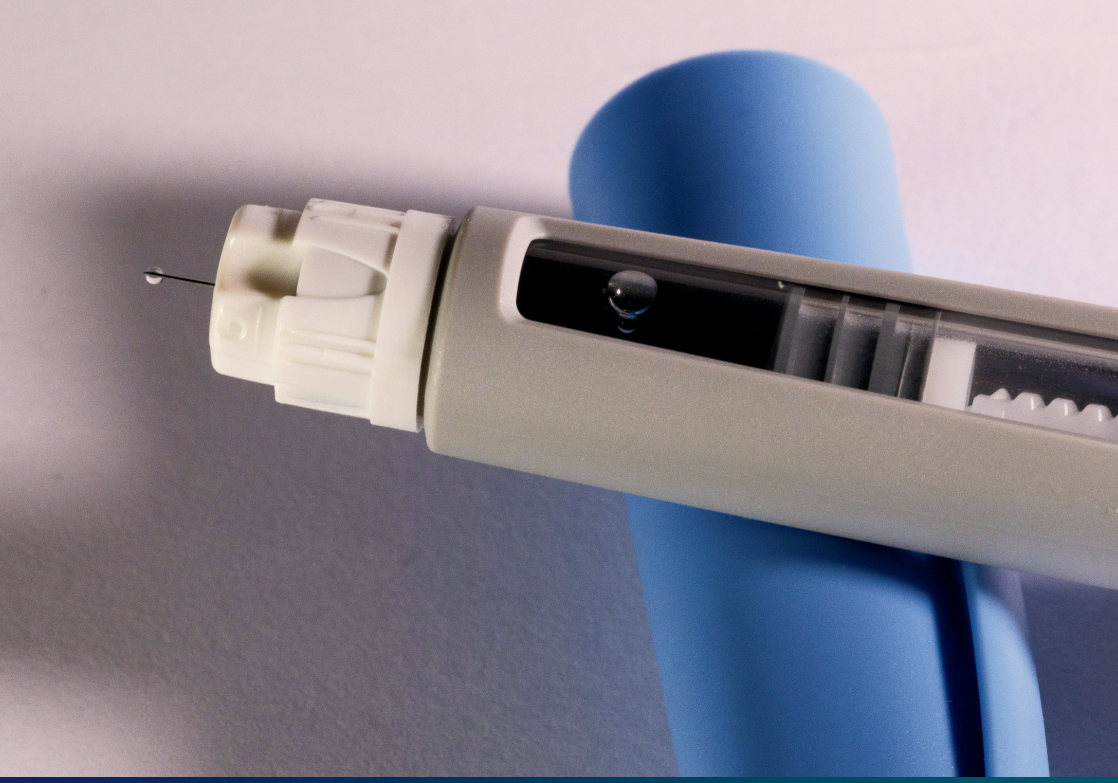

REDUCTION (F)OR REPRODUCTION – THE SAFETY AND EFFICACY OF NEW WEIGHT LOSS APPROACHES IN RELATION TO REPRODUCTIVE HEALTH

WORKSHOP PROGRAMME

21 - 22 MAY 2026

UNIVERSITY OF SURREY

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Project Leads:

Dr Kathryn Hart, University of Surrey

Professor Jill Shawe, University of Plymouth, UK

Professor Roland Devlieger, KU Leuven, Belgium

Administrative support:

Katie Nicol, University of Surrey

Louise Jones, Institute of Advanced Studies, University of Surrey

INTRODUCTION

Obesity is a significant risk factor for male and female infertility and, even if conception is achieved, pregnancies complicated by obesity pose a major risk for mothers and infants and are associated with a range of complications and adverse events. Therefore, prospective parents are encouraged to achieve a healthy weight prior to conception but achieving and maintaining this in practice is extremely difficult due to environmental, lifestyle, health and economic factors. We live in an 'obesogenic' environment with ready access to cheap, energy dense foods and with a lack of access to active transport options or safe, affordable leisure time activity.

Whilst a healthy diet and increased activity have been the mainstay of weight management for decades, more recent surgical and pharmaceutical advancements have offered people living with obesity alternative approaches to support weight loss with proven efficacy and rapid results. Bariatric (obesity) surgery (e.g. gastric bypass or bands) and weight loss drugs (oral tablets or injectable GLP-1 Receptor Agonists such as Ozempic) are an attractive option for those of reproductive age wishing to increase their natural fertility and/or ensure their eligibility for assisted reproduction. However, whilst they undoubtedly 'work' these drugs and techniques have not been developed with reproductive health in mind; there are significant safety concerns and a lack of data for longer term outcomes in people where medication/surgery and pregnancy overlap.

This workshop builds on the success of a previous event, focused on developing clinical guidelines for pregnancies after bariatric surgery, to recognise the evolving field of pharmaceutical weight loss.

By bringing together a group of experienced multidisciplinary professionals from the UK and Europe, along with input from those with lived experience of infertility, weight management and weight loss, the workshop aims to share the findings of the scoping review conducted and any new data that has been published since, discuss the gaps in knowledge and evidence identified, map out the research needs and priorities and identify appropriate funders and develop a dissemination and funding strategy to help build the evidence base.

PROGRAMME

THURSDAY 21 MAY
LECTURE THEATRE B

(BST)

12.45 – 13.00	Coffee, Light Lunch & Registration
13.00 – 13.45	**Welcome, Introductions & Aims** Kath Hart & Jill Shawe
13.45 – 14.30	**Clinical Guidelines** - "Incretin-Based Medications in Women and Reproduction: A Systematic Scoping Review and Consensus Guidelines for Clinical Practice" *Update on review paper and discussion of next steps* Kate Maslin
14.30 – 15.45	**Research** - New Developments in Incretins and Reproductive Health *Short presentations of relevant papers published since search end and of ongoing projects known to team.* **New Research** - "The Search so far and Papers Published Outside of the Search Dates" Sinead Blowers & Jill Shawe **New Research** - "**PRE**conception Weight Management **P**rogramme to **A**chieve Weight **R**eduction and **E**nhance Fertility (PREPARE)" Pauline Dunne **New Research** -"**HE**alth and **R**eproduction Obesity Medic**A**tion (HERA) Study: A Mixed-Method Exploration of Weight Loss Medication and Women's Reproductive Health" Katie Edwards
15.45 – 16.00	Refreshment Break

16.00 – 17.00	**Research** - Remaining Gaps/Unanswered Questions
17.00 – 17.15	**Wrap up** of Day Kath Hart & Jill Shawe
Evening	Workshop Dinner - Guildford Town Centre

FRIDAY 22 MAY

08.30 – 08.45	Coffee, Tea, Juice, Pastries, Fruit
08.45 – 09.45	**Clinical Guidelines** - Further Development and Dissemination *Production of an Infographic*
09.45 – 10.45	**Research** - Next Steps for Research – Funding Opportunities, Bid Development *Group discussion plus small working groups* Jill Shawe
10.45 – 11.00	Break
11.00 – 13.00	**Research/Dissemination** - *Small working groups to develop more focused outputs for sub-topics of interest and to discuss research needs & bids - combining new research with review findings, for example:* *- Postpartum/Breastfeeding* *- Congenital abnormalities* *- Healthcare professional needs* *- Fertility treatment seekers*
13.00 – 13.30	**Dissemination** - Plans & Actions *Group discussion of opportunities, allocation of working groups to lead on different outputs*
13.30 – 13.45	Wrap up/Actions
13.45	Workshop Close

SPEAKER & ORGANISER BIOGRAPHIES

DR KATHRYN HART

Dr Kathryn Hart is an Associate Professor in Nutrition & Dietetics at the University of Surrey, a Registered Dietitian and a Fellow of the University's Institutes of People-Centred AI and Sustainability. She completed her PhD at the University in 2004, with a cross-disciplinary project bringing together psychology and dietetics to understand the levers of behaviour change in families with school-age children, and since then has developed a broad multidisciplinary research portfolio focusing on optimising the diet of under-researched clinical populations in the UK and overseas, optimal nutrition in early life and characterising and managing micronutrient deficiencies. Kath is currently part of the BDA working group developing and delivering dietetic breastfeeding training and has recently updated the pre-pregnancy chapter of the Manual of Dietetic Practice. She has supervised 15 PhD students to successful completion, including many international dietitians, and over 150 undergraduate and masters research students.

PROFESSOR JILL SHAWE

Jill Shawe is Professor of Maternal and Family Health at the University of Plymouth UK and holds honorary appointments as Guest Professor at KU Leuven Belgium and Director of Nursing/Midwifery at Royal Cornwall Hospitals NHS Trust UK. Jill has extensive experience of working in the field of reproductive healthcare, public health and senior management as a clinical academic nurse/midwife. Her programme of research (PREPARE) specialises in improving the health of people with medical conditions and

their partners before and between pregnancies. Jill has been instrumental in forming the international research collaboration to promote care and guidance in relation to weight management and reproductive health.

PROFESSOR ROLAND DEVLIEGER

Roland Devlieger holds an academic position at the KU Leuven as full professor and is the former head of the division of maternal-fetal medicine within the department of Obstetrics and Gynecology. His research interest is mainly clinical and translational and focuses on lifestyle, prematurity, obesity, reproduction after bariatric surgery and fetal medicine. He is Senior Clinical Researcher for the Flemish research fund, FWO Flanders, Belgium and member of the board of directors of the VVOG. He is founder and PI of the REALIFE research group within the KULeuven Department of Growth and Regeneration. He is the PI of the "AURORA" project, a multicenter prospective cohort on reproductive outcomes after bariatric surgery andproject coordinator of INTER-ACT, an innovative FWO funded lifestyle-RCT on postpartum women. He is associate editor for several journals in the field. His H-index is 52 (Web of science) from over 350 peer reviewed publications.

DR KATE MASLIN

Kate Maslin PhD RD is a Senior Research Fellow in Maternal and Child Health and lead for the Reproductive Health research group at the School of Nursing and Midwifery at the University of Plymouth. She is an honorary visiting lecturer at the REALIFE (Reproduction and lifestyle for healthier families) research group in KU Leuven, Belgium. Her research primarily focuses on nutrition during preconception and pregnancy in women with medical conditions. She leads an NIHR-funded grant investigating the use of injectable weight loss medications and women's reproductive health. She is chair for the UK Preconception Partnership early and mid-career network and a founding committee member of the British Dietetic Association Women's Health

and fertility nutrition group. She was the topic expert for the UK NICE guideline committee on Maternal and Child Nutrition (2021-2025). She has previously worked as an MSc programme lead/lecturer in dietetics and clinical dietitian for several years.

SINEAD BLOWERS

Sinead Blowers holds an MA in Information Studies and Librarianship and a BA (Hons) in Sociological Studies and Psychology. With over 20 years' experience across public, academic, and health libraries, she currently works within NHS library services while pursuing CILIP Chartership and JBI Systematic Review training. Sinead leads marketing for Cornwall Health Library and contributes to NHS wellbeing initiatives, EDI work with the University of Plymouth & Royal Cornwall NHS Hospital Trusts and communities, and decolonisation efforts in library practice. Her work includes teaching research skills to University of Plymouth nursing and midwifery students and Cornwall NHS nursing and midwifery staff. Her research interests include health literacy/numeracy, neurodiversity in healthcare education, AI in research, dementia care, and innovative approaches to nursing and midwifery teaching and research.

PAULINE DUNNE

Pauline Dunne RD PhD is a registered dietitian and postdoctoral researcher at RCSI University of Medicine and Health Sciences. Her work focuses on chronic disease prevention, women's metabolic health, and the use of nutrition science alongside artificial intelligence. She takes a life-course approach to improving health after pregnancy complications such as gestational diabetes. Pauline's current research explores the links between obesity and infertility, aiming to identify metabolic mechanisms and interventions that can improve reproductive outcomes.She is chair for the UK Preconception Partnership early and mid-career network and a founding committee member of the British Dietetic

Association Women's Health and fertility nutrition group. She was the topic expert for the UK NICE guideline committee on Maternal and Child Nutrition (2021-2025). She has previously worked as an MSc programme lead/lecturer in dietetics and clinical dietitian for several years.

DR KATIE EDWARDS

Dr Katie Edwards is a Research Fellow in Women's Health in the School of Nursing and Midwifery at the University of Plymouth. Her PhD investigated the use of mHealth to support weight management among women with history of gestational diabetes and her postdoctoral research and publications have focused on the promotion of active lives for older care home residents. She is currently working on the HERA study, investigating the use of weight loss medications in women of reproductive age.

ABSTRACTS

Incretin-Based Medications in Women and Reproduction: A Systematic Scoping Review and Consensus Guidelines for Clinical Practice

Kate Maslin

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 lifecourse 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 1-4267. 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.

The Search so far and Papers Published Outside of the Search Dates

Sinead Blowers & Jill Shawe

This project brought together a multidisciplinary team across NHS, academic, and international healthcare settings to explore the evidence base surrounding incretin use in reproductive and developmental health. Sinead Blowers co-led the design and delivery of a comprehensive, iterative search strategy, developing and combining complex search terms across fertility, preconception, pregnancy, fetal and child development, and parental health, incorporating pharmacological, genetic, and brand-specific terminology with the vital help of the research group members across all of their specialist backgrounds. Her role in the project was to advise on inclusion and exclusion and on different strategies to take when searching and critically assessing the information found. Over 7,000 records were identified for screening which were deduplicated and systematically screened using predefined inclusion and exclusion criteria before handing to the individual subject groups in the research team. Sinead coordinated the organisation, categorisation, and blind screening of evidence across thematic groups and conducted extensive grey literature searches to capture emerging and non-traditional sources.

Together with their frontline team from NHS Cornwall Health Library, in the later stages, Sinead also facilitated full-text access and dissemination of evidence to participants worldwide in preparation for the research symposium and supported real-time evidence tracking during the event itself as well as advice for inclusion and exclusion criteria and took part in discussions on the quality of papers/research to be included.

During the research days in Leuven, Sinead introduced papers that were found after the search took place and found by the research group members (between end of July 2025 and November 2025). They were considered and discussed, and it was decided that a later search would include these papers. Sinead is currently undertaking updated searches to ensure emerging evidence continues to inform future research in this rapidly evolving field. The results of a database search will be shared at this workshop with a further ‘grey literature’ search to be undertaken shortly afterwards.

PREconception Weight Management Programme to Achieve Weight Reduction and Enhance Fertility (PREPARE)

Pauline Dunne

The rate of obesity among women of reproductive potential in Ireland has doubled in recent decades, severely impacting fertility and leading to increased rates of adverse pregnancy outcomes. Access to fertility treatments remains limited for women living with obesity and although international guidelines advocate for the treatment of the disease of obesity before conception, effective obesity management interventions are lacking. Therefore this study aims to evaluate the feasibility and acceptability of a digital obesity management programme that integrates pharmacotherapy and behavioural change in women living with obesity, who are not eligible for publicly funded assisted reproductive technology.
This open-label feasibility RCT will recruit 60 women with obesity (BMI 30–40 kg/m2) and infertility from public fertility clinics and primary care networks in Ireland. Participants will be randomly assigned to a digital intervention group, +/- receiving Tirzepatide alongside structured behavioural change support.
Primary outcome is feasibility (recruitment, retention, intervention adherence, acceptability, determination of sample size for definitive trial). Secondary outcomes include anthropometric, reproductive, metabolic, behaviour change, mental health, quality of life and access to fertility services. Women with lived experience of obesity and infertility (n=3) have shaped the research question, study design, and outcome measures.

This study will provide evidence to inform a decision to progress to a definitive RCT to assess how such an intervention can improve reproductive health and address gaps in obesity management prior to conception, with the potential to enhance fertility and reduce adverse pregnancy outcomes, addressing a critical unmet need in female health.

HEalth and Reproduction Obesity MedicAtion (HERA) Study: A Mixed-Method Exploration of Weight Loss Medication and Women's Reproductive Health

Katie Edwards

Obesity in pregnancy is associated with many adverse outcomes for mothers and infants. Glucagon-like peptide-1 receptor agonists (GLP-1RA) medications could help women reduce weight pre-pregnancy to improve outcomes. They are potentially unsafe to be used during pregnancy, so should only be used with contraception. GLP-1RAs are in high demand. They are prescribed by some NHS

specialist clinics, or may be purchased online via private prescription, or from unregulated websites. Their effect on women's reproductive outcomes is unclear. This study aims to understand and determine the needs, experiences, knowledge, and acceptability of GLP-1RAs in women aged 18-45 and health care professionals (HCPs) caring for them.

The study will use semi-structured interviews with women recruited from three geographically disparate NHS sites who have used, considered using or are using GLP-1Ras (n=30) and with women (n=10) who have obtained GLP-1RAs online, recruited through paid social media advertisements. In addition a cross sectional national HCP survey (n=160) and subsequent semi-structured interviews (n=20) will explore knowledge, practices, and facilitators/barriers to providing preconception/contraceptive advice in relation to GLP-1RAs in women aged 18-45 years.

Approval will be sought from the Health Research Authority and University ethics committee. A public and patient involvement (PPI) panel will be involved throughout to ensure ethical principles, diversity and sensitivity are embedded. This research will generate novel data on GLP1-RAs and women's health, against a rapidly changing clinical landscape, informing the feasibility of a definitive trial of use of GLP-1RAs in preconception reduction of obesity. Dissemination will be coordinated with the PPI panel.

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