for scale-up to improve outcomes for high-risk women and their families.

Disclosures: None.

P04 Lifestyle-oriented engagement with a digital application predicts greater weight loss outcomes in a tier-3 blended-care weight management programme

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Digital weight management programmes generate large volumes of engagement data, yet the behavioural patterns underlying application use and their association with outcomes remain not fully understood. This analysis of a specialist digital weight management programme examined latent dimensions of digital engagement, derived patient typologies, and evaluated their relationship with weight loss. Principal Component Analysis was applied to standardised indicators of 6-month engagement from 738 people living with obesity. Variables captured patterns including multi-functional behavioural use, self-monitoring of physical activity, and cardiometabolic tracking. Retained components were used for cluster analysis to derive engagement profiles, and 6-month weight outcomes were compared between the two largest profiles using matched samples, controlling for age, gender, deprivation decile, and baseline weight. Three components explained 47% of the total variance: behavioural engagement with app-based learning features, cardiometabolic self-monitoring, and physical activity tracking. Cluster analysis revealed three profiles characterized as low digital engagement (minimal app usage), clinically-oriented monitoring (focusing on blood pressure and weight), and lifestyle-oriented engagement (focusing on physical activity tracking). In matched analyses of 237 people per group, absolute weight at 6 months did not differ

between groups ($p > 0.05$). However, lifestyle-oriented engagement was associated with a greater percentage weight loss of 9.39% compared with 8.12% for those in the clinically-oriented monitoring group, representing a mean difference of 1.27 percentage points (95% CI: 0.46–2.07; $p < 0.05$). Digital engagement can be decomposed into distinct behavioural and clinical dimensions that yield meaningful patient typologies. Balanced, lifestyle-oriented engagement was associated with greater weight loss outcomes compared with high-intensity clinical monitoring alone. These findings suggest that engagement quality is more significant than volume and support the tailoring of digital interventions to different patient profiles to optimise clinical outcomes.

Disclosures: All researchers are employees of Oviva UK Limited and this project is funded by Oviva UK Limited.

P05 Enhancing health equity through reduced healthcare utilisation and restored workplace productivity in a tier-3 digital weight management programme

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Obesity is a primary driver of healthcare expenditure and indirect economic costs through workplace absenteeism. While glucagon-like peptide-1 medications show significant clinical efficacy, their impact on healthcare resource utilisation and workplace productivity across different socioeconomic and ethnic strata requires evaluation. This real-world evidence study analysed 12-month outcomes for 1992 participants in a digital weight management intervention using patient-reported outcomes via surveys (ModRUM). Primary outcomes included percentage weight loss, sick-day frequency, and healthcare utilisation involving general practitioner (GP) and hospital visits. Predictive models estimated probabilities of service use and absenteeism while adjusting for age, gender, ethnicity, and deprivation levels. Participants achieved a significant mean weight loss of 16.6% by month 12. The intervention was significantly associated with a 42% reduction in the odds of high-frequency (5 or more days) absenteeism (OR = 0.58, 95% CI: 0.48–0.69; $p < 0.001$). Predictive modeling showed that a typical participant has a 74% probability of achieving perfect workplace attendance by month 12, with 44% of those reporting maximum absenteeism at baseline shifting to zero sick days at follow-up. Systemic reductions in healthcare utilisation were observed, with the odds of face-to-face general practitioner visits decreasing by 71% (OR = 0.29, 95% CI: 0.26–0.33; $p < 0.001$) and hospital outpatient visits by 48% (OR = 0.52, 95% CI: 0.45–0.60; $p < 0.001$). Virtual consultations saw similar reductions in odds. The programme effectively narrowed the deprivation gap, as high-frequency sick leave in the most deprived decile dropped from 19.8% to 5.9%. Among Black participants ($n = 250$), total high application engagement was associated with a 75% reduction in virtual hospital visits (OR = 0.25, 95% CI: 0.09–0.69; $p < 0.05$). A digitally-enabled medical weight loss intervention provides a substantial return on investment by reducing primary and secondary care demand and improving workplace productivity. These findings demonstrate that weight loss alongside specialist behavioural support is a powerful factor in promoting health equity and reducing the disproportionate economic burden of illness in deprived and minority ethnic communities.

Disclosures: All researchers are employees of Oviva UK Limited and this project is funded by Oviva UK Limited.

P06 Determinants of eating behaviour in later life and their implications for weight management

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Given the dual impact of an ageing population and higher obesity prevalence among older adults in the UK, exploring the determinants of eating behaviour in later life is essential. Age-related changes in eating behaviour encompass biological, physiological, psychological, social and environmental factors that shape, or are shaped by, health. The present study explored how older adults understood and navigated eating behaviours and the implications for weight management. Six focus groups were conducted with 36 participants (73.3 ± 6.21 years; 72.2% female; 44.3% living with overweight or obesity; 52.7% reported difficulty in maintaining a healthy weight). Vignettes were used to support the sensitive discussion of eating behaviours. Data were analysed using reflexive thematic analysis, generating four overarching themes: (i) age-related changes; (ii) behavioural drivers and eating patterns; (iii) lifelong influences on eating and identity; (iv) nutrition literacy and the food environment. Many participants described a range of age-related changes, such as reduced appetite, earlier satiety, anxiety around eating practices and shifts in routines after bereavement or retirement. Participants reported disordered eating patterns such as emotional eating fuelled by loneliness, long-held habits, childhood experiences (e.g., rationing, parental pressure to 'clear the plate'), and ongoing difficulty with body image and weight. Participants described the lasting impacts of messaging from weight-loss providers, with one recalling: "Nothing tastes as good as being thin." Limited guidance from health professionals was highlighted, with a participant sharing: "I'm a bit overweight, and I went to the doctor […] he said, well, I believe in the two-word diet […] eat less." Yet, as participants reflected, "part of the difficulty is that it's difficult to eat less," echoing the majority, who indicated they struggled to maintain their weight. Overall, older adults reported a diverse range of eating behaviours, describing both lifelong patterns (e.g., fixed mealtimes) and age-related changes (e.g., eating alone following bereavement). The multifactorial determinants of eating behaviour, combined with widespread difficulty maintaining a healthy weight, indicate that eating and weight challenges persist in older age. This suggests that older adults need more appropriate, tailored support for weight management.

Disclosures: None.

P07 Support to address excess weight and related physical health conditions, for young people with severe mental illness: systematic review

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Children and young people (CYP) with severe mental illness (SMI: psychosis, schizophrenia and bipolar disorder) are at high risk of experiencing excess weight (overweight and obesity). We aimed to systemically review support provided in primary, secondary and social care settings, to prevent and mitigate excess weight and related physical health conditions, amongst CYP with SMI. We defined support as interventions, education, services and resources. We searched three electronic databases, grey literature

sources, and references and citations of included material for studies written in English and published since 1 January 2010. Full papers presenting qualitative or quantitative data on CYP aged 12–18 years with SMI from high/very high development index countries, were considered for inclusion. Screening was conducted by the lead reviewer, with 10% double-screened at each review stage. Database searches identified 14,216 articles following de-duplication, and an additional seven eligible articles through reference and citation searches. In total, 17 articles describing 15 unique studies met inclusion criteria. Findings from qualitative studies were analysed using thematic synthesis. Due to heterogeneity between quantitative studies, meta-analysis was not feasible, and findings were integrated through narrative synthesis. Of the 12 included quantitative articles, five reported lifestyle interventions to address excess weight and related physical health conditions, four reported pharmacological interventions, two reported a combination of these, and one reported a survey of barriers associated with metabolic monitoring. Of the five included qualitative articles, three explored healthcare practitioners' perspectives on metabolic monitoring, and two described implementation of quantitative studies included in this review. Overall, studies successful in avoiding or mitigating excess weight amongst CYP identified potential roles for: metformin, topiramate, switching to lower risk antipsychotics, and implementing structured individual dietetic interventions. For metabolic monitoring, multi-factorial barriers were identified at the level of patient, provider, organisation and culture, which could potentially be mitigated through improved training and resources. Generalisability of these findings are limited by the age range and mental health diagnoses of CYP included, and the timeframe and English language restrictions on searches. Future research should seek to deliver robust, long-duration interventions to promote effective management of excess weight amongst CYP with SMI.

Disclosures: None.

P08 Body image, instant results and the burden of beauty: a study on the prescribing of the weight loss medication tirzepatide in the NHS vs the private sector

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Tirzepatide, a dual glucose- dependent insulinotropic polypeptide and glucagon-like peptide -1 receptor agonist, is increasingly prescribed for the management of type 2 diabetes and, more recently, for weight reduction, with national prescribing data indicating rapid growth in utilisation and associated expenditure; However, real-world prescribing patterns across the National Health Service (NHS) and private healthcare settings remain understood. This study aimed to characterize real-world prescribing of tirzepatide across the NHS and private sectors within Dudley and Netherton, and to examine associated demographic and clinical characteristics. A retrospective observational study was conducted using anonymised population-level data extracted from the EMIS primary care system for all patients prescribed tirzepatide within the study area. Variables assessed included age, sex, ethnicity, body mass index (BMI) and SNOMED-coded weight related comorbidities. Descriptive quantitative analyses were conducted using Microsoft Excel. Clinical governance approval was obtained from the primary care trust along with University of Birmingham ethics. In total, 860 patients were prescribed tirzepatide, with greater utilisation observed in the private sector ($n = 469$, 55%) compared with the NHS ($n = 39$, 45%). NHS prescribing largely aligned with NICE eligibility criteria, whereas private sector prescribing extended to younger individuals and those within lower BMI categories. Females were over-represented in both sectors, particularly in private prescribing. White patients comprised the majority of those receiving tirzeptide while minority ethnic groups were under-represented despite evidence that these populations experience elevated metabolic risk at lower BMI thresholds. Overall, tirzepatide prescribing is substantial and increasing, with notable differences between healthcare sectors. These discrepancies raise concerns regarding equity of access, sustainability of prescribing and alignment with clinical need. These sectoral differences may, in part, reflect broader social and cultural influences on demand for weight loss interventions, including body image pressures and a preference for rapid, appearance focused outcomes, which appear more pronounced within private healthcare settings. These findings highlight the importance of ongoing surveillance of real-world use and outcome-focused research to inform evidence-based policy and clinical guidance.

Disclosures: None.

P09 Dose attainment, weight outcomes, and the role of behavioural support in real-world weight management mediation use: a UK observational study of 121,099 patients

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Evidence on what drives differential outcomes for weight management medications (WMM) remains limited. We examined how prior WMM exposure, patient characteristics, and behavioural support shape weight outcomes, real-world dose attainment, and treatment persistence in patients prescribed tirzepatide or semaglutide ($n = 121{,}099$). Treatment-naïve patients lost more weight than prior WMM users, with mean weight loss of 10.0% (SD = 6.3) vs 7.5% (SD = 6.0) at 3-months, 14.1% (SD = 7.8) vs 10.8% (SD = 8.2) at 6-months; 74.2% vs 55.2% reached >10% weight loss at 6-months (all $p < 0.001$). Pharmacological factors partially account for this gap. The number of any dose escalations beyond initial dose was substantially lower in prior WMM patients compared with treatment-naïve patients (3-months: naïve 80.1% vs prior WMM 45.6%; 6-months: naïve 81.5% vs prior WMM 47.7%). Maximum dose attainment was similar between treatment-naïve (10.1%) and prior WMM patients (11.2%). Patients who reached maximum dose were slightly older (46.8 vs 44.0 years) with a higher baseline BMI (34.8 vs 33.7 kg/m^2) (all $p < 0.001$). Sex was the most striking difference: nearly half of those reaching maximum dose were male (49.4%) compared with 30.8% female ($p < 0.001$), against an overall cohort that was 67.2% female. Ethnicity was not meaningfully different between groups. Patients reaching maximum dose had higher rates of comorbidities: type 2 diabetes (6.4% vs 5.0%), cardiovascular disease (1.7% vs 1.0%), high cholesterol (11.4% vs 9.7%), obstructive sleep apnoea (6.6% vs 3.7%), and MASLD (2.9% vs 2.1%) (all $p < 0.001$), while PCOS (3.0% vs 4.1%) and depression (12.2% vs 13.2%) were slightly lower in the max-dose group. Behavioural support emerges as an independent determinant of dose attainment and treatment persistence (non-persistence defined as >59-day gap in medication deliveries): patients who engaged with health coaching were 3.3-fold more likely to persist (21.9% vs 6.7%) and 1.5-fold more likely to reach maximum dose (13.5% vs 8.7%). Overall, the findings indicate that treatment history, patient demographics, and behavioural support are independent determinants of real-world dose attainment, persistence, and weight outcomes.

Disclosures: RAJ, WC, SB, JHK and ZG are employees and/or option holders at Numan (Vir Health). JA, KG and GF employees of Boehringer Ingelheim Limited UK.

P10 Understanding features of digital interventions that affect engagement and adherence to weight management strategies: a scoping review

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Maintaining engagement with weight management (WM) programmes is essential to successful weight loss and prevention of weight regain. A recent Cochrane review was unable to determine if digital interventions are effective in WM. However, as digital technology continues to develop, understanding key characteristics of digital technology that supports motivation to maintain dietary changes will be paramount to supporting weight loss in clinical practice. A scoping review was undertaken to investigate which characteristics of digital dietary interventions could improve engagement and adherence to weight management programmes. A scoping review was undertaken using the Joanna Briggs Institute guidance. Five databases (Medline via Ovid, EMBASE, CINAHL, PsychINFO and Cochrane) were searched on the 13/11/24, reviewing studies published from January 2019 to November 2024. Screening and full text review was completed by two independent reviewers. Data was extracted from all studies and factors relating to adherence and engagement were charted and synthesised narratively. Eighty two studies were included in the review (including 13 reviews, 58 quantitative, 5 mixed method and 6 qualitative studies). Most studies noted lower adherence resulted in less weight loss. Adherence also reduced over time, irrespective of study length. Participants adhered and engaged for longer when digital interventions were engaging to use; had individual, health professional provided feedback; and data was quick and easy to record. Adherence was noted to be greater with digital dietary recording than paper diaries. Increasing user burden; having to log data on both apps and websites; difficulty finding culturally specific foods within apps and lack of feedback were all found to reduce engagement. A few studies noted that attrition early in the programme was higher than expected. Studies including older people had similar adherence levels, although recommendations were made by authors that interventions may need to be population specific. Maintaining engagement in WM programmes that use digital interventions remains challenging. Attending to the characteristics described may help improve and maintain adherence to digital dietary interventions, ultimately improving outcomes and increasing its potential for use within clinical practice.

