REPORT COMMISSIONED BY THE ROYAL COLLEGE OF GENERAL PRACTITIONERS

Comparison of Colleague and Patient Multisource Feedback Instruments Designed for GPs in UK

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Executive Summary

Purpose: The assessment of nine colleague and 10 patient measurement instruments, provided by the Royal College of General Practitioners (RCGP), was undertaken to guide the selection of instrument(s) that reflect the duties in Good Medical Practice for General Practitioners (GMP) and the General Medical Council (GMC) Framework Attributes and to examine their psychometric qualities for evidence of validity and reliability.

Methods: The 9 colleague instruments examined were:
1. Colleague Feedback Evaluation Tool Version 2 (CFET)
2. Sheffield Peer Review Assessment Tool Version 2 (GP-SPRAT)
3. What Is A Good GP?
4. EDGECUMBE 360° Version 2
5. Academy of Medical Royal Colleges MSF Version 2 (360° Clinical)
6. General Medical Council (GMC) Colleague Questionnaire
7. 2Q MSF
8. Medical 360 Feedback
9. Sample NHS 360

The 10 patient instruments examined were
1. Improving Practice Questionnaire (IPQ)
2. Doctors' Interpersonal Skills Questionnaire (DISQ – Part of IPQ)
3. Consultation and Relationship Empathy Scale (CARE)
4. Consultation Satisfaction Questionnaire (CSQ)
5. Sheffield Patient Feedback Form (SHEFFPAT)
6. EDGECUMBE 360^0 Version 2
7. 360° Clinical
8. General Medical Council Patient Questionnaire (GMC)
9. Medical 360 Feedback
10. Sample NHS 360

In the first phase of the assessment all items on all surveys were matched to the appropriate GMP duties and GMC attributes to determine the coverage of those two frameworks. We then looked at the evidence for reliability and validity of the instruments as provided in psychometric testing. Data for the psychometric testing came in the form of publications in peer reviewed journals, internal reports, print outs of data/graphs, and e-mail correspondence. In this study psychometric properties were a secondary consideration after mapping had been considered since the purpose was to ensure the content assesses areas of importance to the RCGP (namely the duties and attributes). To clarify, while we were interested in the work that had been done to test all instruments, we recognized that the instruments had to cover the necessary elements related to the duties and attributes. Once the instruments were identified that contained the salient content, we then looked at the evidence for reliability and validity.

Results: Our key findings for the colleague questionnaires were:
- Six instruments mapped to all 7 GMP duties. CFET, GP-SPRAT, EDGECUMBE 360^0, 360 CLINICAL, GMC and Sample NHS 360.

- The examination of attributes showed that GP-SPRAT, What is a Good Doctor?, Medical 360 Feedback and EDGECUMBE 360^0 mapped to the most attributes.
- Additional psychometric testing with a larger sample size and/or more analysis of current data is needed for EDGECUMBE 360^0, 360 Clinical, 2 QMSF, Sample NHS 360
- Comprehensive psychometric testing with large samples of GPs has been done for CFET 2, GP-SPRAT, and GMC
- Based on the need for instruments to capture duties and attributes and be tested with a sufficiently large group, GP-SPRAT provided the most comprehensive coverage of duties and attributes, was tested with nearly 600 physicians and has good psychometric properties.

Our key findings for the patient questionnaires were:

- The mapping to GMP duties showed GMC, EDGECUMBE 360^0 and IPQ mapped to the most duties and their components.
- The mapping to GMC attributes showed that IPQ, DISQ, CSQ, EDGECUMBE 360^0 and GMC mapped to the most domains (3/4). GMC mapped to the most attributes (n=5) while IPQ, DISQ, CSQ and EDGECUMBE 360^0 mapped to 4 attributes.
- The instruments with the most comprehensive psychometrics testing were IPQ, DISQ, EDGECUMBE 360^0 and GMC.
- Based on the need that instruments capture duties, attributes and have adequate testing on a sufficiently large number of GP patients; GMC and IPQ appear to be the strongest instruments. GMC covers 3 duties and 8 components; 3 domains and 5 attributes, was tested on 380 GPs requires 16 patients for a generalizability coefficient of 0.93 and has had a factor analysis. IPQ maps to 2 duties and 9 components; covers 3 domains and 4 attributes, was tested with 425 GPs, requires 15 raters for a generalizability coefficient of 0.81 and has had factor analysis completed.

Conclusions: There has been considerable work done within the UK to develop and test instruments that are capable of assessing GMP duties and GMC attributes. Further, extensive psychometric work has been done on many of the instruments. We encourage fuller testing for instruments which have only been assessed with small populations of GPs (i.e., 100 or fewer). We commend the work that has been done to develop and test GP-SPRAT (colleagues) and GMC and IPQ (patients).

Comparison of Multisource Feedback Instruments Designed for GPs in UK

Background

The Royal College of General Practice (RCGP) commissioned a study to examine some of the Multi-Source Feedback (MSF) tools that are currently available for use in the UK for the assessment of GPs.

Multi source feedback (MSF), often termed 360-degree evaluation/assessment, describes specific processes and instruments for information gathering, appraisal and feedback in the workplace. In MSF, questionnaires, designed to gather data about specific behaviors or professional constructs, are administered, on behalf of the person being assessed [Lockyer & Clyman, 2008]. Data from MSF is provided in aggregate form to the person who was assessed.

MSF had its origins in industrial settings in which employees who were not able to be observed closely or frequently enough by the supervisor for the employee to receive meaningful feedback, received feedback from the people around that employee (e.g., supervisors, peers, direct reports and clients). It was recognized that others in the work group were better able to provide work-related information. MSF has been accepted in the industrial world because it uses information from multiple individuals and multiple perspectives, thus reducing the bias inherent in 'one person, one perspective' (i.e., the supervisor) evaluation systems. The employee normally completes a self-assessment instrument as well. [Tornow et al., 1998; Bracken et al., 2001].

MSF has been adopted as a way of assessing post graduate trainees [e.g., Archer et al., 2005; Davies et al., 2005; Hesketh et al, 2005; Johnson & Cujec, 1998; Joshi et al., 2004] and practicing physicians [e.g., Hall et al., 1999; Ramsey et al., 1993;Sargeant et al., 2003; Lockyer et al., 2006; Lockyer, 2003; Lockyer & Clyman, 2008; Violato et al., 1997; Violato et al., 2003; Violato et al., 2006; Violato et al., 2008]. MSF initiatives for practicing physicians are generally part of a revalidation/maintenance of competence initiative. MSF also provides quality improvement data that the physician can use to guide self-development. In medical settings, the questionnaire or instrument may be distributed to medical colleagues (e.g., peers or referring/referral physicians), non-medical co-workers (e.g., nurses, pharmacists and psychologists), patients and their family members, and self [Lockyer & Clyman, 2008].

MSF instruments comprise sets of items that can be constructed in different ways. Typically, items are brief comments, interrogatives or categories of constructs that are associated with a multi-point rating scale (e.g., 1-5, 1-9) or a behavioral anchor scale (e.g., 'usually late' to 'always on-time'). This allows information to be obtained on specific behaviors or more global categories/constructs, or both. Consistency in instrument content allows comparison of an individual's feedback with that of the self assessment and a larger comparator group. MSF can be quite flexible allowing items and domains of interest to be added or deleted as circumstances change, although revisions require re-assessment of the tool.

As MSF is survey-based, each instrument needs to be developed and assessed according to generally accepted standards for survey instruments and data [e.g., Streiner & Norman, 2008; Berk 2006] to ensure there is evidence for the validity and reliability for the inferences made.

The purpose of this study was to examine the instruments available in the UK for use as part of revalidation processes by the Royal College of General Practice. The focus was to assess (1) the instruments' alignment with Good Medical Practice Duties and General Medical Council Attributes for General Practitioners and (2) the psychometric properties of the instruments.

2. Methods

Data Collection

RCGP provided information about 9 Colleague tools and 10 Patient tools for assessment that they had received from the organizations/people who had developed them. These data included copies of the instruments as well as published, grey literature and personal communication related to the instruments.

The colleague tools assessed included:

- Colleague Feedback Evaluation Tool Version 2 (CFET)
- Sheffield Peer Review Assessment Tool Version 2 (GP-SPRAT)
- What Is A Good GP?
- EDGECUMBE 360° Version 2
- Academy of Medical Royal Colleges MSF Version 2 (360° Clinical)
- General Medical Council (GMC) Colleague Questionnaire
- 2Q MSF
- Medical 360 Feedback
- Sample NHS 360

The patient tools assessed included:

- Improving Practice Questionnaire (IPQ)
- Doctors' Interpersonal Skills Questionnaire (DISQ – Part of IPQ)
- Consultation and Relationship Empathy Scale (CARE)
- Consultation Satisfaction Questionnaire (CSQ)
- Sheffield Patient Feedback Form (SHEFFPAT)
- EDGECUMBE 360^0 Version 2
- 360° Clinical
- General Medical Council Patient Questionnaire (GMC)
- Medical 360 Feedback
- Sample NHS 360

The data available for each instrument are available in the reference lists associated with the psychometric analysis of each instrument as well as in the reference list itself.

Data Analysis

The goal of the data analysis was to assess the instruments for evidence of validity and reliability. Two questions underlie validity and reliability, respectively,

- Does the instrument measure what it is intended to assess?

- Does the instrument do this in a stable or consistent way?

Examination of the instruments proceeded in two stages. Initially, we mapped items on each survey to Good Medical Practice Duties and to General Medical Council Attributes.

Good Medical Practice Duties
"Good Medical Practice sets out the principles and values on which good practice is founded; these principles together describe medical professionalism in action. The guidance is addressed to doctors, but it is also intended to let the public know what they can expect from doctors." Good Medical Practice. Royal College of General Practitioners July 2008
http://www.rcgp.org.uk/PDF/PDS_Good_Medical_Practice_for_GPs_July_2008.pdf

General Medical Council Attributes
"This document sets out for all interested parties – GPs; other doctors; the NHS; other colleges, faculties and specialist associations; regulators; independent healthcare providers; and, most importantly, the public – the RCGP's current proposals for the evidence required for the Revalidation of GPs." RCGP Guide to the Revalidation of General Practitioners Version 4.0, June 2010
http://www.rcgp.org.uk/PDF/PDS_Guide_to_Revalidation_for_GPs.pdf

In instrument assessment, the initial goal is to determine whether the items/constructs within the instrument encompass the content for which the assessment is intended. In this case, the RCGP wanted instruments that assessed GMP duties and GMC attributes. Each item on each instrument was mapped to the appropriate sections on the GMP and GMC lists. We then looked for gaps or areas in which the instrument did not cover the required content. This stage was of critical importance as the RCGP wanted to identify the instruments which contained the content necessary for the task of assessing GPs related to both the duties and the attributes.

In the second phase, we examined psychometric data that was provided for the instrument. In some cases, this consisted of personal correspondence to RCGP. In other cases, much more extensive psychometric testing for evidence of instrument validity and reliability had been carried out by the organization (or researchers) which developed the instrument. Some of the work was in high quality peer refereed journals. Our initial goal was to catalogue the information that was provided for each instrument before examining the data itself. We examined the evidence for validity and reliability in a number of ways:

- Aim of the instrument. The 'aim' or purpose of the instrument should provide the conceptual basis for the instrument's development and measurement constructs.
- Scales and scoring used. A variety of scales can be used but must match the intent of the line of questions. Longer scales (e.g., 5 points) will be more amenable to higher levels of statistical analyses than dichotomous or short scales (e.g., yes/no, 0-2).
- Instrument development. Generally high quality instruments proceed through a variety of stages of development. This may include literature reviews, discussions with experts and expert panels, or approaches like nominal group and Delphi methods to develop initial items. There may be several levels of pilot testing in conjunction with statistical analyses

- Statistical analyses conducted.
    - Initial testing may include an examination of descriptive data (ranges, means, standard deviations, skew, etc) in a small sample.
    - Testing in later stages should involve a sufficiently large group of physicians. This will include descriptive statistics but also include factor analyses to see whether the items intercorrelate as intended. Scores may be compared to scores on other similar instruments as a measure of criterion validity. There may be an examination of the data to see whether variables such as year of graduation, gender, age, or amount of training affect scores.
    - Instrument stability (reliability) usually begins with approaches like Cronbach's alpha assessments to assess whether the overall instrument is stable. Further assessments may examine inter-rater reliability and test-retest reliability. The higher levels of assessment will be G and D studies to ensure that the data provided to an individual is reliable. In G and D studies, the instruments are assessed to determine whether the numbers of items and raters are sufficient for stability. It is possible to alter either the number of items or the number of raters to increase the stability. This assessment is important as recipients of data want to be sure that their data accurately reflects their work. In G studies, a generalizability co-efficient of 0.7 – 0.8 appears to be the minimum standard [Lockyer & Clyman, 2008], it has to be recognized that this then sets the requirements for the numbers of questionnaires to be distributed. In many cases, 6-12 colleagues and 20-30 patients will be required to achieve the appropriate G-coefficient. When the required numbers exceed this, it can be difficult to achieve a sufficient response rate. Requiring too many surveys (i.e., from >12 colleagues) may prove problematic as most physicians won't have that many colleagues who can provide the observational data in a high quality way. It may also mean that too many surveys for too many physicians are required at the same time and respondents may not have sufficient time to respond to multiple requests in a thoughtful way. From an organizational perspective, feasibility and acceptability are more likely with fewer raters.
    - Analyses may be conducted to determine whether poorly performing physicians can be identified as further evidence of validity if the instruments are designed to flag questionable performance versus being used as an educational or quality improvement tool. We have termed this "Ability to differentiate sub-optimal performance".
    - Last, there are often acceptability and feasibility studies done. Acceptability studies may involve surveys or focus groups with stakeholders to determine their perceptions of data accuracy, data use and ease of responding to the surveys. Feasibility studies may include examinations of participation rates to determine whether the response rate is high enough that the physicians can obtain reliable data. Feasibility may also look at the organization's capacity to manage the processes of survey administration, data collection, and feedback in a timely manner.

- Feedback. The ultimate purpose of any assessment tool is to provide data that people can use to improve their work. Studies of feedback in MSF look at acceptability and utility of the data to the physician who is assessed.
- Publications. Higher quality instruments are likely to have been subjected to review through the peer review processes required for publication in academic journals. This provides further evidence of quality.

3. Results

3.1 Colleague Instruments

3.1.1 Mapping to Good Medical Practice (GMP) Duties for General Practitioners.

The mapping of colleague items to Good Medical Practice, presented in appendices 1 to 9, shows that all instruments have items that map onto Good Clinical Care; Maintaining Good Practice; and Relationships with Patients. All instruments except Medical 360 Feedback map to Working with Colleagues. Six of the instruments, CFET, GP-SPRAT, EDGECUMBE 360°, 360^0 Clinical, GMC and Sample NHS 360^0 map onto Teaching and Training/Appraising and Assessing. Probidity and Health are captured in all instruments except 2Q MSF. A summary table is provided in Table 1.

There is variability in how many items each instrument contains and thus how well each instrument captures all of the concepts for each of the duties. G-SPRAT is mapped to the most duties of Good Clinical Care (mapped to 10 duties). What is a Good GP?, EDGECUMBE 360^0, GMC and Sample NHS 360 have the most (3) mappings to Maintaining Good Practice. Medical 360^0 Feedback had the most (6) mappings to Relationship with Patients. Sample NHS 360^0, and GP-SPRAT have the most (7) mappings to Working with Colleagues followed by What is a Good GP? with 6 mappings to this Duty. Sample NHS 360^0 has 3 mappings to Probity and Health followed by Medical 360^0 Feedback and CFET with 2 mappings to Health.

In summary the following 6 instruments map to all duties:
CFET, GP-SPRAT, EDGECUMBE 360^0, 360 CLINICAL, GMC and Sample NHS 360.

Table 1: Summary of Mapping of Colleague Items to Good Medical Practice (GMP) Duties

Duties	CFET	GP-SPRAT	What is a good GP	EDEGCUMBE 360°	360 Clinical	GMC	2Q MSF	Medical 360 Feedback	Sample NHS 360
Good Clinical Care	X	X	X	X	X	X	X	X	X
Maintaining good practice	X	X	X	X	X	X	X	X	X
Teaching and training, appraising and assessing	X	X		X	X	X			X
Relationships with patients	X	X	X	X	X	X	X	X	X
Working with colleagues	X	X	X	X	X	X	X		X
Probity	X	X	X	X	X	X		X	X
Health	X	X	X	X	X	X		X	X

3.1.2 Mapping to General Medical Council (GMC) Attributes for General Practitioners

The mapping of colleague items to General Medical Council Attributes, presented in appendices 10 to 18, shows that most instruments have items that map onto The 4 Domains of Knowledge, Skills and Performance; Safety and Quality; Communication, Partnership and Teamwork, and Maintaining Trust. The exception to this is 2Q MSF which does not have any items related to Safety and Quality. See table 2.

Looking more closely at the attributes within each Domain, three instruments, CFET, EDGECUMBE 360^0 and 360^0 Clinical do not map onto all of the attributes of the Knowledge, Skills and Performance Domain. For the Safety and Quality Domain, only GP Sprat contains items for all three attributes. The other instruments are missing one or two of the attributes; 2Q MSF does not contain any safety and quality items. For the Communication, Partnership and Teamwork Domain, all three attributes are included in GP-SPRAT, What is a Good GP? , EDGECUMBE 360^0, 360 Clinical, 2QMSF and Medical 360 Feedback. CFET, GMC and Sample NHS 360 do not cover ‘establish and maintain partnerships with patients’. The Maintaining Trust Domain is mapped by all instruments. Only GP-SPRAT maps to all Attributes.

In summary,

- GP-SPRAT maps to all attributes on all Domains.
- What is a Good GP? and Medical 360 Feedback map onto all but 2 attributes
- EDGECUMBE maps onto all but 3 attributes

Table 2: Summary Mapping of Colleague Items to General Medical Council Attributes

Attributes	CFET	GP-SPRAT	What is a Good GP	EDGECUMBE 360°	360 Clinical	GMC	2Q MSF	Medical 360 Feedback (RMS)	Sample NHS 360
Domain 1 – Knowledge, Skills and Performance									
Attribute: Maintain your professional performance	x	x	x		x	x	x	x	x
Attribute: Apply knowledge and experience to practice	x	x	x	x	x	x	x	x	x
Attribute: Keep clear, accurate and legible records		x	x	x		x	x	x	x
Domain 2 – Safety and Quality									
Attribute: Put into effect systems to protect patients and improve care	x	x	x	x	x				
Attribute: Respond to risks to safety		x		x				x	
Attribute: Protect patients and colleagues from any risk posed by your health	x	x	x			x		x	x
Domain 3 – Communication, Partnership and Teamwork									
Attribute: Communicate effectively	x	x	x	x	x	x	x	x	x
Attribute: Work constructively with colleagues and delegate effectively	x	x	x	x	x	x	x	x	x
Attribute Establish and maintain partnership with		x	x	x	x		x	x	
Domain 4 – Maintaining Trust									
Attribute: Show respect for patients	x	x	x	x		x		x	x
Attribute: Treat patients and colleagues fairly and without discrimination		x		x	x		x		
Attribute: Act with honesty and integrity		x	x		x	x		x	x

3.1.3 Psychometric Assessment

An examination of the instruments and their psychometric properties was carried out. These data are depicted in Appendices 19 to 27. A summary of the analyses is presented in Table 3.

It is to be noted that Sample NHS 360 is not reported; no psychometric testing has been carried out for this instrument. Small sample sizes were reported for Medical 360 Feedback (22 GPs) What is a Good GP? (12 GPs) and 2QMSF (n=46). These are in the early stages of development and/or testing and cannot be further considered as viable tools until additional work is done. CFET version 2, (n= 32), has been assessed by its researchers. One additional item was added to CFET version 2 compared to version 1. As this has not affected its psychometric robustness, CFET is included.

Tests for reliability were carried out for CFET Version 2, GP-SPRAT, EDGECUMBE 360^0 Version 2, 360 Clinical Version 2, GMC, 2QMSF and Medical 360 Feedback. Cronbach's alphas reported were high (0.90 and over) except for Q2MSF whose alpha was still reasonable at

0.80. The Ep^2 ranged from 0.60 to 0.80 for 5 to 14 raters. All of these instruments have had either a G/D study or a Spearman Brown prophecy formula conducted.

There are instruments that require additional work before their psychometric properties can be fully evaluated. EDGECUMBE 360^0 has recently been revised and a limited assessment of validity and reliability (i.e. Spearman Brown prophesy formula and Cronbach's alpha) for GPs has been done. The data available include other specialty groups. Similarly data from 250 family physicians are being analysed for 360 Clinical and not available for examination.

Three instruments have current and extensive psychometric data GP-SPRAT, GMC and CFET.

GP-SPRAT was tested on adequately large samples of 348 and 246 physicians with good response rates of 76%. Factor analysis indicates four factors that accounts for 73% of the variance. The G-SPRAT shows good evidence of reliability by the Cronbach's alpha of 0.97 and inter-item correlation was 0.63. The G study showed good evidence for reliability as indicated by the Ep^2 of 0.80 for 14 assessors in one study and 0.60 for 14 assessors in another study. This instrument has been used for physicians who have been flagged as having low scores provided by their colleagues. The instrument has been used to provide feedback using an appraiser/trainer.

CFET which previously showed robustness (Lockyer & Fidler, Feb 2009) has had an item added related to teaching and training colleagues. The group analyzed this additional item in a study with 32 physicians in 2 Deaneries and found it not affect its robustness. This CFET has also undergone factor analysis (2 factors with 32 physicians; 4 factors in the previous version [Campbell et al, 2010] and a G study.

The GMC showed similar psychometric properties. The GMC used an adequately large sample of GPs (309) from a wide range of practice areas. Factor analysis resulted in three components accounting for 61% of the total variance. Cronbach's alpha was large at 0.92 although a revised formula resulted in an alpha of 0.85. Inter-item correlation was 0.42 and the Spearman Brown prophecy formula of 0.85 was achieved with a minimum of 8 completed questionnaires. The G study showed an Ep^2 of 0.80 for 12 assessors.

Table 3: Summary of the Psychometric Assessment of Colleague Instruments

		CFET Version 2	GP-SPRAT	What is a Good GP?	EDGECUMBE 360° Version 2	360 Clinical Version 2	GMC	2Q MSF	.Medical 360 Feedback (RMS)	Sample NHS 360
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	X	X	X	X	X	X	X	X	X
Scale and Scoring	What do the scales measure?	X	X	X	X	X	X	X	X	X
	How do the scales measure the construct?	X	X	X	X	X	X	X	X	X
Publications	Are there publications related to questionnaires and its assessment?	X	X		X		X	X		
Item development and assessment of items	What approaches have been used to develop items?	X	X	X	X	X	X		X	
Testing of instrument	Descriptive data (means, SD)	X	X				X	X		
Samples used for testing instrument		X	X	X	X	X	X	X	X	
	Study Group	X	X	X	X	X	X	X	X	
Types of Assessors /respondents	(i.e., peers, co-workers)?	X	X	X	X	X	X	X	X	
Construct validity	Comparison to other instruments	X				X		X		
	Factor analysis	X	X			X	X		X	
Reliability	Cronbach's alpha	X	X		X		X	X		
	Inter-rater reliability						X	X		
	Test-retest							X		
	Inter-item Correlation	X	X							
	Spearman Brown prophecy formula				X		X			
	G-study or D-study	X	X			X	X	X	X	
Ability to differentiate sub-optimal performance			X			X	X			
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	X	X	X	X	X	X	X	X	

3.1.4 Summary of Colleague Instruments

Our task was to identify the instruments which mapped to GMP duties and GMC attributes as well as to review psychometric properties. In this study psychometric properties are a secondary consideration after mapping has been considered since the purpose is to ensure the content assesses areas of importance to the RCGP (namely the duties and attributes).

Our key findings are

- Six instruments mapped to all 7 GMP duties. CFET, GP-SPRAT, EDGECUMBER 360^0, 360 CLINICAL, GMC and Sample NHS 360.
- The examination of attributes showed that GP-SPRAT, What is a Good Doctor?, Medical 360 Feedback and EDGECUMBE 360^0 mapped to the most attributes.
- Additional psychometric testing with a larger sample size and/or more analysis of current data is needed for EDGECUMBE 360^0, 360 Clinical, 2 QMSF, Sample NHS 360
- Comprehensive psychometric testing with large samples of GPs has been done for CFET 2, GP-SPRAT, and GMC
- Based on the need for instruments to capture duties and attributes and be tested with a sufficiently large group, GP-SPRAT provided the most comprehensive coverage of duties attributes and was tested with nearly 600 physicians and has good psychometric properties.

3.2 Patient Instruments

3.2.1 Mapping to Good Medical Practice (GMP) Duties for General Practitioners.

There are 7 main duties in GMP. However four of these duties (i.e. Maintaining Good Practice; Teaching and Training, Appraising and Assessing; and Working with Colleagues and Health) are beyond the scope of patients to observe. Consequently these instruments would not be expected to comprehensively assess all duties. Patient relevant duties are presented in appendices 28 to 37.

An examination of the duty, Good Clinical Care, shows all but CARE and 360 Clinical address this duty. However IPQ and EDGECUMBE 360^0 address more of the components in this duty (4 and 3 respectively) compared to the other instruments which address 0, 1 or 2 components. For Relationship with Patients, 360 Clinical addresses 8 components and EDGECUMBE 360^0 addresses 7 components. CARE addresses 6 components, IPQ, and GMC address 5 components. One instrument, GMC, mapped to Probity.

In summary

- GMC mapped to 3 duties and 8 components
- EDGECUMBE 360^0 mapped 2 duties and 10 components
- IPQ mapped to 2 duties and 9 components

Table 4: Summary of Mapping Patient Items to Good Medical Practice (GMP) Duties

Duties	IPQ	DISQ	CARE	CSQ	SHEFFPAT	EDGECUMBE 360°	360 Clinical	GMC	Medical 360 Feedback (RMS)	Sample NHS 360
Good Clinical Care										
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	x	x		x		x		x	x	x
2b. Providing or arranging advice, investigations or treatment where necessary								x		x
3e. Respect the patient's right to seek a second opinion	x									
3(h) be readily accessible when you are on duty	x	x		x		x				
4. Supporting self care	x				x	x				
Relationships with patients										
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.			x	x	x		x			
21. Doctor-patient partnership										
(a) be polite, considerate and honest			x			x	x	x		x
(b) treat patients with dignity						x	x			
(c) treat each patient as an individual	x	x	x	x						
(d) respect patients' privacy and right to confidentiality	x	x		x	x			x		x
(e) support patients in caring for themselves to improve and maintain their health			x		x	x				
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.						x	x	x	x	

Duties	IPQ	DISQ	CARE	CSQ	SHEFFPAT	EDGECUMBE 360°	360 Clinical	GMC	Medical 360 Feedback (RMS)	Sample NHS 360
22. Communicate effectively										
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	x	x	x	x	x	x	x	x	x	x
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	x	x	x	x	x	x	x	x	x	x
(c) respond to patients' questions and keep them informed about the progress of their care						x	x		x	
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.										
31. Open and honest with patients if things go wrong. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	x									
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.							x			
Probity								x		

3.2.2 Mapping to General Medical Council (GMC) Attributes for General Practitioners

The mapping of patient items to General Medical Council Attributes, are presented in appendices 38 to 47.

IPQ, DISQ, CSQ, EDGECUMBE 360^0, GMC, Medical 360 Feedback and Sample NHS 360 mapped to Domain 1 attribute 2 “Apply Knowledge and experience to practice”.

No items mapped to Domain 2 Safety and Quality.

All instruments mapped to Domain 3 Attribute 1 “Communicate effectively” and attribute 3 “Establish and maintain partnership with patients”.

For Domain 4, IPQ, DISQ, CSQ, CARE, SHEFFPAT, EDGECUMBE 360^0, 360 Clinical and CMC mapped to attribute 1 “Shows respect for patients”. Only SHEFFPAT mapped to attribute 2 “Treat patients and colleagues fairly and without discrimination’ and only GMC mapped to attribute 3 “act with honesty and integrity”

Overall GMC mapped to the most attributes (5) followed by IPQ, DISQ, CSQ, SHEFFPAT, and EDGECUMBE 360^0 with mapping to 4 attributes.

In summary,

- IPQ, DISQ, CSQ, EDGECUMBE 360^0 and GMC mapped to the most Domains (n=3/4).
- GMC mapped to 5 attributes while IPQ, DISQ, CSQ, and EDGECUMBE 360^0 all mapped to 4 attributes.
- SHEFFPAT which mapped to 2 Domains covered 5 attributes.

Table 5: Summary of the Mapping of Patients Items to General Medical Council (GMC) Attributes

Attributes	IPQ	DISQ	CARE	CSQ	SHEFFPAT	EDGECUMBE 360°	360 Clinical	GMC	Medical 360 Feedback	Sample NHS 360
Domain 1 – Knowledge, Skills and Performance										
Attribute: Maintain your professional performance										
Attribute: Apply knowledge and experience to practice	x	x		x		x		x	x	x
Attribute: Keep clear, accurate and legible records										
Domain 2 – Safety and Quality										
Attribute: Put into effect systems to protect patients and improve care										
Attribute: Respond to risks to safety										
Attribute: Protect patients and colleagues from any risk posed by your health										
Domain 3 – Communication, Partnership and Teamwork										
Attribute: Communicate effectively	x	x	x	x	x	x	x	x	x	x
Attribute: Work constructively with colleagues and delegate effectively										
Attribute Establish and maintain partnership with patients	x	x	x	x	x	x	x	x	x	x
Domain 4 – Maintaining Trust										
Attribute: Show respect for patients	x	x	x	x	x	x	x	x		
Attribute: Treat patients and colleagues fairly and without discrimination					x					
Attribute: Act with honesty and integrity								x		

3.2.3 Psychometric Assessment

An examination of the instruments and their psychometric properties was carried out. These data are depicted in Appendices 48 to 55.

It is to be noted that psychometric information for Medical 360 Feedback (RMS) and Sample NHS 360 are not reported since no psychometric information was provided for Medical 360 Feedback (RMS) and no testing has been carried out for Sample NHS 360. Four instruments have been tested on new samples since the initial report was completed [Lockyer, Fidler 2009]. These include IPQ, CARE, SHEFFPAT and EDGECUMBE 360^0. GMC, DISQ and CSQ and 360 Clinical instruments, have not changed since our previous report (Lockyer, Fidler 2009).

Adequately large samples were used for IPQ (425 physicians), DISQ (170 physicians), CSQ (126 physicians), EDGECUMBE 360^0 (250 physicians) and GMC (380 physicians). SHEFFPAT has been tested with 67 GPs and is undergoing further data analysis with another 250 physicians. 360 Clinical is undergoing assessment as it has recently been revised. While CARE appears to have been tested extensively in many settings its assessment on a GP sample is limited (26 in 2006, 25 in 2008). A small study was done of 360 Clinical (n=78) so it requires an additional testing in a larger sample.

Results of factor analysis were reported for IPQ, DISQ, CSQ, 360 Clinical and GMC but not for EDGECUMBE 360^0.

Testing of reliability for IPQ, DISQ, CSQ, EDGECUMBE 360^0 and GMC show that the internal consistency of reliabilities were high ($\alpha \geq 0.90$).

Data from the G, D and Spearman Brown prophecy formula assessments were as follows: GMC had a G coefficient of 0.93 based on 16 patient (G study); DISQ had a hypothetical R of 0.81 based on 22 raters (D study); CSQ provided information from a Spearman Brown prophecy formula that 50 patients would produce a 95% confidence interval; IPQ showed an Ep2 of 0.81 for 15 raters. EDGECUMBE 360^0 provided a Spearman Brown prophecy formula result of 0.858 for 20 patients.

Thus the instruments with the most psychometric testing for GPs with an adequate sample size were IPQ, DISQ, CSQ, GMC, and EDGECUMBE 360^0. It should be noted that EDGECUMBE 360^0 is still running analyses and preparing internal reports. They are not at the stage of peer. review.

The instrument with optimal psychometric testing and results that indicate feasibility (a reasonable number of surveys required per physician) are: IPQ, DISQ EDGECUMBE 360^0 and GMC. The EDGECUMBE 360^0 does not have factor analysis data. CSQ reports requiring 50 patients for a 95% CI which is triple the number of patients needed by the other instruments. This may present feasibility and acceptability issues.

Table 6: Summary of Psychometric Assessment of Patient Instrument

		IPQ	DISQ	CARE	CSQ	SHEFFPAT	EDGECUMBE 360°	360 CLINICAL	GMC
Measuring aim or construct of survey	Is there a conceptual basis for the instrument's development and measurement constructs?	X	X	X	X	X	X	X	X
Scale and Scoring	What do the scales measure?	X	X	X	X	X	X	X	X
	How do the scales measure the construct?	X	X	X	X	X	X	X	X
Publications	Are there publications related to the questionnaire and its assessment?	X	X	X	X	X			X
Item development and assessment of items	What approaches have been used to develop items?	X	X	X	X	X	X	X	X
Testing of instrument	Descriptive data (means, SD)	X	X	X	X	X		X	X
Samples used for testing instrument		X	X	X	X	X	X	X	X
	Study Group	X	X	X	X	X	X	X	X
Type of assessors / respondent		X	X	X	X	X	X	X	X
Construct validity	Comparison to other instruments		X	X	X	X			
	Factor analysis	X	X	X	X			X	X
Reliability	Cronbach's alpha	X	X	X	X		X		X
	Inter-rater reliability		X	X					X
	Test-retest	X	X		X				
	Inter-item Correlation	X		X					X
	Spearman Brown prophecy formula						X		X
	G-study or D-study	X	X	X	X	X		X	X
Ability to differentiate sub-optimal performance		X		X	X				X
Feedback to Assessed Physicians	Has the data been used to provide feedback to the sample under study?	X	X	X	X	X	X	X	X

3.2.4 Summary of Patient Instruments

Our task was to identify the instruments which mapped to GMP duties and GMC attributes as well as to review psychometric properties. In this study psychometric properties are a secondary consideration after mapping has been considered since the purpose is to ensure the content assesses areas of importance to the RCGP (namely the duties and attributes).

Our key findings are:

- The mapping to GMP duties showed GMC, EDGECUMBE 360^0 and IPQ mapped to the most duties and their components.

- The mapping to GMC attributes showed that IPQ, DISQ, CSQ, EDGECUMBE 360^0 and GMC mapped to the most domains (3/4). GMC mapped to the most attributes (n=5) while IPQ, DISQ, CSQ, and EDGECUMBE 360^0 mapped to 4 attributes.

- The instruments with the most comprehensive psychometric testing were IPQ, DISQ, and GMC.

- Based on the need for instruments to capture duties and attributes and have adequate testing on a sufficiently large number of GP patients; GMC and IPQ appear to be the strongest instruments. GMC covers 3 duties and 8 components; 3 domains and 5 attributes, was tested on 380 GPs requires 16 patients for a generalizability coefficient of 0.93 and has had factor analysis. IPQ maps to 2 duties and 9 components; covers 3 domains and 4 attributes, was tested with 425 GPs, requires 15 raters for a generalizability coefficient of 0.81 and has had factor analysis completed.

4. Discussion

Developing instruments that are of high quality is an exciting but also a laborious task. The work that has gone into developing instruments in the UK is no exception. For many of the instruments, many iterations were required to obtain high quality questionnaires. Our assessment focused on the alignment with GMP duties and GMC attributes before proceeding to look at the psychometric analyses that had been undertaken. We were impressed by the work that had been done, particularly since our previous reviews of colleagues [Lockyer & Fidler, Feb 2009] and patients [Lockyer & Fidler, Aug 2009].

Our methods section described our approach and what we were looking for in our examination of instruments. Our results section summarizes our findings. Our appendices provide an in-depth look at each of the tools, their mapping, and what we learned about the evidence for their validity and reliability. In reviewing the instruments, we were impressed with the amount of work that has been undertaken. We appreciate that all of the instruments do not have the same aim, thus may not provide the same coverage of GMP duties and GMC attributes. However, our task was to identify the instruments which mapped to GMP duties and GMC attributes as well as to review psychometric properties. In this study psychometric properties are a secondary consideration after mapping has been considered since the purpose is to ensure the content assesses areas of importance to the RCGP (namely the duties and attributes).

Colleague Instruments

All instruments mapped to GMP duties. The examination of attributes showed that GP-SPRAT, What is a Good Doctor?, Medical 360 Feedback and EDGECUMBE 360^0 mapped to the most attributes. However What is a Good Doctor and Medical 360 Feedback require psychometric

assessment with larger sample sizes. In the end, the instruments which provide coverage of the appropriate content and have undergone sufficient testing are GP-SPRAT, EDGECUMBE 360^0 and CFET 2.

We would like to offer the additional comments about the colleague instruments. We recognize that some are still in development while others have been carefully described in the literature. There is considerable variability in the maturation of the instruments and the testing undertaken.

GMC survey. We were impressed by the quality of the work done to develop and test this instrument [Campbell et al., 2008]. The instrument was developed specifically to cover the GMC domains. The initial pilot involved individual discussions with the physicians and solicitation of feedback about the experience. Data analysis was undertaken and adjustments made. A larger study was conducted that enabled the study team to assess the data descriptively as well as to complete a factor analysis, internal consistency analysis, apply the Spearman Brown prophesy formula, and a G-study. That study identified that 12 colleagues were required to achieve G = 0.76 (0.19). Work was also undertaken to understand the free-text comments associated with the instrument [Richards et al., 2009]. While many instruments offer an opportunity for respondents to provide comments, little work has been done to examine the nature and utility of the comments. This study reviewed 1636 colleague comments received by 38.3% of the participating physicians. They found that while comments provided useful data and could be mapped onto the items on the survey; it was not useful to analyze (code/categorize) the comments for the physician. Further they identified that the majority of the comments were positive; 7.8% were negative. The negative comments were clustered around a subset of physicians (80/302 or 26.5%).

GP SPRAT. We commend the work that had been done in creating the GP version of SPRAT [Archer, Technical Report, 2010]. SPRAT was originally developed as an assessment tool for pediatric trainees [Archer et al., 2005; Davies et al., 2005]. They have now tested the instruments with GPs. They developed the GP version with expert consultation, testing with 348 GPS across 3 regions of the UK. They examined the internal structure, conducted factor analyses which determined there were 4 main factors, examined for bias [did different source types such as receptionists versus F2 trainees versus Health Visitors provide higher/lower scores], conducted a D-study which established that 9-14 colleagues were sufficient to achieve 0.70-0.80, examinations of items. They also tested the instruments in conjunction with the National Clinical Assessment Service (NCAS) with physicians who were on the interim register (iMAP). The NCAS D-study indicated that 14 colleagues only produced 0.6 suggesting more would be needed for this group. Nonetheless, they found that GP-SPRAT was able to highlight poor performance with practitioners with whom concerns had been raised. This finding is particularly important if the intent of MSF is to identify physicians in difficulty.

CFET: In our previous work for the RCGP [Lockyer & Fidler, Aug, 2009] CFET was one of the more highly tested instruments. Since that time, the development group has added an item related to teaching and training colleagues (GMP domain) as that was missing. There are GMC attributes that are not covered which may make the instrument less helpful than instruments that assess both GMP domains and GMC attributes. However, it is to be noted that the group [Campbell et al., 2008] have done some more testing with 32 GPs in 2 Deaneries and the

additional item has not affected CFET's psychometric robustness and may strengthen its structure and consistency. Additionally, they have had a recent publication [Campbell et al, 2010] which describes data from another 179 physicians. This study shows that 14 colleague responses will produced a G coefficient of 0.82. More importantly, this paper appears to be the first to include modeling of performance. In this case, they found that items related to specific skills predicted global responses. The combination of CFET with DISQ (patient survey) in a modeling analysis for the same physicians were examined to determine whether the 27 non-global items could predict the 3 global items for a total global score and found this was a good fit. These data demonstrate that colleagues and patients are identifying similar levels of performance and doctors who receive low feedback scores may require further attention suggesting the tool may offer diagnostic value. Data from the CFET has been used in a theoretical/technical study to compare formulae used in G and D studies. That work has contributed to our understanding of minimum numbers required in MSF in which the data are unbalanced (different numbers of raters for each physician), uncrossed (raters rate the physician only once) and fully nested (raters for each physician are unique to that physician) [Narayanan et al., 2010].

EDUCUMBE 360^0: EDUCUMBE 360^0 has also continued to gather data about the instrument as well as modify the instrument. However, the data are not yet formalized into an internal report or a publication. The group has completed a Spearman Brown analysis as well as a Cronbach's analysis. The instrument does cover all of the GMP duties. It covers the domains of the GMC but not all of the attributes.

2Q MSF. 2Q MSF continues to be evaluated as attested to in a recent publication [Murphy et al., 2009] and internal reports. While the instrument does not comprehensively map to all GMP duties and GMC attributes, it has been assessed with that caveat. It is unique in that free text boxes are available which allow those providing data to make specific points to guide the physician. Hopefully, there will be a publication resulting from an analysis of the free text data. Those interested in MSF will be interested in information related to the amount of free text data received for each physician, the types of comments provided, the alignment of the comments to the survey items, physician perception of the free text data and physician use of both quantitative and qualitative data.

What is a Good GP? This instrument maps to GMP duties and covers the domains of the GMC attributes, although, it misses some of the specific attributes. It is at an early stage of development. It must be noted that the intent of the instrument is to promote team working under the concept of the 'good GP'. The items have been developed with input from primary health care teams and their perceptions of what constitutes the good GP? [Lough, Internal Report, no date provided]

360 Clinical. This instrument maps to all of the GMP duties but has incomplete coverage of the GMC attributes within the domains. It was designed as an education/quality improvement initiative for physicians who do not have problems while being able to reliably identify the few who may have performance issues. As such it is formative, but allows poor results to trigger further scrutiny. Internal (unpublished) documents [MacKillop, e-correspondence, 2010] indicate that the most recent assessment of the instrument included a factor analysis, comparison

of mean scores by source and a G-study that indicated 14 assessors were needed for a G coefficient of 0.71. It was initially tested for 105 physicians and later (version 2) with 205 physicians.

360/Tailored Solution is a proposal for a tool. The company involved, Worthy Associates, has identified 33 items for possible inclusion based on the GMC Framework. The company has software and systems that have been used widely in many industrial and public setting settings. The tool would be branded for the RCGP. They provided both a sample questionnaire and a sample report for assessment. No work has been done to administer this assessment in any setting. As a consequence we could only map the items and point out that testing with GPs would be required before making further comments.

RMS 360 is a tool that was developed and tested in 2007 in Southhampton University Hospitals NHS Trust. Based on a small test, the surveys were restructured and re-launched in 2008. The feedback report has also been developed. At this time, 33 GPs have completed the process. As a consequence, we could only map the items and point out that additional testing will be needed before making further comments.

Patient Instruments

The examination of the components of the GMP duties suggested GMC, EDGECUMBE 360^0 and IPQ provided the best mappings. The examination of the attributes showed IPQ, DISQ, CSQ, EDGECUMBE 360^0 and GMC mapped to the most attributes. After looking at the instruments provided, the broadest coverage of duties and attributes we considered the psychometrics associated with each of these. This analysis suggests that IPQ, EDGECUMBE 360^0, GMC and DISQ all had been tested with proven psychometric qualities.

EDGECUMBE 360^0. Work is ongoing to further examine this instrument. As in the case of the colleague instrument, patient data continues to be collected and analyzed. The most recent analyses of data (Feb – Sept 2009) involved 1811 patients and showed that they achieved a Spearman Brown coefficient of 0.858. It is presumed from the internal unpublished report received (S George) that this is based on 20 patients as that is the requirement.

GMC. We were impressed at the work done to assess the patient questionnaire. Physicians were given 45 surveys with the expectation that 30 surveys would form the patient database for the physician but got a mean of 37/physician. The patient surveys were skewed towards favorable responses as has been observed in other studies [Lockyer & Clyman, 2008]. The group [Campbell et al., 2008] conducted a factor analysis, identified that 23 surveys would achieve a G coefficient of 0.65 and 35 respondents would yield a G coefficient of 0.75. This group has also conducted a correlation of the patient and colleagues scores finding the correlation to be positive but low, similar to other work in industry [Smither et al., 2005]. Data from the GMC patient questionnaire has been used in a theoretical/technical study to compare formulae used in G and D studies. That work has contributed to our understanding of minimum numbers required in MSF in which the data are unbalanced (different numbers of raters for each physician), uncrossed (raters rate the physician only once) and fully nested (raters for each physician are unique to that physician) [Narayanan et al., 2010].

DISQ. Critical work has been done to advance understanding of DISQ [Campbell et al., 2010]. This work involved 179 physicians and a mean of 47 patients. The D study showed that 25 patients will produce a generalizability coefficient of 0.81. More importantly, this study conducted a modeling analysis in which DISQ and CFET (colleague survey) data were combined in a modeling analysis for the same physicians to determine whether the 27 non-global items could predict the 3 global items for a total global score and found this was a good fit. They concluded that these data demonstrate that colleagues and patients are identifying similar levels of performance and doctors who receive low feedback scores may require further attention suggesting the tool may offer diagnostic value.

IPQ. Improving Practice Questionnaire was developed as a ‘practical tools to allow general practitioners to seek patient views. It was developed and tested initially with data from 55687 patients (1422 GPs and 22 nurses) [Greco et al., 2003]. The group used the IPQ as part of a randomized control trial involving 14 intervention practices in which a patient/staff partnership group was introduced and 14 practices that did not have an group as controls [Greco et al., 2006]. Data from IPQ has been used in a study to compare different types of G coefficient analysis (alpha coefficient, unaggregated G and aggregated G) and two different D formulae in a theoretical/technical study [Narayanan, Unpublished report]. All of these studies attest to the robustness of the data set and ongoing interest in the instrument.

SHEFFPAT is a well established instrument [Archer, Technical report, 2010]. Recent work has focused on an assessment of 67 GPs who used SHEFFPAT as part of the National Clinical Assessment Service (NCAS). Another study involving 250 physicians who used the instrument as part of the iMAP process is underway. The NCAS study identified that relatively few patients were required to achieve reliability (5 patients yielded 0.7 reliability coefficient and 9 patients yielded 0.9. However, Archer cautions that a cohort of 20 patients should be continued as obtaining reliability with fewer than 20 is unusual.

360 Clinical. This instrument was developed under the auspices of the Federation of Royal College of Physicians to create a questionnaire that would support appraisal and revalidation and cover professional behavior, humanistic qualities and some clinical aspects of a doctor’s work. The initial instrument was revised from 9 compound items to 20 single question items following testing. Originally it was tested with 112 GPs, since then 205 GPs were recruited to test the new version. Analysis of the data from the new version identified two factors: humanistic and performance of technical procedures. The number of raters required could be decreased. This is one of the first studies to compare the evidence for validity between a short survey with compound items and a longer survey in which single concept items are used. It demonstrates that reliability can be affected by changing the items. [Mackillop et al., correspondence].

CARE has received considerable attention with many publications. It was developed as an Empathy Measure so does not cover the attributes and duties in a comprehensive way. The research is worthy of comment as documented by the lead [Mercer, The CARE Measure—summary of research and current use, unpublished report, 2009]. There is evidence of validity and reliability demonstrated in many settings and contexts. The most recent publication [Murphy et al, 2009] compared the reliability offered by CARE with 5 other instruments showing that

CARE offered a reliable and feasible opinion of workplace performance. It was possible to achieve a reliability coefficient of 0.8 with 41 patients. Extensive work has been carried out examining the interrelationship between GP empathy, patient enablement and change in main complaint and well being prospectively using Structural Equation Modeling (SEM) to model these interactions (Mercer et al 2008).

CSQ is a questionnaire with 18 items. This instrument has been tested on samples of adequate size and has publications reporting psychometric testing.

Medical 360 Feedback (RMS) At this time no information has been provided as to the application and psychometric testing of the patient Medical 360 Feedback (RMS). As a consequence, we could only map the items and point out that additional testing will be needed before making further comments.

Sample NHS 360 Feedback is a proposal that Worthy Associates proposed for a patient questionnaire tool using their software and systems. Like the 360/Tailored Solution (colleagues), this instrument has not gone beyond identification of potential items. It has not been administered to patients.

5. Conclusions

Our task was to identify the instruments which mapped to GMP duties and GMC attributes as well as to review psychometric properties for 9 colleague and 10 patient questionnaires. In this study psychometric properties were a secondary consideration after mapping had been considered since the purpose was to ensure the content assesses areas of importance to the RCGP (namely the duties and attributes). To clarify, while we were interested in the work that had been done to test all instruments, we recognized that the instruments had to cover the necessary elements related to the duties and attributes. Once the instruments were identified that contained the salient content, we then looked at the evidence for reliability and validity.

Our key findings for the colleague questionnaire were :

- Six instruments mapped to all 7 GMP duties. CFET, GP-SPRAT, EDGECUMBER 360^0, 360 CLINICAL, GMC and Sample NHS 360.
- The examination of attributes showed that GP-SPRAT, What is a Good Doctor?, Medical 360 Feedback and EDGECUMBE 360^0 mapped to the most attributes.
- Additional psychometric testing with a larger sample size and/or more analysis of current data for EDGECUMBE 360^0, 360 Clinical, 2 QMSF, Sample NHS 360
- Comprehensive psychometric testing with large samples of GPs has been done for CFET 2, GP-SPRAT, and GMC
- Based on the need for instruments to capture duties attributes and tested with a sufficiently large group GP-SPRAT provided the most comprehensive coverage of duties attributes and was tested with nearly 600 physicians and has good psychometric properties.

Our key findings for the patient questionnaire were:

- The mapping to GMP duties showed GMC, EDGECUMBE 360^0 and IPQ mapped to the most duties and their components.
- The mapping to GMC attributes showed that IPQ, DISQ, CSQ, EDGECUMBE 360^0 and GMC mapped to the most domains (3/4). GMC mapped to the most attributes (n=5) while IPQ, DISQ, CSQ and EDGECUMBE 360^0 mapped to 4 attributes.
- The instruments with the most comprehensive psychometrics testing were IPQ, DIQ, EDGECUMBE 360^0 and GMC.
- Based on the need for instruments to capture duties, attributes and have adequate testing on a sufficiently large number of GP patients, GMC and IPQ appear to be the strongest instruments. GMC covers 3 duties and 8 components; 3 domains and 5 attributes, was tested on 380 GPs requires 16 patients for a generalizability coefficient of 0.93 and has had factor analysis. IPQ maps to 2 duties and 9 components; covers 3 domains and 4 attributes, was tested with 425 GPs, requires 15 raters for a generalizability coefficient of 0.81 and has had factor analysis completed.

Appendix 1: Mapping Good Medical Practice Duties to CFET

Duties	CFET
Good Clinical Care	
2(a). adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	2. Clinical ability (Poor - examination technique deficient; does not recognizes serious illness quickly) (Excellent - careful examination and investigation; can detect serious illness quickly)
2(b). providing or arranging advice, investigations or treatment where necessary	
2(c). referring a patient to another practitioner, when this is in the patient's best interests	
3(a). recognise and work within the limits of your competence	9. Ability to say "no" (Poor - always says "yes" without respect to self or others, fails to set limits). (Excellent - aware of need to shape appropriate demand by patients and colleagues 10. Awareness of limitations (Poor - arrogant and egotistical, takes on responsibility beyond competence, takes unwise risks). (Excellent - aware of competence limits, takes risks wisely, seeks helps from others when needed)
3(b). prescribe drugs or treatment, including repeat prescriptions, only when you have adequate knowledge of the patient's health, and are satisfied that the drugs or treatment serve the patient's needs	
3(c). provide effective treatments based on the best available evidence	
3(d). take steps to alleviate pain and distress whether or not a cure may be possible	
3(f). keep clear, accurate and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment	
3(h). be readily accessible when you are on duty	7. Punctuality and reliability (Poor - fails to start on time, unpredictable, clinic/surgery often run late, leaves early) (Excellent - starts on time, reliable, sensitivity to running surgeries/clinics to schedule)
3(i). consult and take advice from colleagues, when appropriate	
3(j). make good use of the resources available to you.	12. Use of resources (Poor - withholds necessary treatments or profligate without sensitivity to budgetary constraints, unwilling to compare their behavior with others). (Excellent - uses resources wisely and prudently, prepared to justify their actions, actively seeks peer review comparisons)
4. Supporting self care	
6. If you have good reason to think that patient safety is or may be seriously compromised by inadequate premises, equipment, or other resources, policies or systems, you should put the matter right if that is possible. In all other cases you should draw the matter to the	

attention of your employing or contracting body. If they do not take adequate action, you should take independent advice on how to take the matter further. You must record your concerns and the steps you have taken to try to resolve them.	
7. The investigations or treatment you provide or arrange must be based on the assessment you and the patient make of their needs and priorities, and on your clinical judgment about the likely effectiveness of the treatment options. You must not refuse or delay treatment because you believe that a patient's actions have contributed to their condition. You must treat your patients with respect whatever their life choices and beliefs. You must not unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them or the treatment you provide or arrange. You should challenge colleagues if their behaviour does not comply with this guidance	
Maintaining good practice	
12. You must keep your knowledge and skills up to date throughout your working life. You should be familiar with relevant guidelines and developments that affect your work. You should regularly take part in educational activities that maintain and further develop your competence and performance.	1. Clinical knowledge (Poor - does not keep knowledge up to date; misinformed) (Excellent - evidence aware; regularly updates knowledge)
14(a). maintain a folder of information and evidence, drawn from your medical practice	
14(b). reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	
14(c). take part in regular and systematic audit	
14(f). help to resolve uncertainties about the effects of treatments	
Teaching and training, appraising and assessing	6. Teaching and training colleagues. (Poor- fails to share their knowledge or help others learn.) (Excellent -seeks to share their knowledge effectively and assists others to learn).
Relationships with patients	
20. Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21(a). be polite, considerate and honest	
21(b). treat patients with dignity	
21(c). treat each patient as an individual	
21(d). respect patients' privacy and right to confidentiality	14. Respect for confidentiality with patients and colleagues (Poor - gossips, handles confidential data carelessly). (Excellent - sensitive to confidentiality issues, respects confidences entrusted by colleagues unless a risk to others)
21(e). support patients in caring for themselves to improve and maintain their health	
21(f). encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. To communicate effectively you must:	
(a). listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	4. Compassion/empathy (Poor - fails to recognize or explore patients' fears and/or concerns). (Excellent - actively seeks patients' fear and concerns, recognizes and responds to them)

(b). share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	
(c). respond to patients' questions and keep them informed about the progress of their care	3. Communication with patients (Poor - doesn't listen well, poor explanations, fails to keep patient informed). (Excellent - listens well, good explanations, keeps patients informed)
(d). make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
23. You must make sure, wherever practical, that arrangements are made to meet patients' language and communication needs.	
29. You must be considerate to relatives, carers, partners and others close to the patient, and be sensitive and responsive in providing information and support, including after a patient has died. In doing this you must follow the guidance in Confidentiality: Protecting and providing information.	
31. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent. You must follow the guidance in Seeking patients' consent: The ethical considerations, which includes advice on children and patients who are not able to give consent	
Working with colleagues	
41. Most doctors work in teams with colleagues from other professions. Working in teams does not change your personal accountability for your professional conduct and the care you provide. When working in a team, you should act as a positive role model and try to motivate and inspire your colleagues	15. Appearance and behaviour (Poor - personal hygiene or appearance deficient, behaviour in or out of work likely to bring professional reputation into disrepute). (Excellent - well presented, behaviour in keeping with professional status in and out of work)
(a). respect the skills and contributions of your colleagues	
(b). communicate effectively with colleagues within and outside the team	5. Communication with colleagues (Poor - fails to record all consultations, records illegible, fails to talk to colleagues). (Excellent - clear and concise records, intelligible and detailed treatment plan; seeks to meet and talk to colleagues)
(c). make sure that your patients and colleagues understand your role and responsibilities in the team, and who is responsible for each aspect of patient care	
(d). participate in regular reviews and audit of the standards and performance of the team, taking steps to remedy any deficiencies	
(e). support colleagues who have problems with performance, conduct or health.	8. Respect for colleagues (Poor - selfish, arrogant and insensitive to colleagues' needs or work pressures). (Excellent - sensitive to

	others' needs, actively seeks to offer colleagues help if needed)
42 If you are responsible for leading a team, you must follow the guidance in Management for doctors.	18. Management/leadership skills (Poor - fails to take any responsibility or overtly dominates, fails to manage or supervise others e.g. Junior doctors). (Excellent - takes responsibility within skills and limitations, takes fair share of management roles, supervises and manages others)
45 If you have management responsibilities you should make sure that systems are in place through which colleagues can raise concerns about risks to patients, and you must follow the guidance in Management for doctors.	
46. You must treat your colleagues fairly and with respect. You must not bully or harass them, or unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them. You should challenge colleagues if their behaviour does not comply with this guidance.	11. Team orientation (Poor - delegates excessively or not enough, selfish and uncompromising, demeans colleagues). (Excellent - delegates appropriately, seeks to reach compromise, encourages colleagues)
54. Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.	
55. Referral involves transferring some or all of the responsibility for the patient's care, usually temporarily and for a particular purpose, such as additional investigation, care or treatment that is outside your competence. You must be satisfied that any healthcare professional to whom you refer a patient is accountable to a statutory regulatory body or employed within a managed environment. If they are not, the transfer of care will be regarded as delegation, not referral. This means you remain responsible for the overall management of the patient, and accountable for your decision to delegate.	
Probity	
56. Probity means being honest and trustworthy, and acting with integrity: this is at the heart of medical professionalism.	17.Trustworthiness/honesty/probity (Poor - dishonest, fraudulent or fails to speak honestly, lies and deceives). (Excellent - honest and trusted, displays probity and declares conflicting interests)
72. You must be honest and open in any financial arrangements with patients	
Conflicts of interest	
Health	
77. You should be registered with a general practitioner outside your family to ensure that you have access to independent and objective medical care. You should not treat yourself.	16. Respect to their own health (Poor - ignores own physical or psychological health, fails to achieve work-life balance, fails to see k help for illnesses, self diagnoses and medicates - abuses drink or drugs). (Excellent - actively seeks to maintain healthy mind and body, good work-life balance, seeks medic al help promptly

	when needed - sober)
78. You should protect your patients, your colleagues and yourself by being immunised against common serious communicable diseases where vaccines are available.	
79. If you know that you have, or think that you might have, a serious condition that you could pass on to patients, or if your judgement or performance could be affected by a condition or its treatment, you must consult a suitably qualified colleague. You must ask for and follow their advice about investigations, treatment and changes to your practice that they consider necessary. You must not rely on your own	13. Ability to manage stress (Poor - overtly displays emotions (e.g. anger, tears, sulks), vulnerable to depression, takes problems out on themselves or others). (Excellent - displays emotions appropriately, aware of vulnerabilities and seeks help when needed)

Appendix 2: Mapping Good Medical Practice Duties to GP-SPRAT

Duties	GP-SPRAT
Good Clinical Care	
2(a). adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	2. Gather relevant data to make a sound clinical judgment 7. Respond to psychosocial aspects of illness 3. Formulate appropriate management plans 4. Manage complex medical problems
2(b). providing or arranging advice, investigations or treatment where necessary	
2(c). referring a patient to another practitioner, when this is in the patient's best interests	8. Refer appropriately to secondary care
3(a). recognise and work within the limits of your competence	13. Demonstrate awareness of own limitations
3(b). prescribe drugs or treatment, including repeat prescriptions, only when you have adequate knowledge of the patient's health, and are satisfied that the drugs or treatment serve the patient's needs	1. Make appropriate decisions
3(c). provide effective treatments based on the best available evidence	15. Use computers appropriately in practice, in seeking to apply evidence based medicine 16. Apply up-to-date/evidence based medicine
3(d). take steps to alleviate pain and distress whether or not a cure may be possible	
3(f). keep clear, accurate and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment	11. Keep good medical records
3(h). be readily accessible when you are on duty	6. Manage time effectively/prioritise
3(i). consult and take advice from colleagues, when appropriate	
3(j). make good use of the resources available to you.	5. Appropriately use resources
4. Supporting self care	12.Contribute to the health of the local community, beyond the individual patient
6. If you have good reason to think that patient safety is or may be seriously compromised by inadequate premises, equipment, or other resources, policies or systems, you should put the matter right if that is possible. In all other cases you should draw the matter to the attention of your employing or contracting body. If they do not take adequate action, you should take independent advice on how to take the matter further. You must record your concerns and the steps you have taken to try to resolve them.	14. Asses risk and benefits when treating patients
7. The investigations or treatment you provide or arrange must be based on the assessment you and the patient make of their needs and priorities, and on your clinical judgment about the likely effectiveness of the treatment options. You must not refuse or delay treatment because you believe that a patient's actions have contributed to their condition. You must treat your patients with respect whatever their life choices and beliefs. You must not unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them or the treatment you provide or arrange. You should challenge colleagues if their behaviour does not comply with this guidance	
Maintaining good practice	
12. You must keep your knowledge and skills up to date throughout your working life. You should be familiar with relevant guidelines and developments that affect your work. You should regularly take	17. Maintain professional development

part in educational activities that maintain and further develop your competence and performance.	
14(a). maintain a folder of information and evidence, drawn from your medical practice	
14(b). reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	
14(c). take part in regular and systematic audit	
14(f). help to resolve uncertainties about the effects of treatments	
Teaching and training, appraising and assessing	19. Be willing and effective in teaching /training colleagues
Relationships with patients	
20. Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21(a). be polite, considerate and honest	
21(b). treat patients with dignity	
21(c). treat each patient as an individual	
21(d). respect patients' privacy and right to confidentiality	24. Practice with respect for patient's dignity and their right to privacy & confidentiality
21(e). support patients in caring for themselves to improve and maintain their health	
21(f). encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. To communicate effectively you must:	
(a). listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	21. Communicate with patients
(b). share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	
(c). respond to patients' questions and keep them informed about the progress of their care	
(d). make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
23. You must make sure, wherever practical, that arrangements are made to meet patients' language and communication needs.	
29. You must be considerate to relatives, carers, partners and others close to the patient, and be sensitive and responsive in providing information and support, including after a patient has died. In doing this you must follow the guidance in Confidentiality: Protecting and providing information.	22. Provide support to family/careers
31. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent. You must follow the guidance in Seeking patients' consent: The ethical considerations, which includes advice on children and patients who are not able to give consent	

Working with colleagues	
41. Most doctors work in teams with colleagues from other professions. Working in teams does not change your personal accountability for your professional conduct and the care you provide. When working in a team, you should act as a positive role model and try to motivate and inspire your colleagues	27. Work cooperatively in a team
(a). respect the skills and contributions of your colleagues	
(b). communicate effectively with colleagues within and outside the team	26. Communicate effectively with colleagues
(c). make sure that your patients and colleagues understand your role and responsibilities in the team, and who is responsible for each aspect of patient care	10. Provide continuity of care
(d). participate in regular reviews and audit of the standards and performance of the team, taking steps to remedy any deficiencies	
(e). support colleagues who have problems with performance, conduct or health.	25. Be accessible to colleagues
42 If you are responsible for leading a team, you must follow the guidance in Management for doctors.	28. Demonstrate leadership skills
45 If you have management responsibilities you should make sure that systems are in place through which colleagues can raise concerns about risks to patients, and you must follow the guidance in Management for doctors.	
46. You must treat your colleagues fairly and with respect. You must not bully or harass them, or unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them. You should challenge colleagues if their behaviour does not comply with this guidance.	20. Give feedback that is private, honest and supportive
54. Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.	
55. Referral involves transferring some or all of the responsibility for the patient's care, usually temporarily and for a particular purpose, such as additional investigation, care or treatment that is outside your competence. You must be satisfied that any healthcare professional to whom you refer a patient is accountable to a statutory regulatory body or employed within a managed environment. If they are not, the transfer of care will be regarded as delegation, not referral. This means you remain responsible for the overall management of the patient, and accountable for your decision to delegate.	8. Refer appropriately to secondary care 9. Coordinate patient care
Probity	
56. Probity means being honest and trustworthy, and acting with integrity: this is at the heart of medical professionalism.	23. Practice ethically and with integrity
72. You must be honest and open in any financial arrangements with patients	
Conflicts of interest	
Health	
77. You should be registered with a general practitioner outside your family to ensure that you have access to independent and objective	18. Deal appropriately with stress

medical care. You should not treat yourself.	
78. You should protect your patients, your colleagues and yourself by being immunised against common serious communicable diseases where vaccines are available.	
79. If you know that you have, or think that you might have, a serious condition that you could pass on to patients, or if your judgement or performance could be affected by a condition or its treatment, you must consult a suitably qualified colleague. You must ask for and follow their advice about investigations, treatment and changes to your practice that they consider necessary. You must not rely on your own	

Appendix 3: Mapping Good Medical Practice Duties to What Is A Good GP?

Duties	What is a good GP
Good Clinical Care	
2(a). adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	- Diagnostically astute
2(b). providing or arranging advice, investigations or treatment where necessary	
2(c). referring a patient to another practitioner, when this is in the patient's best interests	- Able to make appropriate decisions - An appropriate user of the referral system
3(a). recognise and work within the limits of your competence	
3(b). prescribe drugs or treatment, including repeat prescriptions, only when you have adequate knowledge of the patient's health, and are satisfied that the drugs or treatment serve the patient's needs	- A safe prescriber, particularly with danger drugs
3(c). provide effective treatments based on the best available evidence	
3(d). take steps to alleviate pain and distress whether or not a cure may be possible	- Willing to care effectively for a dying patient, e. g., terminal care.
3(f). keep clear, accurate and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment	- Able to record his/her consultations consistently and accurately - Able to write legibly
3(h). be readily accessible when you are on duty	- Easily accessible and able to be contacted when necessary - Willing to take responsibility for getting his/her share of work done
3(i). consult and take advice from colleagues, when appropriate	
3(j). make good use of the resources available to you.	
4. Supporting self care	
6. If you have good reason to think that patient safety is or may be seriously compromised by inadequate premises, equipment, or other resources, policies or systems, you should put the matter right if that is possible. In all other cases you should draw the matter to the attention of your employing or contracting body. If they do not take adequate action, you should take independent advice on how to take the matter further. You must record your concerns and the steps you have taken to try to resolve them.	
7. The investigations or treatment you provide or arrange must be based on the assessment you and the patient make of their needs and priorities, and on your clinical judgment about the likely effectiveness of the treatment options. You must not refuse or delay treatment because you believe that a patient's actions have contributed to their condition. You must treat your patients with respect whatever their life choices and beliefs. You must not unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them or the treatment you provide or arrange. You should challenge colleagues if their behaviour does not comply with this guidance	- Sensitive to cultural issues
Maintaining good practice	
12. You must keep your knowledge and skills up to date throughout your working life. You should be familiar with relevant guidelines	- Up-to-date with their clinical knowledge - Commitment to continue his/her personal

and developments that affect your work. You should regularly take part in educational activities that maintain and further develop your competence and performance.	learning
14(a). maintain a folder of information and evidence, drawn from your medical practice	- Well organized
14(b). reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	
14(c). take part in regular and systematic audit	
14(f). help to resolve uncertainties about the effects of treatments	- Able to handle uncertainties of general practice
Teaching and training, appraising and assessing	
Relationships with patients	
20. Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	- Approachable - Able to put patient at ease
21(a). be polite, considerate and honest	- Polite to patient and staff
21(b). treat patients with dignity	
21(c). treat each patient as an individual	
21(d). respect patients' privacy and right to confidentiality	- Able to demonstrate respect for confidentiality
21(e). support patients in caring for themselves to improve and maintain their health	
21(f). encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. To communicate effectively you must:	
(a). listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	- Willing to listen to patients, colleagues and staff
(b). share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	- Able to speak good English
(c). respond to patients' questions and keep them informed about the progress of their care	
(d). make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
23. You must make sure, wherever practical, that arrangements are made to meet patients' language and communication needs.	
29. You must be considerate to relatives, carers, partners and others close to the patient, and be sensitive and responsive in providing information and support, including after a patient has died. In doing this you must follow the guidance in Confidentiality: Protecting and providing information.	
31. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent. You must	

follow the guidance in Seeking patients' consent: The ethical considerations, which includes advice on children and patients who are not able to give consent	
Working with colleagues	
41. Most doctors work in teams with colleagues from other professions. Working in teams does not change your personal accountability for your professional conduct and the care you provide. When working in a team, you should act as a positive role model and try to motivate and inspire your colleagues	- Professional appearance - Enthusiastic about job - Able to demonstrate a sense of humor where appropriate - Commitment to the whole practice team
(a). respect the skills and contributions of your colleagues	- Able to recognize and value the contribution of others
(b). communicate effectively with colleagues within and outside the team	- Committed to use the telephone as deemed appropriate by the practice - Able to use e-mail as deemed appropriate by the practice - Able to use a computer at a level deemed appropriate by the practice - Able to demonstrate a sense of humor where appropriate - Willing to listen to patient, colleagues and staff
(c). make sure that your patients and colleagues understand your role and responsibilities in the team, and who is responsible for each aspect of patient care	
(d). participate in regular reviews and audit of the standards and performance of the team, taking steps to remedy any deficiencies	
(e). support colleagues who have problems with performance, conduct or health.	
42 If you are responsible for leading a team, you must follow the guidance in Management for doctors.	
45 If you have management responsibilities you should make sure that systems are in place through which colleagues can raise concerns about risks to patients, and you must follow the guidance in Management for doctors.	
46. You must treat your colleagues fairly and with respect. You must not bully or harass them, or unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them. You should challenge colleagues if their behaviour does not comply with this guidance.	- Willing to compromise where appropriate - Willing to implement agreed changes
54. Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.	- Willing to take responsibility for follow-up of patients where necessary
55. Referral involves transferring some or all of the responsibility for the patient's care, usually temporarily and for a particular purpose, such as additional investigation, care or treatment that is outside your competence. You must be satisfied that any healthcare professional to whom you refer a patient is accountable to a	- An appropriate user of the referral system

statutory regulatory body or employed within a managed environment. If they are not, the transfer of care will be regarded as delegation, not referral. This means you remain responsible for the overall management of the patient, and accountable for your decision to delegate.	
Probity	
56. Probity means being honest and trustworthy, and acting with integrity: this is at the heart of medical professionalism.	- Honest and trustworthy
72. You must be honest and open in any financial arrangements with patients	
Conflicts of interest	
Health	
77. You should be registered with a general practitioner outside your family to ensure that you have access to independent and objective medical care. You should not treat yourself.	
78. You should protect your patients, your colleagues and yourself by being immunised against common serious communicable diseases where vaccines are available.	
79. If you know that you have, or think that you might have, a serious condition that you could pass on to patients, or if your judgement or performance could be affected by a condition or its treatment, you must consult a suitably qualified colleague. You must ask for and follow their advice about investigations, treatment and changes to your practice that they consider necessary. You must not rely on your own	- Calm under pressure

Appendix 4: Mapping Good Medical Practice Duties to EDGECUMBE 360^0

Duties	EDEGCUMBE 360°
Good Clinical Care	
2(a). adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	1.Assess patients' history 2. Provide clinical care
2(b). providing or arranging advice, investigations or treatment where necessary	
2(c). referring a patient to another practitioner, when this is in the patient's best interests	7. Consult colleagues, or refer patients to colleagues, when this is in the patient's best interests
3(a). recognise and work within the limits of your competence	
3(b). prescribe drugs or treatment, including repeat prescriptions, only when you have adequate knowledge of the patient's health, and are satisfied that the drugs or treatment serve the patient's needs	
3(c). provide effective treatments based on the best available evidence	
3(d). take steps to alleviate pain and distress whether or not a cure may be possible	
3(f). keep clear, accurate and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment	9. Keep patient records
3(h). be readily accessible when you are on duty	
3(i). consult and take advice from colleagues, when appropriate	13. Respond constructively to feedback
3(j). make good use of the resources available to you.	
4. Supporting self care	8. Support patients in caring for themselves
6. If you have good reason to think that patient safety is or may be seriously compromised by inadequate premises, equipment, or other resources, policies or systems, you should put the matter right if that is possible. In all other cases you should draw the matter to the attention of your employing or contracting body. If they do not take adequate action, you should take independent advice on how to take the matter further. You must record your concerns and the steps you have taken to try to resolve them.	12. Act in a clinically safe manner 15. Follow infection control procedures 16. Take appropriate action when patients are at risk 18. Safeguard the health and well-being of vulnerable people
7. The investigations or treatment you provide or arrange must be based on the assessment you and the patient make of their needs and priorities, and on your clinical judgment about the likely effectiveness of the treatment options. You must not refuse or delay treatment because you believe that a patient's actions have contributed to their condition. You must treat your patients with respect whatever their life choices and beliefs. You must not unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them or the treatment you provide or arrange. You should challenge colleagues if their behaviour does not comply with this guidance	31. Treat each patient fairly
Maintaining good practice	
12. You must keep your knowledge and skills up to date throughout your working life. You should be familiar with relevant guidelines and developments that affect your work. You should regularly take part in educational activities that maintain and further develop your competence and performance.	3. Maintain good medical practice
14(a). maintain a folder of information and evidence, drawn from your medical practice	
14(b). reflect regularly on your standards of medical practice in	

accordance with GMC guidance on licensing and revalidation	
14(c). take part in regular and systematic audit	6. Take part in regular and systematic audit
14(f). help to resolve uncertainties about the effects of treatments	
Teaching and training, appraising and assessing	5. Apply the skills, attributes and practice of a competent teacher/trainer
Relationships with patients	
20. Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	21. Establish and maintain relationships with patients
21(a). be polite, considerate and honest	
21(b). treat patients with dignity	
21(c). treat each patient as an individual	32. Treat each patient as an individual
21(d). respect patients' privacy and right to confidentiality	30. Maintain confidentiality
21(e). support patients in caring for themselves to improve and maintain their health	
21(f). encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. To communicate effectively you must:	
(a). listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	20. Listen to patients
(b). share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	
(c). respond to patients' questions and keep them informed about the progress of their care	
(d). make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
23. You must make sure, wherever practical, that arrangements are made to meet patients' language and communication needs.	
29. You must be considerate to relatives, carers, partners and others close to the patient, and be sensitive and responsive in providing information and support, including after a patient has died. In doing this you must follow the guidance in Confidentiality: Protecting and providing information.	
31. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	33. Respond to patients' complaints and suggestions
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent. You must follow the guidance in Seeking patients' consent: The ethical considerations, which includes advice on children and patients who are not able to give consent	
Working with colleagues	
41. Most doctors work in teams with colleagues from other professions. Working in teams does not change your personal accountability for your professional conduct and the care you provide. When working in a team, you should act as a positive role model and try to motivate and inspire your colleagues	10. Work as a manager 24. Give praise where appropriate 25. Provide effective leadership

(a). respect the skills and contributions of your colleagues	22. Show respect for colleagues
(b). communicate effectively with colleagues within and outside the team	23. Communicate effectively with staff 26. Encourage colleagues to contribute to discussions 27. Encourage colleagues to communicate effectively with one another
(c). make sure that your patients and colleagues understand your role and responsibilities in the team, and who is responsible for each aspect of patient care	
(d). participate in regular reviews and audit of the standards and performance of the team, taking steps to remedy any deficiencies	14. Comply with risk management and clinical governance procedures 17. Make sure that all staff for whose performance he/she is responsible are properly supervised
(e). support colleagues who have problems with performance, conduct or health.	
42 If you are responsible for leading a team, you must follow the guidance in Management for doctors.	
45 If you have management responsibilities you should make sure that systems are in place through which colleagues can raise concerns about risks to patients, and you must follow the guidance in Management for doctors.	
46. You must treat your colleagues fairly and with respect. You must not bully or harass them, or unfairly discriminate against them by allowing your personal views* to affect adversely your professional relationship with them. You should challenge colleagues if their behaviour does not comply with this guidance.	
54. Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.	4. Pass on information to colleagues when handing over the care of a patient.
55. Referral involves transferring some or all of the responsibility for the patient's care, usually temporarily and for a particular purpose, such as additional investigation, care or treatment that is outside your competence. You must be satisfied that any healthcare professional to whom you refer a patient is accountable to a statutory regulatory body or employed within a managed environment. If they are not, the transfer of care will be regarded as delegation, not referral. This means you remain responsible for the overall management of the patient, and accountable for your decision to delegate.	
Probity	
56. Probity means being honest and trustworthy, and acting with integrity: this is at the heart of medical professionalism.	35. Do you have any concerns about this person's professional integrity that impacts on their ability to perform their duties as a doctor?
72. You must be honest and open in any financial arrangements with patients	
Conflicts of interest	
Health	

77. You should be registered with a general practitioner outside your family to ensure that you have access to independent and objective medical care. You should not treat yourself.	28. Cope with stress and pressure 37. Do you have any concerns about this person's health that impacts on their ability to perform their duties as a doctor?
78. You should protect your patients, your colleagues and yourself by being immunised against common serious communicable diseases where vaccines are available.	
79. If you know that you have, or think that you might have, a serious condition that you could pass on to patients, or if your judgement or performance could be affected by a condition or its treatment, you must consult a suitably qualified colleague. You must ask for and follow their advice about investigations, treatment and changes to your practice that they consider necessary. You must not rely on your own	

Appendix 5: Mapping Good Medical Practice Duties to 360 Clinical

Duties	360 Clinical
Good Clinical Care	
2(a). adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	1. Diagnostic skill 2. Performance of practical/technical procedures 3. Management of complex clinical problems 5. Conscientiousness and reliability
2(b). providing or arranging advice, investigations or treatment where necessary	
2(c). referring a patient to another practitioner, when this is in the patient's best interests	
3(a). recognise and work within the limits of your competence	
3(b). prescribe drugs or treatment, including repeat prescriptions, only when you have adequate knowledge of the patient's health, and are satisfied that the drugs or treatment serve the patient's needs	
3(c). provide effective treatments based on the best available evidence	8. Commitment to improving quality of service
3(d). take steps to alleviate pain and distress whether or not a cure may be possible	
3(f). keep clear, accurate and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment	
3(h). be readily accessible when you are on duty	7. Time management
3(i). consult and take advice from colleagues, when appropriate	6. Availability for advice and help when needed
3(j). make good use of the resources available to you.	4. Appropriate use of resources
4. Supporting self care	
6. If you have good reason to think that patient safety is or may be seriously compromised by inadequate premises, equipment, or other resources, policies or systems, you should put the matter right if that is possible. In all other cases you should draw the matter to the attention of your employing or contracting body. If they do not take adequate action, you should take independent advice on how to take the matter further. You must record your concerns and the steps you have taken to try to resolve them.	
7. The investigations or treatment you provide or arrange must be based on the assessment you and the patient make of their needs and priorities, and on your clinical judgment about the likely effectiveness of the treatment options. You must not refuse or delay treatment because you believe that a patient's actions have contributed to their condition. You must treat your patients with respect whatever their life choices and beliefs. You must not unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them or the treatment you provide or arrange. You should challenge colleagues if their behaviour does not comply with this guidance	
Maintaining good practice	
12. You must keep your knowledge and skills up to date throughout your working life. You should be familiar with relevant guidelines and developments that affect your work. You should regularly take part in educational activities that maintain and further develop your	9. Keeps up-to-date with knowledge and skills.

competence and performance.	
14(a). maintain a folder of information and evidence, drawn from your medical practice	
14(b). reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	
14(c). take part in regular and systematic audit	
14(f). help to resolve uncertainties about the effects of treatments	
Teaching and training, appraising and assessing	10. Contribution to the education and supervision of students and junior colleagues.
Relationships with patients	
20. Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21(a). be polite, considerate and honest	14. Is polite, considerate and respectful to patients and colleagues of all levels.
21(b). treat patients with dignity	
21(c). treat each patient as an individual	
21(d). respect patients' privacy and right to confidentiality	
21(e). support patients in caring for themselves to improve and maintain their health	
21(f). encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. To communicate effectively you must:	
(a). listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	
(b). share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	11. Spoken English
(c). respond to patients' questions and keep them informed about the progress of their care	
(d). make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
23. You must make sure, wherever practical, that arrangements are made to meet patients' language and communication needs.	
29. You must be considerate to relatives, carers, partners and others close to the patient, and be sensitive and responsive in providing information and support, including after a patient has died. In doing this you must follow the guidance in Confidentiality: Protecting and providing information.	13. Communication with patients, families and carers. 15. Compassion and empathy towards patients and their relatives
31. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent. You must follow the guidance in Seeking patients' consent: The ethical	

considerations, which includes advice on children and patients who are not able to give consent	
Working with colleagues	
41. Most doctors work in teams with colleagues from other professions. Working in teams does not change your personal accountability for your professional conduct and the care you provide. When working in a team, you should act as a positive role model and try to motivate and inspire your colleagues	
(a). respect the skills and contributions of your colleagues	16. Values the skills and contributions of multi-disciplinary team members
(b). communicate effectively with colleagues within and outside the team	12. Communication with colleagues
(c). make sure that your patients and colleagues understand your role and responsibilities in the team, and who is responsible for each aspect of patient care	
(d). participate in regular reviews and audit of the standards and performance of the team, taking steps to remedy any deficiencies	
(e). support colleagues who have problems with performance, conduct or health.	
42 If you are responsible for leading a team, you must follow the guidance in Management for doctors.	17. Takes the leadership role when circumstances require.
45 If you have management responsibilities you should make sure that systems are in place through which colleagues can raise concerns about risks to patients, and you must follow the guidance in Management for doctors.	
46. You must treat your colleagues fairly and with respect. You must not bully or harass them, or unfairly discriminate against them by allowing your personal views* to affect adversely your professional relationship with them. You should challenge colleagues if their behaviour does not comply with this guidance.	
54. Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.	18. Delegates appropriately
55. Referral involves transferring some or all of the responsibility for the patient's care, usually temporarily and for a particular purpose, such as additional investigation, care or treatment that is outside your competence. You must be satisfied that any healthcare professional to whom you refer a patient is accountable to a statutory regulatory body or employed within a managed environment. If they are not, the transfer of care will be regarded as delegation, not referral. This means you remain responsible for the overall management of the patient, and accountable for your decision to delegate.	
Probity	
56. Probity means being honest and trustworthy, and acting with integrity: this is at the heart of medical professionalism.	19. Do you have any concerns about the Probity or Health (physical or mental) of this doctor that may impact on patient care?
72. You must be honest and open in any financial arrangements with patients	

Conflicts of interest	
Health	
77. You should be registered with a general practitioner outside your family to ensure that you have access to independent and objective medical care. You should not treat yourself.	19. Do you have any concerns about the Probity or Health (physical or mental) of this doctor that may impact on patient care?
78. You should protect your patients, your colleagues and yourself by being immunised against common serious communicable diseases where vaccines are available.	
79. If you know that you have, or think that you might have, a serious condition that you could pass on to patients, or if your judgement or performance could be affected by a condition or its treatment, you must consult a suitably qualified colleague. You must ask for and follow their advice about investigations, treatment and changes to your practice that they consider necessary. You must not rely on your own	

Appendix 6: Mapping Good Medical Practice Duties to GMC

Duties	GMC
Good Clinical Care	
2(a). adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	2. Diagnosis
2(b). providing or arranging advice, investigations or treatment where necessary	4. Treatment
2(c). referring a patient to another practitioner, when this is in the patient's best interests	
3(a). recognise and work within the limits of your competence	7. Recognising and working within limitations
3(b). prescribe drugs or treatment, including repeat prescriptions, only when you have adequate knowledge of the patient's health, and are satisfied that the drugs or treatment serve the patient's needs	5. Prescribing
3(c). provide effective treatments based on the best available evidence	3. Clinical decision making
3(d). take steps to alleviate pain and distress whether or not a cure may be possible	
3(f). keep clear, accurate and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment	6. Medical record keeping
3(h). be readily accessible when you are on duty	
3(i). consult and take advice from colleagues, when appropriate	
3(j). make good use of the resources available to you.	
4. Supporting self care	
6. If you have good reason to think that patient safety is or may be seriously compromised by inadequate premises, equipment, or other resources, policies or systems, you should put the matter right if that is possible. In all other cases you should draw the matter to the attention of your employing or contracting body. If they do not take adequate action, you should take independent advice on how to take the matter further. You must record your concerns and the steps you have taken to try to resolve them.	
7. The investigations or treatment you provide or arrange must be based on the assessment you and the patient make of their needs and priorities, and on your clinical judgment about the likely effectiveness of the treatment options. You must not refuse or delay treatment because you believe that a patient's actions have contributed to their condition. You must treat your patients with respect whatever their life choices and beliefs. You must not unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them or the treatment you provide or arrange. You should challenge colleagues if their behaviour does not comply with this guidance	
Maintaining good practice	
12. You must keep your knowledge and skills up to date throughout your working life. You should be familiar with relevant guidelines and developments that affect your work. You should regularly take part in educational activities that maintain and further develop your competence and performance.	1. Clinical knowledge 8. Keeping knowledge and skills up to date
14(a). maintain a folder of information and evidence, drawn from your medical practice	

14(b). reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	12. Commitment to care and well being of patients 9. Reviewing and reflecting on own performance
14(c). take part in regular and systematic audit	
14(f). help to resolve uncertainties about the effects of treatments	
Teaching and training, appraising and assessing	10. Teaching (students, trainee, others)
Relationships with patients	
20. Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21(a). be polite, considerate and honest	
21(b). treat patients with dignity	
21(c). treat each patient as an individual	
21(d). respect patients' privacy and right to confidentiality	15. I am confident that this doctor respects patient confidentiality
21(e). support patients in caring for themselves to improve and maintain their health	
21(f). encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. To communicate effectively you must:	
(a). listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	
(b). share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	
(c). respond to patients' questions and keep them informed about the progress of their care	
(d). make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
23. You must make sure, wherever practical, that arrangements are made to meet patients' language and communication needs.	
29. You must be considerate to relatives, carers, partners and others close to the patient, and be sensitive and responsive in providing information and support, including after a patient has died. In doing this you must follow the guidance in Confidentiality: Protecting and providing information.	13. Communication with patients and relatives
31. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent. You must follow the guidance in Seeking patients' consent: The ethical considerations, which includes advice on children and patients who are not able to give consent	
Working with colleagues	
41. Most doctors work in teams with colleagues from other	14. Working effectively with colleagues

professions. Working in teams does not change your personal accountability for your professional conduct and the care you provide. When working in a team, you should act as a positive role model and try to motivate and inspire your colleagues	
(a). respect the skills and contributions of your colleagues	
(b). communicate effectively with colleagues within and outside the team	
(c). make sure that your patients and colleagues understand your role and responsibilities in the team, and who is responsible for each aspect of patient care	
(d). participate in regular reviews and audit of the standards and performance of the team, taking steps to remedy any deficiencies	
(e). support colleagues who have problems with performance, conduct or health.	
42 If you are responsible for leading a team, you must follow the guidance in Management for doctors.	
45 If you have management responsibilities you should make sure that systems are in place through which colleagues can raise concerns about risks to patients, and you must follow the guidance in Management for doctors.	
46. You must treat your colleagues fairly and with respect. You must not bully or harass them, or unfairly discriminate against them by allowing your personal views* to affect adversely your professional relationship with them. You should challenge colleagues if their behaviour does not comply with this guidance.	11. Supervising colleagues
54. Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.	
55. Referral involves transferring some or all of the responsibility for the patient's care, usually temporarily and for a particular purpose, such as additional investigation, care or treatment that is outside your competence. You must be satisfied that any healthcare professional to whom you refer a patient is accountable to a statutory regulatory body or employed within a managed environment. If they are not, the transfer of care will be regarded as delegation, not referral. This means you remain responsible for the overall management of the patient, and accountable for your decision to delegate.	
Probity	
56. Probity means being honest and trustworthy, and acting with integrity: this is at the heart of medical professionalism.	16. I am confident that this doctor is honest and trustworthy
72. You must be honest and open in any financial arrangements with patients	
Conflicts of interest	
Health	
77. You should be registered with a general practitioner outside your family to ensure that you have access to independent and objective medical care. You should not treat yourself.	

78. You should protect your patients, your colleagues and yourself by being immunised against common serious communicable diseases where vaccines are available.	
79. If you know that you have, or think that you might have, a serious condition that you could pass on to patients, or if your judgement or performance could be affected by a condition or its treatment, you must consult a suitably qualified colleague. You must ask for and follow their advice about investigations, treatment and changes to your practice that they consider necessary. You must not rely on your own	17. I am confident that this doctor's performance is not impaired by ill health 18. I am confident that this doctor is fit to practice medicine

Appendix 7: Mapping Good Medical Practice Duties to 2Q MSF

Duties	2Q MSF
Good Clinical Care	
2(a). adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	- Conduct a thorough history and physical *(to be completed by clinical staff only)* - Perform clinical and technical skills skillfully *(to be completed by clinical staff only)* - Identify patients' problems *(to be completed by clinical staff only)*
2(b). providing or arranging advice, investigations or treatment where necessary	- Take a diagnostic patient centered approach *(to be completed by clinical staff only)*
2(c). referring a patient to another practitioner, when this is in the patient's best interests	
3(a). recognise and work within the limits of your competence	
3(b). prescribe drugs or treatment, including repeat prescriptions, only when you have adequate knowledge of the patient's health, and are satisfied that the drugs or treatment serve the patient's needs	
3(c). provide effective treatments based on the best available evidence	
3(d). take steps to alleviate pain and distress whether or not a cure may be possible	
3(f). keep clear, accurate and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment	
3(h). be readily accessible when you are on duty	- Manage time appropriately *(to be completed by clinical staff only)*
3(i). consult and take advice from colleagues, when appropriate	
3(j). make good use of the resources available to you.	
4. Supporting self care	
6. If you have good reason to think that patient safety is or may be seriously compromised by inadequate premises, equipment, or other resources, policies or systems, you should put the matter right if that is possible. In all other cases you should draw the matter to the attention of your employing or contracting body. If they do not take adequate action, you should take independent advice on how to take the matter further. You must record your concerns and the steps you have taken to try to resolve them.	
7. The investigations or treatment you provide or arrange must be based on the assessment you and the patient make of their needs and priorities, and on your clinical judgment about the likely effectiveness of the treatment options. You must not refuse or delay treatment because you believe that a patient's actions have contributed to their condition. You must treat your patients with respect whatever their life choices and beliefs. You must not unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them or the treatment you provide or arrange. You should challenge colleagues if their behaviour does not comply with this guidance	- Shows no prejudice in the care of patients *(to be answered by all respondents)*
Maintaining good practice	
12. You must keep your knowledge and skills up to date throughout your working life. You should be familiar with relevant guidelines and developments that affect your work. You should regularly take	- Takes responsibility for own learning *(to be answered by all respondents*

part in educational activities that maintain and further develop your competence and performance.	
14(a). maintain a folder of information and evidence, drawn from your medical practice	- Learn from clinical practice *(to be completed by clinical staff only)*
14(b). reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	
14(c). take part in regular and systematic audit	
14(f). help to resolve uncertainties about the effects of treatments	
Teaching and training, appraising and assessing	
Relationships with patients	
20. Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	- Is caring of patients *(to be answered by all respondents)*
21(a). be polite, considerate and honest	
21(b). treat patients with dignity	
21(c). treat each patient as an individual	
21(d). respect patients' privacy and right to confidentiality	- Is respectful of patients *(to be answered by all respondents)*
21(e). support patients in caring for themselves to improve and maintain their health	
21(f). encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. To communicate effectively you must:	
(a). listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	- Communicates effectively with patients *(to be answered by all respondents)*
(b). share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	- Speaks good English and at appropriate level for the patient *(to be answered by all respondents)*
(c). respond to patients' questions and keep them informed about the progress of their care	
(d). make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
23. You must make sure, wherever practical, that arrangements are made to meet patients' language and communication needs.	
29. You must be considerate to relatives, carers, partners and others close to the patient, and be sensitive and responsive in providing information and support, including after a patient has died. In doing this you must follow the guidance in Confidentiality: Protecting and providing information.	
31. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent. You must follow the guidance in Seeking patients' consent: The ethical considerations, which includes advice on children and patients who are not able to give consent	
Working with colleagues	

41. Most doctors work in teams with colleagues from other professions. Working in teams does not change your personal accountability for your professional conduct and the care you provide. When working in a team, you should act as a positive role model and try to motivate and inspire your colleagues	- Works constructively in the health care team *(to be answered by all respondents)* - