Research title:
Methodological progression of Social Return On Investment (SROI) applied to orthognathic surgery.

Rationale:
The aim of the research is to understand more fully the wider social changes associated with Orthognathic Surgery (OS) that have been identified in previous research undertaken by the applicants.[1] Further research will help verify the results, increase the conceptual sensitivity of the patient outcomes model, and provide the basis for developing a patient outcomes questionnaire.

Research objectives:
1. Conduct a grounded theory-SROI methodology
2. Refine a theory of change concerning patient outcomes
3. Investigate contextual factors;
4. Investigate the perceived benefits and drawbacks of surgery;
5. Develop and pilot test a patient survey.

Research questions:
1. What are the short, medium and long term outcomes of OS perceived by patients?
2. What is the nature of factors that are perceived to facilitate or prevent successful outcomes of OS?
3. What are the overall opinions of postoperative OS patients?
4. What are the perceived benefits and costs of undergoing OS?
5. What is the estimated value of OS to postoperative OS patients?

Research design:
A mixed methods research design will be adopted involving a qualitative and quantitative component. The qualitative component is focused on eliciting feedback from postoperative patients (target n = 12 to 15) from each site) and professionals (n = 2 to 3 from each site) involved in providing orthognathic treatment concerning their experiences, outcomes, and perceptions of the surgical staff. Led by staff from the University of Gloucestershire, storyboard workshops at each of the locations will allow participants to discuss in-depth their experiences and perceptions.

The research locations are:
1. Gloucestershire Hospitals NHS Foundation Trust
2. John Radcliffe Hospital, Oxford
3. Royal Gwent Hospital, Newport
4. Royal United Hospital, Bath

A grounded theory-Social Return On Investment (SROI) methodology will be applied to explore the qualitative data via a constant comparative process in which transcript data will be coded into a series of initial themes in order to unpack the data before increasingly advanced selective and theoretical coding are used to develop an integrated outcomes model.

The quantitative element will focus on developing a patient survey using data obtained in the qualitative element. The survey will be administered to patients to quantitatively assess changes experienced by postoperative patients over time to help understand and value the impact of surgery. Data analysis will conform with the requirements of the SROI methodology.

[1] https://doi.org/10.1016/j.bjoms.2018.12.011

Inclusion criteria:

1. Postoperative patients who have been orthodontically debonded following surgery during the period May 2016 to May 2018.
2. Professionals involved in providing orthognathic treatment

Sampling and consent

Potential participants will be identified by surgical staff at each location (PIC site). A study information sheet and informed consent form will be sent to participants by surgical staff at each location, inviting patients/professionals involved in providing orthognathic treatment to attend one of the workshops.

Participants will be asked to sign a voluntary informed consent form. The study's purpose and format will be outlined, together with the nature of consent i.e. that patients can withdraw at any point, and are free not to take part in some aspects of discussion if they do not wish to.

Ethics

Approval has been given for the research by HRA and Health and Care Research Wales (HCRW):
IRAS project ID:241524; REC reference: 18/SC/0327. Sponsor: University of Gloucestershire.

CI: Dr Colin Baker (cmbaker@glos.ac.uk).

Timeline: 2019-2020:

Activities		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
A. Project management and implementation														
A1	Project planning & management													
A2	Scoping / Logic Model													
B. Data collection and analysis														
B1	Data collection workshops & ToC													
B2	Qualitative data analysis													
B3	Survey design & administration													
B4	Quantitative analysis & modelling													
C. Data collation and reporting														
C1	Report writing													