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P11 Supporting healthier feeding behaviours: potential impact of sugar warning labels on commercial baby food—a qualitative com-b study

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Two in three toddlers consume too much sugar, increasing their risk of obesity and dental caries. The UK Government has expressed concern about high sugar levels in commercial baby food (CBF) and issued voluntary guidance to industry to reduce these levels. In 2027, progress towards targets will be reviewed and additional policy measures considered. The World Health Organization recommends front-of-pack sugar warning labels (SWLs) on CBFs to reduce free sugar intakes. This study aimed to (i) identify the facilitators and barriers to reducing consumption of high-sugar CBFs, and (ii) assess the potential impact of introducing SWLs on feeding patterns, including free sugar intake. Parents of children aged 6–35 months living in England were recruited for online interviews using purposive sampling to maximise variation in socioeconomic position and ethnicity. Topic guides were informed by patient and public involvement and engagement (PPIE) with parents. Data were analysed thematically and mapped to the COM-B (Capability, Opportunity, Motivation – Behaviour) model. Twenty-five parents were interviewed between January and April 2025. Parents described actively trying to limit their children's sugar intake, but they faced multiple barriers to reducing intake of high-sugar CBFs, including difficulty identifying high-sugar products, confusion arising from claims such as "no added sugar" and "only natural sugars", and health-halo messaging such as "0% junk". Most parents were unaware that puréeing fruit releases free sugars or that whole or chopped fruit is recommended over purées. Parents were supportive of SWLs and analysis indicated that these could enhance capacity to compare CBF products and support lower free sugar intake. However, SWLs alone would not overcome wider barriers created by misleading marketing claims, convenience, and limited awareness of healthier alternatives. These findings support the need for mutually reinforcing policies to achieve meaningful public health impact. SWLs may be most effective when implemented as part of a broader policy package, including mandatory restrictions on misleading claims and clearer practical guidance on recommended alternatives such as fresh fruit. These findings provide timely evidence to inform UK CBF policy, support parents, and strengthen early years obesity prevention.

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P12 "They send you like a poster and money-off coupons": a qualitative study of parental engagement with the commercial baby food industry

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Most infants and toddlers in the UK regularly consume commercial baby food (CBF). Interactions with the CBF industry shape parents' feeding decisions, yet little is known about how these interactions occur or how parents perceive them. Concerns have been raised about CBF composition, age-suitability labelling, and health-halo claims that may undermine government feeding advice. This study aimed to explore parental experiences of engagement with, and perceptions of, the CBF industry. Parents ($n = 25$) of children aged 6–35 months living in England were recruited for online interviews using purposive sampling to maximise variation in socioeconomic position and ethnicity. Topic guides were informed by patient and public involvement and engagement (PPIE) with parents. Interviews were conducted between January and April 2025 and analysed using reflexive thematic analysis. Three themes were developed: (i) early brand exposure, (ii) growing relationships with premium

brands, and (iii) brand scepticism, critical awareness and its limits. Parents described early exposure to CBF brands through multiple channels, including retail environments, social media, free samples and community or healthcare settings. Well-known brands were often highly visible and became familiar before weaning began. Many parents viewed brands as trusted sources of feeding advice who provided timely, step-by-step weaning guidance at key moments, filling a gap left by official support, which was often perceived as generic, limited or difficult to access. Continued engagement through newsletters, websites, recipes, and peer sharing reinforced trust and normalised brand use. As parents' confidence grew, some became more critical of premium branding, pricing and marketing claims, and increasingly turned to supermarket own-brand products and home-prepared foods. However, scepticism had limits—many parents continued to assume that CBF products were highly regulated and therefore broadly trustworthy, even when they questioned specific claims. These findings suggest that parental engagement with the CBF industry begins early and trust is built through repeated exposure across multiple settings. Improving accessible, practical, non-commercial feeding support is essential. Policy responses should address not only product composition and labelling, but also the marketing strategies that shape parental trust, feeding decisions and childhood obesity risk.

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P13 The NHS economic case for tirzepatide as a transplant-enabling therapy in obesity-related kidney transplant ineligibility

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Obesity is a major barrier to kidney transplantation in patients with kidney failure, restricting access to listing and eligibility. Tirzepatide, a dual GIP/GLP-1 receptor agonist, supports clinically meaningful weight loss; the NHS economic case for its use as an enabler of transplantation has not been described. We undertook a five-year health economic evaluation from an NHS commissioner perspective, anchored to observed outcomes in 37 patients commencing tirzepatide within a tier 3 weight management service between October 2024 and October 2025 (mean age 47; 21/37 (56.8%) female; 24/37 (64.9%) haemodialysis, 6/37 (16.2%) peritoneal dialysis; 9/37 (24.3%) with type 2 diabetes). 3/37 (8.1%) had progressed to transplantation by 12 months, with mean reductions of 18.6 kg in weight and 5.4 kg/m^2 in BMI at listing or transplantation over a median of 308 days. Unit costs followed NHS Standard Contract values: in-centre haemodialysis £30,800 per patient per year, kidney transplantation £17,000 in year 1 and £5,000 per patient per year thereafter. Tirzepatide acquisition reflected the September 2025 NHS list price (mean £250 per month across titration to maintenance), with weight management service overhead of £600 per patient per year. QALY gains used a published utility increment of 0.20 QALY per transplant-year on a functioning graft compared with maintenance haemodialysis. Total cohort intervention cost over the 12-month observation period was £114,700, attributed conservatively to the three transplants achieved to date (£38,200 per transplant). Continued dialysis over five years would have incurred £154,000 per patient against a realised pathway cost of £58,500 per patient, yielding a net five-year NHS saving of £57,300 per transplanted patient (£171,800 across the three transplants) and an incremental QALY gain of 0.84 per transplanted patient (2.5 across the three transplants). One-way sensitivity analyses confirmed that net saving remained positive across all plausible parameter ranges. These data support prospective evaluation of incretin-based therapies in overcoming obesity-related barriers to kidney transplantation.

Disclosures: None.

P14 Real-world use of tirzepatide in patients with kidney failure awaiting transplantation: a tier 3 weight management experience

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Obesity is a major barrier to kidney transplantation, restricting access to listing and eligibility in patients with kidney failure. Dual GIP/GLP-1 receptor agonists offer effective weight management but real-world evidence for tirzepatide in this population are limited. We conducted a retrospective evaluation of patients with kidney failure prescribed Tirzepatide within a tier 3 weight management service between October 2024 and October 2025. Demographic, anthropometric, dialysis modality, comorbidity, and transplant pathway data were analysed. Of 306 patients screened, 40 commenced treatment and 37 were analysed (3 discontinued). Mean age was 47 and 21/37 (56.8%) were female. Kidney replacement therapy comprised haemodialysis in 24/37 (64.9%), peritoneal dialysis in 6/37 (16.2%), and not yet receiving dialysis in 4/37 (10.8%). Comorbidities included hypertension in 23/37 (62.2%), type 2 diabetes in 9/37 (24.3%), ischaemic heart disease in 9/37 (24.3%), obstructive sleep apnoea in 6/37 (16.2%) and previous stroke in 1/37 (2.7%). At analysis, 3/37 (8.1%) had been transplanted, 5/37 (13.5%) were active on the waiting list, 4/37 (10.8%) had been referred but not activated, and 3/37 (8.1%) were suspended. Of 29 patients awaiting listing 6/29 (20.6%) achieved target weight over a median of 279 days, with mean reductions of 12.4 kg and 5.4 kg/m^2 from baseline. Among the 8/37 (26%) progressing to listing or transplantation (8/37; 21.6%), median time to listing and transplantation was 279 and 308 days, respectively, with mean weight reduction of 18.6 kg and BMI reduction of 5.4 kg/m^2 at listing. In patients with kidney failure and obesity, tirzepatide was associated with clinically meaningful weight loss and supported progression along the transplant pathway in a defined subset. These data support prospective evaluation of incretin-based therapies in overcoming obesity-related barriers to kidney transplantation.

Disclosures: None.

P15 How can delivery timelines and a prioritised approach to eligibility for weight loss drugs be effectively communicated to the public? A rapid systematic review

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Around 3.4 million adults living with obesity are eligible to receive Glucagon-like peptide-1 receptor agonists (GLP-1s) in England. Given the large size of the eligible group, the timeline for delivering GLP-1s for weight loss through the NHS is likely to take up to 12 years. Therefore, it is important to consider how this tiered/prioritised approach and delivery timeline could be effectively communicated to the public, including the offer of alternative treatments or interventions, to manage expectations and mitigate negative impacts on health and wellbeing. This study aimed to identify approaches for communicating delivery timelines and a tiered/prioritised approach for national- and regional-level pharmaceutical and obesity/weight management interventions. A rapid systematic review was conducted that assessed articles that describe or evaluate interventions that communicate treatment delivery timelines or a prioritised approach to treatment access. Eligible treatments included all pharmaceutical and non-pharmaceutical interventions, and bariatric surgery. The following databases were searched on 4th March 2026: Embase, MEDLINE, PsychInfo, Scopus, and Web of Science, alongside grey literature via Overton and Google. Qualitative, quantitative, and evidence synthesis articles from countries with a universal healthcare system (where all people have access to a full range of healthcare services without financial hardship) were eligible for inclusion. Data were narratively synthesised. The components of included interventions were mapped against behavioural and social science theory, specifying the key actions, actors, context, target and time that this is happening using the AACTT framework, and the acceptability, practicability, effectiveness, affordability, side-effects, and equity (APEASE) criteria. The protocol is registered on PROSPERO (CRD420261285366). A total of 3569 articles were retrieved, of which 229 were screened at the full-text stage. Seventeen articles met our inclusion criteria. The majority of these ($n = 12$) were grey literature and the remaining five were academic papers. Most articles described a wait-list communication approach that had been implemented, rather than evaluated their effectiveness. The findings of this study provide important insights for healthcare organisations to effectively communicate GLP-1-associated waiting times to their local population. Future research should evaluate the effectiveness of existing approaches to inform communication strategies that are sensitive and effective.

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P16 How to engage children, young people and families from ethnic minority backgrounds in weight management services: a scoping review

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Childhood overweight and obesity disproportionately affects children, young people and families (CYP&F) from ethnic minority backgrounds, yet engagement with weight management (WM) services remains low. Despite an international focus on reducing health inequalities, research relating to strategies used to support engagement with WM services amongst CYP&F from ethnic minority backgrounds is limited. This scoping review aimed to understand the extent and type of evidence on how WM services support CYP&F from ethnic minority backgrounds to engage. The review includes literature on CYP aged 0–18 (and their families), from ethnic minority backgrounds who are living with overweight or obesity. A systematic search was conducted across multiple databases, including MEDLINE, CINHAL via EBSCOhost, PsycInfo via ProQuest, PubMed and The Cochrane Library. Eligible literature met at least one of the following: (1) discussed barriers and facilitators to engagement with WM services, (2) discussed strategies used to support engagement, and/or (3) specifically tailored interventions that are designed to improve accessibility, participation and relevance amongst ethnic minority populations. Services not related to WM and studies not published in English were excluded. All screening stages and data extraction were conducted independently by at least two reviewers, with a third reviewer available for dispute resolution. In total, 17 papers were included. Findings from this scoping review highlight multiple barriers to engagement with WM services, including logistical barriers (e.g., transport, time constraints, and competing family commitments), structural barriers related to service delivery, financial barriers, and cultural barriers. Key facilitators to engagement include family-centred approaches, cultural tailoring and the involvement of culturally competent staff. Identified engagement strategies include cultural tailoring, flexible and interactive delivery methods, and referral pathways facilitated by healthcare professionals. Barriers and facilitators will be mapped to the COM-B model to provide a structured, theory-based framework for understanding behaviours and how the needs of CYP&F are best supported. The findings from this scoping review will be integrated with primary data collected during the PhD to inform interpretation and guide the development of recommendations for WM services that meet the needs of CYP&F from ethnic minority backgrounds.

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P17 Mapping the fast food environment close to secondary schools in Northern Ireland

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Evidence shows that young people in NI are consuming too much sugar and saturated fat and that the food environment plays a significant role in influencing dietary choices. This study aimed to examine the food environment surrounding secondary schools in Northern Ireland by assessing the availability of fast food outlets and grocery retailers within a 5-min walk and investigating any trends with deprivation through two different lenses; location-based deprivation and student level deprivation. Fast food outlets and grocery retailers were mapped across NI and analysed for all secondary schools. Outlet availability was assessed within a 400m buffer. Deprivation was measured using Super Output Area (SOA) level Multiple Deprivation Measure (MDM), reflecting area level deprivation of the school location, and Free School Meal Entitlement (FSME), used as a proxy for student level socio economic deprivation. Across Northern Ireland, fast food outlets were on average 2.4 times more prevalent than grocery retailers. Half of secondary schools had no fast food outlets within 400 m, while almost one in five had five or more, with a maximum of 21 outlets observed around one school. Using area level MDM, weak correlations were identified between deprivation and outlet availability, with higher numbers of both fast food outlets and grocery retailers observed in the most deprived areas compared

with the least deprived. No correlation was observed between deprivation measured by MDM and FSME, indicating that these measures capture different dimensions of deprivation. When deprivation was assessed using FSME, schools with more deprived student cohorts were more likely to have at least one fast food outlet and grocery retailer within 400 m. However, among schools with fast food availability, higher outlet densities were more commonly observed around schools with less deprived student cohorts. Grocery retailer densities were similar across deprivation groups where present. Area level and student level indicators of deprivation provide distinct and complementary insights, and reliance on a single metric may obscure differences in exposure. While health outcomes were not assessed, these findings support the consideration of both deprivation measures when informing monitoring and policy discussions on school adjacent food environments in Northern Ireland.

Disclosures: None.

P18 Defining empowerment in an obesity context using multiple stakeholder perspectives

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Behavioural weight-management programmes (BWMPs) are recommended within NICE guidance as a key treatment option for the management of obesity. However, evaluations consistently show limited weight loss, and qualitative evidence suggests that participants leave BWMPs without feeling empowered to self-manage without ongoing support. Within UK health policy, 'empowerment' is positioned as a mechanism for enhanced participation and longer-term self-management, yet the meaning and application within BWMPs remains entirely undefined, and therefore the role and value of empowerment is unclear. Indeed, a scoping review by the author identified a complete lack of consensus in how empowerment is defined, operationalised and measured within empowerment-based BWMPs. No studies were conducted in UK settings, highlighting the need to understand how empowerment is understood by those directly involved in UK contexts. Semi-structured interviews were conducted with UK stakeholders ($N = 28$), adults living with obesity ($n = 13$), BWMP leads ($n = 8$), and BWMP commissioners ($n = 7$). Using constructivist grounded theory, the study explored: (a) what constitutes empowerment, (b) mediators of empowerment, (c) moderators of empowerment, and (d) outcomes of being or becoming empowered. The net result was the emergence of five conceptual categories deemed to constitute empowerment: (a1) control and power, (a2) perceived self governance, (a3) personal development, (a4) understanding one's relationship with food and influences on weight gain, and (a5) emotional growth. Mediators included (b1) giving the power back, (b2) connecting the dots, (b3) engagement as an act of self care, and (b4) supporting sustainable change. Moderators included (c1) the shame cycle, (c2) ability to prioritise health, and (c3) desire to prioritise health. Six outcomes were identified: (d1) social and emotional connectedness, (d2) independence and adaptive coping, (d3) self regulation and goal orientation, (d4) proactive behaviour and habit formation, (d5) visible progress and future orientation, and (d6) advocacy and participatory power. This new empowerment model builds on current knowledge to refine and clarify the concept of empowerment to support the translation between research, policy and practice. Importantly, this model also provides the conceptual foundation for developing a UK specific measurement tool to quantitatively assess the extent of empowerment in adults living with obesity.

