

Impact of a change to remuneration on the technical efficiency of dental practices: evaluation of the pilots of a new NHS Dental Contract in Northern Ireland

Submission date 15/06/2015	Recruitment status No longer recruiting	☐ Prospectively registered ☒ Protocol
Registration date 18/01/2016	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 20/10/2022	Condition category Oral Health	☐ Individual participant data

Plain English summary of protocol

Background and study aims

The clinical activity of many high-street dentists appears to be influenced by how they are paid. If dentists are paid for each item of treatment that they provide for patients (known as fee-for-service or FFS) e.g. fillings or dentures, there is a tendency to over-treat and do more fillings and dentures. However, if dentists are paid a set amount of money per month for each patient (known as capitation), there is a tendency to under-treat or see patients less frequently. This problem of dentists responding to the incentives within a payment system is evident in the National Health Service (NHS) across the United Kingdom. In Northern Ireland, high-street dentists working in the NHS have traditionally been paid on a FFS basis, but in 2015 the Government decided to undertake a large study that paid dentists on a capitation basis. The studies will run for a year and then change back to a FFS system of payment. This presents a unique opportunity to undertake a rigorous evaluation and provide evidence on the impact of changing payment systems in NHS dentistry. The aim of this study is to evaluate the impact of a change in payment systems on the productivity of the dental team, the quality of the care provided and the patients' experience.

Who can participate?

NHS dental practices in Northern Ireland.

What does the study involve?

The research team measure changes in clinical activity as dental practices move from being paid for what they do (FFS), to a capitation system and then back again to FFS. Participating practices and a group of practices that are not taking part are compared. In addition, the research team interviews patients and distributes questionnaires to pilot and non-pilot practices to assess dentists' and patients' views about these changes and how they affect the quality of care delivered.

What are the possible benefits and risks of participating?

The study will help inform policy makers across Europe who are grappling with the problems involved in re-designing dental services. It will also contribute valuable information to the health and social care system more broadly. No risk of participation in the study is envisaged.

Where is the study run from?

NHS dental practices in Northern Ireland.

When is the study starting and how long is it expected to run for?

July 2015 to May 2018.

Who is funding the study?

National Institute for Health Research (UK).

Who is the main contact?

Prof. Paul Brocklehurst

Contact information

Type(s)

Public

Contact name

Prof Paul Brocklehurst

Contact details

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Additional identifiers

Protocol serial number

14/19/12

Study information

Scientific Title

Impact of a change to remuneration on the technical efficiency of dental practices: evaluation of the pilots of a new NHS Dental Contract in Northern Ireland

Study objectives

The aim of the proposed research is to evaluate the impact of a change in the system of provider remuneration on the productivity, quality of care and health outcomes of dental services.

The objectives will be to measure changes in activity and costs over the different phases of the pilots; examining productivity, the service mix of key indicator treatments, time spent by dentists delivering patient care and co-payment income. In addition, the research will assess dentists' and patients' views about the extent to which changes in remuneration affect delivery and quality of care, measure patient-reported oral health knowledge, attitudes and behaviour and patient-rated oral health outcomes and quality of care.

Ethics approval required

Old ethics approval format

Ethics approval(s)

University of Manchester University Research Ethics Committee (UREC), 10/06/2015, ref: 15236

Primary study design

Observational

Study design

Observational qualitative study

Study type(s)

Other

Health condition(s) or problem(s) studied

Provision of general dental services

Interventions

The Health and Social Care Board are piloting a new way of paying dentists based on capitation, i. e. paying for the number of patients registered, rather than paying for individual items of treatment (FFS). Two phases are planned, the first will involve a small number of pilot practices over a six month period, which will be followed by a second phase with 15 practices over a period of 12 months. Practices would then return back to a FFS payment system.

The aim of the proposed research is to evaluate the impact of a change in the way that dentists are paid in NI on the productivity of the dental team and the quality of care provided. The objectives will be to measure changes in clinical activity as dentists move from being paid for what they do (FFS), to a capitation system and then back again to FFS. In addition, the research team will use interviews and questionnaires to assess dentists' and patients' views about these changes and how they affect the quality of care received.

Intervention Type

Other

Primary outcome(s)

Changes in activity and costs over the different phases of the study in terms of :

1. Productivity as measured by the mean quantity of care delivered per provider
2. Service mix as measured by the proportions of key indicator treatments; these include: examination plus scale and polish, radiographs, fillings, root canal therapy, crown and bridgework
3. Dentists' time spent delivering patient care
4. Co-payment income

Key secondary outcome(s)

1. Dentists' and patients' views about how, why and to what extent the changes in remuneration affect the delivery and quality of care
2. Patient-reported oral health knowledge, attitudes and behaviour
3. Patient-rated oral health outcomes and quality of care

Completion date

31/05/2018

Eligibility

Key inclusion criteria

NHS dental practices

Participant type(s)

Health professional

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

Private dental practices

Date of first enrolment

18/08/2015

Date of final enrolment

17/08/2016

Locations

Countries of recruitment

United Kingdom

Study participating centre

NHS dental practices in Northern Ireland

United Kingdom

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Sponsor information

Organisation

University of Manchester (UK)

ROR

<https://ror.org/027m9bs27>

Funder(s)**Funder type**

Government

Funder Name

NIHR HS&DR (UK)

Results and Publications**Individual participant data (IPD) sharing plan**

The researchers keep all of their data at NWORDTH Trials Unit (<http://nworth-ctu.bangor.ac.uk/>) and have a series of SOPs relating to data archiving.

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/01/2020	17/12/2020	Yes	No
Protocol file			20/10/2022	No	No