Analysis of fitness to practise case data for the General Dental Council

Detailed Report

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Contents

Introduction

This document summarises the results from a series of analyses conducted to answer a set of 23 specific research questions posed by the GDC. The questions cover four broad 'themes' or over-arching questions as summarised in Table 1 to Table 4 below. The main body of the document is set out to align with these four broad 'themes' and the analyses conducted to answer the of 23 specific research questions are set out in the order shown in Table 1 to Table 4. Each analysis consists of a short description of the statistical methods used, followed by a summary of the results including tables and graphs where relevant.

Research Questions

After removing a duplicate question from the original list we classified the 23 research questions into four themes, each characterised by a broad over-arching question. The original question numbering has been retained for reference in the tables below which show the particular questions within each theme.

Theme A: What are the characteristics of registrant who have allegations made against them?

Table 1: Research Questions in Theme A

#	Question
13	Are male registrants overrepresented at all or any stages of the FtP process?
15	Are registrants in particular age brackets overrepresented at all or any stages of the FtP process?
8	Are BME registrants overrepresented at all or any individual stages of the FtP process?
23	Are there variations between the four countries or region on whether you are more likely to appear in FtP?
10a	For cases by registration type, are there any particular routes to registration that are overrepresented at all or any stages of the FtP process?
10b	And are any countries of primary qualification overrepresented at all or any stages of the FtP process?
19	Are registrants with a particular primary qualification more likely to appear at FtP? At any particular stages?
17	Is there a link between length of time on register and FtP involvement? by Registration Type and Primary Qualification?
21	Are dental specialists less likely to go through FtP?

Theme B: What is the nature of informants and what sort of allegations do they make?

Table 2: Research Questions in Theme B

#	Question
7	Is there any associations in the type of complainant (informant) and where they refer from (e.g. complaint pathway)?
6	Do particular types of allegation (consideration) come from any particular sources (patient, other organisation, employer, whistleblower)?

Theme C: How are the characteristics of registrants related to the types of allegations that are made against them?

Table 3: Research Questions in Theme C

#	Question
14	Are there any particular considerations that are associated with complaints about male registrants?
16	Is there a link between age and different types of allegation (consideration)?
9	Are there any particular considerations that are associated with complaints about BME registrants? At all or any particular stages of the process?
24	Is there a link between nation or region and different types of allegation (consideration)?
20	Is there a link between primary qualification and different types of allegation (consideration)?
12	Is there a link between length of time on register and different types of allegation (consideration)?
22	Are there certain allegations (considerations) more likely to be made about those on the specialist lists?

Theme D: How are the characteristics of registrants and the type of allegations made against them related to the progress and outcomes of FtP cases?

Table 4: Research Questions in Theme D

#	Question
1	How likely are each of the considerations types to get through: Triage, Assessment, Investigating Committee, Closure at Practice Committee?
2	Is there statistical significance in case prevalence and length of case and at each stage based on the considerations types of the allegations identified?
5	What is the relationship between type of allegation (consideration) and sanction imposed?
4	What is the relationship between type of allegation (consideration) and whether impairment is found?
11	Is there any significant association or correlation between closure type and consideration, for all resolved cases at each stage of the FtP process?

The Data Sample

Following the model of a previous set of analyses conducted for the GDC we agreed that a sample of FtP case data would be extracted from the organisation's database system to include four linked data sets:

1. FtP case information (N=8,855), including information on the registrant who was the subject of each case. This data set covered all cases that were either
   a. open on 1st September 2013, or
   b. received between 1st September 2013 and the date of data extraction
2. 'Considerations' data (N=16,461) relating to the above cases, detailing the subject matter of the allegation(s) being made against the registrants concerned
3. 'Decisions' data (N=26,648) relating to the above cases, detailing the decisions made at each of the case processing stages (as shown in **Error! Reference source not found.**)
4. Registrant data (N=120,854), giving information on <u>all</u> dentists and dental care professionals registered with the GDC who were either
   a. On the register on 1st September 2013, or
   b. Joined the register between 1st September 2013 and the date of extraction.

Some General Definitions

Types of allegation / consideration

Themes B, C and D involve analyses of the types of allegation that are made in cases. The subject matter of FtP cases is classified by the GDC using a three-tier hierarchy of what are known as 'Considerations' in the case. At the highest level, this detailed subject matter is classified into 18 'Consideration Groups' (Table 5). Nine of these groups are aligned with the nine principles which currently define the standards of conduct, performance and ethics that govern dental professionals, as set out in 'Standards for the Dental Team' (2013). The remaining nine groups are those that were used prior to 2013.

Table 5: The 18 Consideration Groups

Consideration Group
Clear and effective complaints procedure [ξ]
Communicating effectively [ξ]
Cooperating with dental team members
DCS Service Issue
Health
Illegal Practice
Laws and regulations
Maintain and protect patients' information [ξ]
Obtain valid consent [ξ]
Patient interests
Personal behaviour [ξ]
Probity
Professional knowledge and skills [ξ]
Put patients' interests first [ξ]
Raising concerns [ξ]
Respect patients' dignity and choices
Scope of practice
Working with colleagues [ξ]

[ξ] *Aligned with one of the nine principles set out in 'Standards for the Dental Team' (2013)*

At the next level the subject matter of FtP cases is classified into one or more of the 57 'Consideration Subgroups', while at the lowest level the case details are described by Consideration Particulars of which there were 290 in the data sample. The complexity of this classification system in relation to the number of FtP cases in the data set tends to make statistical analysis at the Subgroup or Particular level either difficult or impossible.

Following discussions with the GDC we created a new 'Consideration Subgroup' classification in the Considerations data. This contained 29 types of Consideration and was based on the 18 Consideration Groups in the original data set (Table 5) but with five of these groups (*Personal behaviour, Probity, Professional knowledge and skills, Putting patients' interests first*, and *Working with colleagues*) being subdivided into 16 subgroups (Table 6). Of the 29 final subgroups, 17 were identified by the GDC as being of particular interest in relation to the research questions that concerned Considerations.

Table 6: Consideration Subgroups used for analysis

#	Consideration Subgroup	Frequency in Considerations data
1	Clear and effective complaints procedure *	330
2	Communicating effectively *	1,023
3	Cooperating with dental team members	28
4	DCS Service Issue	122
5	Health	55
6	Illegal Practice	12
7	Laws and regulations	85
8	Maintain and protect patients' information *	1,327

9	Obtain valid consent *	583
10	Patient interests *	1,123
11	*Personal behaviour - Protecting patients from risks* *	422
12	*Personal behaviour - Public confidence in profession* *	1,575
13	*Personal behaviour - Other*	333
14	*Probity - Caution / charge / conviction* *	102
15	*Probity - Other*	121
16	*Professional knowledge and skills - Failure to provide good quality care* *	5,193
17	*Professional knowledge and skills - Training and competence* *	322
18	*Professional knowledge and skills - Other*	105
19	*Put patients' interests first - Advertising* *	182
20	*Put patients' interests first - Behaviour and attitude* *	1,187
21	*Put patients' interests first - Indemnity* *	149
22	*Put patients' interests first - Laws and regulations* *	749
23	*Put patients' interests first - Treatment* *	562
24	*Put patients' interests first - Other*	59
25	Raising concerns	38
26	Respect patients' dignity and choices *	208
27	Scope of practice *	37
28	*Working with colleagues - Team working* *	277
29	*Working with colleagues - Other*	152
	All	16,461

* Subgroups of particular interest

Types of sanction

Four types of 'sanction' - *IC Published Warning, Conditions, Suspension* and *Erasure* - were defined by 23 of the 85 Decision Options that can occur in a case (Table 7).

Table 7: 23 Decision Options constituting the four types of Sanction

Decision option	Sanction type
Close with published warning	IC Published Warning[ξ]
Conditions	Conditions
Conditions (with a review)	Conditions
Conditions continued	Conditions
Conditions extended (with a review)	Conditions
Conditions extended and varied (with a review)	Conditions
Conditions varied	Conditions
Conditions with immediate conditions (with a review)	Conditions
Interim Conditions	Conditions
Revoke suspension, impose conditions	Conditions
Suspension revoked and conditions imposed (with a review)	Conditions
Conditions revoked and suspension imposed	Suspension
Conditions revoked and suspension imposed (with a review)	Suspension
Interim Suspension	Suspension
Revoke conditions, impose suspension	Suspension
Suspended indefinitely	Suspension
Suspended with immediate suspension	Suspension
Suspended with immediate suspension (with a review)	Suspension
Suspension	Suspension
Suspension (with a review)	Suspension
Suspension continued	Suspension
Erased	Erasure
Erased + Immediate suspension	Erasure

[ξ] *IC = Investigating Committee*

Findings of impairment

One possible outcome of an FtP case is that the registrant's fitness to practise is impaired. A finding of 'impairment' was defined by 17 of the 85 types of Decision Option that can occur in a case (Table 8).

Table 8: Decision Options constituting a finding of impairment

Decision option
Conditions
Conditions (with a review)
Conditions extended (with a review)
Conditions extended and varied (with a review)
Conditions revoked and suspension imposed
Conditions revoked and suspension imposed (with a review)
Conditions with immediate conditions (with a review)
Erased
Erased + Immediate suspension
FTP impaired, case concluded
FTP impaired. Reprimand
Suspended indefinitely
Suspended with immediate suspension
Suspended with immediate suspension (with a review)
Suspension
Suspension (with a review)
Suspension revoked and conditions imposed (with a review)

Dental specialists

'Dental Specialist' was defined as anyone recorded as being a Dentist and registered with the GDC under one or more of the 13 specialist lists:

- Dental Maxillofacial Radiology
- Dental Public Health
- Endontics
- Oral and Maxillofacial Pathology
- Oral Medicine
- Oral Microbiology
- Oral Surgery
- Orthodontics
- Paediatric Dentistry
- Periodontics
- Prosthodontics
- Restorative Dentistry
- Special Care Dentistry

Registration Route

The 11 original categories of Registration Route used in the GDC database were collapsed into eight categories as follows:

- Dentist UK Application
- Dentist Assessment (Dentists Assessment Application, Dentist EEA & Overseas Application)
- DCP UK Application
- DCP Assessment (DCP Assessment Application, EEA DCP Assessment Application, Non-EEA DCP Assessment Application)
- Overseas Registration Examination
- Dentist Restoration
- DCP Restoration
- Missing

Theme A: What are the characteristics of registrant who have allegations made against them?

Regression model(s) to answer questions relating to over or under representation at each stage of the FtP process by Sex (#13), Age (#15), Ethnicity (#8), Registration Type (#10b), Primary Qualification (#19), Time on Register (#17), Specialist Status (#21), and Country (#23)

Methods

Give the duplication of cases in the FtP dataset (cases moving from investigation to prosecution having two records which cannot be identified or linked), we combined demographic details with FtP case data on the basis of whether each registered professional had been 'involved in one or more closed cases at Stage X', where Stage X is Triage, Assessment, Investigating Committee, or Practice Committee. This resulted in four separate outcome variables, and the questions are addressed by stage by running the regression model on each outcome. Duplicate cases added in error and cases in which the complainee is unknown, were excluded from the analyses. In addition, cases recorded as 'Practice Committee' *and* 'Investigation' *and* 'Closed' were excluded, as were cases recorded as 'Investigating Committee' *and* 'Prosecution' *and* 'Closed'.

We used logistic regression models to predict, on the basis of registrants' demographic and professional characteristics, whether or not they were involved in an FtP case closed at any one of the four stages. The registrant characteristics used were: Sex, Age, Ethnicity, Registration type, Region of primary qualification, Time since registration, Specialist registration and UK country. When fitting the models, any registrant with missing data for any of the variables in the model was excluded from the analysis.

Important Caveats

A number of groups contained only a small number of individuals. This can lead to inflated estimates of case involvement likelihood. This was a particular problem with Clinical Dental Technicians who comprised less than 0.1% of the registrant population (Table 20), though the estimates for all small groups may be inflated. However, these groups have been retained in the models in order to provide a complete picture of the dataset. This applies to all logistic regression models presented in this section (Theme A).

Results

Odd Ratios for Involvement in an FtP case closed at any Stage

Table 9: Odds ratios for involvement in an FtP case closed at any stage. Factor levels that differ significantly from the reference level are emboldened; p-values associated with the reference category reflect the overall significance of the factor.

Factor	Level	Odds Ratio	Lower 95% CL[§]	Upper 95% CL[§]	P value
Sex	Female (Reference)				**<0.001**
	Male	**1.75**	**1.53**	**2.00**	**<0.001**
Age	<30 (Reference)				**0.430**
	31-40	**1.55**	**1.33**	**1.80**	**<0.001**
	41-50	**1.54**	**1.27**	**1.87**	**<0.001**
	51-60	**1.33**	**1.03**	**1.72**	**0.028**
	>60	1.18	0.78	1.74	0.430
Ethnicity	White (Reference)				**0.010**
	Asian	**1.22**	**1.05**	**1.41**	**0.008**
	Other	**1.24**	**1.01**	**1.50**	**0.037**
Registration Route	Dentist UK Application (Reference)				**<0.001**
	Dentist Assessment	**1.76**	**1.48**	**2.09**	**<0.001**
	Dentist Restoration	**1.55**	**1.19**	**2.03**	**0.001**
	DCP UK Application	**0.20**	**0.11**	**0.36**	**<0.001**
	DCP Assessment	0.41	0.14	1.06	0.076
	DCP Restoration	**0.28**	**0.15**	**0.55**	**<0.001**
	Overseas Registration Examination	**0.47**	**0.21**	**0.91**	**0.041**
Primary Qualification	Dental (Reference)				**<0.001**
	Dental Technician	**1.92**	**1.02**	**3.43**	**0.035**
	Dental Hygienist	**2.17**	**0.98**	**4.51**	**0.047**
	Dental Nurse	0.84	0.47	1.43	0552
	Dental Therapist	1.59	0.74	3.20	0.211
	Orthodontic Therapist	0.33	0.06	1.35	0.144
	Clinical Dental Technician	**6.06**	**0.90**	**23.99**	**0.024**
Time	**Time (Years)**	**1.03**	**1.02**	**1.04**	**<0.001**
Dental Specialist	No (Reference)				**0.040**
	Yes	**0.64**	**0.41**	**0.96**	**0.040**
Country	England (Reference)				**<0.001**
	Scotland	1.05	0.86	1.27	0.636
	Wales	0.78	0.56	1.06	0.122
	Northern Ireland	0.81	0.55	1.14	0.245
	Non-UK	**0.47**	**0.36**	**0.61**	**<0.001**

[§] CL = Confidence limit

Odd Ratios for Involvement in an FtP case closed at Triage.

Table 10: Odds ratios for involvement in an FtP case closed at the Triage stage. Factor levels that differ significantly from the reference level are emboldened; p-values associated with the reference category reflect the overall significance of the factor.

Factor	Level	Odds Ratio	Lower 95% CL§	Upper 95% CL§	P value
Sex	Female (Reference)				**<0.001**
	Male	**1.79**	**1.41**	**2.27**	**<0.001**
Age	≤30 (Reference)				**<0.001**
	31-40	**1.54**	**1.17**	**2.04**	**0.002**
	41-50	**1.99**	**1.43**	**2.79**	**<0.001**
	51-60	**1.66**	**1.07**	**2.54**	**0.022**
	>60	1.31	0.65	2.50	0.437
Ethnicity	White (Reference)				0.510
	Asian	0.90	0.68	1.18	0.446
	Other	1.13	0.79	1.58	0.487
Registration Route	Dentist UK Application (Reference)				**<0.001**
	Dentist Assessment	**1.72**	**1.25**	**2.38**	**0.001**
	Dentist Restoration	**1.75**	**1.08**	**2.78**	**0.02**
	DCP UK Application	**0.17**	**0.07**	**0.49**	**<0.001**
	DCP Assessment	0.19	0.02	1.18	0.115
	DCP Restoration	**0.30**	**0.11**	**0.98**	**0.033**
	Overseas Registration Examination	1.54	0.58	3.34	0.327
Primary Qualification	Dental (Reference)				**0.001**
	Dental Technician	**2.65**	**0.88**	**6.76**	**0.06**
	Dental Hygienist	1.74	0.37	6.29	0.438
	Dental Nurse	1.03	0.36	2.39	0.948
	Dental Therapist	1.52	0.34	5.15	0.544
	Orthodontic Therapist	0.78	0.03	10.64	0.858
	Clinical Dental Technician	**10.09**	**0.50**	**65.33**	**0.043**
Time	**Time (Years)**	**1.03**	**1.00**	**1.05**	**0.023**
Dental Specialist	No (Reference)				0.247
	Yes	0.65	0.29	1.26	0.247
Country	England (Reference)				**0.006**
	Scotland	1.05	0.74	1.45	0.778
	Wales	0.69	0.36	1.18	0.212
	Northern Ireland	**0.46**	**0.18**	**0.95**	**0.06**
	Non-UK	**0.50**	**0.32**	**0.76**	**0.002**

§ CL = Confidence limit

Odd Ratios for Involvement in an FtP case closed at Assessment.

Table 11: Odds ratios for involvement in an FtP case closed at the Assessment stage. Factor levels that differ significantly from the reference level are emboldened; p-values associated with the reference category reflect the overall significance of the factor.

Factor	Level	Odds Ratio	Lower 95% CL[§]	Upper 95% CL[§]	P value
Sex	Female (Reference)				**<0.001**
	Male	**1.65**	**1.38**	**1.98**	**<0.001**
Age	<30 (Reference)				**<0.001**
	31-40	**1.72**	**1.39**	**2.13**	**<0.001**
	41-50	**1.55**	**1.16**	**2.05**	**0.003**
	51-60	**1.52**	**1.05**	**2.20**	**0.026**
	>60	1.34	0.73	2.34	0.325
Ethnicity	White (Reference)				**0.013**
	Asian	**1.33**	**1.09**	**1.62**	**0.004**
	Other	1.22	0.92	1.61	0.159
Registration Route	Dentist UK Application (Reference)				**<0.001**
	Dentist Assessment	**1.73**	**1.37**	**2.19**	**<0.001**
	Dentist Restoration	**1.57**	**1.08**	**2.24**	**0.015**
	DCP UK Application	**0.18**	**0.08**	**0.44**	**<0.001**
	DCP Assessment	0.58	0.14	2.06	0.419
	DCP Restoration	**0.27**	**0.11**	**0.71**	**0.006**
	Overseas Registration Examination	**0.21**	**0.03**	**0.66**	**0.028**
Primary Qualification	Dental (Reference)				**<0.001**
	Dental Technician	1.68	0.67	3.82	0.243
	Dental Hygienist	2.10	0.65	5.87	0.185
	Dental Nurse	0.69	0.29	1.44	0.362
	Dental Therapist	1.53	0.50	4.07	0.424
	Orthodontic Therapist	0.15	0.01	1.17	0.111
	Clinical Dental Technician	6.14	0.31	37.13	0.102
Time	**Time (Years)**	**1.02**	**1.00**	**1.04**	**0.014**
Dental Specialist	No (Reference)				0.106
	Yes	0.61	0.32	1.06	0.106
Country	England (Reference)				**<0.001**
	Scotland	1.05	0.79	1.37	0.739
	Wales	1.00	0.66	1.47	0.982
	Northern Ireland	0.78	0.44	1.27	0.356
	Non-UK	**0.39**	**0.26**	**0.56**	**<0.001**

[§] CL = Confidence limit

Odd Ratios for Involvement in an FtP case closed at Investigating Committee.

Table 12: Odds ratios for involvement in an FtP case closed at the Investigating Committee stage. Factor levels that differ significantly from the reference level are emboldened; p-values associated with the reference category reflect the overall significance of the factor.

Factor	Level	Odds Ratio	Lower 95% CL[§]	Upper 95% CL[§]	P value
Sex	Female (Reference)				**<0.001**
	Male	**1.68**	**1.29**	**2.19**	**<0.001**
Age	≤30 (Reference)				0.052
	31-40	**1.41**	**1.04**	**1.91**	**0.027**
	41-50	1.33	0.89	1.97	0.159
	51-60	1.05	0.61	1.77	0.850
	>60	0.63	0.24	1.50	0.323
Ethnicity	White (Reference)				0.810
	Asian	1.05	0.77	1.41	0.761
	Other	1.14	0.74	1.68	0.537
Registration Route	Dentist UK Application (Reference)				**<0.001**
	Dentist Assessment	**1.97**	**1.39**	**2.79**	**<0.001**
	Dentist Restoration	1.31	0.74	2.24	0.344
	DCP UK Application	0.64	0.16	2.51	0.552
	DCP Assessment	2.50	0.36	14.62	0.338
	DCP Restoration	0.44	0.08	2.16	0.335
	Overseas Registration Examination	0.31	0.02	1.45	0.254
Primary Qualification	Dental (Reference)				**<0.001**
	Dental Technician	0.51	0.12	2.15	0.380
	Dental Hygienist	1.17	0.22	5.81	0.853
	Dental Nurse	0.27	0.07	1.02	0.071
	Dental Therapist	0.26	0.03	1.59	0.181
	Orthodontic Therapist	0.08	<0.01	1.03	0.073
	Clinical Dental Technician	4.32	0.18	38.88	0.251
Time	**Time (Years)**	**1.05**	**1.02**	**1.08**	**0.001**
Dental Specialist	No (Reference)				0.180
	Yes	0.54	0.19	1.16	0.180
Country	England (Reference)				**0.016**
	Scotland	1.08	0.73	1.56	0.680
	Wales	0.46	0.18	0.96	0.065
	Northern Ireland	0.92	0.43	1.71	0.809
	Non-UK	**0.46**	**0.26**	**0.75**	**0.003**

[§] CL = Confidence limit

Odd Ratios for Involvement in an FtP case closed at Practice Committee.

Table 13: Odds ratios for involvement in an FtP case closed at the Practice Committee stage. Factor levels that differ significantly from the reference level are emboldened; p-values associated with the reference category reflect the overall significance of the factor.

Factor	Level	Odds Ratio	Lower 95% CL§	Upper 95% CL§	P value
Sex	Female (Reference)				**<0.001**
	Male	**2.76**	**1.80**	**4.29**	**<0.001**
Age	≤30 (Reference)				**0.006**
	31-40	1.47	0.91	2.39	0.118
	41-50	**2.37**	**1.39**	**4.05**	**0.002**
	51-60	**2.15**	**1.10**	**4.11**	**0.023**
	>60	**3.90**	**1.66**	**8.61**	**0.001**
Ethnicity	White (Reference)				0.340
	Asian	1.29	0.80	2.00	0.279
	Other	1.40	0.77	2.38	0.233
Registration Route	Dentist UK Application (Reference)				**<0.001**
	Dentist Assessment	**3.25**	**1.75**	**6.35**	**<0.001**
	Dentist Restoration	**4.73**	**2.09**	**10.71**	**<0.001**
	DCP UK Application	0.32	0.08	1.74	0.133
	DCP Assessment	0.00	0.00	0.00	0.981
	DCP Restoration	0.71	0.16	4.32	0.680
	Overseas Registration Examination	<0.01	<0.01	<0.01	0.988
Primary Qualification	Dental (Reference)				0.190
	Dental Technician	3.24	0.60	12.10	0.120
	Dental Hygienist	2.22	0.10	17.11	0.520
	Dental Nurse	1.77	0.35	5.72	0.413
	Dental Therapist	**6.18**	**0.93**	**27.40**	**0.033**
	Orthodontic Therapist	<0.01	<0.01	<0.01	0.986
	Clinical Dental Technician	<0.01	<0.01	<0.01	0.997
Time	Time (Years)	0.99	0.96	1.02	0.544
Dental Specialist	No (Reference)				0.131
	Yes	0.22	0.01	0.99	0.131
Country	England (Reference)				0.630
	Scotland	1.14	0.62	1.94	0.638
	Wales	1.04	0.40	2.18	0.930
	Northern Ireland	1.63	0.63	3.45	0.251
	Non-UK	0.74	0.38	1.35	0.352

§ CL = Confidence limit

Odd Ratios for Involvement in an FtP case for each Stage.

In order to assess to what extent the odds of FtP case involvement for each registrant characteristic vary across stages, the odds ratios for each category (Factor-Level) in the four tables above have been compiled in Table 14.

The impact of each factor on the odds of involvement in a case remains fairly consistent across the four stages, though at some stages the pattern may reverse. For example, relative to under-30's, those over 60 years old are more likely to be involved in FtP cases closed at all stages, except Investigating Committee where they are less likely (OR=0.65) to be involved in cases closed at that stage. This example is highlighted in green in Table 14 along with other instances of pattern reversal

Table 14: Compiled Odds Ratios for involvement in FtP cases by stage of closure

Factor	Level	Any	Triage	Assessment	Investigating Committee	Practice Committee
Sex	Female (Reference)					
	Male	1.75	1.79	1.65	1.68	2.76
Age	≤30 (Reference)					
	31-40	1.55	1.54	1.72	1.41	1.47
	41-50	1.54	1.99	1.55	1.33	2.37
	51-60	1.33	1.66	1.52	1.05	2.15
	>60	1.18	1.31	1.34	0.63	3.90
Ethnicity	White (Reference)					
	Asian	1.22	0.90	1.33	1.05	1.29
	Other	1.24	1.13	1.22	1.14	1.40
Registration Route	Dentist UK Application (Reference)					
	Dentist Assessment	1.76	1.72	1.73	1.97	3.25
	Dentist Restoration	1.55	1.75	1.57	1.31	4.73
	DCP UK Application	0.20	0.17	0.18	0.64	0.32
	DCP Assessment	0.41	0.19	0.58	2.50	0.00
	DCP Restoration	0.28	0.30	0.27	0.44	0.71
	Overseas Registration Examination	0.47	1.54	0.21	0.31	0.00
Primary Qualification	Dental (Reference)					
	Dental Technician	1.92	2.65	1.68	0.51	3.24
	Dental Hygienist	2.17	1.74	2.10	1.17	2.22
	Dental Nurse	0.84	1.03	0.69	0.27	1.77
	Dental Therapist	1.59	1.52	1.53	0.26	6.18
	Orthodontic Therapist	0.33	0.78	0.15	0.08	<0.01
	Clinical Dental Technician	6.06	10.09	6.14	4.32	<0.01
Time	Time (Years)	1.03	1.03	1.02	1.05	0.99
Dental Specialist	No (Reference)					
	Yes	0.64	0.65	0.61	0.54	0.22
Country	England (Reference)					
	Scotland	1.05	1.05	1.05	1.08	1.14
	Wales	0.78	0.69	1.00	0.46	1.04
	Northern Ireland	0.81	0.46	0.78	0.92	1.63
	Non-UK	0.47	0.50	0.39	0.46	0.74

#13 Are male registrants overrepresented at all or any stages of the FtP process?

Methods

We tabulated the registrants by involvement in an FtP case, sex and case stage at closure. This information, in percentage form is also presented graphically. This tabulation and graphical presentation is repeated in subsequent sections for each of the registrant characteristics used in the logistic regression models above.

Results

The logistic regression analyses above (Table 9 to Table 13) show that registrant sex is a statistically significant predictor of case involvement, with males being over-represented at any and all stages of the FtP process.

Table 15: Registrants by FtP case involvement, sex and case stage at closure (N=120,854).

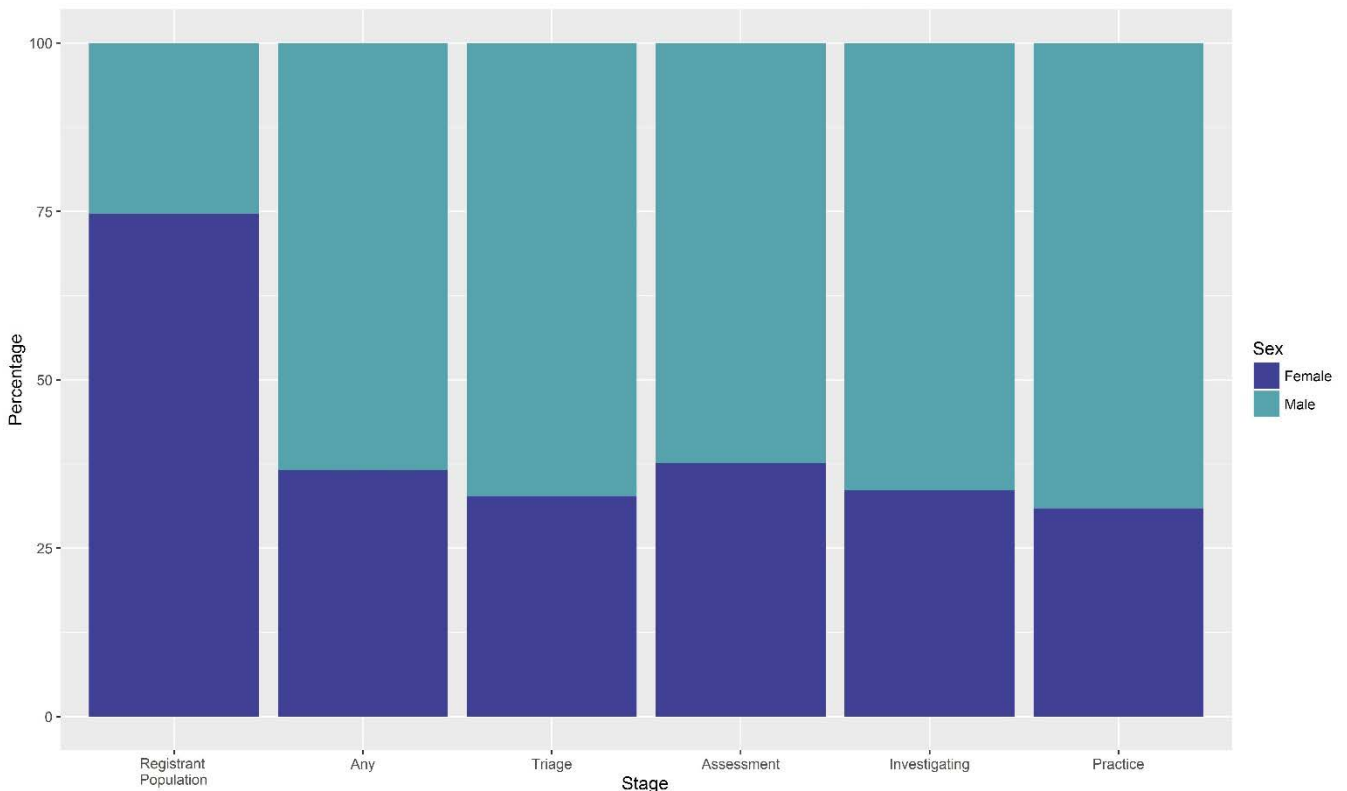|	All registrants	Registrants involved in cases closed at				
		Any Stage	Triage	Assessment	Investigating committee	Practice committee
N registrants	120,854	4,870	1,565	2,391	1,233	573
% Female	74.6	36.6	32.7	37.6	33.6	30.9
% Male	25.4	63.4	67.3	62.4	66.4	69.1

Figure 1: Distribution of sex for those involved in cases closed at each stage compared to the distribution of sex in the registrant population.

#15 Are registrants in particular age brackets overrepresented at all or any stages of the FtP process?

Methods

We tabulated the registrants by involvement in an FtP case, age and case stage at closure. This information, in percentage form is also presented graphically. Registrants whose age was unknown were also included in this analysis

Results

The logistic regression analyses above (Table 9 to Table 13) show that registrant age group is a statistically significant predictor of case involvement at all stages except Investigating Committee, with older registrants representing larger and larger proportions of the total number of cases closed at each stage of the process.

Table 16: Registrants by FtP case involvement, age and case stage at closure (N=120,854)

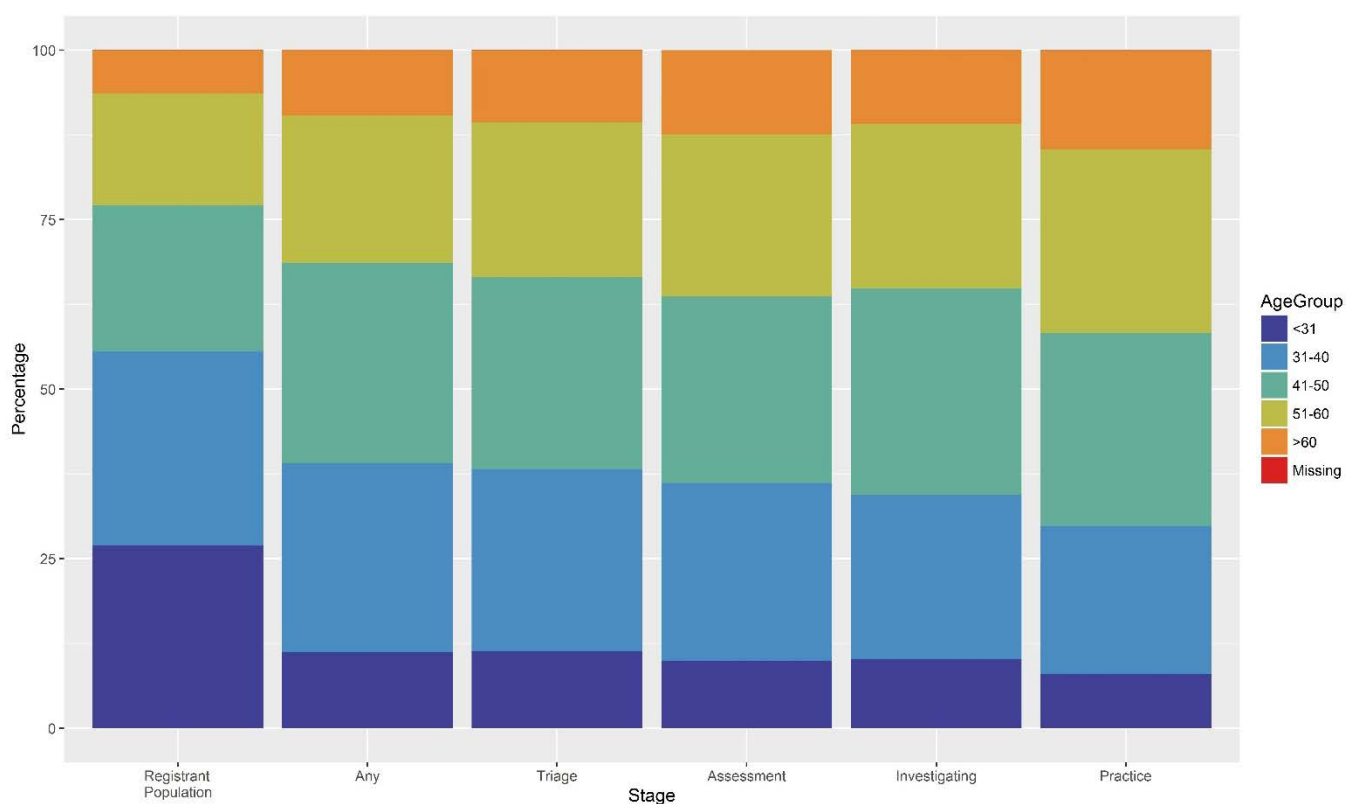| | All registrants | Registrants involved in cases closed at | | | | |
		Any Stage	Triage	Assessment	Investigating committee	Practice committee
N registrants	120,854	4,870	1,565	2,391	1,233	573
% <31	26.9	11.4	10.2	11.2	10.1	7.9
% 31-40	28.6	27.0	24.2	27.9	26.4	21.1
% 41-50	21.6	28.3	30.5	29.6	27.2	29.5
% 51-60	16.5	22.6	24.2	21.7	23.8	27.1
% >60	6.4	10.6	10.9	9.7	12.5	14.3
Missing	0.0	0.0	0.0	0.0	0.0	0.2

Figure 2: Distribution of age groups for those involved in cases closed at each stage compared to the distribution of age groups in the registrant population.

#8 Are BME registrants overrepresented at all or any individual stages of the FtP process?

Methods

We tabulated the registrants by involvement in an FtP case, ethnicity and case stage at closure. This information, in percentage form is also presented graphically. Registrants whose ethnicity was unknown were also included in this analysis

Results

The logistic regression analyses above (Table 9 to Table 13) show that registrant ethnicity is a statistically significant predictor of case involvement at any stage and assessment. Overall, non-White registrants appear more likely to be involved in closed cases regardless of which stage is considered. In terms of representation relative to the entire registrant population, Asian and Other ethnicities seem to be marginally over-represented at each stage, with White registrants being marginally under-represented. There are a large number of individuals for whom ethnicity data is missing, which may distort this picture.

Table 17: Registrants by FtP case involvement, ethnicity and case stage at closure (N=120,854)

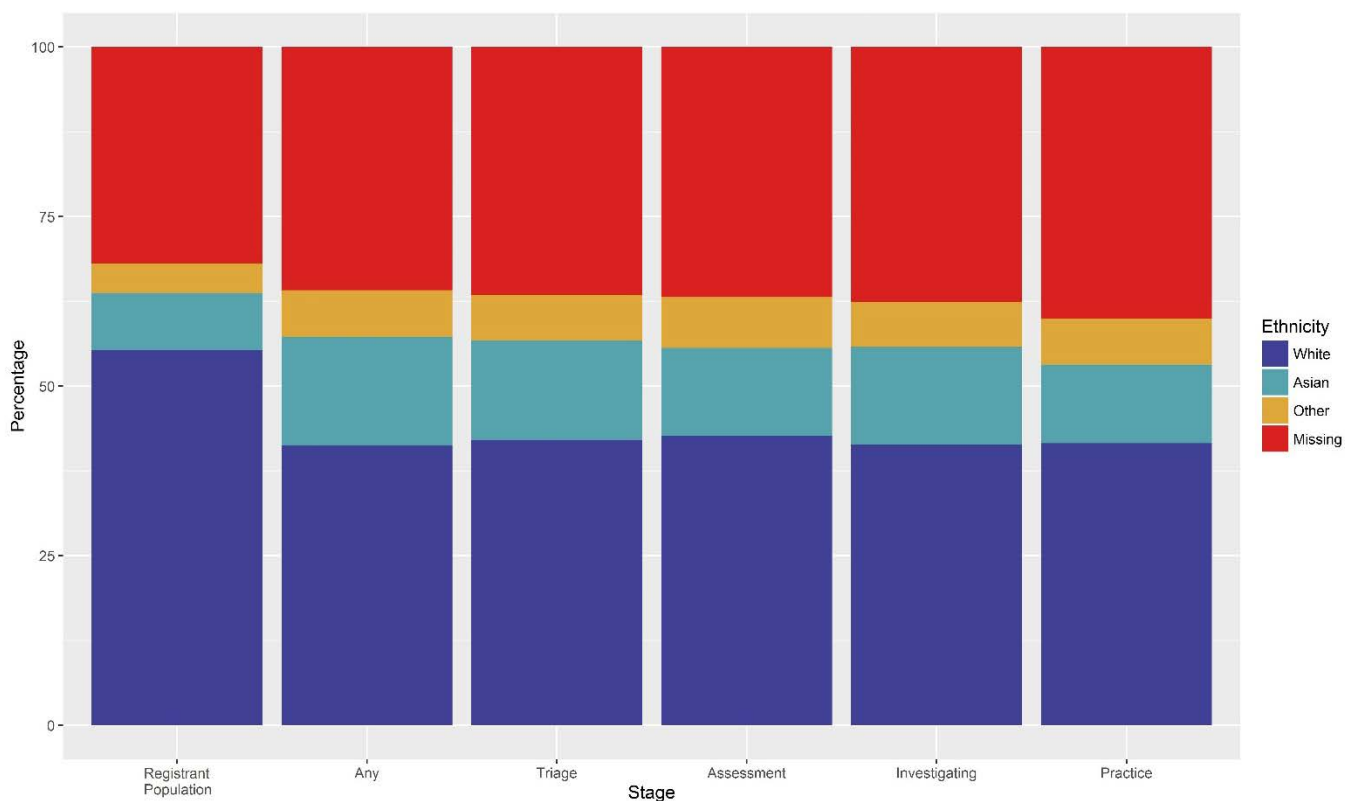|	All registrants	Registrants involved in cases closed at				
		Any Stage	Triage	Assessment	Investigating committee	Practice committee
N registrants	120,854	4,870	1,565	2,391	1,233	573
% White	55.3	42.0	41.3	41.2	42.5	40.1
% Asian	8.4	14.9	14.4	16.0	12.9	12.4
% Other	4.4	6.8	6.7	6.9	7.6	7.5
% Missing	31.9	36.4	37.6	35.9	37.0	40.0

Figure 3: Distribution of ethnicities for those involved in cases closed at each stage compared to the distribution of ethnicities in the registrant population.

#23 Are there variations between the four countries or region on whether you are more likely to appear in FtP?

Methods

In this section we simply report results from the logistic regression models given in Table 9 to Table 13 above.

Results

After controlling for sex, age group, ethnicity, registration type, primary qualification, time on the register, and specialist status, UK Country has little effect on the odds ratios associated with FtP involvement in general, or associated with involvement in cases which close at any stage.

Relative to English Dentists and DCPs, Welsh and Northern Irish Dentists and DCPs do not differ in their odds of being involved in FtP cases closed at any stage, or at triage, assessment, or investigating committee. Wales and NI show slightly increased odds for practice committee stages relative to their English counterparts. Scottish Dentists and DCPs show slightly greater though non-significant odds of being involved in FtP cases at any and all individual stages relative to English Dentists and DCPs. Non-UK registrants are however less likely to be involved in FtP cases which close at any, or any individual stage. See preceding tables for specifics.

#10a For cases by registration type, are there any particular routes to registration that are overrepresented at all or any stages of the FtP process?

Methods

We tabulated the registrants by involvement in an FtP case, route to registration and case stage at closure.

Results

The logistic regression analyses above (Table 9 to Table 13) show that in general, relative to Dentist UK Applications, those following the Dentists Assessment and Dentists Restoration routes to registration are more likely to be involved in FtP cases closed at any stage overall, or at any particular stage individually. DCP and ORE registrants are typically less likely than Dentists UK Applicants to be involved in FtP cases closes at any stage overall, or at any stage in particular.

Table 18: Registrants by FtP case involvement, route to registration and case stage at closure (N=120,854)

	All registrants	Registrants involved in cases closed at				
		Any Stage	Triage	Assessment	Investigating committee	Practice committee
N registrants	120,854	5,105	1,565	2,391	1,269	969
% Dentist UK Application	7.6	9.7	8.6	10.5	8.6	4.1
% Dentist Assessment	5.8	12.9	12.6	13.8	12.6	12.1
% Dentist Restoration	1.8	5.1	5.9	5.0	4.7	6.9
% DCP UK Application	55.2	11.9	10.7	10.0	9.0	17.1
% DCP Assessment	0.8	0.3	0.2	0.5	0.3	0.1
% DCP Restoration	3.1	1.3	1.3	0.9	0.8	1.9
% Overseas Reg. Exam.	0.3	0.2	0.4	0.1	0.2	0.2
% Missing	25.4	58.7	60.3	59.2	63.8	57.6

#10b … and are any countries of primary qualification overrepresented at all or any stages of the FtP process?

Methods

We tabulated the registrants by involvement in an FtP case, route to registration and case stage at closure. This information, in percentage form was also presented graphically. Registrants whose region of registration was unknown were also included in this analysis.

Results

Focussing on country of qualification, in terms of representation relative to the entire registrant population, EEA registrants appear to be over-represented, and Non-EEA registrants appear to be marginally over-represented at each stage.

Table 19: Registrants by FtP case involvement, region of registration and case stage at closure (N=120854)

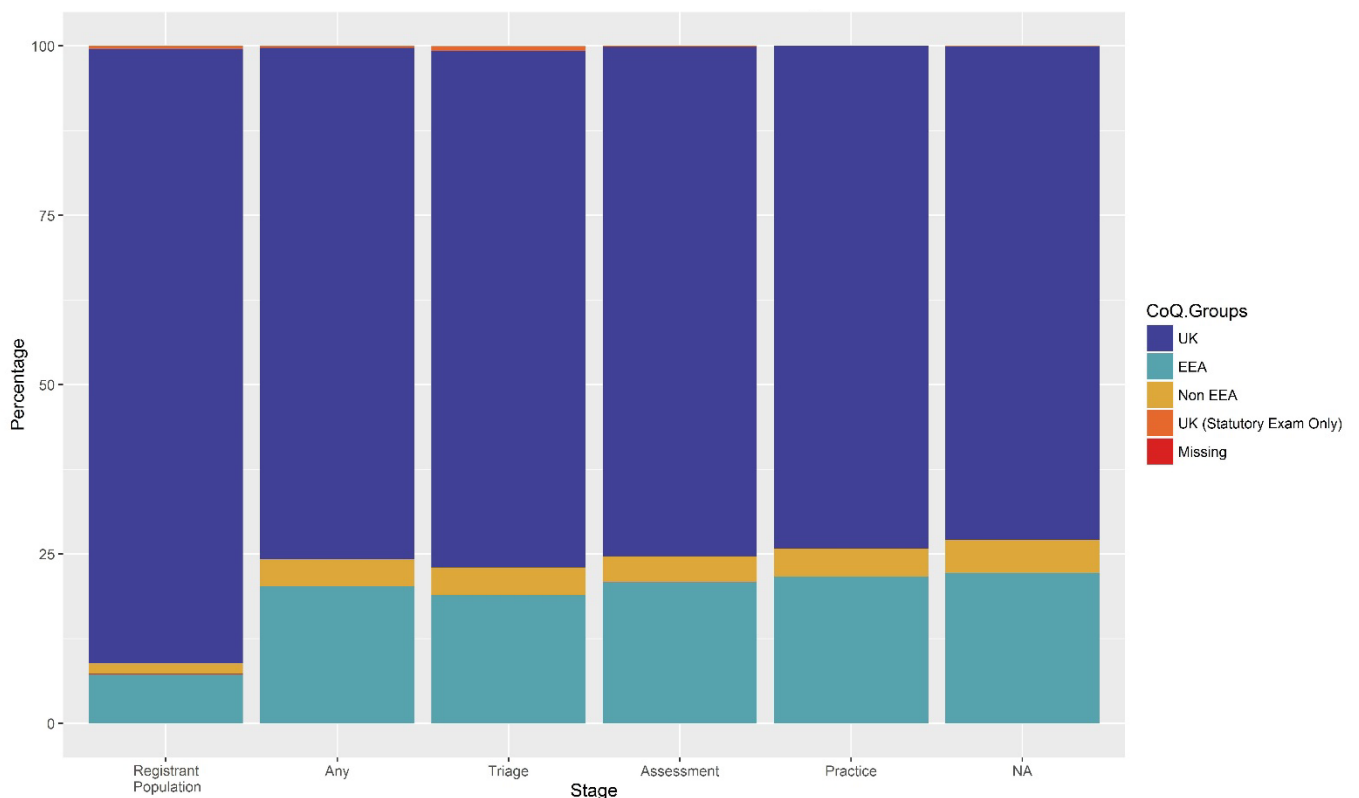|	All registrants	Registrants involved in cases closed at				
		Any Stage	Triage	Assessment	Investigating committee	Practice committee
N registrants	120,854	4,870	1,565	2,391	1,233	573
% EEA	7.2	20.2	18.9	20.9	22.2	21.6
% Non EEA	1.5	4.0	4.1	3.8	4.9	4.2
% UK	90.7	75.5	76.3	75.2	72.8	74.2
% UK (Statutory Exam Only)	0.4	0.3	0.7	0.1	0.1	0.0
% Missing	0.1	0.0	0.0	0.0	0.0	0.0

Figure 4: Distribution of country of qualification between those involved, and those not involved, in cases closed at each stage

#19 Are registrants with a particular primary qualification more likely to appear at FtP? At any particular stages?

Methods

We tabulated the registrants by involvement in an FtP case, primary qualification and case stage at closure. This information, in percentage form is also presented graphically. Registrants whose primary qualification was unknown were also included in this analysis

Results

The logistic regression analyses above (Table 9 to Table 13) show that primary qualification is a generally a statistically significant predictor of case involvement, with registrants holding Dental qualifications being over-represented in the number of cases closed at any stage overall, and at each individual stage.

Table 20: Registrants by FtP case involvement, primary qualification and case stage at closure (N=120854)

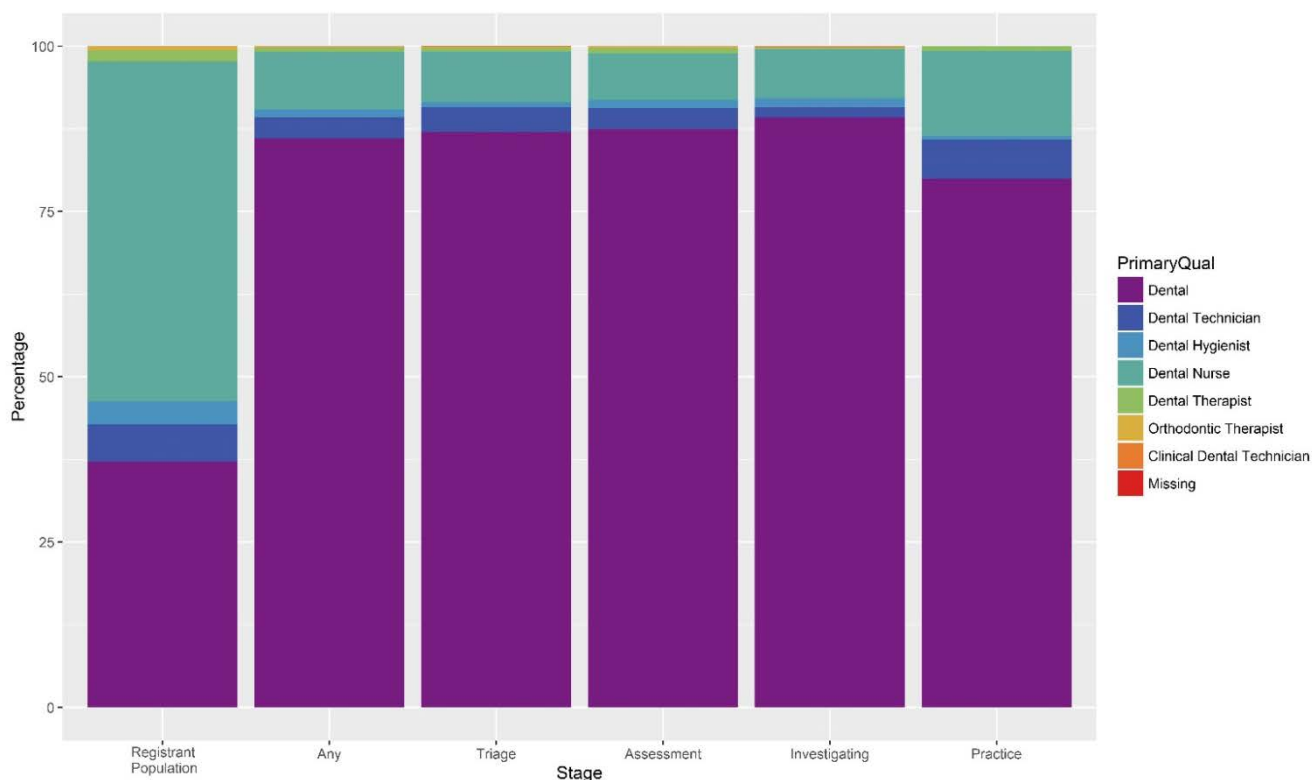|	All registrants	Registrants involved in cases closed at				
		Any Stage	Triage	Assessment	Investigating committee	Practice committee
N registrants	120,854	4,870	1,565	2,391	1,233	573
% Dental	37.2	86.1	87.0	87.5	89.2	79.9
% Dental Technician	5.6	3.2	3.7	3.2	1.6	5.9
% Dental Hygienist	3.5	1.2	0.8	1.3	1.3	0.5
% Dental Nurse	51.4	8.7	7.7	7.0	7.5	12.9
% Dental Therapist	1.7	0.7	0.6	0.8	0.2	0.7
% Orthodontic Therapist	0.6	0.1	0.1	0.1	0.1	0.0
% Clinical Dental Technician	<0.1	0.1	0.1	0.1	0.2	0.0
% Missing	<0.1	0.0	0.0	0.0	0.0	0.0

Figure 5: Distribution of Primary Qualifications for those involved in cases closed at each stage compared to the distribution of Primary Qualifications in the registrant population.

#17 Is there a link between length of time on register and progress through FtP? At any particular stages?

Methods

For registrants involved in FtP cases closed at each of the four stages and for each primary qualification type we calculated the mean and standard deviation of the time since registration.

To provide an overview of when cases are received relative to when registrants first registered, we have plotted the frequency of cases received at each time point (in years) since first registration for Dentists and DCPs.

We also used a logistic regression model to predict involvement in an FtP case (closed at any stage) from the registrants' time since registration and presented the results both as odds ratios and in graphical format.

Results

Table 21: Mean time on register (years) by Primary Qualification and Stage at closure

Primary Qualification	Stage at Closure	N	M (Years)	SD (Years)
Dental	Assessment	2510	16.59	11.51
Dental	Case Review	108	15.99	11.32
Dental	Investigating Committee	1181	17.76	12.08
Dental	Practice Committee	460	17.20	11.68
Dental	Triage	1559	18.21	11.87
Dental Technician	Assessment	97	6.63	3.25
Dental Technician	Case Review	9	4.71	1.16
Dental Technician	Investigating Committee	22	6.27	3.22
Dental Technician	Practice Committee	28	5.56	1.17
Dental Technician	Triage	67	6.72	1.11
Dental Hygienist	Assessment	34	19.87	9.72
Dental Hygienist	Case Review	2	19.80	14.79
Dental Hygienist	Investigating Committee	16	14.35	8.98
Dental Hygienist	Practice Committee	1	29.46	---
Dental Hygienist	Triage	11	20.40	8.69
Dental Nurse	Assessment	187	4.65	2.26
Dental Nurse	Case Review	6	3.17	1.87
Dental Nurse	Investigating Committee	98	4.06	2.14
Dental Nurse	Practice Committee	68	4.06	1.86
Dental Nurse	Triage	124	4.99	2.71
Dental Therapist	Assessment	20	8.03	8.70
Dental Therapist	Investigating Committee	2	5.04	0.78
Dental Therapist	Practice Committee	5	4.40	1.50
Dental Therapist	Triage	8	5.64	4.64
Orthodontic Therapist	Assessment	4	2.55	1.47
Orthodontic Therapist	Triage	2	0.37	0.63
Clinical Dental Technician	Assessment	4	6.98	1.17
Clinical Dental Technician	Investigating Committee	2	6.06	0.78
Clinical Dental Technician	Triage	6	6.99	1.82

After controlling for sex, age group, ethnicity, registration type, primary qualification, specialty and country, time since registration was a significant predictor of involvement in FtP cases closed at any stage. The Odds

Ratio (OR) of 1.03 indicates that the odds of case involvement increase by an average of 3% per year on the registration. Time since registration was also a significant predictor of involvement in FtP cases closed at Triage (OR 1.03), Assessment (OR 1.02) and Investigating Committee (OR 1.05) but not at Practice Committee (OR 0.99).
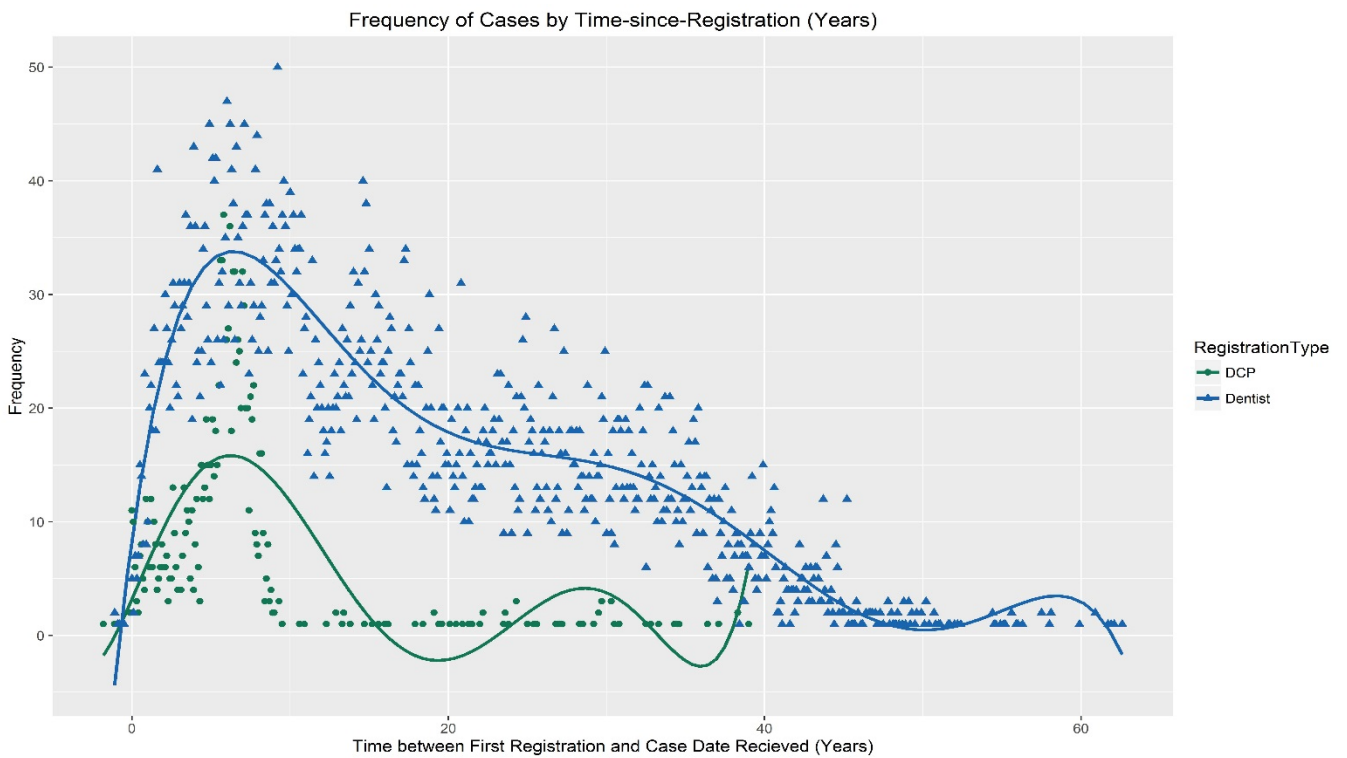

Figure 6: Frequency of case received dates against time since first registration, by registration type. Curves show 6th-order polynomial smooth of the distribution.
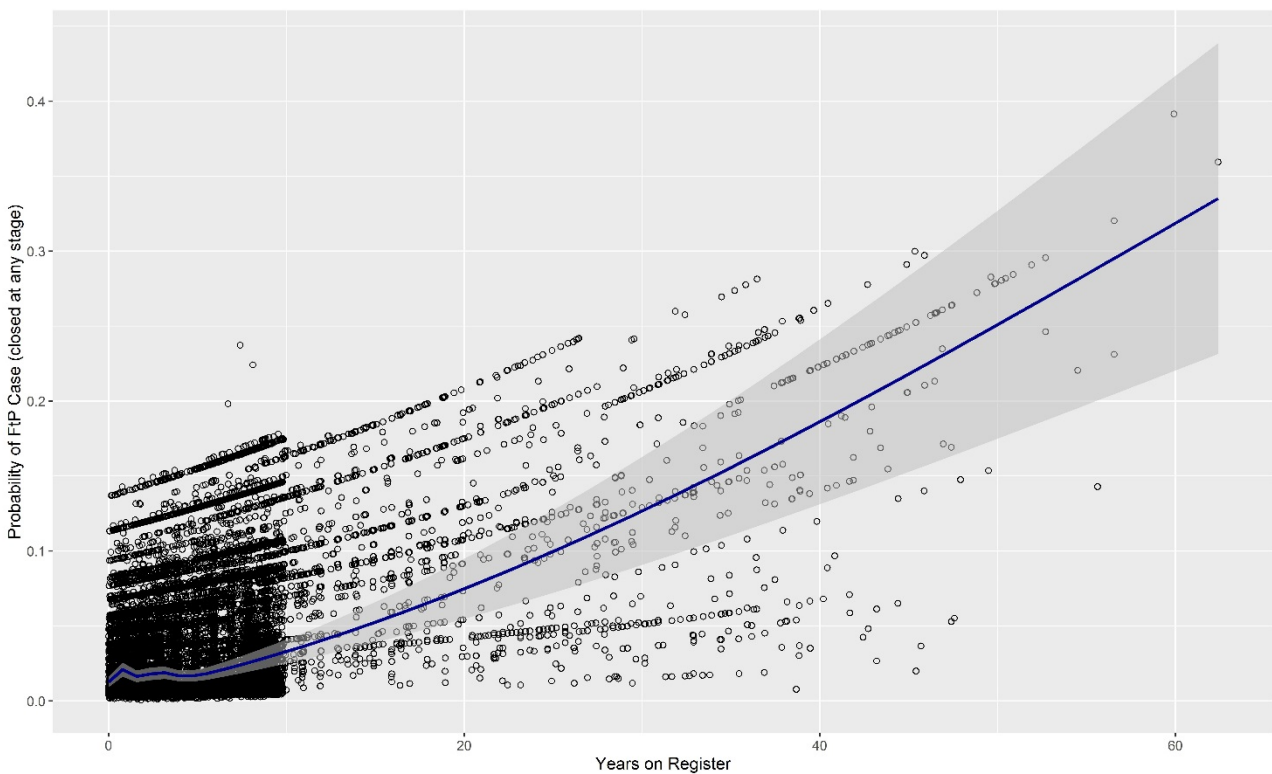

Figure 7: Probability of FtP Case (closed at any stage) by Years on Register.

#21 Are dental specialists less likely to go through FtP?

Methods

In this section we simply report results from the logistic regression models given in Table 9 to Table 13 above

Results

After controlling for sex, age group, ethnicity, registration type, primary qualification, time on the register, and UK country, Dental specialists are less likely to be involved in an FtP case overall (OR 0.64 relative to Non-Specialists), FtP cases which close at Triage (OR 0.66), at Assessment (OR 0.62), and Investigating Committee (OR 0.53), and at Practice Committee (OR 0.25).

Theme B: What is the nature of informants and what sort of allegations do they make?

#7 Is there any associations in the type of complainant (informant) and where they refer from (e.g. complaint pathway)?

Methods

Starting with the FTP Case data (N=10,607), duplicate cases added in error and cases in which the informant is unknown were excluded from the analyses. These were indicated in the data by Case Status being listed as "Cancelled", and Contact Key being recorded as "00000000-0000-0000-0000-000000000000" respectively. In addition, cases recorded as 'Practice Committee' *and* 'Investigation' *and* 'Closed' were excluded, as were cases recorded as 'Investigating Committee' *and* 'Prosecution' *and* 'Closed'. Cases with an unknown Informant type were also excluded. These exclusions resulted in an FTP case dataset of N=8,390.

The percentages of complaints made by combinations of complainant ('Informant Type') and pathway (Informant age, country, UK region, and disability) were then calculated to give a clear picture of the relative distributions in the current sample of case data.

Chi-squared tests of association were also conducted on the frequency data, resampling the data 10,000 times to correct for small cell counts when estimating significance levels. However, where there were empty cells, these were not corrected for in order to maintain an appropriate level of distinction between Informant type categories and the levels of each factor under investigation.

Categories of Informant Type have been grouped as follows:

Table 22: Informant Type Classifications and their relationship to GDC Informant Type categories

Informant Type Group	GDC Informant Type Categories	Notes
Self-Referral	"Self-referral"	Self-referral by the registrant
GDC*	"GDC"	The regulator deciding to open the case without any third party raising a concern
Non-NHS employer	"Employer" + "Private Provider"	It is not possible to discern if Employer includes only non-NHS employer
Patient or service user	"Patient" + "Member of Public" + "Whistleblower – non registrant"	Assumed that Whistleblower – non-registrant is related to service user
NHS	"PCT or NHS"	
Other Registrant	"Registrant" + "Whistleblower – registrant"	
Anonymous	"Anonymous" + "Whistleblower – anonymous"	
Other Regulator Body	"Police or other investigatory body" + "Other Public Body"	
Other	"Other Informant"	Excluded from subsequent tables
Unknown	No data recorded / data missing for this field in the dataset	Excluded from subsequent tables

* The GDC may itself initiate an FtP investigation where new information has been received on an existing case, or where concerns are identified from media coverage, for example.

Results

The distribution of informants with each characteristic varies across informant types. For example, informants self-referring are largely below 50 years old (83.5%), whereas NHS informants tend to be older (60.0% aged 51 or older). The particular patterns across Informant Types by informant age, country, UK region, and disability are shown in the tables below. Chi-squared tests of association between the informant characteristic and informant type are also reported, but should be treated with caution, especially where there are large numbers of low or zero percentages.

There was a significant association between Informant type and Region (X^2=106.59, p<0.001)

Table 23: FtP Cases by Informant Country (Percentage within Informant Type)

Country	Self-Referral	Other Registrant	GDC	Other Regulatory Body	NHS	Non-NHS Employer	Patient or Service User	Anonymous
UK	93.1	75.7	74.4	85.3	68.4	76.1	73.6	87.4
EEA	6.3	20.1	21.0	12.8	27.4	22.4	21.9	11.2
Non EEA	0.7	4.2	4.6	1.8	4.2	1.5	4.5	1.4

There was a significant association between Informant type and UK region (X^2=1250.10, p<0.001)

Table 24: Percentage of total FtP Cases by Informant UK Region within Informant Type

UK Region	Self-Referral	Other Registrant	GDC	Other Regulatory Body	NHS	Non-NHS Employer	Patient or Service User	Anonymous
Channel Islands	0.7	1.3	0.4	2.3	0.3	0.0	0.6	1.0
East Midlands	5.3	4.4	0.0	2.3	5.9	5.0	5.4	0.0
East of England	8.1	7.0	1.5	2.3	4.3	11.0	8.9	1.0
London	15.1	21.5	91.9	48.8	13.2	14.0	19.5	91.8
North East	4.2	5.5	0.0	7.0	7.6	2.0	2.0	1.0
North West	8.4	10.8	1.1	9.3	9.2	10.0	10.8	2.0
Northern Ireland	2.1	2.7	0.4	7.0	0.3	1.0	1.4	0.0
Scotland	16.5	11.3	1.1	0.0	13.9	9.0	8.1	0.0
South East	13.0	13.8	0.7	11.6	15.2	14.0	19.7	2.0
South West	8.1	7.9	0.7	2.3	9.6	13.0	7.9	1.0
Wales	3.5	3.1	0.4	7.0	7.3	2.0	3.1	0.0
West Midlands	8.4	6.1	0.7	0.0	7.3	13.0	7.2	0.0
Yorkshire & Humberside	6.7	4.7	1.1	0.0	5.9	6.0	5.4	0.0

There was a significant association between Informant type and Age Group (X^2=769.93, p<0.001)

Table 25: Percentage of total FtP Cases by Informant Age Group within Informant Type

Age Group	Self-Referral	Other Registrant	GDC	Other Regulatory Body	NHS	Non-NHS Employer	Patient or Service User	Anonymous
<=30	28.4	12.2	0.4	0.0	2.9	4.4	10.0	5.9
31-40	28.8	20.2	0.0	20.0	14.3	22.2	14.1	8.8
41-50	26.3	26.9	2.7	0.0	22.9	35.6	18.6	2.9
51-60	13.0	23.1	1.1	0.0	31.4	28.9	12.1	0.0
>=60	3.5	17.6	95.8	80.0	28.6	8.9	45.2	82.4

There was a significant association between Informant type and Disability (X^2=94.32, p<0.001).

Table 26: Percentage of total FtP Cases by Informant Disability within Informant Type

Disability status	Self-Referral	Other Registrant	GDC	Other Regulatory Body	NHS	Non-NHS Employer	Patient or Service User	Anonymous
I am not disabled	86.8	93.1	100.0	100.0	100.0	85.2	79.8	100.0
Prefer not to say	7.5	4.3	0.0	0.0	0.0	0.0	6.9	0.0
Yes I am disabled	5.7	2.7	0.0	0.0	0.0	14.8	13.3	0.0

#6 Do particular types of allegation (consideration) come from any particular sources (patient, other organisation, employer, whistleblower)?

Methods

Following advice from the GDC we reclassified case sources into eight types of informant: *Self-referral, Other registrant, GDC, Other Regulatory Body, NHS, Non-NHS employer, Patient or Service User, Anonymous* and *Unknown*. For the purpose of analysis we excluded cases where the informant type was unknown. For all cases with Considerations data attached we calculated, for each informant type, the percentage of cases involving considerations in each of the 29 subgroups. For each of these Consideration Subgroups we conducted a chi-squared test of the null hypothesis that the presence (or not) of that type of consideration in a case was not associated with the type of informant. Because of multiple testing a Bonferroni correction was applied to these tests.

Results

There were 7,158 cases, both open and closed, where the informant type was known and to which Considerations data was attached. Patients and service users were the source of over half of these cases while non-NHS employers were the source of the least number of referrals (Table 27). Problems were encountered in conducting chi-squared tests due to low incidence of Considerations in many of the subgroups. It is apparent from the data however that there are differing patterns of Consideration raised by the various types of informant. In reporting the results we have therefore focused on the Consideration Subgroups associated with more than 10% of the cases reported by each type of informant. These subgroups are highlighted in Table 27.

Six types of consideration were associated with a substantial proportion (≥10%) of referrals from five or more of the eight informant groups (*Maintain and protect patients' information, Personal behaviour - Protecting patients from risks, Personal behaviour - Public confidence in profession, Professional knowledge and skills - Failure to provide good quality care, Put patients' interests first - Behaviour and attitude* and *Put patients' interests first - Laws and regulations*). However, the patterns of Considerations in cases that were referred by patients, anonymous sources or the registrants themselves were markedly different from those for other informant types.

Over half of the cases initiated by patients were concerned with *Professional knowledge and skills - Failure to provide good quality care* and patients were the only informant group for whom *Communicating effectively* and *Patient interests* were a substantial area of concern. Compared to other informants however, patients were much less likely to raise cases involving any type of *Personal Behaviour*.

In contrast to this, cases self-referred by registrants were primarily concerned with raising issues of *Personal Behaviour*, particularly those liable to affect public confidence in the profession, but few or none were concerned with either *Maintain and protect patients' information, Professional knowledge and skills - Failure to provide good quality care* or any category of *Put patient interests first*.

The primary concerns raised in cases referred by anonymous informants were different again from those found in patient- or self-referred cases. This group seldom raised issues of *Communicating effectively, Maintain and protect patients' information* or *Patient interests* but were the only type of informant that initiated a substantial proportion of cases involving either *Professional knowledge and skills - Training and competence* or *Put patients' interests first - Advertising*.

Table 27: Cases by Consideration Subgroup (percentage within Informant Type). Subgroups involved in at least 10% of cases are emboldened in the table.

					Informant Type				
Consideration Subgroup	N cases	Self-referral	Other registrant	GDC	Other Regulatory Body	NHS	Non-NHS employer	Patient or Service User	Anon	*All*
		313	*545*	*593*	*250*	*525*	*142*	*4,563*	*227*	*7,158*
Clear and effective complaints procedure *		-	0.9	0.2	2.0	0.8	0.7	6.3	-	*4.3*
Communicating effectively *		0.3	5.5	2.4	3.6	2.9	7.0	**15.2**	1.8	***10.8***
Cooperating with dental team members		-	2.0	-	-	1.0	0.7	0.0	-	*0.3*
DCS Service Issue		-	-	0.2	-	-	-	2.2	-	*1.4*
Health		1.3	0.2	0.8	1.2	2.9	4.2	0.2	0.9	*0.6*
Illegal Practice		-	-	1.5	0.4	-	-	0.0	-	*0.2*
Laws and regulations		-	1.8	1.2	6.4	2.1	3.5	0.3	0.9	*0.9*
Maintain and protect patients' information *		0.3	**15.4**	**10.6**	7.6	**20.8**	**21.8**	**17.3**	3.1	***15.4***
Obtain valid consent *		-	5.1	1.9	3.2	2.9	5.6	9.5	0.4	*7.1*
Patient interests *		0.6	5.7	4.9	2.4	9.5	2.1	**14.4**	2.6	***11.0***
Personal behaviour - Protecting patients from risks *		**14.4**	**10.5**	**12.6**	7.2	**13.7**	**16.9**	1.1	7.9	*5.0*
Personal behaviour - Public confidence in profession *		**76.0**	**27.3**	**20.4**	**40.0**	**27.4**	**35.9**	6.7	**31.3**	***16.5***
Personal behaviour - Other		3.8	2.9	6.4	8.8	**10.1**	**10.6**	2.7	2.2	*4.0*
Probity - Caution / charge / conviction *		8.0	0.6	1.3	8.4	1.7	3.5	0.3	1.3	*1.2*
Probity - Other		1.6	1.8	3.9	2.8	5.9	1.4	0.5	1.3	*1.5*
Professional knowledge and skills - Failure to provide good quality care *		-	**25.1**	**16.5**	**10.0**	**29.5**	**28.9**	**60.1**	**10.6**	***45.0***
Professional knowledge and skills - Training and competence *		1.3	7.3	8.4	2.8	5.3	4.2	3.0	**11.5**	*4.1*
Professional knowledge and skills - Other		0.6	1.1	1.5	1.6	2.7	-	1.4	0.9	*1.4*
Put patients' interests first - Advertising *		-	4.2	8.9	0.8	0.2	0.7	1.1	**14.1**	*2.2*
Put patients' interests first - Behaviour and attitude *		1.0	**15.4**	9.4	4.4	**15.6**	**15.5**	**15.6**	**15.9**	***14.0***
Put patients' interests first - Indemnity *		4.5	2.4	5.9	-	2.7	4.2	0.9	2.2	*1.8*
Put patients' interests first - Laws and regulations *		1.9	**16.0**	**10.5**	**25.2**	**14.5**	**14.1**	5.5	**16.3**	*8.4*
Put patients' interests first - Treatment *		-	4.0	2.0	3.2	5.0	0.7	9.6	2.2	*7.2*
Put patients' interests first - Other		-	0.7	0.5	1.2	0.4	-	0.9	0.9	*0.8*
Raising concerns		0.3	1.5	0.7	2.0	0.8	-	0.2	0.4	*0.5*
Respect patients' dignity and choices *		-	2.0	0.3	0.8	0.6	1.4	3.1	0.4	*2.3*
Scope of practice *		-	2.0	0.8	-	0.4	-	0.3	1.3	*0.5*
Working with colleagues - Team working *		0.6	**13.6**	8.6	2.4	2.7	4.2	1.2	9.3	*3.2*
Working with colleagues - Other		-	3.3	1.5	1.6	1.9	-	2.2	-	*2.0*
Total§		116.6	178.5	144.0	150.0	183.6	188.0	182.0	139.6	*173.5*

* *Subgroups of particular interest*

§ *Columns total to more than 100% because cases can involve multiple considerations*

Theme C: How are the characteristics of registrants related to the types of allegations that are made against them?

#14 Are there any particular considerations that are associated with complaints about male registrants?

Methods

For all cases with Considerations data attached we calculated, for cases involving either male or female registrants, the percentage of cases involving considerations in each of the 29 subgroups. For each of these Consideration Subgroups we conducted a chi-squared test of the null hypothesis that the presence (or not) of that type of consideration in a case was not associated with the sex of the registrant concerned. Because of multiple testing a Bonferroni correction was applied to these tests.

Results

Of the 7,526 cases (open or closed) with Considerations attached 7,488 (99.5%) also had registrant sex recorded. The registrant was male in 5,104 (68.2%) of these 7,488 cases.

Patterns of incidence of considerations in the 29 subgroups were generally similar for cases involving registrants of either sex (Table 28). After correcting for multiple testing, seven Consideration Subgroups exhibited a statistically significant association between that type of Consideration and the sex of the registrant. Compared to cases involving a female registrant, those involving a male registrant were significantly:

- less likely to involve considerations in the *Personal behaviour - Public confidence in profession* and *Probity - Caution / charge / conviction* subgroups, but
- more likely to involve considerations in the *Communicating effectively, Maintain and protect patients' information, Obtain valid consent, Patient interests* and *Professional knowledge and skills - Failure to provide good quality care* subgroups.

It should be noted however that none of the above differences are large in real terms, amounting to no more than a 5.2 percentage point difference between the sexes for any of the Consideration Subgroups.

Table 28: Cases by Consideration Subgroup (percentage within registrant sex). Subgroups whose incidence was significantly associated with registrant sex are emboldened in the table.

Consideration Subgroup	N cases	Registrant Sex Female	Male	All
		2,384	5,104	7,488
Clear and effective complaints procedure *		3.9	4.4	4.2
Communicating effectively *		**9.0**	**11.6**	**10.8**
Cooperating with dental team members		0.2	0.3	0.3
DCS Service Issue		0.7	1.4	1.2
Health		0.9	0.6	0.7
Illegal Practice		0.0	0.2	0.2
Laws and regulations		0.9	1.0	1.0
Maintain and protect patients' information *		**13.4**	**16.7**	**15.6**
Obtain valid consent *		**5.2**	**8.0**	**7.1**
Patient interests *		**8.2**	**12.4**	**11.0**
*Personal behaviour - Protecting patients from risks **		5.5	4.9	5.1
Personal behaviour - Public confidence in profession *		**20.3**	**15.2**	**16.8**
Personal behaviour - Other		4.7	3.9	4.2
Probity - Caution / charge / conviction *		**2.3**	**0.7**	**1.2**
Probity - Other		1.9	1.4	1.5
Professional knowledge and skills - Failure to provide good quality care *		**41.5**	**46.0**	**44.6**
*Professional knowledge and skills - Training and competence **		5.0	3.7	4.1
Professional knowledge and skills - Other		1.4	1.4	1.4
*Put patients' interests first - Advertising **		1.6	2.6	2.3
*Put patients' interests first - Behaviour and attitude **		12.8	14.5	14.0
*Put patients' interests first - Indemnity **		2.3	1.8	2.0
*Put patients' interests first - Laws and regulations **		8.6	8.4	8.4
*Put patients' interests first - Treatment **		7.2	7.1	7.1
Put patients' interests first - Other		0.6	0.8	0.8
Raising concerns		0.6	0.4	0.5
Respect patients' dignity and choices *		1.8	2.6	2.4
Scope of practice *		0.5	0.4	0.5
*Working with colleagues - Team working **		3.2	3.5	3.4
Working with colleagues - Other		1.6	2.1	2.0

* Subgroups of particular interest
§ *Columns total to more than 100% because cases can involve multiple considerations*

#16 Is there a link between age and different types of allegation (consideration)?

Methods

For all cases with Considerations data attached we calculated, for cases involving registrants in each age group, the percentage of cases involving considerations in each of the 29 subgroups. For each of these Consideration Subgroups we conducted a chi-squared test of the null hypothesis that the presence (or not) of that type of consideration in a case was not associated with the age of the registrant concerned. Because of multiple testing a Bonferroni correction was applied to these tests.

Results

Of the 7,526 cases (open or closed) with Considerations attached 7,484 (99.4%) also had registrant age recorded.

Patterns of incidence of considerations in the 29 subgroups were generally similar across the five registrant age groups (Table 29). After correcting for multiple testing, five Consideration Subgroups (*Obtain valid consent, Patient interests, Personal behaviour - Public confidence in profession, Probity - Caution / charge / conviction* and *Probity - Other*) exhibited a statistically significant association between the incidence of that type of Consideration and the age of the registrant.

- The incidence of considerations in the *Obtain valid consent* and *Patient interests* subgroups both increased with the age of the registrant.
- The incidence of considerations in the *Personal behaviour - Public confidence in profession* and *Probity - Caution / charge / conviction* subgroups both decreased with age. Overall, 16.8% of cases involved considerations in the *Personal behaviour - Public confidence in profession* subgroup but this proportion was far higher (29.2%) in cases concerning registrants less than 30 years of age.
- While generally low, the incidence of considerations in the *Probity - Other* subgroup reached a peak among registrants in the 41-50 age group.

Table 29: Cases by Consideration Subgroup (percentage within registrant age group). Consideration Subgroups whose incidence was significantly associated with age are emboldened in the table.

		Registrant Age					
		≤30	31-40	41-50	51-60	>60	All
Consideration Subgroup	*N cases*	*695*	*1,846*	*2,284*	*1,786*	*873*	*7,484*
Clear and effective complaints procedure *		3.0	3.8	5.0	3.8	5.0	4.2
Communicating effectively *		8.5	10.1	11.2	11.8	11.1	10.8
Cooperating with dental team members		0.1	0.4	0.2	0.2	0.5	0.3
DCS Service Issue		0.4	1.0	1.4	1.3	1.4	1.2
Health		0.7	0.3	0.8	0.5	1.5	0.7
Illegal Practice		-	0.2	0.1	0.2	0.1	0.2
Laws and regulations		0.4	0.6	1.0	1.0	2.1	1.0
Maintain and protect patients' information *		12.8	14.0	15.6	18.0	16.7	15.6
Obtain valid consent *		**4.3**	**5.4**	**6.8**	**9.1**	**9.6**	**7.1**
Patient interests *		**4.7**	**9.5**	**11.3**	**13.0**	**14.8**	**11.1**
*Personal behaviour - Protecting patients from risks **		5.0	4.9	4.6	6.0	4.7	5.1
***Personal behaviour - Public confidence in profession ***		**29.2**	**17.0**	**17.0**	**13.7**	**12.3**	**16.8**
Personal behaviour - Other		3.6	3.3	5.2	3.6	4.9	4.2
***Probity - Caution / charge / conviction ***		**3.3**	**1.2**	**1.1**	**0.7**	**0.9**	**1.2**
Probity - Other		**0.9**	**1.0**	**2.4**	**1.3**	**1.5**	**1.5**
*Professional knowledge and skills - Failure to provide good quality care **		40.9	46.6	43.6	44.9	45.2	44.6
*Professional knowledge and skills - Training and competence **		6.3	3.8	3.5	4.5	4.0	4.1
Professional knowledge and skills - Other		0.9	1.1	1.6	1.5	1.5	1.4
*Put patients' interests first - Advertising **		0.7	2.5	2.5	2.1	2.5	2.3
*Put patients' interests first - Behaviour and attitude **		12.5	14.0	15.5	12.9	13.3	14.0
*Put patients' interests first - Indemnity **		1.4	1.9	2.1	2.1	2.1	2.0
*Put patients' interests first - Laws and regulations **		6.0	7.0	8.8	9.5	10.2	8.4
*Put patients' interests first - Treatment **		7.8	7.7	6.6	6.9	7.3	7.1
Put patients' interests first - Other		0.4	0.5	1.3	0.7	0.6	0.8
Raising concerns		0.9	0.8	0.3	0.2	0.7	0.5
Respect patients' dignity and choices *		1.3	1.7	2.5	3.1	2.9	2.4
Scope of practice *		0.6	0.4	0.5	0.2	1.0	0.5
*Working with colleagues - Team working **		1.7	3.3	4.0	3.3	3.6	3.4
Working with colleagues - Other		2.3	1.7	1.9	2.4	1.6	2.0

* Subgroups of particular interest

§ *Columns total to more than 100% because cases can involve multiple considerations*

#9 Are there any particular considerations that are associated with complaints about BME registrants? At all or any particular stages of the process?

Methods

For all cases with Considerations data attached we calculated, for cases involving either white or BME (Black or Minority Ethnic group) registrants, the percentage of cases involving considerations in each of the 29 subgroups. For each of these Consideration Subgroups we conducted a chi-squared test of the null hypothesis that the presence (or not) of that type of consideration in a case was not associated with the ethnicity of the registrant concerned. Because of multiple testing a Bonferroni correction was applied to these tests.

Results

Of the 7,526 cases (open or closed) with Considerations attached 4,646 (61.7%) also had registrant ethnicity recorded. Of these 4,646 cases the registrant was white in 3,008 (64.7%) instances.

Patterns of incidence of considerations in the 29 subgroups were generally similar for cases involving either white or BME registrants (Table 30). After correcting for multiple testing only two Consideration Subgroups exhibited a statistically significant association between that type of Consideration and the ethnicity of the registrant. Compared to cases involving a white registrant, those involving a BME registrant were:

- significantly less likely to involve considerations in the *Professional knowledge and skills - Training and competence* subgroup, but
- significantly more likely to involve considerations in the *Put patients' interests first - Behaviour and attitude* subgroup.

Table 30: Cases by Consideration Subgroup (percentage within Ethnic Group). Subgroups whose incidence was significantly associated with registrant ethnicity are emboldened in the table.

		Ethnic Group		
		BME	White	All
Consideration Subgroup	*N cases*	1,638	3,008	4,646
Clear and effective complaints procedure *		4.8	3.6	4.0
Communicating effectively *		11.9	10.3	10.9
Cooperating with dental team members		0.3	0.2	0.3
DCS Service Issue		1.0	1.3	1.2
Health		0.7	0.9	0.8
Illegal Practice		-	0.1	0.1
Laws and regulations		0.7	1.2	1.0
Maintain and protect patients' information *		13.2	15.5	14.7
Obtain valid consent *		6.0	6.5	6.3
Patient interests *		11.3	11.0	11.1
Personal behaviour - Protecting patients from risks *		4.6	6.1	5.5
Personal behaviour - Public confidence in profession *		16.7	17.8	17.4
Personal behaviour - Other		4.2	3.8	3.9
Probity - Caution / charge / conviction *		1.5	1.1	1.2
Probity - Other		1.1	1.7	1.5
Professional knowledge and skills - Failure to provide good quality care *		46.2	43.1	44.1
Professional knowledge and skills - Training and competence *		**1.0**	**5.5**	**3.9**
Professional knowledge and skills - Other		0.9	1.7	1.4
Put patients' interests first - Advertising *		1.2	2.4	2.0
Put patients' interests first - Behaviour and attitude *		**17.7**	**11.6**	**13.8**
Put patients' interests first - Indemnity *		1.7	2.5	2.2
Put patients' interests first - Laws and regulations *		7.0	9.0	8.3
Put patients' interests first - Treatment *		6.7	6.9	6.8
Put patients' interests first - Other		0.8	1.0	0.9
Raising concerns		0.5	0.7	0.6
Respect patients' dignity and choices *		2.3	2.1	2.2
Scope of practice *		0.1	0.7	0.5
Working with colleagues - Team working *		3.2	3.6	3.4
Working with colleagues - Other		1.9	1.9	1.9

* *Subgroups of particular interest*

§ *Columns total to more than 100% because cases can involve multiple considerations*

#24 Is there a link between nation or region and different types of allegation (consideration)?

Methods

For all cases with Considerations data attached we calculated, for cases involving registrants from each UK country, the percentage of cases involving considerations in each of the 29 subgroups. For each of these Consideration Subgroups we conducted a chi-squared test of the null hypothesis that the presence (or not) of that type of consideration in a case was not associated with the registrant's country. Because of multiple testing a Bonferroni correction was applied to these tests.

Results

Of the 7,526 cases (open or closed) with Considerations attached 7,169 (95.3%) also had the registrant's country of residence recorded. Patterns of incidence of considerations in the 29 subgroups were generally similar across the four nations (Table 31). Two Consideration Subgroups (*Personal behaviour - Public confidence in profession* and *Put patients' interests first - Laws and regulations*) exhibited a statistically significant association between the incidence of that type of Consideration and the registrant's country.

- The incidence of considerations in the *Personal behaviour - Public confidence in profession* subgroup was lowest for registrants from England and broadly similar across the other nations.
- The incidence of considerations in the *Put patients' interests first - Laws and regulations* subgroup was also lowest for registrants from England but slightly higher in Wales than in Northern Ireland or Scotland.

Table 31: Cases by Consideration Subgroup (percentage within UK country). Consideration Subgroups whose incidence was significantly associated with country are emboldened in the table.

Consideration Subgroup	N cases	Registrant Country				
		England	N. Ireland	Scotland	Wales	All
		6,079	181	649	260	7,169
Clear and effective complaints procedure *		4.2	6.6	3.7	3.1	4.2
Communicating effectively *		11.1	10.5	10.3	7.3	10.9
Cooperating with dental team members		0.3	-	-	0.4	0.3
DCS Service Issue		1.2	1.1	0.6	2.7	1.2
Health		0.6	0.6	0.5	2.3	0.7
Illegal Practice		0.2	-	-	-	0.2
Laws and regulations		1.0	-	1.1	-	0.9
Maintain and protect patients' information *		15.2	12.7	18.2	16.5	15.5
Obtain valid consent *		7.0	7.2	7.6	4.6	7.0
Patient interests *		11.1	5.5	10.6	7.7	10.8
Personal behaviour - Protecting patients from risks *		4.9	7.2	7.7	3.8	5.1
Personal behaviour - Public confidence in profession *		**16.2**	**23.8**	**22.3**	**21.2**	**17.1**
Personal behaviour - Other		3.6	6.6	5.5	4.6	3.9
Probity - Caution / charge / conviction *		1.3	1.1	0.9	1.5	1.3
Probity - Other		1.6	0.6	0.9	1.9	1.5
Professional knowledge and skills - Failure to provide good quality care *		45.2	37.0	39.8	43.1	44.4
Professional knowledge and skills - Training and competence *		4.1	9.4	4.8	4.2	4.3
Professional knowledge and skills - Other		1.4	2.2	0.9	1.2	1.3
Put patients' interests first - Advertising *		2.1	3.9	2.9	1.2	2.2
Put patients' interests first - Behaviour and attitude *		14.4	9.4	12.6	13.1	14.0
Put patients' interests first - Indemnity *		1.8	4.4	0.9	1.9	1.8
Put patients' interests first - Laws and regulations *		**7.8**	**11.0**	**11.7**	**13.8**	**8.5**
Put patients' interests first - Treatment *		7.4	5.5	5.5	5.8	7.1
Put patients' interests first - Other		0.9	-	0.6	-	0.8
Raising concerns		0.4	-	1.7	0.4	0.5
Respect patients' dignity and choices *		2.3	0.6	2.6	1.9	2.3
Scope of practice *		0.5	0.6	0.6	-	0.5
Working with colleagues - Team working *		3.5	5.0	3.5	1.2	3.5
Working with colleagues - Other		2.0	2.8	1.8	1.9	2.0

* Subgroups of particular interest

§ *Columns total to more than 100% because cases can involve multiple considerations*

#20 Is there a link between primary qualification and different types of allegation (consideration)?

Methods

Following a suggestion from the GDC we interpreted 'primary qualification' in this instance as a simple dichotomous split by registration type: dentists vs. DCPs. For all cases with Considerations data attached we calculated, for cases involving either dentists or DCPs registrants, the percentage of cases involving considerations in each of the 29 subgroups. For each of these Consideration Subgroups we conducted a chi-squared test of the null hypothesis that the presence (or not) of that type of consideration in a case was not associated with the registration type of the registrant concerned. Because of multiple testing a Bonferroni correction was applied to these tests.

Results

Of the 7,526 cases (open or closed) with Considerations attached 7,483 (99.4%) also had registration type recorded. The registrant was a dentist in 6,494 (86.8%) of these 7,483 cases.

Patterns of incidence of different types of consideration were generally different between cases involving dentists and DCPs (Table 32). After correcting for multiple testing, 17 Consideration Subgroups exhibited a statistically significant association between that type of Consideration and the registration type of the registrant. Compared to cases involving dentists, those involving DCPs were significantly:

- More likely to involve considerations in nine of the subgroups (*Illegal Practice, Personal behaviour - Protecting patients from risks, Personal behaviour - Public confidence in profession, Probity - Caution / charge / conviction, Probity – Other, Professional knowledge and skills - Training and competence, Put patients' interests first - Advertising, Put patients' interests first - Indemnity* and *Scope of practice*)
- Less likely to involve considerations in eight of the subgroups (*Clear and effective complaints procedure, Communicating effectively, Maintain and protect patients' information, Obtain valid consent, Patient interests, Professional knowledge and skills - Failure to provide good quality care, Put patients' interests first - Behaviour and attitude* and *Put patients' interests first - Treatment*).

Differences between the two types of registrant were greater than 10 percentage points for four of the Consideration Subgroups. Considerations in the *Personal behaviour - Public confidence in profession* and *Professional knowledge and skills - Training and competence* subgroups were more common in cases involving DCPs by 23.2 and 21.1 percentage points respectively while those in the *Maintain and protect patients' information* and *Professional knowledge and skills - Failure to provide good quality care* subgroups were more common in cases involving dentists by 12.1 and 40.4 percentage points respectively.

Table 32: Cases by Consideration Subgroup (percentage within registrant type). Subgroups whose incidence was significantly associated with registrant type are emboldened in the table.

		Registrant Type		
		DCP	Dentist	All
Consideration Subgroup	*N cases*	989	6,494	7,483
Clear and effective complaints procedure *		**1.7**	**4.6**	**4.2**
Communicating effectively *		**3.1**	**12.0**	**10.8**
Cooperating with dental team members		0.5	0.2	0.3
DCS Service Issue		1.0	1.2	1.2
Health		1.2	0.6	0.7
Illegal Practice		**0.7**	**0.1**	**0.2**
Laws and regulations		1.4	0.9	1.0
Maintain and protect patients' information *		**4.9**	**17.3**	**15.6**
Obtain valid consent *		**0.3**	**8.1**	**7.1**
Patient interests *		**2.4**	**12.4**	**11.1**
***Personal behaviour - Protecting patients from risks ***		**9.2**	**4.4**	**5.1**
***Personal behaviour - Public confidence in profession ***		**36.9**	**13.7**	**16.8**
Personal behaviour - Other		5.9	3.9	4.2
***Probity - Caution / charge / conviction ***		**4.8**	**0.7**	**1.2**
Probity - Other		**3.4**	**1.2**	**1.5**
***Professional knowledge and skills - Failure to provide good quality care ***		**9.5**	**50.0**	**44.6**
***Professional knowledge and skills - Training and competence ***		**22.4**	**1.3**	**4.1**
Professional knowledge and skills - Other		0.6	1.5	1.4
***Put patients' interests first - Advertising ***		**5.4**	**1.8**	**2.3**
***Put patients' interests first - Behaviour and attitude ***		**7.8**	**14.9**	**14.0**
***Put patients' interests first - Indemnity ***		**5.6**	**1.4**	**2.0**
*Put patients' interests first - Laws and regulations ***		8.5	8.4	8.4
***Put patients' interests first - Treatment ***		**0.8**	**8.1**	**7.1**
Put patients' interests first - Other		0.4	0.8	0.8
Raising concerns		0.9	0.4	0.5
Respect patients' dignity and choices *		1.1	2.6	2.4
Scope of practice *		**3.3**	**0.0**	**0.5**
*Working with colleagues - Team working ***		3.3	3.4	3.4
Working with colleagues - Other		1.5	2.0	2.0

* Subgroups of particular interest

§ Columns total to more than 100% because cases can involve multiple considerations

#12 Is there a link between length of time on register and different types of allegation (consideration)?

Methods

Because of the different historical pattern of registrations and the much lower number of FtP cases involving allegations about DCPs, this analysis was conducted separately for cases involving dentists and DCPs. Using dates of first registration and of case receipt we calculated the registrant's time since registration at the start of each case. For dentists we then classified the time since registration into four bands: 10 years or less, 10 to 20 years, 20 to 30 years and more than 30 years. For DCPs, who appeared less frequently in the case data and for whom times since registration were much shorter, we classified the time since registration into two bands: 5 years or less and more than 5 years.

For all cases with Considerations data attached we calculated, for cases involving registrants in each time-since-registration group, the percentage of cases involving considerations in each of the 29 subgroups. For each of these Consideration Subgroups we conducted a chi-squared test of the null hypothesis that the presence (or not) of that type of consideration in a case was not associated with the time since registration of the registrant concerned. Because of multiple testing a Bonferroni correction was applied to these tests.

Results - Dentists

All of the 6,494 cases (open or closed) with Considerations attached and which involved dentists also had the date of registration recorded.

Patterns of incidence of considerations in the 29 subgroups were generally similar across the time-since-registration groups (Table 33). After correcting for multiple testing, two Consideration Subgroups (*Obtain valid consent* and *Personal behaviour - Protecting patients from risks*) exhibited a statistically significant association between the incidence of that type of Consideration and the registrant's time since registration. In both of these subgroups the incidence of the Consideration was lowest in cases where the registrant was within their first 10 years of registration

Table 33: Cases against dentists by Consideration Subgroup (percentage within time-since-registration group). Consideration Subgroups whose incidence was significantly associated with time-since-registration are emboldened in the table.

Consideration Subgroup	N cases	≤10	10-20	20-30	>30	All
		Time since registration (years)				
		2,303	1,792	1,216	1,183	6,494
Clear and effective complaints procedure *		3.8	5.4	4.4	5.3	4.6
Communicating effectively *		11.3	12.6	11.1	13.1	12.0
Cooperating with dental team members		0.3	0.2	0.2	0.3	0.2
DCS Service Issue		1.0	1.3	1.6	1.4	1.2
Health		0.4	0.5	0.6	1.3	0.6
Illegal Practice		0.1	-	0.2	0.1	0.1
Laws and regulations		0.7	0.9	1.2	1.1	0.9
Maintain and protect patients' information *		15.9	18.5	16.1	19.4	17.3
Obtain valid consent *		**6.0**	**8.1**	**9.0**	**11.6**	**8.1**
Patient interests *		12.7	11.3	13.0	12.6	12.4
Personal behaviour - Protecting patients from risks*		**2.9**	**5.4**	**4.9**	**5.6**	**4.4**
*Personal behaviour - Public confidence in profession**		12.9	14.5	14.3	13.5	13.7
Personal behaviour - Other		3.6	5.0	3.5	3.4	3.9
*Probity - Caution / charge / conviction**		0.6	0.7	0.7	1.0	0.7
Probity - Other		1.1	1.6	0.9	1.2	1.2
*Professional knowledge & skills - Failure to provide good quality care**		51.4	48.7	49.3	49.7	50.0
*Professional knowledge and skills - Training and competence**		1.3	0.7	1.9	1.8	1.3
Professional knowledge and skills - Other		1.7	1.3	1.2	1.7	1.5
*Put patients' interests first - Advertising**		1.9	2.1	1.4	1.6	1.8
*Put patients' interests first - Behaviour and attitude**		14.5	17.3	13.2	14.0	14.9
*Put patients' interests first - Indemnity**		1.7	1.2	1.2	1.4	1.4
*Put patients' interests first - Laws and regulations**		7.7	8.5	8.3	9.8	8.4
*Put patients' interests first - Treatment**		8.5	7.7	7.5	8.5	8.1
Put patients' interests first - Other		0.7	1.0	1.2	0.6	0.8
Raising concerns		0.4	0.5	0.2	0.4	0.4
Respect patients' dignity and choices *		2.9	2.2	2.9	2.2	2.6
Scope of practice *		0.1	-	-	-	0.0
*Working with colleagues - Team working**		3.0	3.1	4.7	3.3	3.4
Working with colleagues - Other		1.9	1.9	2.4	2.3	2.0

* Subgroups of particular interest
§ *Columns total to more than 100% because cases can involve multiple considerations*

Results - DCPs

All of the 989 cases (open or closed) with Considerations attached and which involved DCPs also had the date of registration recorded.

Patterns of incidence of considerations in the 29 subgroups were generally similar across the time-since-registration groups (Table 34). After correcting for multiple testing, six Consideration Subgroups (*Personal behaviour - Public confidence in profession, Probity - Caution / charge / conviction, Probity – Other, Professional knowledge and skills - Failure to provide good quality care, Professional knowledge and skills - Training and competence* and *Put patients' interests first - Advertising*) exhibited a statistically significant association between the incidence of that type of Consideration and the registrant's time since registration. Considerations in the first three of these Consideration Subgroups were less common among DCPs registered for more than five years while considerations in the latter three subgroups were more common among these more experienced DCPs. Some of these differences are quite marked though it should be noted that they are based on a much smaller sample of cases than the parallel analysis for cases against dentists shown in Table 33 above.

Table 34: Cases against DCPs by Consideration Subgroup (percentage within time-since-registration group). Consideration Subgroups whose incidence was significantly associated with time-since-registration are emboldened in the table.

Consideration Subgroup	N cases	Time since registration (years)		
		≤5	>5	All
		339	*650*	*989*
Clear and effective complaints procedure *		0.3	2.5	1.7
Communicating effectively *		1.5	4.0	3.1
Cooperating with dental team members		0.3	0.6	0.5
DCS Service Issue		0.3	1.4	1.0
Health		2.7	0.5	1.2
Illegal Practice		-	1.1	0.7
Laws and regulations		1.8	1.2	1.4
Maintain and protect patients' information *		2.9	5.8	4.9
Obtain valid consent *		-	0.5	0.3
Patient interests *		2.9	2.2	2.4
*Personal behaviour - Protecting patients from risks **		9.4	9.1	9.2
***Personal behaviour - Public confidence in profession ***		**44.8**	**32.8**	**36.9**
Personal behaviour - Other		7.7	4.9	5.9
***Probity - Caution / charge / conviction ***		**12.7**	**0.6**	**4.8**
Probity - Other		**7.1**	**1.5**	**3.4**
***Professional knowledge and skills - Failure to provide good quality care ***		**3.5**	**12.6**	**9.5**
***Professional knowledge and skills - Training and competence ***		**11.8**	**28.0**	**22.4**
Professional knowledge and skills - Other		-	0.9	0.6
***Put patients' interests first - Advertising ***		**1.8**	**7.2**	**5.4**
*Put patients' interests first - Behaviour and attitude **		5.6	8.9	7.8
*Put patients' interests first - Indemnity **		3.2	6.8	5.6
*Put patients' interests first - Laws and regulations **		5.3	10.2	8.5
*Put patients' interests first - Treatment **		0.6	0.9	0.8
Put patients' interests first - Other		-	0.6	0.4
Raising concerns		0.3	1.2	0.9
Respect patients' dignity and choices *		1.8	0.8	1.1
Scope of practice *		4.7	2.6	3.3
*Working with colleagues - Team working **		2.1	4.0	3.3
Working with colleagues - Other		0.6	2.0	1.5

* *Subgroups of particular interest*

§ *Columns total to more than 100% because cases can involve multiple considerations*

#22 Are there certain allegations (considerations) more likely to be made about those on the specialist lists?

Methods

For all cases involving dentists and having Considerations data attached we calculated, for cases involving registrants either on or not on the specialist lists, the percentage of cases involving considerations in each of the 29 subgroups. For each of these Consideration Subgroups we conducted a chi-squared test of the null hypothesis that the presence (or not) of that type of consideration in a case was not associated with whether or not the dentist concerned was on one of the specialist lists or not. Because of multiple testing a Bonferroni correction was applied to these tests.

Results

All 6,494 cases against dentists (open or closed) with Considerations attached also had presence on the specialist lists recorded. In 479 (7.4%) of these cases the dentist concerned was on one (or more) of the specialist lists.

Patterns of incidence of considerations in the 29 subgroups were generally similar for cases involving registrants who were or were not on the specialist lists (Table 35). After correcting for multiple testing, only one Consideration Subgroup exhibited a statistically significant association between that type of Consideration and presence on the specialist lists. Cases involving dentists on the specialist lists more frequently included considerations in the *Obtain valid consent* subgroup than cases concerning dentists not on the lists (12.9% of cases vs. 7.8% of cases respectively).

Table 35: Cases by Consideration Subgroup (percentage within registrant specialism). Subgroups whose incidence was significantly associated with presence on the specialist lists are emboldened in the table.

		On specialist lists		
		No	Yes	All
Consideration Subgroup	*N cases*	6,015	479	6,494
Clear and effective complaints procedure *		4.6	5.0	4.6
Communicating effectively *		11.7	15.9	12.0
Cooperating with dental team members		0.2	0.2	0.2
DCS Service Issue		1.2	1.7	1.2
Health		0.6	0.2	0.6
Illegal Practice		0.1	-	0.1
Laws and regulations		0.9	0.4	0.9
Maintain and protect patients' information *		17.3	16.7	17.3
Obtain valid consent *		**7.8**	**12.9**	**8.1**
Patient interests *		12.4	12.3	12.4
*Personal behaviour - Protecting patients from risks **		4.7	1.7	4.4
*Personal behaviour - Public confidence in profession **		13.4	17.1	13.7
Personal behaviour - Other		3.8	5.0	3.9
*Probity - Caution / charge / conviction **		0.7	0.2	0.7
Probity - Other		1.3	0.4	1.2
*Professional knowledge & skills - Failure to provide good quality care **		49.9	50.1	50.0
*Professional knowledge and skills - Training and competence **		1.2	2.7	1.3
Professional knowledge and skills - Other		1.6	0.6	1.5
*Put patients' interests first - Advertising **		1.7	3.3	1.8
*Put patients' interests first - Behaviour and attitude **		15.0	14.2	14.9
*Put patients' interests first - Indemnity **		1.4	1.0	1.4
*Put patients' interests first - Laws and regulations **		8.6	6.1	8.4
*Put patients' interests first - Treatment **		8.0	9.8	8.1
Put patients' interests first - Other		0.8	0.6	0.8
Raising concerns		0.3	1.5	0.4
Respect patients' dignity and choices *		2.6	2.1	2.6
Scope of practice *		<0.1	-	<0.1
*Working with colleagues - Team working **		3.5	2.3	3.4
Working with colleagues - Other		2.0	2.3	2.0

* Subgroups of particular interest

§ Columns total to more than 100% because cases can involve multiple considerations

Theme D: How are the characteristics of registrants and the type of allegations made against them related to the progress and outcomes of FtP cases?

#1 How likely are each of the considerations types to get through: Triage, Assessment, Investigating Committee, Closure at Practice Committee?

Methods

For each FtP case that appeared in the Considerations data set we identified all of the subgroups of consideration that were attached to it. In the Case data we created a 'stage at closure variable' with four categories (Triage, Assessment, Investigating Committee, and Practice Committee) and removed all cases that were still open. Investigation cases marked as closing at the Practice Committee stage and Prosecution cases marked as closing at the Investigating Committee were also removed from the Case data prior to analysis.

We merged the Case and Consideration data sets and tabulated, by stage at closure, the proportion of cases with Considerations attached. We cross-tabulated Consideration Subgroups by stage at closure for those cases that had Considerations attached.

Results

Considerations were attached to 4,787 (64.5%) of the 7,427 closed cases. Almost all cases closed at the Assessment and Investigating Committee stages had Considerations attached but the same was true of only three quarters of those closed at the Practice Committee stage and a tiny proportion of those closed at Triage (Table 36). Because of this inconsistency in the recording of considerations the research question cannot be reliably answered in relation to cases closed at Triage and results relating to cases that reached the Practice Committee will inevitably be biased to some extent.

Table 36: Frequency of closed FtP cases with Considerations data attached, by stage at closure

Stage at closure	N cases	N cases with considerations attached	% cases with considerations attached
Triage	2,546	93	3.7%
Assessment	2,873	2,858	99.5%
Investigating Committee	1,322	1,319	99.8%
Practice Committee	686	517	75.4%
All	7,427	4,787	64.5%

Cases concerning '*Working with colleagues - Team working*' and '*Put patients' interests first - Advertising*' were least likely to go beyond the Assessment stage while those concerning '*Probity - Caution / charge / conviction*' and '*Patient interests*' were most likely to do so. Most likely to reach the Practice Committee stage were cases concerned with '*Probity'* (both subgroups), '*Health'* and '*Illegal Practice*' (Table 37).

Table 37: Percentage of cases closed at each stage by Consideration Subgroup

Consideration subgroup	No of cases	Percentage of cases closed by			
		Triage	Assessment	*Investigating Committee*	*Practice Committee*
Clear and effective complaints procedure *	188	0.0	63.3	34.0	2.7
Communicating effectively *	404	0.2	53.0	40.3	6.4
Cooperating with dental team members	13	0.0	61.5	0.0	38.5
DCS Service Issue	81	65.4	28.4	6.2	0.0
Health	22	0.0	31.8	22.7	45.5
Illegal Practice	7	0.0	42.9	14.3	42.9
Laws and regulations	49	0.0	71.4	12.2	16.3
Maintain and protect patients' information *	585	0.0	33.5	56.4	10.1
Obtain valid consent *	221	0.0	29.0	62.4	8.6
Patient interests *	539	0.0	27.1	43.6	29.3
Personal behaviour - Protecting patients from risks *	149	0.0	65.8	18.1	16.1
Personal behaviour - Public confidence in profession *	639	0.9	55.4	27.9	15.8
Personal behaviour - Other	148	2.0	48.0	27.0	23.0
Probity - Caution / charge / conviction *	60	1.7	18.3	30.0	50.0
Probity - Other	68	0.0	30.9	17.6	51.5
Professional knowledge and skills - Failure to provide good quality care *	2,072	0.8	61.5	32.2	5.5
Professional knowledge and skills - Training and competence *	165	0.6	67.9	18.2	13.3
Professional knowledge and skills - Other	84	0.0	70.2	13.1	16.7
Put patients' interests first - Advertising *	117	1.7	75.2	17.1	6.0
Put patients' interests first - Behaviour and attitude *	582	1.7	70.3	20.4	7.6
Put patients' interests first - Indemnity *	47	0.0	40.4	36.2	23.4
Put patients' interests first - Laws and regulations *	374	0.8	69.5	23.5	6.1
Put patients' interests first - Treatment *	314	0.3	58.0	36.6	5.1
Put patients' interests first - Other	48	0.0	66.7	22.9	10.4
Raising concerns	16	0.0	62.5	25.0	12.5
Respect patients' dignity and choices *	111	0.0	31.5	33.3	35.1
Scope of practice *	21	0.0	38.1	23.8	38.1
Working with colleagues - Team working *	148	0.0	73.0	23.6	3.4
Working with colleagues - Other	72	0.0	56.9	31.9	11.1
All cases with Considerations attached	4,787	*1.9*	*59.7*	*27.6*	*10.8*
All cases	7,427	*34.3*	*38.7*	*17.8*	*9.2*

* Subgroups of particular interest

#2 Is there statistical significance in case prevalence and length of case and at each stage based on the considerations types of the allegations identified?

Methods

Case prevalence at each stage in respect of the Consideration types was dealt with in research question #1 and so we analysed the same subset of closed cases with Considerations attached to them. The mean and standard deviation (SD) of the time (in weeks) taken to resolve each case were calculated and summarised: overall, by stage at closure, and by Consideration Subgroup for those cases that had Considerations attached. Because cases can have multiple Considerations attached to them we then investigated which Consideration Subgroups were particularly associated with variation in case length using a linear regression model. Because of non-normality in the distribution of case lengths we used the logarithm of the case resolution time as the dependent variable in the regression model. Independent variables were the stage at closure and the attached Consideration Subgroups.

Results

As one would expect, the mean case resolution times increased according to the stage reached by the case (Table 38).

Table 38: Mean and SD of time (weeks) taken to resolve cases by stage at closure

Stage at closure	No of cases	Mean	SD
Triage	93	7.7	14.9
Assessment	2,858	25.9	22.5
Investigating Committee	1,319	49.8	24.5
Practice Committee	517	109.1	45.2
All cases with Considerations attached	4,787	41.1	37.0
All cases	7,427	31.7	41.1

Among cases with Considerations attached, those concerned with '*Probity'* (both subgroups), '*Health'* and '*Respect patients' dignity and choices*' took typically longer than average to resolve while those related to '*DCS Service Issues*', '*Put patients' interests first - Advertising*' and '*Working with colleagues - Team working*' took the least time to resolve (Table 39).

Table 39: Mean (SD) of time (weeks) to case resolution by case type and Consideration Subgroup

Consideration Group	No of cases	Mean	SD
Clear and effective complaints procedure *	188	34.5	22.9
Communicating effectively *	404	39.2	29.2
Cooperating with dental team members	13	73.3	49.5
DCS Service Issue	81	10.7	11.2
Health	22	89.3	67.4
Illegal Practice	7	57.6	31.9
Laws and regulations	49	77.8	48.1
Maintain and protect patients' information *	585	46.7	31.7
Obtain valid consent *	221	48.1	31.4
Patient interests *	539	77.8	44.1
Personal behaviour - Protecting patients from risks *	149	40.2	36.2
Personal behaviour - Public confidence in profession *	639	37.9	35.8
Personal behaviour - Other	148	52.8	46.6
Probity - Caution / charge / conviction *	60	79.3	49.7
Probity - Other	68	92.1	50.2
Professional knowledge and skills - Failure to provide good quality care *	2,072	36.0	28.6
Professional knowledge and skills - Training and competence *	165	34.3	30.8
Professional knowledge and skills - Other	84	46.4	48.8
Put patients' interests first - Advertising *	117	25.2	21.6
Put patients' interests first - Behaviour and attitude *	582	35.6	32.8
Put patients' interests first - Indemnity *	47	42.8	30.0
Put patients' interests first - Laws and regulations *	374	39.1	33.8
Put patients' interests first - Treatment *	314	41.9	28.7
Put patients' interests first - Other	48	39.9	38.6
Raising concerns	16	39.5	24.0
Respect patients' dignity and choices *	111	81.3	50.3
Scope of practice *	21	66.6	34.1
Working with colleagues - Team working *	148	34.3	31.5
Working with colleagues - Other	72	40.6	31.9
All cases with Considerations attached	4,787	41.1	37.0

* Subgroups of particular interest

The linear regression model (Table 40) explained 52% of the variation in case lengths. The column labelled 'Time Ratio' indicates the ratio by which the time to resolution is increased / decreased. For example, the figure of 0.80 for *DCS Service Issue* indicates that cases where this was a Consideration were, on average, 20% shorter than those where they were not. Similarly, the figure of 1.40 for *Health* indicates that cases where this was a Consideration were, on average, 40% longer than those where it was not.

Compared to cases closed at the Practice Committee stage, those closed at Triage, Assessment or Investigating Committee took a significantly shorter time to resolve. After controlling for variation by stage at closure, 13 types of Consideration (emboldened in Table 40) were associated with statistically significant variation in the time taken to resolve a case.

Two types of Consideration were associated with shorter case resolution times: *DCS Service Issues* and *Put patients' interests first - Advertising* reduced case times by 20% and 19% respectively. The remaining 11 types of significant Consideration increased case resolution times by between 9% (*Professional knowledge and skills - Failure to provide good quality care*) and 128% (*Laws and regulations*). Among the 13 statistically significant Consideration subgroups, there were four of particular interest: *Patient interests, Probity - Caution / charge / conviction, Professional knowledge and skills - Failure to provide good quality care* and *Put patients' interests first - Advertising*.

Table 40: Regression output. Dependent variable, (log of) time to resolve case; independent variables, Consideration Groups and stage at closure.

Independent variable	B	Std. Error	P value	Time Ratio	Lower 95% CL§	Upper 95% CL§
Clear and effective complaints procedure *	0.047	0.046	0.305	1.05	0.96	1.15
Communicating effectively *	0.021	0.034	0.533	1.02	0.96	1.09
Cooperating with dental team members	**0.484**	**0.172**	**0.005**	**1.62**	**1.16**	**2.27**
DCS Service Issue	**-0.221**	**0.087**	**0.011**	**0.80**	**0.68**	**0.95**
Health	**0.333**	**0.133**	**0.012**	**1.40**	**1.08**	**1.81**
Illegal Practice	0.229	0.233	0.325	1.26	0.80	1.99
Laws and regulations	**0.826**	**0.089**	**<0.001**	**2.28**	**1.92**	**2.72**
Maintain and protect patients' information *	0.046	0.030	0.126	1.05	0.99	1.11
Obtain valid consent *	0.070	0.045	0.125	1.07	0.98	1.17
Patient interests *	**0.523**	**0.035**	**<0.001**	**1.69**	**1.58**	**1.81**
*Personal behaviour - Protecting patients from risks **	0.050	0.052	0.340	1.05	0.95	1.16
*Personal behaviour - Public confidence in profession **	-0.057	0.029	0.052	0.94	0.89	1.00
Personal behaviour - Other	**0.119**	**0.052**	**0.023**	**1.13**	**1.02**	**1.25**
Probity - Caution / charge / conviction *	**0.288**	**0.083**	**0.001**	**1.33**	**1.13**	**1.57**
Probity - Other	**0.419**	**0.077**	**<0.001**	**1.52**	**1.31**	**1.77**
Professional knowledge and skills - Failure to provide good quality care *	**0.086**	**0.023**	**<0.001**	**1.09**	**1.04**	**1.14**
*Professional knowledge and skills - Training and competence **	-0.007	0.050	0.885	0.99	0.90	1.10
Professional knowledge and skills - Other	0.102	0.069	0.139	1.11	0.97	1.27
Put patients' interests first - Advertising *	**-0.216**	**0.059**	**<0.001**	**0.81**	**0.72**	**0.90**
*Put patients' interests first - Behaviour and attitude **	0.017	0.028	0.548	1.02	0.96	1.07
*Put patients' interests first - Indemnity **	-0.072	0.091	0.427	0.93	0.78	1.11
*Put patients' interests first - Laws and regulations **	**0.198**	**0.034**	**<0.001**	**1.22**	**1.14**	**1.30**
*Put patients' interests first - Treatment **	**0.211**	**0.037**	**<0.001**	**1.24**	**1.15**	**1.33**
Put patients' interests first - Other	0.007	0.090	0.938	1.01	0.84	1.20
Raising concerns	0.206	0.154	0.181	1.23	0.91	1.66
Respect patients' dignity and choices *	**0.214**	**0.062**	**0.001**	**1.24**	**1.10**	**1.40**
Scope of practice *	0.250	0.135	0.064	1.28	0.99	1.67
*Working with colleagues - Team working **	0.087	0.052	0.095	1.09	0.98	1.21
Working with colleagues - Other	0.094	0.073	0.200	1.10	0.95	1.27
Stage at closure			<0.001			
Triage	-2.577	0.086	<0.001	0.08	0.06	0.09
Assessment	-1.458	0.032	<0.001	0.23	0.22	0.25
Investigating Committee	-0.719	0.033	<0.001	0.49	0.46	0.52
Practice Committee	Ref cat					

* Subgroups of particular interest
§ CL = Confidence limit

Note of caution

It should be noted that the number of cases involving considerations in the following five subgroups are very low: *Cooperating with dental team members, Health, Illegal Practice, Raising concerns, Scope of practice*. Consequently the estimates for these subgroups shown in Table 40 should be interpreted with caution. However, removal of these subgroups from the model made no substantive difference to the effects of the other subgroups and so the full model has been presented.

#5 What is the relationship between type of allegation (consideration) and sanction imposed?

Methods

In the Decisions data we identified cases where each of the four types of sanction had been imposed on the registrant, then merged this information with the Case and Consideration data sets and analysed the subset of cases that had both Consideration and Decision data attached. We used a logistic regression model to predict the imposition of (any type of) sanction by Consideration Subgroup. Similar models were run with each of the four types of sanction as the dependent variable but due to the low numbers of cases in which each type of sanction was imposed robust results could not be obtained.

Results

Sanctions were imposed in 393 (8.2%) of the 4,787 cases that had both Consideration and Decision data attached. *Published warnings* were the most common type of sanction (Table 41).

Table 41: Imposition of sanctions in closed cases with Considerations attached

Sanction	N cases	% of cases
IC published warning	160	3.3%
Conditions	107	2.2%
Suspension	123	2.6%
Erasure	72	1.5%
Any type of sanction(s) imposed	393	8.2%

Results for the logistic regression model (Table 42) show the odds ratios for the imposition of sanctions associated with each of the Consideration Subgroups. Sixteen types of Consideration (emboldened in Table 42) were associated with statistically significant variation in the imposition of sanctions. Twelve of these are subgroups of particular interest: *Obtain valid consent, Patient interests, Personal behaviour - Protecting patients from risks , Personal behaviour - Public confidence in profession, Probity - Caution / charge / conviction, Professional knowledge and skills - Failure to provide good quality care, Professional knowledge and skills - Training and competence, Put patients' interests first - Advertising, Put patients' interests first - Behaviour and attitude, Put patients' interests first - Indemnity, Respect patients' dignity and choices* and *Scope of practice.* All of these Consideration Subgroups except for *Professional knowledge and skills - Failure to provide good quality care* were associated with increased risk of the imposition of sanctions.

Table 42: Logistic regression output: Dependent variable, imposition of sanctions; independent variables, Consideration Subgroups.

Consideration Subgroup	Odds Ratio	Lower 95% CL§	Upper 95% CL§	P value
Clear and effective complaints procedure *	0.36	0.11	1.15	0.085
Communicating effectively *	0.98	0.58	1.67	0.949
Cooperating with dental team members	**4.68**	**1.26**	**17.34**	**0.021**
DCS Service Issue	0.22	0.03	1.62	0.137
Health	**5.97**	**2.24**	**15.96**	**<0.001**
Illegal Practice	2.72	0.32	23.05	0.358
Laws and regulations	0.57	0.16	1.99	0.379
Maintain and protect patients' information *	1.21	0.80	1.85	0.368
Obtain valid consent *	**2.51**	**1.43**	**4.41**	**0.001**
Patient interests *	**1.47**	**1.01**	**2.15**	**0.042**
***Personal behaviour - Protecting patients from risks ***	**2.64**	**1.68**	**4.16**	**<0.001**
***Personal behaviour - Public confidence in profession ***	**4.17**	**3.13**	**5.55**	**<0.001**
Personal behaviour - Other	**2.44**	**1.54**	**3.88**	**<0.001**
***Probity - Caution / charge / conviction ***	**11.27**	**6.29**	**20.19**	**<0.001**
Probity - Other	**4.27**	**2.35**	**7.77**	**<0.001**
***Professional knowledge and skills - Failure to provide good quality care ***	**0.41**	**0.29**	**0.58**	**<0.001**
***Professional knowledge and skills - Training and competence ***	**2.01**	**1.21**	**3.34**	**0.007**
Professional knowledge and skills - Other	1.31	0.55	3.11	0.541
***Put patients' interests first - Advertising ***	**1.97**	**1.10**	**3.54**	**0.023**
***Put patients' interests first - Behaviour and attitude ***	**0.53**	**0.33**	**0.83**	**0.006**
***Put patients' interests first - Indemnity ***	**5.28**	**2.72**	**10.26**	**<0.001**
*Put patients' interests first - Laws and regulations ***	0.76	0.46	1.25	0.285
*Put patients' interests first - Treatment ***	0.48	0.22	1.05	0.065
Put patients' interests first - Other	0.75	0.18	3.19	0.702
Raising concerns	1.99	0.51	7.81	0.324
Respect patients' dignity and choices *	**2.30**	**1.30**	**4.07**	**0.004**
Scope of practice *	**5.71**	**2.15**	**15.17**	**<0.001**
*Working with colleagues - Team working ***	1.04	0.57	1.89	0.907
Working with colleagues - Other	1.50	0.58	3.93	0.405

* Subgroups of particular interest
§ CL = Confidence limit

Note of caution

It should be noted that the number of cases involving considerations in the following five subgroups are very low: *Cooperating with dental team members, Health, Illegal Practice, Raising concerns, Scope of practice*. Consequently the estimates for these subgroups shown in Table 42 should be interpreted with caution. However, removal of these subgroups from the model made no substantive difference to the effects of the other subgroups and so the full model has been presented.

#4 What is the relationship between type of allegation (consideration) and whether impairment is found?

Methods

In the Decisions data we identified cases where impairment had been found, then merged this information with the Case and Consideration data sets and analysed the subset of cases that had both Consideration and Decision data attached. We used a logistic regression model to predict the finding of impairment by Consideration Subgroup.

Results

Impairment occurred in 219 (4.6%) of the 4,787 cases that had both Consideration and Decision data attached. Among cases involving particular subgroups of Consideration this percentage ranged from 0 to 32.4% (Table 43).

Table 43: Cases in which impairment was found by Consideration Subgroup

Consideration Subgroup	No of cases	% in which impairment found
Clear and effective complaints procedure *	188	1.1
Communicating effectively *	404	1.5
Cooperating with dental team members	13	30.8
DCS Service Issue	81	0.0
Health	22	22.7
Illegal Practice	7	14.3
Laws and regulations	49	6.1
Maintain and protect patients' information *	585	3.1
Obtain valid consent *	221	3.2
Patient interests *	539	9.3
Personal behaviour - Protecting patients from risks *	149	7.4
Personal behaviour - Public confidence in profession *	639	8.8
Personal behaviour - Other	148	15.5
Probity - Caution / charge / conviction *	60	31.7
Probity - Other	68	32.4
Professional knowledge and skills - Failure to provide good quality care *	2,072	1.7
Professional knowledge and skills - Training and competence *	165	9.7
Professional knowledge and skills - Other	84	6.0
Put patients' interests first - Advertising *	117	3.4
Put patients' interests first - Behaviour and attitude *	582	1.9
Put patients' interests first - Indemnity *	47	17.0
Put patients' interests first - Laws and regulations *	374	2.7
Put patients' interests first - Treatment *	314	1.3
Put patients' interests first - Other	48	4.2
Raising concerns	16	6.3
Respect patients' dignity and choices *	111	12.6
Scope of practice *	21	28.6
Working with colleagues - Team working *	148	0.7
Working with colleagues - Other	72	4.2
All closed cases with considerations attached	4,787	4.6

* Subgroups of particular interest

Results for the logistic regression model (Table 44) show the odds ratios for a finding of impairment associated with each of the Consideration Subgroups. Thirteen types of Consideration (emboldened in Table 44) were associated with statistically significant variation in the incidence of impairment of which eight are of particular interest: *Patient interests, Personal behaviour - Public confidence in profession, Probity - Caution / charge / conviction, Professional knowledge and skills - Failure to provide good quality care, Professional knowledge and skills - Training and competence, Put patients' interests first - Indemnity, Respect patients' dignity and choices* and *Scope of practice.* Except for *Professional knowledge and skills -*

Failure to provide good quality care all of these Consideration Subgroups were associated with an increased risk of a finding of impairment.

Table 44: Logistic regression output: Dependent variable, finding of impairment; independent variables, Consideration Subgroups where one or more instances of impairment were found.

Independent variable	Odds Ratio	Lower 95% CL§	Upper 95% CL§	P value
Clear and effective complaints procedure *	0.47	0.11	1.95	0.298
Communicating effectively *	0.57	0.24	1.39	0.218
Cooperating with dental team members	**11.68**	**3.19**	**42.79**	**<0.001**
Health	2.73	0.81	9.20	0.104
Illegal Practice	7.90	0.91	68.74	0.061
Laws and regulations	1.15	0.33	3.97	0.830
Maintain and protect patients' information *	1.15	0.65	2.03	0.623
Obtain valid consent *	1.70	0.72	3.98	0.224
Patient interests *	**2.87**	**1.84**	**4.46**	**<0.001**
*Personal behaviour - Protecting patients from risks ***	1.70	0.86	3.34	0.124
***Personal behaviour - Public confidence in profession ***	**3.23**	**2.18**	**4.77**	**<0.001**
Personal behaviour - Other	**4.63**	**2.75**	**7.79**	**<0.001**
***Probity - Caution / charge / conviction ***	**11.01**	**5.65**	**21.42**	**<0.001**
Probity - Other	**8.90**	**4.81**	**16.47**	**<0.001**
***Professional knowledge and skills - Failure to provide good quality care ***	**0.64**	**0.41**	**0.99**	**0.047**
***Professional knowledge and skills - Training and competence ***	**3.64**	**2.01**	**6.59**	**<0.001**
Professional knowledge and skills - Other	2.35	0.90	6.09	0.080
*Put patients' interests first - Advertising ***	0.80	0.27	2.34	0.680
*Put patients' interests first - Behaviour and attitude ***	0.60	0.32	1.14	0.121
***Put patients' interests first - Indemnity ***	**4.55**	**1.98**	**10.45**	**<0.001**
*Put patients' interests first - Laws and regulations ***	0.98	0.50	1.93	0.958
*Put patients' interests first - Treatment ***	0.55	0.20	1.53	0.250
Put patients' interests first - Other	1.70	0.40	7.24	0.476
Raising concerns	1.35	0.16	11.20	0.782
Respect patients' dignity and choices *	**2.31**	**1.20**	**4.46**	**0.012**
Scope of practice *	**8.35**	**2.85**	**24.48**	**<0.001**
*Working with colleagues - Team working ***	0.15	0.02	1.11	0.063
Working with colleagues - Other	1.85	0.56	6.11	0.315

*Subgroups of particular interest
§ CL = Confidence limit

Note of caution

It should be noted that the number of cases involving considerations in the following five subgroups are very low: *Cooperating with dental team members, Health, Illegal Practice, Raising concerns, Scope of practice.* Consequently the estimates for these subgroups shown in Table 44 should be interpreted with caution. However, removal of these subgroups from the model made no substantive difference to the effects of the other subgroups and so the full model has been presented.

#11 Is there any significant association or correlation between closure type and consideration, for all resolved cases at each stage of the FtP process?

Methods

Closure types at the Triage, Assessment, Investigating Committee and Practice Committee stages, were identified by particular subsets of Decision option in the Decision data set. After merging this data with the Case and Consideration data sets we analysed the subset of cases that had both Consideration and Decision data attached and were closed at (a) the Assessment, (b) the Investigating Committee, and (c) the Practice Committee stages. Cases closed at the Triage stage were not analysed due to inadequate data on Considerations.

a) For cases closed at the Assessment stage we removed the small number of cases closed due to voluntary removal of the registrant from the Register. We classified the remaining cases dichotomously as either *Closed after full assessment* or *Closed after partial or no assessment*.

b) For cases closed at the Investigating Committee and Practice Committee stages we classified the closure types dichotomously as either *Closure with sanctions* or *Closure without sanctions.* For each stage we then used a logistic regression model to predict *Closure with sanctions* by Consideration Subgroup.

Results 1: cases closed at Assessment

After removal of the 14 cases closed due to voluntary removal from the Register, 2,088 (73.1%) of the remaining 2,738 cases closed at the Assessment stage were *Closed after full assessment*. Results for the logistic regression model (Table 45) show the odds ratios for *Closure after full assessment* associated with 24 of the Consideration Subgroups. Six subgroups were removed from the model because all cases involving Considerations in those subgroups were *Closed after full assessment.* These subgroups are indicated by missing results in Table 45.

Eleven types of Consideration (emboldened in Table 45) were associated with statistically significant variation in the likelihood of *Closure after full assessment*. Considerations in two of these subgroups (*DCS Service Issue* and *Put patients' interests first - Behaviour and attitude*) were associated with lower odds of *Closure after full assessment* while Considerations in the remaining nine were related to increased odds of *Closure after full assessment.* Among the subgroups of particular interest Considerations classified under either *Patient interests* or *Personal behaviour - Protecting patients from risks* were associated with the greatest likelihood of *Closure after full assessment.*

Table 45: Logistic regression output: Dependent variable, Closure after full assessment; independent variables, Consideration Subgroups.

Consideration Subgroup	Odds Ratio	Lower 95% CL	Upper 95% CL	P value
Clear and effective complaints procedure *	1.30	0.82	2.07	0.259
Communicating effectively *	1.17	0.82	1.67	0.381
Cooperating with dental team members	2.44	0.29	20.38	0.411
DCS Service Issue	**0.33**	**0.14**	**0.78**	**0.011**
Health	–	–	–	–
Illegal Practice	–	–	–	–
Laws and regulations	**11.16**	**1.51**	**82.74**	**0.018**
Maintain and protect patients' information *	**2.09**	**1.37**	**3.19**	**0.001**
Obtain valid consent *	**2.17**	**1.06**	**4.47**	**0.035**
Patient interests *	**3.83**	**2.04**	**7.22**	**0.000**
***Personal behaviour - Protecting patients from risks ***	**2.61**	**1.36**	**4.99**	**0.004**
*Personal behaviour - Public confidence in profession **	1.04	0.77	1.40	0.816
Personal behaviour - Other	**2.35**	**1.09**	**5.07**	**0.029**
*Probity - Caution / charge / conviction **	–	–	–	–
Probity - Other	–	–	–	–
*Professional knowledge and skills - Failure to provide good quality care **	0.93	0.74	1.17	0.532
*Professional knowledge and skills - Training and competence **	1.52	0.91	2.55	0.111
Professional knowledge and skills - Other	1.08	0.57	2.05	0.803
*Put patients' interests first - Advertising **	1.78	0.98	3.25	0.059
***Put patients' interests first - Behaviour and attitude ***	**0.76**	**0.59**	**0.98**	**0.035**
*Put patients' interests first - Indemnity **	0.77	0.26	2.24	0.630
***Put patients' interests first - Laws and regulations ***	**1.68**	**1.16**	**2.43**	**0.006**
***Put patients' interests first - Treatment ***	**1.75**	**1.17**	**2.61**	**0.007**
Put patients' interests first - Other	–	–	–	–
Raising concerns	–	–	–	–
Respect patients' dignity and choices *	1.59	0.53	4.77	0.406
Scope of practice *	1.92	0.22	16.50	0.551
***Working with colleagues - Team working ***	**2.42**	**1.30**	**4.51**	**0.005**
Working with colleagues - Other	1.31	0.59	2.88	0.509

* Subgroups of particular interest
§ CL = Confidence limit

Note of caution

It should be noted that the number of cases involving considerations in the *DCS Service Issue* and *Laws and regulations* subgroups are very low. Consequently the estimates for these subgroups shown in Table 45 should be interpreted with caution. However, removal of these subgroups from the model made no substantive difference to the effects of the other subgroups and so the full model has been presented.

Results 2: cases closed at Investigating Committee

Of the 1,318 cases closed at Investigating Committee 160 (12.1%) were closed with sanctions. Results for the logistic regression model (Table 46) show the odds ratios for *Closure with sanctions* associated with 24 of the Consideration Subgroups. Five subgroups were removed from the model because all cases involving Considerations in those subgroups were *Closed without sanctions.* These subgroups are indicated by missing results in Table 46.

Seven types of Consideration (emboldened in Table 46) were associated with statistically significant variation in the likelihood of *Closure with sanctions*. Considerations in two of these subgroups (*Patient interests* and *Professional knowledge and skills - Failure to provide good quality care*) were associated with lower odds of *Closure with sanctions* while Considerations in the remaining five (*Personal behaviour - Protecting patients from risks , Personal behaviour - Public confidence in profession, Probity - Caution / charge / conviction, Put patients' interests first - Advertising* and *Put patients' interests first - Indemnity*) were related to increased odds of *Closure with sanctions.*

Table 46: Logistic regression output: Dependent variable, Closure with sanctions at Investigating Committee; independent variables, Consideration Subgroups.

Consideration Subgroup	Odds Ratio	Lower 95% CL§	Upper 95% CL§	P value
Clear and effective complaints procedure *	0.89	0.19	4.14	0.885
Communicating effectively *	1.16	0.49	2.73	0.735
Cooperating with dental team members	–	–	–	–
DCS Service Issue	2.94	0.24	36.27	0.401
Health	0.48	0.03	9.10	0.623
Illegal Practice	–	–	–	–
Laws and regulations	0.94	0.11	8.23	0.959
Maintain and protect patients' information *	1.02	0.44	2.35	0.960
Obtain valid consent *	1.74	0.67	4.51	0.257
Patient interests *	**0.05**	**0.01**	**0.21**	**0.000**
***Personal behaviour - Protecting patients from risks ***	**4.85**	**1.44**	**16.32**	**0.011**
***Personal behaviour - Public confidence in profession ***	**7.48**	**4.19**	**13.35**	**0.000**
Personal behaviour - Other	0.33	0.09	1.23	0.099
***Probity - Caution / charge / conviction ***	**12.27**	**3.85**	**39.05**	**0.000**
Probity - Other	–	–	–	–
***Professional knowledge and skills - Failure to provide good quality care ***	**0.11**	**0.06**	**0.24**	**0.000**
*Professional knowledge and skills - Training and competence **	1.42	0.48	4.15	0.525
Professional knowledge and skills - Other	1.01	0.12	8.63	0.990
***Put patients' interests first - Advertising ***	**8.17**	**2.85**	**23.45**	**0.000**
*Put patients' interests first - Behaviour and attitude **	0.56	0.24	1.31	0.184
***Put patients' interests first - Indemnity ***	**5.13**	**1.32**	**19.85**	**0.018**
*Put patients' interests first - Laws and regulations **	0.62	0.24	1.63	0.337
*Put patients' interests first - Treatment **	0.40	0.12	1.34	0.138
Put patients' interests first - Other	–	–	–	–
Raising concerns	1.79	0.10	32.69	0.693
Respect patients' dignity and choices *	0.53	0.06	4.33	0.553
Scope of practice *	–	–	–	–
*Working with colleagues - Team working **	2.31	0.91	5.83	0.077
Working with colleagues - Other	0.66	0.07	6.06	0.715

 *Subgroups of particular interest
§ CL = Confidence limit

Results 3: cases closed at Practice Committee

Of the 360 cases closed at Practice Committee 173 (48.1%) were closed with sanctions. Results for the logistic regression model () show the odds ratios for *Closure with sanctions* associated with 27 of the Consideration Subgroups. Two subgroups were removed from the model because all cases involving Considerations in those subgroups were *Closed without sanctions.* These subgroups are indicated by missing results in Table 47.

Considerations in two subgroups (emboldened in Table 47) were associated with statistically significant increases in the likelihood of *Closure with sanctions*. It must be noted however that the number of cases with Considerations in these subgroups was small (27 for each subgroup) so the results may not be robust.

Table 47: Logistic regression output: Dependent variable, Closure with sanctions at Practice Committee; independent variables, Consideration Subgroups.

Consideration Subgroup	Odds Ratio	Lower 95% CL§	Upper 95% CL§	P value
Clear and effective complaints procedure *	1.04	0.07	16.08	0.978
Communicating effectively *	0.95	0.28	3.29	0.941
Cooperating with dental team members	1.97	0.30	12.82	0.477
DCS Service Issue	–	–	–	–
Health	5.29	0.56	49.86	0.146
Illegal Practice	–	–	–	–
Laws and regulations	1.20	0.09	16.76	0.892
Maintain and protect patients' information *	0.68	0.26	1.78	0.432
Obtain valid consent *	1.73	0.48	6.19	0.399
Patient interests *	0.83	0.42	1.60	0.570
Personal behaviour - Protecting patients from risks *	1.44	0.41	5.12	0.572
Personal behaviour - Public confidence in profession *	1.12	0.55	2.29	0.757
Personal behaviour - Other	**8.34**	**2.51**	**27.72**	**0.001**
Probity - Caution / charge / conviction *	1.53	0.58	4.04	0.395
Probity - Other	**3.00**	**1.17**	**7.71**	**0.022**
Professional knowledge and skills - Failure to provide good quality care *	0.73	0.34	1.56	0.415
Professional knowledge and skills - Training and competence *	2.28	0.76	6.83	0.141
Professional knowledge and skills - Other	1.91	0.48	7.57	0.356
Put patients' interests first - Advertising *	3.29	0.32	34.14	0.319
Put patients' interests first - Behaviour and attitude *	0.50	0.19	1.36	0.175
Put patients' interests first - Indemnity *	2.45	0.57	10.63	0.231
Put patients' interests first - Laws and regulations *	2.67	0.79	8.99	0.114
Put patients' interests first - Treatment *	0.55	0.11	2.73	0.467
Put patients' interests first - Other	1.69	0.10	28.38	0.716
Raising concerns	3.23	0.11	97.55	0.499
Respect patients' dignity and choices *	1.69	0.66	4.33	0.275
Scope of practice *	6.60	0.75	58.38	0.090
Working with colleagues - Team working *	0.13	0.01	1.95	0.141
Working with colleagues - Other	0.43	0.04	4.88	0.499

* Subgroups of particular interest
§ CL = Confidence limit

Glossary

Term	Explanation
95% confidence interval	A confidence interval is a range of values that tell us about the accuracy of a particular statistic (e.g. a mean or an odds ratio) that has been calculated from a sample of data. We can be 95% confident that the true value of the statistic falls within the confidence interval.
Categorical variable	A variable that describes something by allocating it to a given category, often described in words rather than numbers. Three examples in the FtP case data are: • *The sex of a registrant, which has two categories – male and female. Variables with just two categories are 'dichotomous'.* • *The region in which a registrant obtained their primary qualification, which we classified into three categories – UK. EEA and non-EE.* • *The current stage that a case has reached in the FtP process, which we classified into four categories – triage, assessment, investigating committee and practice committee.* Numeric variables are sometimes converted into categorical variables for convenience in analysing or interpreting. *In some of our analyses for example we grouped registrant age into 5 categories: 30 years and under, 31-40, 41-50, 51-60, 61 years and over.* See also 'Numeric variable' and 'Date variable'.
Chi squared test	A particular type of hypothesis test that can be used to examine relationships between two categorical variables. *For example,* Table 23 *examines the possible association between informant type and their region of residence. Here the null hypothesis of the test is that, in the background population of all FtP cases that we might have sampled, the informant's region of residence is the same for all types of informant. The p-value (which was less than 0.001) tells us that we would be extremely unlikely to find this amount of variation in the proportions if the null hypothesis were true. We therefore reject the null hypothesis and conclude that region of residence differs across eitght types of informant. i.e. region of residence and informant type are associated.* See also 'Hypothesis test'.
Correlation	Correlation is a way of describing the relationship between two (numeric) variables. If both variables tend to increase together they are positively correlated but if one increases as the other decreases they are negatively correlated.
Date variable	A variable that gives the date on which something occurred. Two examples in the FtP case data are: • *The date on which a case was opened.* • *The date on which a registrant was first registered with the GDC.* A date variable is a particular type of numeric variable. See also 'Categorical variable' and 'Numeric variable'.
Descriptive statistics	Descriptive statistics are simple measures such as the mean, the median, the range, the standard deviation, etc. that summarise data in a meaningful way.

Term	Explanation
Frequency (table)	In statistical terms frequency is the number of times that a particular value of a variable appears in the data. For example Table 6 shows the frequency with which each Consideration Subgroup appeared in the Consideration data set. Table 6 is an example of a 'frequency table'.

Hypothesis test	A statistical method of deciding whether an apparent relationship between variables in a data set represents either:
	
	    1. a meaningful (or 'statistically significant') relationship, or else
	    2. a chance occurrence.
	
	The decision is based on a probability, called a P-value, which is calculated from the data. If the P-value is less than a threshold value, commonly 0.05, then we conclude that a 'statistically significant' relationship exists.
	
	For a specific example, as used in the analyses described in this report, see 'Chi squared test'.

Logistic regression	A statistical method of investigating the relationship between a particular dichotomous variable (one which has only two possible outcomes) and a number of other independent variables. The relationship of each variable to the dichotomous outcome variable can be summarised by 'odds ratios'. The first example of the use of logistic regression in this report occurs under Theme A where we investigated whether a registrant being involved in an FtP case (a dichotomous yes/no outcome) was related to a number of other variables including their sex, ethnicity, age, etc. (see Table 9) See also 'Odds' and 'Odds ratio'.
Mean	The usual measure of average of a set of numbers, found by adding them up and dividing by the number of numbers.

Numeric variable	A variable that describes something by counting or measuring and is a number rather than a word. Two examples in the FtP case data are:
	
	  • *The age of a registrant.*
	  • *The number of FtP cases involving a particular registrant.*
	See also 'Categorical variable' and 'Date variable'.

Odds	Odds are a way of describing the chance of something happening. The odds that an event occurs is defined as the probability that it occurs divided by the probability that it doesn't occur. *For example, the odds of rolling a six with a fair die is 1/6÷5/6 = 0.2 while the odds of tossing heads with a fair coin is 1/2÷1/2 = 1.* The higher the probability of something happening then the higher the odds but while probability is measured on a zero to one scale, odds can range from zero to infinity. The advantage of using odds rather than probability in statistical analysis is that they can be more easily estimated by regression methods. See also 'Logistic regression'.

Term	Explanation
Odds ratio	Some of the results in Themes A and D of this report are accompanied by Odds Ratios (ORs), which provide a comparison between two different subgroups (the 'reference group' and the 'comparison group') of the chance of something happening. The first example of this appeared under Theme A where we examined whether the chance of being subject to an FtP case differed between the sexes. We reported that male registrants (the comparison group) were more likely than female registrants (the reference group) to be involved in an FtP case that closed at any stage. An odds ratio of 1.75 is attached to this statement and indicates that the odds of being involved in such a case was 75% higher for males than for females. (Table 9) An odds ratio is always a positive number and should be interpreted as follows: • Odds ratio greater than 1.00: the event is more likely to occur among the comparison group • Odds ratio equal to 1.00: the comparison group is no different to the reference group • Odds ratio less than 1.00: the event is less likely to occur among the comparison group
P-value	See 'Hypothesis test'
Standard deviation (SD)	A statistical measure of the extent to which the values of a numeric variable are closely bunched together (in which case they have a small SD) or spread out (large SD). Usually, most values of a variable will fall within 2 SDs of the mean.
Variable	In the present context, variables are the characteristics of a registrant or a Fitness to Practice case that are recorded in the GDC's database and which can be used to distinguish one registrant or one case from another. Examples include the date on which a case was opened, the stage at which a case was closed, the age, sex and ethnicity of the registrant who is the subject of an allegation, the UK region from which the allegation originated and so on. Variables can be classified into three types - see 'Categorical variable', 'Date variable' and 'Numeric variable'.