Disclosures: None.

P19 Preliminary efficacy over 24 weeks of a novel hydrogel pill for weight management in women of typical perimenopausal age

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Perimenopause is often associated with weight gain, with women frequently reporting challenges managing their weight during this period. Therefore, new treatment options are required. A novel, gastro-retentive, hydrogel pill has been developed for obesity management. Upon reaching the stomach, the hydrogel swells rapidly, where it remains for 2–5 days before breaking down and passing naturally. A pre-registered (ISRCTN14083641) pilot randomized, placebo-controlled (3:1 ratio), double-blind 12-week RCT was followed by a 12-week open-label extension (OLE). Here, we report a post-hoc comparison of the response to treatment of women before or of typical perimenopausal age. Participants with a body mass index (BMI) of 30–40 were enrolled across three UK sites. This post-hoc analysis was restricted to women who received active treatment during both RCT and OLE. Endpoints included weight loss (% total body weight loss, TBWL), safety and adherence to dosing. As a pilot study, null-hypothesis significance testing was not conducted, with Hedges'g as an effect size measure between groups. Twenty women were recruited to receive treatment, and one participant discontinued after 12 weeks due to unrelated illness. Nineteen participants (mean (SD) age = 42.1(8.4); weight = 99.6(10.3) kg; BMI = 36.4(3.3), and 8/19 White British) were categorised into two groups based on their age at baseline: typical perimenopause age (≥40 years, $n = 10$) or unlikely perimenopause (age <40 years, $n = 9$). No serious adverse events were reported across the RCT and OLE and adherence to protocol-specified dose was high (95.6%). Greater weight loss was seen over 24-week treatment for those of perimenopausal age (5.2 (4.7)%TBWL) compared to those younger than typical perimenopausal age (3.3(2.7)%TBWL, $g = 0.5$ [−0.4, 1.3 95% mCI], medium effect size). Preliminary evidence suggests that, compared to women <40 years, women aged ≥40 years, here as a pragmatic proxy for typical perimenopausal age, showed numerically greater weight loss, with the average TBWL meeting the 5% clinically significant WL threshold for this group. This encouraging finding warrants further investigation within a larger sample within future trials, and suggests this novel treatment is a non-pharmacological treatment option with a favourable safety and tolerability profile for weight management across the life stages.

Disclosures: Data reported were from a commercially sponsored trial (Oxford Medical Products, OMP) and was primarily funded by a Innovate UK Biomedical Catalyst grant with support from OMP. Innovate UK were not involved in the design of the study, collection and analysis of data and decision to publish. Hinton is employed by both the University of Bristol and OMP. Drs Easter, Hinton and Ashrafian have stock options in OMP.

P20 Dosing protocol for switching patients with overweight/obesity between semaglutide and tirzepatide based on prescribing data - tolerability, adverse events and recommendations for clinical practice

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Patients often wish to change from one GLP-1 based medication to another for reasons including cost, tolerability and efficacy. We developed a dosing protocol enabling safe switching of patients from semaglutide to tirzepatide, and vice versa. Noting a paucity of relevant evidence in the existing literature, we created a protocol based on both the minimal existing data and our own experience; we believe this is the first published protocol of its kind for the prescribing of these medications, for the indication of obesity. Our significant event reporting process allows us to identify patients experiencing serious side effects while switching between medications. This enables assessment of underlying causes and predictive factors that could inform a reiteration of our protocol where necessary. In August 2025, the increased tirzepatide cost prompted many switches to semaglutide; we undertook a rapid 6-week review from September to November 2025 to ensure our protocol was safe. We then reviewed our switching from semaglutide to tirzepatide from September 2025 to March 2026 as there was less urgency, and to capture comparable numbers. We switched 3291 patients from tirzepatide to semaglutide. 62 (1.8%) of these reported significant side effects potentially attributable to the medication switch. 47 (75%) reported gastrointestinal side effects and 8 (13%) reported dysaesthesia. The rest reported headache and mood changes. 56 (90%) of patients continued their treatment, by either continuing with semaglutide or switching back to tirzepatide. Two patients of the 3291 (<0.1%) reported hospitalisation. One had cholecystitis and emergency cholecystectomy, and the other had colitis that was presumed to be infectious in aetiology. Following recovery, both patients continue to receive weight loss medication from our service. We switched 2320 patients from semaglutide to tirzepatide. Only one patient reported a significant side effect, which was uveitis; if it was caused by tirzepatide, it is unlikely that a different dose would have altered this outcome. These data compare favourably with our own data relating to patients who do not switch treatments. Our protocol for switching patients between semaglutide and tirzepatide and vice versa, is safe and well tolerated.

Disclosures: None.

P21 Mapping initial implementation plans for the rollout of tirzepatide in primary care: the national evaluation of weight medication access study (NEWA)

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Obesity affects nearly one-third of English adults, with major health, social, and economic impacts. In 2024, NICE approved tirzepatide, a new weight management medication (WMM), for primary care use alongside behavioural "wraparound care". NHS England's interim commissioning guidance defines priority cohorts for initial access through new service models. NEWA is a mixed-methods evaluation of these models. To provide early context, we mapped Integrated Care Boards' (ICBs) implementation plans and synthesised publicly available information on WMM provision. All ICBs were invited to complete a proforma describing emerging service models, access criteria, anticipated numbers, and wraparound care, and express interest in stakeholder meetings (autumn 2025). We extracted publicly available information on early implementation plans (Jan-Feb 2026). Descriptive analyses summarised plans, supplemented by stakeholder meeting insights. Using English prescribing data (EPD), tirzepatide prescribing trends were examined with interrupted time-series methods, comparing monthly prescriptions before and after June 2025 (implementation start) against a synthetic control series based on semaglutide prescribing. Of 42 ICBs, 23 (55%) returned the proforma, and public documents provided partial information for 18 (43%), enabling model characterisation for 41 (98%). Three (8%) reported using >1 model. GP-led delivery (18; 44%) was most common, followed by community/local delivery (9; 22%), specialist & GP shared care (7; 17%), specialist community outreach (7; 17%), and 'other' (4; 10%). ICBs with behavioural wraparound care information (37), all used nationally commissioned services, with one also using local services. Two stakeholder meetings (November 2025) with 18 leads (from 13 ICBs) highlighted challenges aligning funding with eligible cohort numbers, leading some to adopt stricter criteria or cap numbers (8/39, 21%). Model choice was shaped by affordability, infrastructure, equity, capacity, and rapid timelines, with anticipated evolution. From EPD, we found no evidence of an increase in tirzepatide prescribing above background diabetes-related rates, between June-December 2025, consistent with stakeholder reports of variation in local readiness to start in June 2025. Understanding how ICBs implement tirzepatide is critical to ensuring equitable access. Early mapping highlights variation in adopted models and the pressures ICBs face in implementing WMM. NEWA findings will support future commissioning to optimise clinical and cost-effectiveness of WMM delivery.

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P22 Using systems mapping to identify influential factors for healthy weight in North Wales

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This study used a systems-based approach to explore factors influencing healthy weight behaviours across three domains in North Wales: access to affordable and healthy food, eating well and being active in schools, and eating well and being active in workplaces. Building on an earlier regional systems mapping exercise, researchers developed draft causal loop diagrams (CLDs) to represent key dynamics across these domains. The CLDs were refined through participatory workshops with local stakeholders to ensure the local context was reflected. In a subsequent workshop, participants assigned scores relating to the perceived influence (i.e., how much influence one factor has on another, score 1–3) and degree of control (i.e. the extent to which stakeholders can control the driving factor, score 0–3) between connected factors within the CLDs. These scores were then used to calculate and prioritise influential factors. Across the three settings, influential factors included access to healthy food, quality of school-based physical activity, organisational commitment to workplace health, and employee wellbeing. Other factors, such as home food practices and opportunities for everyday physical activity, were identified as responsive indicators that may help monitor wider system change over time. The findings demonstrate that combining participatory systems mapping with an accessible scoring system can help identify locally actionable intervention points and indicators for ongoing evaluation, while improving understanding of how interconnected drivers shape health-related behaviours within local communities.

Disclosures: None.

P23 Parental peer support program (PPSP) for children living with severe obesity and attending the complications of excess weight clinic: the Nottingham experience

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Positive outcomes have been shown for structured self-management education programmes in chronic health conditions in adults, including those delivered virtually. WHO recommendations on ending childhood obesity recognise the importance of family-based interventions and improving nutrition literacy for parents and caregivers. The Complications of Excess Weight (CEW) service is an NHS England funded Tier 3 Paediatric Obesity pilot programme running in 37 clinics across England. A parent peer support program (PPSP) was developed in Nottingham to provide peer support and education specifically for parents of younger children and those with additional needs. The program ran for 5 weeks offering a weekly 1 h session aimed to increase parents' knowledge, skills, and confidence to aid self-management behaviours. Sessions were delivered by the CEW Dietitian virtually at lunchtime to minimise travel, time costs and to allow parents to attend during lunchbreaks and school hours. Topics covered included role of the CEW service, food groups, age-appropriate portions, reading food labels, increasing activity levels, reducing screen time and sleep hygiene. Behaviour change techniques were used throughout. Attendance was recorded for each session. A feedback questionnaire was completed at the end of the program. Four cohorts ran from November 2023 to December 2025. 9–12 families were invited to each program with 53% of invited families agreeing and attending at least one of the five sessions within the program. 60% of families across the four cohorts attended three or more of the five sessions. 13.5% attended only one session. Reasons for missing sessions included illness, appointment clashes, work commitments, childcare and technical difficulties. Mothers primarily attended (90%). Where fathers did attend, attendance was lower (2/5 sessions). Feedback was gained from 12/22 (55%) families attending. Of those, 100% were 'likely' or 'very likely' to recommend attending PPSP to friends and family. Feedback included 'Learnt lots of new things I didn't know about' and 'I found the course beneficial for myself and my child'. Female caregivers of CEW patients were more likely to attend and found the PPSP valuable. Further analysis of barriers to attendance and clinical outcomes of the children whose parents attended the programme will inform future iterations.

Disclosures: None.

P24 Green plates, fussy palates: a proof-of-concept study on the acceptability of healthy and sustainable school menus

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Children's diets frequently fail to meet national nutrition guidelines. Given children consume ~30% of their food at school, this provides an ideal setting to implement change. A co-production proof-of-concept intervention was conducted in partnership with Bradford City Council, schools, caterers, and children. The FixOurFood team identified school foods with the highest environmental impact and worked with stakeholders to co-design menu swaps. This included introducing six new meals and adapting six existing dishes for improved health and sustainability, while maintaining nutritional quality, meeting nutritional standards, and limiting cost. The new menus were implemented in five primary schools in Bradford ($n = 630$ meals in total per day). This paper evaluates the acceptability of these new menus among school children and head chefs. Five child focus groups ($n = 4$–9) and head chef interviews took place after the lunch service. To determine the acceptability and feasibility of implementing the new menus, a thematic analysis, informed by grounded theory, was conducted to extract codes and conceptual themes. Longer-term attitudes towards the new menus were collected via a post-intervention survey completed by head chefs. While head chefs recognised the nutritional and environmental value of the new menu, challenges were faced during the implementation process. This included increased kitchen labour, tweaking recipes to increase desirability and ease preparation, recipe suitability for different demographics, and concerns over food waste. Many children preferred familiar "safe" options like jacket potatoes over new dishes that visibly contained more vegetables and legumes. The visual appeal of recipes determined meal choice; blending ingredients within sauces helped increase uptake. Head chefs reported the need to be included in the planning process, and flagged concerns over allergen risks associated with meat substitutes. Supported by survey feedback, several dishes were highly regarded and were chosen for long-term adoption. Kitchen staff buy-in is integral to ensuring the successful implementation of nutritious and sustainable menus. Tasting opportunities are a useful approach to increase exposure and mitigate risk avoidance. Plate waste data and nutrient analysis will provide the necessary evidence to evaluate child acceptability and long-term sustainability of new menus.

Disclosures: None.

P25 Pens don't win battles: weight regain after glucagon-like peptide-1 (GLP-1) agonist discontinuation and the role of dietary intake and nutritional support: a targeted review of real-world evidence and gaps

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GLP-1 receptor agonists (GLP-1 RAs) are effective in achieving clinically meaningful weight loss in patients with obesity, with rapidly growing real-world use globally. However, outcomes following treatment discontinuation remain poorly understood, and the role of dietary intake and nutritional support in weight maintenance in this context is insufficiently characterised in the real-world. This review aimed to summarise real-world evidence (RWE) on post-discontinuation weight regain; identify what is reported on dietary intake, nutrition counselling or structured programmes during and after GLP-1 RA therapy and explore links between diet quality and weight maintenance. A targeted literature review was conducted in PubMed (January 2021–April 2026), limited to English-language human studies on GLP-1 RA therapy, weight outcomes and nutritional variables, across populations in Europe and North America. 14 studies were included: 8 RCTs (including pragmatic, pilot and post-treatment analyses) and 6 observational studies. Six of 14 studies reported post-discontinuation weight data. The STEP 1 extension and SURMOUNT-4 trials both reported rapid and substantial regain within 12 months: approximately 67% of lost weight after stopping semaglutide and 14% of body weight after stopping tirzepatide. A large US real-world cohort ($n = 125{,}474$) demonstrated that post-discontinuation weight gain was significantly associated with treatment reinitiation, highlighting the burden of rebound. Formal dietary data were captured in only 3 studies. A US cross-sectional study found GLP-1 RA users failed to meet

dietary reference intakes for multiple micronutrients. A UK pilot RCT showed semaglutide alone did not alter macronutrient composition, whereas a structured very-low-calorie diet increased protein proportion. The STEP 3 trial included intensive dietary counselling but did not quantify dietary intake. Partial lifestyle support without dietary quantification was reported in 3 of 14 studies. Critically, 4 of 6 studies reporting post-discontinuation weight data captured no dietary data, and none linked nutritional variables to post-discontinuation weight trajectories. Weight regain after GLP-1 RA discontinuation is consistently documented, yet nutritional determinants during and after treatment remain unmeasured in real-world datasets. Future RWD collection should routinely incorporate dietary assessment, protein intake and nutritional support variables to inform evidence-based weight maintenance strategies.

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P26 The role of community based behavioural weight management programmes in supporting individuals using weight loss medication: findings from a UK member survey

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The use of weight loss medication (WLM) is increasing, yet pharmacotherapy alone does not address the behavioural factors necessary for long term weight management, and evidence suggests weight regain following cessation of WLM is likely. Evidence on the role of community based weight management programmes (CWMPs) in providing wraparound support for individuals using WLM remains limited. This study evaluates whether a structured behavioural CWMP can provide effective wraparound care for individuals taking WLM. An online survey of members who were taking WLM explored medication use, prescribing pathway, perceived support from the CWMP, how CWMPs fit with WLM, dietary preferences and appetite, and physical activity. Descriptive analyses were undertaken, and free text responses analysed thematically. Ethical approval was obtained. 380 members responded (93.9% female). Tirzepatide was reported most frequently (61.4%); 36.5% obtained WLM via the NHS and 63.0% privately. Fewer than half of those prescribed WLMs via the NHS reported receiving support from their prescriber (47.1%) while 64.4% reported receiving support from their private prescriber. Regardless of prescribing pathway, where provided, advice was limited to general healthy eating or portion size guidance. Engagement with the CWMP was high, with 89.7% attending group sessions weekly. Participants reported that key components of the CWMP fitted well alongside WLM use, including the eating plan (94.7%), support system (80.4%) and physical activity programme (85.9%). Most found it easy to adapt the eating plan to their dietary preferences (85.3%) and appetite (82.0%). Since joining the CWMP, 88.7% reported eating more healthily, 61.0% reported increased protein intake, 49.6% increased fibre. 57.9% reported increased physical activity. Participants valued weekly weight monitoring (95.7%), the group facilitator's support (92.6%) and ideas/inspiration from fellow members (76.3%). Fewer than half felt comfortable disclosing WLM use within the group setting. Qualitative findings highlighted perceived stigma, fear of judgement and negative perceptions of WLM as barriers to disclosure. Structured behavioural CWMPs could offer valuable wraparound support for individuals using WLM. Ongoing group-based behaviour change support may help sustain healthy behaviours beyond medication use. Addressing societal stigma could further enhance outcomes. Future analyses will explore weight change and dietary intake data.

Disclosures: All authors are or were employed by Slimming World.

P27 Supporting young adults (18–34 years) to achieve a healthier weight and behaviours to benefit long-term health

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The increasing prevalence of obesity in young adults is of concern given the strong association between obesity, comorbidities and the prolonged burden of managing chronic disease. Positive sustainable behavioural changes to diet and activity and achieving a healthier weight, offer long-term health benefits. However, 18–34-year-olds are under-represented in evaluations of weight management programmes (WMP). This study evaluates outcomes of a behavioural WMP among 18–34-year-olds. An online survey explored health, wellbeing, self-confidence, diet, activity, challenges and perceived support among group and online members. All non-pregnant members aged 18–34 years who had attended for >4 weeks, were invited ($n = 37{,}720$). Matched electronic weight and attendance data were available. Optional free-text responses were thematically analysed. Ethical approval was obtained. 3466 responded (3262 group; 3131 aged 25–34 years), 93.2% identifying as female and 97.4% white ethnicity. Mean baseline BMI was 37.9 kg/m^2 (SD = 7.76). Mean weight loss was 11.4% (SD = 9.19), median attendance was 32 weeks. 72.1% reported improved general health, qualitative analysis highlighted improvements in energy ($n = 695$), fitness ($n = 392$), breathlessness ($n = 296$), aches/pains ($n = 221$), comorbidities ($n = 150$), clinical measures including blood tests, heart rate, blood pressure ($n = 127$), gut health (n = 97), mobility/joints ($n = 89$), sleep ($n = 80$), women's/reproductive health ($n = 52$) and skin ($n = 51$). Respondents reported learning how to make healthier food choices (96.1%), feeling more in control of their food choices (91.4%), developing a better relationship with food (88.6%) and having more positive thoughts and feelings about food (86.5%). Eight themes emerged regarding changes to shopping, cooking and eating behaviour: eating more fruit and vegetables ($n = 625$), consuming more fresh/less processed foods ($n = 424$), meal planning ($n = 408$), making healthy swaps/choices ($n = 362$), cooking from scratch ($n = 354$), changing snacking habits ($n = 267$), consuming less sugar/junk food ($n = 234$) and having fewer takeaways ($n = 164$). 44.6% reported changes to alcohol consumption—26.5% reduced intake, 13.5% reduced binge drinking and 10.0% had stopped drinking alcohol. 64.2% of respondents were more active than before joining and 60.0% found the intervention encouraged activity in a way that works for them. These findings suggest the community WMP supports weight loss, positive behavioural change and a better relationship with food in young adults, with potential benefits for long-term health.

Disclosures: All authors are or were employed by Slimming World.

P28 Shaped: children and young people's experiences of support to improve health behaviours post-cancer treatment

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Paediatric cancer survival rates have doubled since the 1970s; however, treatment can negatively affect long term health. During treatment, physical activity often decreases, and C&YP may develop unhealthy eating habits due to prioritising energy intake to cope with treatment demands, rather than focusing on eating healthy foods. This is associated with adverse weight outcomes, with many C&YP living with obesity following cancer treatment. C&YP and their families also report limited access to weight management support post-treatment. SHAPED aims to co-design a health behaviour programme for C&YP aged 0–19 years who have completed cancer treatment. Three approaches were used to explore experiences of post-cancer support and gaps for future support provision. First, C&YP received "Ideas Kits" containing creative activities to share their thoughts through text, drawings, and other creations. Follow-up semi-structured interviews explored these responses in more depth. Concurrently, a survey examined parent and carer experiences of support and perceptions of their child's needs was conducted online. Findings from the Ideas Kits and interviews highlighted a strong desire among C&YP to return to typical childhood activities, although many reported physical and psychological limitations following treatment. The parent survey ($n = 434$) identified a need for accessible, family-based support for health behaviours related to weight management. Key barriers to resuming daily life included fatigue, reduced mental wellbeing, and low confidence. In contrast, support from family and healthcare professionals, alongside incentives such as online rewards, were identified as important motivators for programme engagement. This is the first study to use creative methods to explore C&YP's experiences of health behaviour support after cancer treatment, identifying key barriers and facilitators to recovery. These findings will inform co-design workshops to develop a support programme to encourage C&YP to engage in health behaviours post-cancer treatment. Providing timely, appropriate support may reduce the likelihood of C&YP living with obesity post-treatment, while improving physical and mental health and reducing demand on weight management services.

Disclosures: None.

P29 Experiencing food pantry use: place, stigma, and everyday life in a deprived urban neighbourhood

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Food insecurity has become an increasingly prominent aspect of daily life across many high-income countries. However, there is limited research exploring how experiences of food assistance are shaped by neighbourhood environments and local social contexts. This qualitative study investigates how individuals engage with and experience the use of a community food pantry within a deprived urban neighbourhood in the United Kingdom. Employing a participatory action research approach, residents contributed to shaping the research aims and provided input on the interpretation of findings. The study combined semi structured interviews with pantry users and volunteers ($n = 22$), approximately 30 h of participant observation undertaken during volunteering activities (with 10 observation datasets), and visual documentation of neighbourhood environmental conditions (105 photographs). Data were analysed using reflexive thematic analysis, resulting in three interconnected themes: territorial stigma and the visibility of food insecurity; navigating dignity within constrained food environments; and community infrastructures of care and belonging. Participants initially expressed concerns about being judged when accessing the pantry, reflecting wider social discourses around poverty and deservingness. These concerns were intensified by neighbourhood environments marked by visible deprivation and limited public infrastructure. However, sustained engagement with the pantry facilitated the development of supportive relationships with volunteers and other users, which helped to reduce experiences of stigma and enhance feelings of belonging. The findings indicate that community food initiatives function not only as sources of food provision, but also as important local social infrastructures that shape how food insecurity is experienced and negotiated within disadvantaged neighbourhoods. Conceptualising food insecurity as a place based social process may support the development of more integrated policy approaches that address both food access and neighbourhood inequality.

Disclosures: None.

P30 Food insecurity as a predictor of addiction like eating behaviour

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Food insecurity has been associated with a range of adverse physical and psychological outcomes, but its relationship with addiction like eating behaviour has not yet been explored. Addiction like eating describes a pattern of compulsive overeating characterised by heightened appetitive drive and impaired dietary control and has been linked to poorer health outcomes and increased body weight. The present study examined whether food insecurity predicts an increased prevalence of addiction like eating behaviours. Across 15 different sites, and 6 countries. A total of 3349 adults completed the United States' Department of Agriculture's 18-item food insecurity module and the addiction like eating behaviour scale. A linear regression revealed a highly significant association between food insecurity and overall addiction like eating behaviours ($b = 0.128$, $r^2 = 0.016$, $p < 0.001$). However, of the two subscales within the addiction like eating behaviours scale, food insecurity was only correlated with the appetitive drive subscale ($r = 0.169$, $p < 0.001$), which broadly relates to an increased loss of control around food. Food insecurity was not associated with the dietary control subscale ($r = -0.024$, $p = 0.174$), which broadly relates to heightened motivational drive toward food. These findings suggest that food insecurity may be an important psychosocial risk factor for addiction like eating behaviour. They further highlight some of the less visible consequences associated with living with food insecurity. Addressing food insecurity may play a critical role in reducing compulsive and maladaptive eating patterns.

Disclosures: None.

P31 Shaped: healthcare professionals' role in supporting children and young people to engage with health behaviours post-cancer treatment

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Children and young people (C&YP) diagnosed with cancer experience increased survival rates due to advances in treatment. However, treatment can lead to physiological and psychological challenges, including high levels of C&YP living with obesity and engaging in sedentary behaviours after cancer treatment. Although there is a desire from C&YP to manage their weight and engage in support around physical activity and nutrition, there is a lack of specialist support available. Families report having positive relationships with healthcare professionals (HCPs) during cancer treatment and evidence suggests HCPs are well placed to promote health behaviours. A mixed method approach was conducted using online surveys of 79 paediatric oncology HCPs and semi-structured follow-up interviews with 15 HCPs working in the UK. Broad job roles included: (1) Dietitians; (2) Medical staff; (3) Nurses; (4) Psychology staff; (5) Therapists; (6) Other HCPs. The objectives were to explore current health behaviour support provided by HCPs, gaps for future support, and engagement motivators and barriers for HCPs and C&YP. Structured support for behaviours related to weight management were limited. Mental health support was the only health behaviour that over half of participants reported delivering often, typically by HCPs who were more experienced (e.g., 10+ years' experience). Peer support and dietary support were delivered the least frequently. Support was mostly delivered using referrals to other specialists or charities, or through families. Key influences of behaviour included acknowledging the physical and psychological impact of cancer treatment on C&YP, limited resources for HCPs, and challenges of undoing negative health habits developed during treatment. Despite HCPs' high level of experience, participants discussed a lack of formal training opportunities around promoting health behaviour change for C&YP and limited access to weight management support, highlighting gaps for future support provision. Future programmes need to be co-designed alongside C&YP and families, including physical activity, nutrition, and mental wellbeing support. The findings will be used to co-design a future health behaviour intervention to support C&YP's physical and mental wellbeing to reduce the likelihood of adverse weight-related health outcomes, sedentary lifestyles, and mental health challenges post-cancer treatment.

Disclosures: None.

P32 Safeguarding and family support for children living with obesity in a uk complications of excess weight service

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Children and young people living with obesity often experience complex social, emotional, environmental and economic challenges that influence engagement with weight-management care and health outcomes. Family support workers and social workers may help families address wider determinants of health, safeguarding concerns and stigma, alongside the medical, nursing, dietetic, psychological and physical-activity input provided by a specialist multidisciplinary team. This service evaluation used routinely collected service data and two illustrative case studies to describe the complexity of need among children and young people attending the West Midlands Complications of Excess Weight clinic and to explore the contribution of embedded family support and social work input. Among 177 active patients, 166 (94%) lived in areas of high deprivation, 63 (36%) had an identified mental health need, 40 (23%) had a confirmed learning disability and 54 (30%) had a confirmed diagnosis of autism or attention deficit hyperactivity disorder. Forty-six patients (26%) were receiving targeted support from the family support worker and social worker, including 21 (11.9%) with a safeguarding plan in place. A 15-year-old boy attended clinic with a weight of 140.5 kg, body mass index of 47.3 kg/m^2, low confidence, school attendance below 30%, bullying concerns and multiple health complications. Following multidisciplinary input, pharmacotherapy, lifestyle support and intensive family support, including school meetings, Early Help and housing support, he lost 8.9 kg, returned to education and is now attending a full-time mechanics course; he no longer requires Early Help or community mentoring. As a further example, a 12-year-old boy was admitted for multidisciplinary weight-management support, with weight reducing from 126.85 kg to 120.2 kg over a 9-day inpatient stay. Interventions included family support, social work, psychology, home visits, confidence building, physical activity and discharge planning with school liaison. These findings suggest that integrating family support and social work within specialist paediatric weight-management services can improve engagement, reduce stigma and support more holistic outcomes for children, young people and families affected by obesity.

Disclosures: None.

P33 The delivery, value and utilisation of the national child measurement programme in england: a qualitative study of local authority perspectives

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The National Child Measurement Programme (NCMP), established in 2006, is a national surveillance programme in England that measures the height and weight of children aged 4–5 and 10–11 years. While the NCMP is nationally mandated, local authorities (LAs) are responsible for programme implementation and delivery. Limited research has explored variation in local delivery models, resource utilisation and costs, and local use of the programme data. Addressing this evidence gap, we aimed to explore how the NCMP is delivered, how its data are used to inform local knowledge, practice and decision-making about healthy weight, and the programme's perceived value at a local level. We undertook fourteen online, semi-structured interviews with 38 participants across 10 purposively sampled local authorities in England (interviews took place individually, in pairs and groups). In addition, participants completed a pre-interview survey about their local delivery model. Participants included public health practitioners, commissioners, school nursing providers, NCMP leads and data analysts and public health intelligence staff. Data were analysed thematically.

NCMP was often delivered through school nursing services, with delivery split between externally commissioned NHS/public health providers or in-house LA-employed school nursing teams. Similarly, post-measurement results to parents varied with some areas providing every parent with their child's height and weight, others to parents whose children were above or below healthy weight categories. Some areas provide proactive follow-up or targeted support for families, while others reported little or no structured follow-up. Locally, data is used for a wide range of purposes, including monitoring healthy weight trends, informing interventions (e.g., Healthy Weight Strategies), commissioning (e.g., planning restrictions on hot food takeaways and family hub investments), supporting school engagement in health promotion, evaluating local programmes, as evidence with local health strategies and presentation to formal council committees (e.g. oversight or scrutiny committees). Some councils saw the NCMP purely as a surveillance programme, others as serving a broader public health intervention, and a mechanism for wider child health promotion. Overall, this study highlights the NCMP as an important public health programme within local authorities, however its delivery, resource utilisation and perceived value vary across local authorities.

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P34 Infant appetite traits and parental feeding practices during the first six months of life in a Mexican cohort

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Early infancy is critical for appetite regulation and feeding behaviours linked to later obesity risk. Appetite traits (ATs), including Food Responsiveness (FR), Satiety Responsiveness (SR), Enjoyment of Food (EF), and General Appetite (GA), may be shaped by Parental Feeding Practices (PFPs), yet longitudinal evidence remains limited. This study examined associations between PFPs and infant ATs during the first six months of life. This prospective study analysed mother–infant dyads from the LACTAR cohort in Guadalajara, Mexico, recruited from a public university hospital. Data were collected between August 2024 and October 2025 and included variables measured at different time points. Infant ATs such as FR, EF and GA were assessed at four and six months using the Baby Eating Behaviour Questionnaire validated in Mexico (BEBQ-Mex). PFPs included Use of Food to Calm (UFC), Persuasive Feeding (PF), Parent-Led Feeding (PLF), and Feeding on Demand (FOD) were measured at two and six months using the Feeding Practices and Structure Questionnaire during milk feeding (FPSQ-Milk). Linear mixed-effects models conducted in R version 4.5.2, examined associations between PFPs and ATs, adjusted for time, infant sex, and BMI z-score. P-values were corrected using the False Discovery Rate (FDR) method ($p < 0.05$). A total of 121 mother–infant dyads were included in the analysis. Most mothers had primary-level education (51%). Among infants, 54.5% were female and 62.8% were exclusively breastfed. From four to six months, FR and GA decreased significantly (FR: $\beta = -0.156$, 95%, CI [−0.289, −0.024], $p = 0.022$; GA: $\beta = -0.429$, 95%, CI [−0.597, −0.262], $p < 0.001$). UFC was positively associated with FR and was the only association that remained significant after FDR correction ($\beta = 0.236$, 95%, CI [0.120, 0.351], $p < 0.001$, $p_FDR < 0.001$). Food Responsiveness and General Appetite decreased from four to six months, while greater Use of Food to Calm was associated with higher Food Responsiveness between 2 and 6 months. These findings suggest that, in early infancy, parental feeding practices may already be associated with appetite traits, highlighting this period as a potential window for responsive feeding interventions.

Disclosures: None.

P35 A fully integrated specialist weight management service in Hertfordshire: outcomes, efficiency, and cost effectiveness

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TBC Healthcare, a provider of psychologically led weight management services, has been commissioned to deliver the first fully integrated specialist weight management service in Hertfordshire, jointly funded by Public Health and NHS, commissioned by Hertfordshire County Council and the Hertfordshire and West Essex Integrated Care Board (ICB). Providing a single point of access for Tier 2, Tier 3, Tier 4, SEND, SMI, and maternal pathways in line with National Institute for Health Care Excellence (NICE) PH47, the model is designed to streamline pathways, reduce duplication, and deliver cost efficiencies. Between September 2024 and March 2026, 4414 referrals were received and accepted into the service. Where referrals were identified as more appropriately served elsewhere, patients were seamlessly redirected to alternative provision, reducing unnecessary waiting times and ensuring NHS resources were utilised appropriately. The pathway encompasses triage, holistic Edmonton Obesity Staging System (EOSS) assessment across medical, functional, and psychological domains, multimodal intervention, and ongoing follow-up. Tier 2 is a one-year pathway with a 12-week group programme, face-to-face weight checks, and follow-up calls at 6 and 12 months, supported by My Digital Assistant. Tier 3 is a two-year pathway with 12 months of face-to-face contact including dietitian appointments, one-to-one exercise assessment, and weight checks, with home visits for complex patients, followed by My Digital Assistant access, monitoring, and follow-up calls at 15, 18, and 24 months. Lower risk Tier 3 patients can step down into Tier 2 via EOSS. The service demonstrated consistent outcomes across both tiers. Among Tier 3 completers, 92% achieved weight loss and 89% reported satisfaction and improved Rosenberg Self-Esteem scale (RSE) scores. Among Tier 2 completers, 87% achieved weight loss, 42% achieving 5% or more, and 91% reported satisfaction with 93% improving RSE scores. 480 Tier 3 patients were stepped down to Tier 2, reducing waiting lists. Ethnic minority and physical disability inclusion targets were exceeded at 23.7% and 12.8%. TBC Healthcare's integrated service demonstrates that a psychologically led, flexible, and culturally appropriate pathway achieves high engagement, meaningful outcomes, and significant commissioning efficiencies across a diverse population, offering a transferable framework for NHS commissioners seeking sustainable obesity care.

Disclosures: None.

P36 Comparing videoconferencing and face-to-face delivery in a 12-month tier 3 weight management programme: a service evaluation

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Tier 3 specialist weight management programmes play an important role in supporting adults living with obesity; however, barriers including travel, work commitments and geography may limit engagement with traditional face-to-face services. Since the COVID-19 pandemic, videoconferencing has become increasingly integrated into NHS service delivery, although large-scale evidence comparing its effectiveness with face-to-face delivery within standardised group-based programmes remains limited. This service evaluation compared weight loss outcomes, clinically significant weight loss and completion rates between videoconferencing and face-to-face delivery within a 12-month Tier 3 weight management programme in Greater Manchester. Anonymised prospectively collected service-level data were analysed for 4162 adults living with obesity referred by NHS general practitioners between October 2020 and July 2023. Participants self-selected videoconferencing ($n = 3041$; 73.1%) or face-to-face delivery ($n = 1121$; 26.9%). Mean age was 44.9 years (SD 13.3), mean baseline weight was 122.3 kg (SD 27.8), and 77.5% were female. The intervention consisted of a cognitive behavioural therapy-based group programme delivered over 12 months. Wilcoxon signed-rank and Mann–Whitney U tests were used for statistical analysis. Both modalities achieved statistically significant weight loss from baseline at 12 weeks and 12 months ($p < 0.001$). At 12 months, videoconferencing participants achieved greater absolute weight loss than face-to-face participants (−7.55 kg vs −6.62 kg; $p = 0.015$), although percentage weight loss was similar between groups (−5.70% vs −5.33%; $p = 0.159$). Among programme completers, 52.0% achieved ≥5% weight loss and 18.0% achieved ≥10% weight loss. Completion rates were comparable between modalities (36.5%). Videoconferencing achieved outcomes comparable to face-to-face delivery within a Tier 3 weight management programme, supporting its use as an accessible and scalable option within NHS obesity services.

Disclosures: The presenting author was employed by MoreLife UK at the time of the research.

P37 Removed (Encore Presentation)

P38 Removed (Withdrawn from Publication)

P39 Adjunct tirzepatide in adults with type 1 diabetes, obesity and hybrid closed-loop therapy: a real-world case series

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Obesity in adults with Type 1 diabetes (T1DM) is increasingly recognised as a significant clinical challenge. Although hybrid closed-loop (HCL) systems improve glycaemic management, challenges still exist to address obesity or insulin resistance. Data regarding adjunct incretin-based therapies in adults with T1DM using HCL systems remain limited. Tirzepatide, a dual GIP/GLP-1 receptor agonist, has demonstrated substantial metabolic benefits in type 2 diabetes and obesity, but evidence in T1DM is limited. We evaluated the real-world effects of adjunct Tirzepatide in adults with T1DM and obesity established on HCL. We conducted a retrospective analysis of 13 adults with T1DM (BMI ≥ 30 kg/m^2) treated with Tirzepatide at Croydon University Hospital. Complete follow-up data were available for 9 participants. Outcomes at baseline, 3 months, and 6–9 months included weight, HbA1c, time in range (TIR), and total daily insulin dose (TDD). Nine patients were analysed (mean age 43 years; baseline BMI 40.7 kg/m^2). Weight decreased by −4.6 kg (95% CI: −7.72, −1.55) at 3 months and −9.0 kg (95% CI: −14.61, −3.43) at 6–9 months. Time in range increased by 13.5% (95% CI:5.27, 21.72) at 3 months and 20.3% (95% CI:9.41, 31.16) at 6–9 months. HbA1c decreased by −9.1 mmol/mol (95% CI: −14.6, −3.7) at 6–9 months. Total daily insulin dose declined by −18.7% (95% CI: −31.1, −6.3) at 3 months and −40.7% (95% CI: −52.7, −28.8) at 6–9 months, with reductions in both basal and bolus insulin. No adverse events, including diabetic ketoacidosis, severe hypoglycaemia, or treatment discontinuation were observed. Adjunct Tirzepatide in adults with T1DM and obesity using HCL was associated with clinically meaningful improvements in weight, glycaemic control, and insulin requirements without major safety concerns. These findings add to emerging evidence supporting incretin-based therapy in carefully selected adults with T1DM, including those using hybrid closed-loop systems. Although limited by the small retrospective single-centre design, ongoing data collection will help inform development of a structured local prescribing pathway, while larger prospective studies are needed to establish long-term efficacy and safety.

Disclosures: None.

P40 Removed (Encore Presentation)

P41 Exploring opinions of healthcare professionals on incretin-based therapies for weight management accessed through UK private services

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Rising obesity rates in the United Kingdom (UK) have increased demand for effective weight management interventions. The emergence of incretin-based therapies, such as semaglutide, liraglutide and tirzepatide, has resulted in clinically effective weight loss outcomes. Limited National Health Service capacity, wait times and eligibility restrictions have contributed to the growth of private prescribing. This expansion has raised concerns regarding patient safety and long-term weight management outcomes. Therefore, this study aimed to explore UK healthcare professionals' opinions on incretin-based therapies accessed privately. A cross-sectional online survey was conducted between March and April 2026. Quantitative data were analysed through descriptive statistics, Kruskal-Wallis and Mann-Whitney tests. Free-text qualitative responses were analysed by thematic analysis. Ethical approval was granted by the Newcastle University Ethics Committee. Of the 83 individuals who began the survey, 62 healthcare professionals completed it (75% completion rate). Respondents were predominantly female (74%) and aged 26–40 years (53%), representing ten professional groups including doctors (37%), dietitians (15%) and nurses (15%). Thirteen reported direct involvement in incretin-based therapy provision. Most participants reported incretin-based therapies as effective, but expressed concerns about inequitable access (87%), high cost (86%) and inadequate supervision (86%). Nearly all participants (98%) considered in-person appointments as the most appropriate eligibility verification method and believed GPs should be contacted prior to prescribing (95%). Significant differences in familiarity of the medications were identified across professions ($p = 0.046$) and between Scotland and England ($p = 0.024$) with Scottish professionals reporting greater familiarity. Suggested multi-disciplinary team (MDT) composition highlighted notable gaps, particularly in the provision of nutrition education (31% current vs. 69% proposed) and physiotherapy support (31% current vs. 43.5% proposed). Qualitative analysis identified three main themes: inadequate regulation of private practice, conflicting ethical and financial motives, and limited MDT involvement. Participants recognised the benefit of incretin-based therapies for weight management but expressed concerns regarding current private sector practices. The gap between current MDT provision and proposed standards, alongside ethical concerns, highlights the potential need for standardisation in the private sector. Future research should focus on a larger sample of UK private clinicians

to gain a more comprehensive understanding of current practice in the private sector.

Disclosures: None.

P42 Removed (Withdrawn from Publication)

P43 Experiences of adults in the UK who have privately purchased incretin-based therapies for weight management: a cross-sectional survey

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In the United Kingdom (UK), access to incretin-based therapies for weight management has expanded rapidly beyond the National Health Service into private prescribing pathways. Whilst clinical trials demonstrate the efficacy of these therapies, the wider treatment experience for individuals accessing these medications privately remains unclear. This study aimed to explore experiences of UK adults who privately purchased incretin-based therapies for weight management. A cross-sectional online survey was deployed with data collected between February and March 2026. Adults (≥18 years) who privately purchased an incretin-based therapy were recruited. The questionnaire captured demographics, treatment patterns, support provision, challenges and satisfaction. Quantitative data was presented descriptively with Chi-square (χ^2) and Fisher's exact tests to explore associations between key variables. A total of 148 survey responses were collected (mean age 35.9 years, SD ± 11.10, range 18–65; 60.1% male). Tirzepatide was the most used incretin-based therapy (57%), followed by semaglutide (34%). Overall, participant satisfaction with incretin-based therapy provision in the private sector was high (89.2% very satisfied or satisfied) and was positively associated with participants perceived adequacy of overall support ($r_s = 0.28$, $p < 0.001$). Individuals reported varying support, 61% accessed medical support, 42% psychological support and 28% dietetic support, during treatment. Individuals who acquired incretin-based therapies through online pharmacies received significantly less follow-up than those attending in-person clinics (χ^2 (2), $N = 140) = 19.29$, $p < 0.001$). No significance was observed between provider-type and provision of dietary advice ($p = 0.945$). Female participants reported significantly greater appetite reduction compared to males (55.9% vs. 22.5%; $p < 0.001$). Financial cost was the most reported challenge (71%). Side effects were common, with 88% reporting at least one side effect, most commonly headaches (55%), vomiting (54%), and nausea (46%). These findings indicate that incretin-based therapies are associated with high satisfaction within the private sector. However, they are prescribed alongside inconsistent support, limited dietary guidance and result in a high financial burden for individuals. This questions the sustainability of health outcomes for those utilising private prescribing pathways. Strengthening multidisciplinary care within private services could ensure that outcomes extend beyond short-term weight loss alone and provide a long-term effective obesity treatment.

Disclosures: None.

P44 Removed (Encore Presentation)

P45 Eligibility in principle, access in practice: psychological and experiential implications of GLP-1 prioritisation within specialist weight management services

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While national guidance recommends GLP-1 receptor agonists for adults meeting specific criteria, local commissioning and prescribing capacity often limit access, creating a gap between eligibility and clinical practice. This study evaluated illness perceptions, psychological burden, and the lived experience of individuals eligible for, but unable to access, GLP-1 pharmacotherapy within a Tier 3 specialist weight management service. A mixed-methods evaluation was conducted. Quantitative data were collected from 167 adults living with obesity (mean BMI 44.5; 84% female; 41% from the highest deprivation quintile) using the Revised Illness Perception Questionnaire (IPQ-R), GAD-7, PHQ-9, and SWEMWBS. Qualitative data ($n = 14$) were gathered via semi-structured interviews and focus groups, analysed through reflexive thematic analysis. Participants reported significant distress, with the perceived life and emotional impacts of weight both scoring a mean of 9/10. Clinical markers indicated moderate depression (mean PHQ-9: 11.34), mild-to-moderate anxiety (mean GAD-7: 6.79), and low wellbeing (mean SWEMWBS: 21.00). Most participants (98%) expressed frustration or disappointment regarding access barriers. Regarding illness perceptions, most participants viewed behavioural change and medication as complementary for weight management, though a subgroup rated treatment control (GLP-1) significantly higher than personal control. Qualitative findings suggested that dissatisfaction was primarily driven by expectation misalignment formed during primary care and initial referral. Participants framed medication as a functional enabler for behavioural effort and mobility, rather than a replacement. Failure to access medication was experienced as a withdrawal of a treatment opportunity, which for some individuals reduced motivation and engagement with the wider behavioural programme. In conclusion, individuals facing restricted GLP-1 access experience a notable psychological burden. Prioritisation principles are generally accepted by patients if communication is transparent and expectations are managed early in the clinical pathway. Implementation strategies must include explicit discussion of local thresholds and clear review pathways to sustain therapeutic alliance and programme engagement.

Disclosures: None.

P46 Removed (Encore Presentation)

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P49 Weight loss engagement with local communities: evaluating the impact of morelife's local activator model

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Obesity prevalence is strongly shaped by structural disadvantages, yet communities most affected are frequently underrepresented within structured weight management services. While services may be technically accessible, availability does not automatically translate into engagement due to barriers such as mistrust of institutions, language differences, and socioeconomic constraints. To bridge the gap between service eligibility and meaningful access, the Local Activator model situates engagement and support within community organisations already embedded in the daily lives of residents. Morelife partnered with six local organisations in North England to implement this community-embedded approach, where activators worked within trusted settings to address cultural and practical barriers. Engagement, completion, and outcome data were analysed for 230 participants enrolled through this model. Results showed that 76% of

participants completed the programme. Weight loss was achieved by 74% of participants, with 56% improving nutritional behaviours and 49% improving wellbeing scores. The model effectively engaged populations often underrepresented in traditional services: 33% were male, 16% were individuals living with disabilities, and 5% were individuals living with severe mental illness. Ethnic diversity among participants was high, including 27.6% Pakistani, 16.1% Bangladeshi, and 11.5% Asian individuals, with over half of the cohort residing in the most deprived areas. In conclusion, embedding delivery within trusted community organisations significantly improves engagement and outcomes among ethnically diverse and socioeconomically deprived populations. Reducing obesity inequalities requires relational, community-anchored models that actively address structural barriers. The Local Activator model provides a scalable, practical mechanism for increasing equitable access to weight management support within routine commissioned services.

Disclosures: None.

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P52 Disordered eating support for men living with obesity: a pilot evaluation of a co-produced emotional eating programme

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Disordered eating is highly prevalent and associated with mental health difficulties among individuals living with obesity. Data analysis within a weight management service indicated that men living with obesity who scored highly on binge eating scales were significantly less likely to complete standard support programmes. These individuals also showed lower participation rates in mixed-sex emotional eating groups, frequently citing discomfort sharing emotions in such settings. To address this need, a male-only emotional eating programme was co-produced by clinicians and service users. This pilot intervention aimed to improve participants' relationships with food, enhance emotional regulation, and support weight management using less traditional therapeutic language and a strong emphasis on peer support. The programme comprised eight biweekly 90-min sessions followed by eight monthly sessions. Seven men completed the pilot. At 16 weeks, the mean weight loss was 8.24 kg, representing a 6.12% reduction in body weight. Participants demonstrated improvements across all psychological measures, with mean anxiety scores (GAD-7) reducing from 9 to 4.6 and depression scores (PHQ-9) decreasing from 10.58 to 7.3. Improvements were also observed in emotion regulation and emotional appetite, with negative emotional appetite scores reducing from 73 to 54. Qualitative feedback highlighted that the male-only environment facilitated the disclosure of binge eating behaviours that were previously kept secret. Participants reported that hearing shared experiences from peers reduced feelings of isolation and improved confidence. For some, the intervention resulted in significant life changes beyond weight loss, including improved mobility, increased motivation for physical activity, and improved employment prospects. In conclusion, emotional and binge eating are significant barriers to completing standard weight management support for men living with obesity. Tailored programmes that use gender-sensitive language and leverage peer support show promise in overcoming these barriers and improving both psychological and physical outcomes.

Disclosures: None.

P53 A United Kingdom-wide survey of specialist weight management services for housebound people with obesity: the housebound obesity pathways and engagement (HOPE) study

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People with obesity can have significant mobility limitations and mental health, making some housebound. This may limit access to treatment from Specialist Weight Management Services (SWMS). SWMS provision for housebound people with obesity (HbPwO) is under-researched. An online (Qualtrics) survey was disseminated United Kingdom (UK) wide via professional networks between July and October 2025. Data were analysed using descriptive statistics and framework analysis of free text comments. From 62 participants, 59 (95%) had no documented pathway specific to HbPwO. Four (6%) participants reported offering no SWMS services at all for HbPwO. 26 (42%) participants were currently working with HbPwO: 16 (62%) of whom reported working with HbPwO aged 40 years and under. A further 22 (35%) participants had worked with HbPwO in the past. For assessment appointments for HbPwO, 50 (81%) did not offer a home visit, with 51 (82%) using telephone assessments, while 48 (77%) used 1-to-1 digital platforms; Seven (11%) offered clinic-based assessment only. For intervention delivery, 42 (68%) participants had no availability for home visiting, 16 (26%) reported limited capacity for home visiting with four (6%) offering it as needed. 54 (87%) used telephone 1-to-1, whilst 49 (79%) used digital groups and 48 (77%) used digital 1-to-1. For intervention equity, 41 (66%) participants offered obesity medications to non-HbPwO, dropping to 21 (34%) for HbPwO. 34 (55%) participants offered bariatric surgery to non-HbPwO, reducing to 10 (16%) for HbPwO. For the statement that "My service meets the weight management needs of housebound people with obesity" 18% ($n = 11$) agreed or strongly agreed, with 71% ($n = 44$) participants either disagreeing or strongly disagreeing. When asked about barriers to service provision for HbPwO, the top three selections were limited capacity for home visits (48 votes out of 272, 18%), within-service pressures (42/272, 15%) and services for HbPwO not being commissioned (32/272, 12%). HbPwO in the UK are under-served by SWMS, experiencing inequitable access to effective obesity treatments. Whilst phone and digital provision are widely used, their impact is unknown for HbPwO. Given poor quality of life for HbPwO and high wider care costs, research is needed to guide service provision.

Disclosures: None.

P54 Treatment patterns following semaglutide initiation in UK telehealth obesity care: a real-world study of GLP-1RA based therapies (reveal-1)

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Background: Glucagon like peptide 1 receptor agonist based therapies (GLP 1RAs) are widely used for weight management. However, real world treatment patterns following semaglutide initiation in the UK private telehealth sector are not well

characterised. This study evaluated semaglutide initiation, dose selection, and persistence among GLP 1RA–naïve patients and those switching from another GLP 1RA in a single UK private telehealth service. Methods: This observational cohort study included adults initiating semaglutide for weight management via HeliosX, trading as MedExpress, between 01MAY24 and 31JAN26. Demographics, comorbidities, and prior GLP 1RA use outside MedExpress were self reported. Prescriptions and dispensations were captured during routine care. Treatment patterns were analysed for GLP 1RA–naïve initiators and GLP 1RA switchers, including starting dose and time to leaving the MedExpress service (≥84 days between dispensations). Results: Among 231,442 semaglutide initiators, 127,821 (55%) switched from another GLP 1RA and 103,621 (45%) were GLP 1RA–naïve. The cohort was predominantly female (78%), aged 30–49 years (53%), of White ethnicity (91%), with mean BMI of 33.6 kg/m^2 (SD:5.7). Among GLP 1RA switchers, 37% had 4–6 prior dispensations, 33% 1–3, 19% 7–9, and 11% ≥10. Semaglutide initiation frequently occurred above 0.25 mg and increased with greater prior GLP 1RA exposure. Among patients with 1–3 prior dispensations, 52.1% initiated at 0.25 mg, 27.6% at 0.5 mg, and 17.4% at 1.0 mg. In patients with 4–6 prior dispensations, 31.1% initiated at 1.0 mg, 0.25 mg (26.0%) and 0.5 mg (20.9%). Among those with 7–9 or ≥10 prior dispensations, initiation at ≥1.0 mg accounted for over half of initiations. In contrast, 98% of GLP 1RA–naïve started at 0.25 mg. Median time to leaving MedExpress was 124 days (95% CI: 123–125) among switchers and 134 days (95% CI: 133–134) for naïve-initiators. Conclusions: This is the largest real world study of semaglutide-treated patients globally. Over half of semaglutide initiators switched from another GLP-1 RA. Higher starting dose was associated with prior GLP 1RA exposure, while GLP 1RA–naïve patients predominantly initiated at 0.25 mg. Persistence based on time to leaving MedExpress was similar across groups. These findings provide granular real world evidence on semaglutide initiation and switching behaviour during rapid market expansion in UK private obesity care.

Disclosures: MB, NS and AT are employed by Novo Nordisk. ORP and SD are employed by HeliosX. AM and MF are employed by Lane, Clark & Peacock.

P55 Removed (Withdrawn from Publication)

P56 Maternal prenatal obesity and offspring neurodevelopmental disorders: a systematic review and meta-analysis

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To provide an update of existing reviews focusing on maternal prenatal obesity and offspring neurodevelopmental disorders; and to undertake sub-group analyses to assess the impact of exposure measurement timing and outcome diagnostic method on the association. The objectives stated above were achieved using a systematic review and meta-analysis. After searching EMBASE, MEDLINE, PsycINFO, Global Health, PubMed, Web of Science and Scopus, a total of 1203 eligible studies published from inception until August 2025 were retrieved. This systematic review included cohort studies and case-control studies that assessed the effect of maternal obesity on offspring Attention Deficit Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD). A total of 17 studies with over 673,632 participants were included in the meta-analyses. Raw counts were extracted and computed to derive the effect estimates for all studies. For ASD, mothers with obesity had higher odds of having a child with ASD compared to mothers without obesity (OR = 1.56, 95% CI = 1.42–1.72) and even higher odds when compared to mothers with normal weight (OR = 1.67, 95% CI = 1.47–1.90). For ADHD, mothers with obesity had higher odds of having a child with ADHD compared to mothers without obesity (OR = 1.57, 95% CI = 1.36–1.81) and even higher odds when compared to mothers with normal weight (OR = 1.62, 95% CI = 1.40–1.88). Foetal biological exposure window (BEW) was found to be a significant moderator of the association in both ASD categories ($p = 0.0003$ for normal weight and $p < 0.001$ for non-obese). Outcome diagnostic method for both ASD categories ($p = 0.324$ for normal weight and $p = 0.5341$ for non-obese) was not a significant moderator of the association. Due to the paucity of studies, the subgroup analyses using foetal BEW and outcome diagnostic method could not be conducted for ADHD studies. This meta-analysis found that maternal obesity was associated with increased odds of both ADHD and ASD in offspring. The strength of the association was moderate, ranging from 1.56 to 1.67. Foetal BEW was also found to moderate the association between maternal obesity and ASD in offspring.

Disclosures: None.

P57 Changes in food and drink product advertising at bus shelters—year one results from two natural experiments

Scott Lloyd[1,2,3], Amelia A Lake[4], Emma Boyland[5], Mark A Green[5], Jay J Duckworth[6], Sarah Sowden[3], Greg Fell[7], Ashley Adamson[3]*

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Food marketing contributes to poor diet. Out of home (OOH) is a key space for food adverts. Over 30 Local Authorities (LA) have adopted policies restricting the advertisement of less healthy foods on their estate. At the same time, OOH advertising is shifting from traditional paper-based adverts to digital formats. This study analysed what was advertised at bus shelters before and after one LA (Swindon) adopted a policy that restricts the advertisement of less healthy foods (but not other health-harming commodities such as alcohol), in another area (North Tyneside – NT) that saw a change from paper-based adverts at bus shelters to either digital assets or removal of the advertising, and a control area (Middlesbrough). Data was obtained in-person from all bus shelters on four occasions at baseline (T0, 10/2024 – 12/2024) and follow up (T1, 08/2025 – 09/2025). In Swindon, there were 263 bus shelter advertising assets (261 paper, two digital). In NT, at T0 there were 330 paper-based advertising assets and at T1 172 paper-based and 14 digital advertising assets plus 144 with no adverts. Middlesbrough had 300 advertising assets (274 paper, 26 digital). Foods were categorised as healthy or less healthy using the 2004/05 UK Nutrient Profiling Model. At T0, 61.2% of bus shelters in Swindon had food advertising (51.4% less healthy), 50.7% in NT (56.8% less healthy) and 48.3% in Middlesbrough (53.1% less healthy). At T1, this was 27.7% (9.1% less healthy), 57.6% (42.0% less healthy) and 54.0% (44.9% less healthy) respectively. Adverts for alcohol products were minimal at T0 (0.54%, 0.61% and 1.5%) but increased to 10.9%, 6.9% and 4.9% at T1. Statistical analysis will be undertaken and presented at the conference. The advertisement of food products (including less healthy) reduced in Swindon. Whilst the number of advertising sites fell in NT, the proportion of food adverts remained similar. The increase in alcohol advertising in Swindon – if statistically significant and sustained – is concerning. LAs should adopt advertising policies to restrict the advertisement of health-harming commodities on their estate via their public health

responsibilities. Alternatively, national legislation could be introduced to avoid policy fragmentation.

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P58 Impact of regular nutritional follow-up attendance on weight loss and nutritional status after sleeve gastrectomy

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Laparoscopic Sleeve Gastrectomy (SG) is an effective treatment for morbid obesity, and regular postoperative follow-up may enhance weight loss outcomes. This study examine the impact of regular nutritional follow-up during the first year after SG on weight loss and nutritional status. Fifty patients with morbid obesity (mean age: 35.9 ± 14.1 years; mean BMI: 44.35 ± 7.47 kg/m^2) who underwent SG were recruited and followed for one year. Patients were initially interviewed 1 week postoperatively and were subsequently scheduled for follow-up visits at 1, 3, 6, and 12 months after surgery. At each visit, anthropometry and blood samples were obtained. Dietary intake was assessed using a 24-h dietary recall, and physical activity levels were evaluated using the International Physical Activity Questionnaire. Postoperative nutritional follow-up adherence was classified as regular (≥75% attendance, defined as attendance at ≥3 follow-up visits) or irregular (<75% attendance, defined as attendance at <3 follow-up visits). A dramatic change in body weight at 1 month, 3 months, 6 months and 1 year were observed (mean ± SD: 104.09 ± 21.62 kg, 92.34 ± 17.66 kg, 82.39 ± 14.76 kg and 77.52 ± 14.14 kg, respectively). There were no significant differences in the percentage of body weight, Excess Body Weight Loss (EBWL%), dietary intake, physical activity, and blood biomarkers between patients with regular and irregular postoperative nutritional follow-ups. The study confirmed the beneficial effect of SG on weight loss. However, patients who attended regular follow-ups did not achieve a greater 1-year weight loss or nutritional status improvements compared with patients with irregular follow-ups. Further work is needed to optimize the postoperative follow-ups to achieve greater effects on weight loss and nutritional status after the SG.

Disclosures: None.

P59 Real world experience of GLP-1 agonists in patients with IIH in South West England

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Idiopathic intracranial hypertension (IIH) is defined by raised intracranial pressure (ICP) with no identifiable underlying aetiology, often affecting women of childbearing age with obesity. Patients may develop irreversible, bilateral sight loss from optic neuropathy, whereby intracranial pressure damages the optic nerves secondary to compression. The mainstay of treatment is weight loss through lifestyle modification. Glucagon-like peptide-1 (GLP-1) agonists promote weight loss and may be beneficial in IIH. The primary objective of this retrospective cohort study is to evaluate visual outcomes of IIH patients with persistent papilloedema who received GLP-1 agonists alongside conventional weight loss advice versus those who received conventional weight loss advice alone. The following outcomes were compared: weight loss, visual fields, visual acuity and retinal nerve fibre layer (RNFL) thickness. Diagnosis of IIH was made using modified Dandy criteria and patients were excluded if they had prior or coinciding invasive interventions. 37 patients diagnosed with IIH attending the neuro-ophthalmology clinic between 11/06/2025 and 10/10/2025 were included. These patients were aged between 19 and 50 years and 96% were women. Seven patients were started on GLP 1 agonists over that period. This subgroup was aged 25 to 43 years, and all were women. The mean BMI was 39.9 in the group on GLP1 agonists, and they experienced an average weight loss of 13.53% within 1 year. In the standard weight loss group, the mean BMI was 43.9 and they experienced an average weight loss of 8.25% within one year. Both groups saw an improvement in RNFL over the course of the treatment. The weight loss group went from an average right eye RNFL of 187 to 113.25 and the GLP-1 group went from 165.5 to 108.67. However, there was no meaningful change for either group in terms of visual fields or acuity. Of the patients on GLP-1 agonists, 6 remained on treatment within one year. Treatment was discontinued in one patient due to side effects: vomiting and diarrhoea. GLP-1 agonists effectively increased weight loss in our patient group, suggesting they may be an effective adjunct in IIH management. Larger prospective studies are required to further evaluate these findings.

Disclosures: None.

P60 Evaluation of engagement and weight outcomes with a 12-week digitally delivered low-energy diet (led) within a UK tier 3 specialist weight management service (SWMS)

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Low-energy diets (LEDs) offering approximately 800–900 kcal/day are used in Tier 3 weight management services as a short yet intensive approach to induce weight-loss to treat obesity. LEDs offer a useful alternative for achieving significant weight-loss (~10–15%) in those who have contraindications to, cannot tolerate or cannot access pharmacotherapy or metabolic surgery. Weight-loss outcomes of these LEDs delivered through Tier 3 services remain limited. Here we report the first 12-week (Phase 1) outcomes (%weight-loss, completion rates and reported reasons for non-completion) from a digital 52-week LED programme for patients under the care of a Tier 3 SWMS funded by local ICB (Leicester, Leicestershire and Rutland). The LED comprised of 3 phases; Phase 1 (12-weeks): an 800–900kcal/day diet, Phase 2 (4–8 weeks): food reintroduction and Phase 3 (7–8 months): weight-maintenance. We retrospectively collected data on all patients referred to the LED programme. Baseline characteristics (age, sex, ethnicity, weight and BMI on referral) were recorded. Percentage weight-loss was assessed at the end of the initial 12-week LED phase for completers or the last available weight for non-completers. For completers, weight-loss is presented as mean ± SD, alongside the proportions achieving >5%, >10% or >15%. Thirty-six patients opted for the 52-week LENA programme. The cohort was predominantly female (92%), mean age 47-years and predominantly White British (69%). Eighteen (50%) completed the programme. Among completers with available data ($n = 17$) weight-loss at 12 weeks was 11.4% ± 6.0 with 3 (18%) achieving <5%, 3 (18%) >5%, 8 (47%) >10% and 3 (18%) ≥15%. Eighteen (50%) did not complete the programme; among seven with follow-up data, one achieved 20% weight loss at 11 weeks and others had smaller losses (0–5%). Reasons for non-completion included poor palatability ($n = 5$), side effects/intolerance ($n = 4$), limited product choice ($n = 2$), inadequate digital support ($n = 1$),

persistent hunger ($n = 3$) or social factors ($n = 2$). In our Tier 3 service, the first phase of the 52-week digitally delivered low-energy formula programme produced clinically meaningful weight loss among completers. Non-completion was common, reflecting known tolerability and programme-related challenges, indicating a need to further optimise variety of product options (e.g. food choices, flavours) and digital support to improve acceptability and retention.

Disclosures: None.

P61 Beyond survival: the hidden burden of obesity in paediatric all survivors

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As survival rates in paediatric acute lymphoblastic leukaemia (ALL) continue to improve, attention has increasingly turned to long-term treatment effects, including excess weight gain. This review summarises the prevalence of overweight and obesity in survivors of childhood ALL and associated risk factors. A systematic search of MEDLINE/PubMed (2015–2025) identified studies including at least ten paediatric ALL survivors reporting body mass index, overweight, or obesity outcomes after chemotherapy. Data were extracted on study characteristics, treatment exposures, follow-up, and outcomes. Quality was assessed using the Newcastle–Ottawa Scale. Sixteen studies, including >2000 survivors, were analysed. Overweight and obesity prevalence ranged from 20 to 50%, generally exceeding that of comparison populations. Associated risk factors were corticosteroid exposure, cranial radiotherapy, younger age at diagnosis, male sex, reduced physical activity, and socioeconomic disadvantage. Study quality was generally moderate to high, although variability in treatment protocols and outcome assessment limited comparability across studies. Survivors of paediatric ALL remain at increased risk of overweight and obesity after therapy. Even though cranial radiotherapy is used less often in modern treatment protocols, the risk still exists. This supports the need for regular long-term monitoring and early, practical lifestyle support to help prevent weight-related complications.

Disclosures: None.

P62 Workforce readiness in bariatric care: are future nurses equipped for postoperative challenges?

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The rising prevalence of obesity has led to increased demand for bariatric metabolic surgery (BMS), placing growing responsibility on nurses to deliver safe and effective postoperative care. Despite this, evidence indicates that pre-registration nursing education may not adequately prepare students for the complexities of bariatric care, particularly in recognising complications and managing postoperative needs. This study aimed to assess pre-registration adult nursing students' knowledge and preparedness for postoperative bariatric care and to examine the relationship between educational exposure, clinical experience, knowledge, and confidence. A cross-sectional quantitative survey was conducted among second- and third-year pre-registration adult nursing students at a UK university in the East Midlands. Data were collected from 81 participants using a 24-item anonymous online questionnaire assessing demographic characteristics, exposure to bariatric education and clinical practice, knowledge of surgery and postoperative care, and perceived preparedness. Descriptive statistics were used to summarise findings, and Spearman's rank correlation was applied to explore relationships between educational exposure, clinical experience, knowledge, and confidence. Students demonstrated moderate but inconsistent knowledge of postoperative bariatric care, with strengths in areas such as nutritional management and discharge education but notable gaps in recognising complications, including anastomotic leaks, and understanding surgical procedures. Over half of participants reported limited formal teaching (51.9%), and 35.8% reported no clinical exposure. Only 27.1% felt prepared to manage post-operative bariatric patients. Significant positive correlations were identified between educational exposure, clinical experience, knowledge, and confidence, with clinical exposure showing the strongest association ($\rho = 0.47$, $p < 0.001$). Findings highlight a misalignment between current nursing education and the increasing clinical demands of bariatric care. Although knowledge levels were moderate, low confidence and critical knowledge gaps suggest insufficient preparation for practice. Enhanced curriculum integration is required, including structured bariatric education, simulation-based learning, and increased clinical exposure. Strengthening these areas is essential to develop a competent and confident nursing workforce capable of delivering safe, high-quality postoperative bariatric care.

Disclosures: None.

P63 Cost-effectiveness of diabetes remission programmes for recently diagnosed type 2 diabetes in England: a modelling study

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Rapid weight loss in people with recently diagnosed diabetes can lead to diabetes remission. Choosing to commission remission interventions requires policymakers to assess their cost-effectiveness. This lifetime economic evaluation assessed the incremental cost-effectiveness of two diabetes remission programmes compared with usual care for people with recently diagnosed type 2 diabetes (T2D) in England. The DIAMOND programme is a low-energy food-based intervention costing £300 per person. The Diabetes Remission Clinical Trial (DiRECT), also conducted in the UK, evaluated the use of Total Diet Replacement (TDR) for achieving T2D remission and cost £1137 to deliver. We conducted a network meta-analysis (NMA) of randomised controlled trials to estimate 12-month diabetes remission rates across studies and compare the effectiveness of TDR against the DIAMOND programme. We used the Sheffield Diabetes treatment model version 4.0 to capture the effect of diabetes remission on body mass index (BMI) and HbA1c based on analysis of DIAMOND trial data. Using established risk factor equations, we extrapolated these differences, through to effects on quality adjusted life years (QALY) and healthcare system costs. We assumed weight loss at 12 months attenuated linearly for 5 years before returning to the individual's weight trajectory in usual care. A UK National Health Service and personal social services perspective was taken, costs and QALYs discounted at 3.5%. Probabilistic analysis on parameter inputs reflected uncertainty. The results of the NMA showed the highest probability of remission for TDR after 12 months. DIAMOND and TDR both generated lifetime QALY gains compared with usual care, with TDR generating greater QALYs than

DIAMOND. In the base case comparison of both remission programmes versus usual care, the incremental cost-effectiveness ratios (ICERs) were below £25,000 per QALY gained UK willingness to pay threshold. The ICER for TDR versus DIAMOND was close to the £25,000 UK threshold. Both diabetes remission programmes provide cost-effective strategies for managing recently diagnosed T2D. TDR is cost-effective compared with DIAMOND, but there is a high degree of uncertainty in the ICER. Future head-to-head trials may reduce uncertainty in the ICER for DIAMOND versus TDR, but policymakers should consider commissioning a variety of programmes to accommodate patient preferences.

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P64 Removed (Encore Presentation)

P65 Online-only food outlets (dark kitchens) in England: implications for obesogenic environments and local authority monitoring and regulation

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The rapid expansion of online-only food outlets, including dark kitchens, is reshaping local food environments in England and may contribute to obesity by increasing access to energy-dense, nutrient-poor foods, yet their scale and regulation remain poorly understood. This NIHR-ADA funded study aimed to quantify their prevalence and explore how they are perceived/managed by local authority professionals. A mixed-methods design was used, combining automated searches of online food delivery platforms across four northern areas of England with validation using Food Standards Agency (FSA) and Google data, alongside six semi-structured interviews with Environmental Health Officers and a stakeholder workshop ($n = 5$), with quantitative measures including prevalence per 100,000 population, premise type, Positive Predictive Value (PPV) and sensitivity of FSA data, and qualitative data analysed using an inductive descriptive approach within a critical realist framework. Substantial numbers of online-only outlets were identified, ranging from 9 to 59 per 100,000 population, with approximately 40% operating from existing premises, while PPV was 100% but FSA data sensitivity was low (9.1–26.2%), indicating that routine monitoring systems capture only a small proportion of these businesses; qualitative findings revealed limited formal recognition of dark kitchens within local authorities, alongside concerns about increasing availability of less healthy foods, regulatory ambiguity, and challenges in monitoring and cross-departmental coordination. These findings suggest that online-only food outlets represent a rapidly evolving and under-recognised driver of obesogenic environments, with current surveillance and policy tools insufficient to capture or regulate their impact; urgent adaptation of data systems, planning and regulatory frameworks, and cross-sector collaboration is needed to support local authorities in mitigating potential obesity and health inequality impacts.

Disclosures: None.

P66 GLP-1 receptor agonists in paediatric obesity: a systematic review of lived experiences

Claire Williams[1], Fiona McGinnes[1], Pelagia Mavraki[1], Louisa Ells[2], Catherine Homer[1], Elysa Loannou[1]*

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The prevalence of obesity in childhood continues to rise steadily. In the UK, the most recent National Child Measurement program showed just over one-in-ten reception age children are living with obesity. Aside from the pandemic, this is the highest prevalence seen since measurements began in 2006. By ages 10–11, prevalence doubles to one-in-5 children living with obesity. In adult obesity management, GLP-1s have been gaining increasing traction, being made widely available in the UK. While GLP-1s have not been made widely available for children, they are available in trials and in specialist clinics for children and young people living with severe obesity. Several reviews on the efficacy and physiology of GLP1-s use in children and young people have been published. However, there are no reviews to the authors knowledge that synthesise the views, experiences, support needs or perceptions of GLP-1 use in children and young people. Therefore, this review aims to synthesise existing qualitative studies in GLP-1 use in children and young people, to better understand psychosocial considerations and support needs. The review was registered on OSF (osf.io/yj3dh). Studies eligible for inclusion had to include young people living with obesity aged 18 or under who had used any form of GLP-1, or their carers. PubMed, Scopus, CINAHL, PsycINFO and Cochrane were searched in February 2026 using search terms around 'population' (e.g., 'child obesity') and 'intervention' (e.g., 'glucagon-like peptide-1'). Covidence was used to support a two-stage screening process: (1) title and abstract and (2) full text. A total of 50 articles were identified, with 25 sought for full text retrieval. Three studies are included in the final review. Preliminary thematic analysis shows participants motivation to take GLP-1s was influenced by the media and social pressures, assuming GLP-1s may be less harmful than dietary restrictions. However, participants who were apprehensive felt GLP-1s were unsafe, or had concerns about weight regain. Caregivers' previous experiences further influenced perceptions on GLP-1s. Should the abstract be accepted, we will present the complete findings at the UKCO conference in 2026.

Disclosures: None.

P67 GLP-1 receptor agonists in paediatric obesity: an umbrella review

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Childhood obesity continues to rise, just over one-in-ten reception age children are living with obesity, where prevalence doubles to one-in-5 for children ages 10–11. GLP-1 medications have been trialled in the UK with children and young people for their potential to reduce complications related to obesity and support longer term health. However, there is still insufficient evidence available to inform a NICE Technology Appraisal to enable routine prescribing of GLP1-s to children and young people. Several reviews have been published previously, examining the efficiency and effectiveness of GLP-1 use for physiological measures and potential to reduce comorbidities associated with obesity. However, no previous review has systematically mapped the

existing literature or identified key evidence gaps to guide future research on GLP-1 use in children and young people. Therefore, this umbrella review aims to capture all reviews previously undertaken in GLP-1 use in children and young people, to map out intervention types, regimes, durations and follow-up periods. The review was registered on PROSPERO. Reviews eligible for inclusion had to involve children or young people living with obesity aged 18 or below. Eligible interventions included any GLP-1 regimen compared with placebo or standard care, or lifestyle interventions. Outcomes of interest included weight-related measures, cardiometabolic parameters, adverse events, quality of life, functional outcomes, co-morbidity outcomes, and other physiological measures where reported. In February 2026, PubMed, Scopus, CINAHL, PsycINFO and Cochrane were searched using terms related to 'population' (e.g., 'obesity', 'child obesity' etc.) and 'intervention' (e.g., 'GLP-1', 'glucagon-like peptide-1' etc.). Covidence was used as part of a two-stage screening process: (1) title and abstract and (2) full text. AMSTAR 2 was used as a quality assessment tool, conducted independently by three reviewers, with disagreements resolved through discussion. A total of 1267 articles were identified, with $n = 50$ sought for full text retrieval and 25 reviews included in the final umbrella review. Data extraction is currently underway.

Disclosures: None.

P68 Removed (Encore Presentation)

P69 Removed (Encore Presentation)

P70 Removed (Encore Presentation)

P71 Why Turkey? A qualitative thematic study exploring the perspectives and experiences of adult patients with obesity from the UK who chose to have weight loss surgery in Türkiye

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Obesity is considered the disease of the twenty-first century. the prevalence of obesity has tripled since 1975. It is estimated that nearly 880 million adults are living with obesity. Treatment options for obesity include dietary and lifestyle changes, among others, and weight loss surgery, also known as bariatric surgery. Globally, the rate of bariatric surgery is increasing rapidly; the number of bariatric surgeries has more than doubled every ten years. In the UK, a 35% increase in bariatric surgeries in 2018 compared to 2010. Turkey reported an increase from 6347 to 33,589 surgeries in a four-year period; this may reflect Turkey's status as a hotspot for weight loss surgery. The aim of the study is to explore the perspective and experiences of why UK adult patients with obesity choose to have weight loss surgery in Turkey. A qualitative thematic analysis was carried out using semi-structured online interviews with patients who had undergone bariatric surgery in Turkey. Purposive sampling was used to recruit patients who had bariatric surgery from online platforms; six female participants consented to take part. Thematic analysis was selected for this study; the Six-Phase thematic analysis approach was used to assess the concealed content of the data collected. Ethical approval for the structured interview was obtained from the London Metropolitan University School of Human Sciences. Four main themes and twelve subthemes were generated from the coded data. Theme 1 - Motivators for Bariatric Surgery: Health, Mental Health, Last Resort. Theme 2- Why Turkey: Cost, NHS Not Accessible, Convenience/Accessibility. Theme 3 - Patient Outcomes: Positive, Negative, Follow Up; and Theme 4 - NHS Service Perspective: Clinicians: Bariatric Surgery Opportunity: Surgery Follow up post Turkey. The study achieved the aim of this study by conducting a thematic analysis of the participants' experiences and perceptions. The growing trend of weight loss surgery tourism among UK patients presents complex immediate and long-term healthcare implications for both the individuals and the NHS. This study highlights the need for further development of comprehensive resources and guidelines to address the challenges and improve patient care.

Disclosures: None.

P72 Removed (Withdrawn)

P73 "My mouth hurts": families welcome dental team-led oral health support alongside complications from excess weight (CEW) clinics

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Complications from Excess Weight (CEW) teams have observed many children and young people (CYP) are at risk of dental decay and gum disease, and live with neurodiversity. This unique CEW-dental collaboration provides patients with specialist oral health (OH) advice as an extension of their weight management appointment, and facilitates access to dental care via a bespoke commissioning pathway. Families receive tailored OH advice from the dental team immediately after their CEW appointment and are invited to complete a questionnaire to explore CYP's oral hygiene and dietary practices, access to dental care, and dental problems. A dental student outreach programme runs concurrently, supporting these sessions. Students learn about the interplay of oral and systemic disease. Oral health resources are provided to families, including a variety of toothbrushes and toothpastes, to accommodate sensory needs. Sixty-eight questionnaires were completed (January–December 2024; October 2025–May 2026). Two CYP (2.9%) had never visited a dentist, three did not have a dentist (4.4%) and two (2.9%) only visited when they had a problem. Twenty-three (33.8%) reported past and/or present dental problems, including pain. Only 35 CYP (51.5%) reported brushing teeth twice daily or more and 9 CYP (13.2%) never brushing or brushing less than once a week. As part of the first evaluation, twenty-two families (67%) reported what they had learned, including upskilling brushing technique and awareness of sugar content in food/drinks and impact on OH. As part of the second evaluation, families rated the OH session on helpfulness. Twenty-two families (88%) felt the OH session was very helpful/helpful. The remaining three respondents (12%) felt it was neither helpful/unhelpful. Five CYP without a dentist, experiencing dental problems, accepted referral to appropriate dental services (October 2025-May 2026). Findings suggest CYP attending CEW, despite their known high risk of dental disease, are inconsistently able to access the resources and dental treatment they need, and families value the support from the OH team. This inter-professional collaboration aligns with the NHS 10 Year Plan of Prevention, by facilitating early access to education and dental care, delivering prevention and supporting CYP with both their weight and OH at a single contact.

Disclosures: None.

P74 Patient perspectives on behavioural support for obesity prescribing: pilot service evaluation

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Behavioural Support for Obesity Prescribing (BSOP) was introduced in 2025 as part of the Tirzepatide pathway for obesity management. NHS England commissioned Thrive Tribe to deliver BSOP, building on its existing role as a provider of the NHS National Diabetes Prevention Programme (NDPP), an evidence-based lifestyle and behaviour change service with strengths in peer support and person-centred care. However, after eight months of delivery it was important to explore whether BSOP was fully reflecting this patient group's perspectives and needs, recognising that it had been adapted from a service originally designed for a different demographic. A pilot Patient Advisory Forum was convened to explore participant experience, assess whether the programme was meeting their needs, identify areas for improvement, and inform future service design. A 2-h pilot evaluation was conducted with seven active BSOP participants at various stages of Tirzepatide treatment. The group involved three men and four women from South Asian, Black African Caribbean, White British, and other White backgrounds. Participant-led discussion was guided by open-ended questions about the programme's strengths and limitations. The session was transcribed verbatim and reviewed using rapid thematic analysis to identify key themes. Six themes were identified: wraparound support and shared experience; food and emotional wellbeing; identity and the wider impact of weight loss; transition and ongoing support; person-centred care; and community and lived experience. Participants consistently described practitioner support, reassurance, and connection with others as key strengths. Feedback was positive, particularly regarding the supportive environment created through shared experience. However, the post-programme phase emerged as a concern, with participants describing completion as a vulnerable period and highlighting the need for clearer onward support and continuity of care. Participants viewed BSOP as a valuable addition to Tirzepatide treatment, although the findings suggest further adaptation and evaluation are needed to ensure the programme remains personalised and sustainable. The forum demonstrated the importance of continued patient involvement and engagement in programme development, and strengthening transition planning at programme completion. Continuous collaboration with NHS England, public health providers, and third sector organisations, will support future delivery and help contribute to a more person-centred model of obesity care.

Disclosures: All authors were employed by Thrive Tribe during the conduct of this research. The organisation provided support for the work, including salary support and potential reimbursement for symposium attendance. The organisation may have an interest in the dissemination of the findings. Thrive Tribe had involvement in the conduct of the work and supported the decision to submit the abstract for presentation.

P75 The evolution of 'the weigh ahead' NHS tier 3 specialist weight management service

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In 2018, 'The Weigh Ahead' was awarded ASO best practice, in recognition for the redevelopment of the service to focus on behaviour change and include compassion-focussed interventions across the MDT, which studies have shown significantly improves patient self-criticism and emotional eating. The impact of this was an increase in patient engagement (reduction in dropouts), in addition to improved patient mental wellbeing, illustrated by combined PHQ-9 and GAD-7. The service has undergone notable changes since, including a move from 100% face-to-face to 95% remote delivery, in response to Covid-19, and more recently the development of group pathway delivery and the inclusion of pharmacotherapy. Small group 'classes' held remotely over Teams of up to 6 patients across a 6-month pathway, have allowed for improved efficiencies, enabling greater access, reducing waiting time and includes greater peer support all whilst navigating the cost considerations and value for money of a NHS funded service. This year has seen the addition of Specialist Nurse Prescribers within the MDT, delivering an intensive level of support remotely prescribing Tirzepatide to eligible patients, alongside the standard programme. This pathway will be further developed, as patients progress with outcomes, and more is learnt regarding the support required during down-titration and handover to primary care. The service continues to listen to patient feedback to drive improvement, resulting in the establishment of regular 'drop-in' group support sessions and the ongoing development of additional webinars on topics to include PCOS, cardiovascular health, autoimmune conditions, chronic pain and low mobility, navigating weight plateaus and emotional eating; all within the context of weight management. Early patient outcomes of group delivery are comparable with the previous pathway, showing continued improvement in combined PHQ-9 and GAD-7, in addition to similar levels of patients improving activity and fruit and vegetable intake scores. 'The Weigh Ahead' continues to demonstrate how innovation in delivery models and multidisciplinary care can enhance both patient outcomes and service efficiency. Despite significant transformation, outcomes remain consistent, while access and engagement have improved. Continued evaluation of newer elements, particularly pharmacotherapy pathways, will be key in shaping future provision and long-term patient support.

Disclosures: None.

P76 From evidence to implementation: system levers to transform food provision in Wales

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Population diet and healthy weight are strongly shaped by food environments rather than individual behaviour alone. System-level interventions have significant potential to improve population health and reduce health inequalities. In Wales, there has been an identified need for a coherent, evidence-informed framework to support coordinated action across policy, public services, and communities to improve healthier food provision. A Welsh systems-based framework was developed drawing on existing evidence and stakeholder engagement. A targeted workshop (March 2026) was convened with senior public health professionals and Welsh Government representatives to review and adapt findings from the Obesity Action Scotland (2023) evidence review. A structured approach identified and contextualised key system-level levers, alongside assessing feasibility, implementation considerations, and opportunities for national–local alignment within the Welsh policy landscape. Based on evidence of the most effective approaches to improve food environments, dietary norms, and reduce inequalities, key system-level levers for healthier food provision were identified and adapted for Wales. However, it is recognised that implementation is influenced by governance complexity, variation in local capacity, and differing levels of control between Welsh and UK policy contexts (e.g. digital advertising). In addition, cross-cutting findings highlighted the importance of national-local policy alignment; data and monitoring systems; workforce capacity and technical expertise; & equity-focused, place-based approaches. Consequently a 3 tier delivery model was proposed. This presentation will outline the 6 priority system levers identified and our framework for delivery. In conclusion, strengthening healthier food provision in Wales

requires coordinated, system-wide action across multiple sectors and levels of governance. This work proposes a practical, evidence-informed framework that integrates national policy levers with local delivery mechanisms. Key priorities include embedding health across planning and procurement systems, strengthening data infrastructure, and ensuring equity-led implementation. Work is ongoing to refine the framework through wider stakeholder engagement and identify priority actions for implementation.

Disclosures: None.

P77 Representativeness of children living with obesity in major UK child health and longitudinal databases: a rapid evidence review and data equity assessment

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Population-level datasets of children's body dimensions underpin surveillance of obesity and inform public health policy. However, from a human factors and ergonomics perspective, these data also shape the design of environments, products, and services intended for children. In correct representation within this datasets risks weakening the validity and equity of health evidence and drives design standards that ignore body diversity, producing environments, products, and systems with poor fit, usability, and safety, thereby compounding exclusion and widening health inequalities. To evaluate the extent to which major UK child health and longitudinal datasets represent children living with obesity, and to identify patterns of demographic under-representation, with consideration of implications for inclusive and equitable design. A rapid review was conducted of publicly available documentation and methodological reports for key UK child health datasets and cohorts. Data were extracted on inclusion criteria, anthropometric measures, reported obesity prevalence, and sample demographics. Where possible, prevalence estimates were compared with National Child Measurement Programme rates for corresponding age groups and periods. Representativeness was assessed across deprivation, ethnicity, region, and other key characteristics, alongside the breadth of anthropometric data relevant to ergonomic application. Preliminary synthesis indicates widespread under-representation of children living with obesity across several major datasets. Reported prevalence is often substantially lower than NCMP surveillance, suggesting systematic sampling and retention biases. Most datasets rely solely on height and weight, with limited collection of detailed anthropometry (e.g., body circumferences, skinfolds), constraining both health interpretation and design applicability. Under-representation is particularly evident across deprived and ethnically diverse populations. Current UK child health datasets do not adequately capture the diversity of children living with obesity. These gaps extend beyond epidemiology: they risk embedding bias into the evidence base that informs design, resulting in products, environments, and interventions that do not fit or serve all children. This misalignment may exacerbate health inequalities by marginalising already under-represented groups. More inclusive, representative, and ergonomically relevant data are essential for both equitable health research and design practice.

Disclosures: None.

P78 Healthy weight coaching: person-centred behaviour change conversations

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In 2020, the UK Government introduced a new role in primary care, the 'Healthy Weight Coach' (HWC). The HWC would undertake additional training to support adults living with obesity to make "positive health behaviour changes". As only 20% of communication guidance on health behaviours is evidence based, very little is known about effective behaviour change conversations. Communication is central to this new role, when 'behaviour change' is talked about, negotiated, and agreed. To understand how effective and preferred communication practices are negotiated and agreed upon in coaching conversations. Fifty-seven face-to-face conversations between WHC and clients were recorded. We used conversation analysis to analyse the sequential co-construction of behaviour change. A survey to explore the experience of attending HWC consultations ($n = 72$) and interviews ($n = 22$) to explore communication practices that they perceived positively were also conducted. We triangulated findings from conversation analysis, the interviews and the survey. Drawing together learning from all three approaches, effective communication practices from the perspective of people attending HWC consultations were identified. Conversation analysis identified three conversational phases with different HWC obligations: (1) The HWC's role is to facilitate the conversation, (2) the HWC and the client collaborate to explore options, and (3) the HWC is instrumental to 'locking in' the agreed behaviour change. The thematic analysis shows that this 'gradually constructed' and collaborative approach to behaviour change conversations was well received by clients. Implementation of ideas of 'person-centredness' as a philosophy of practice continues to be a practical challenge. Our study demonstrates how HWCs can support behaviour change conversations. We find three phases that enact collaboration, result in agreed behaviour changes, and are well received by clients. These findings are relevant to ongoing discussions of person-centred care by identifying practical solutions to delivering person-centred care in a healthcare context.

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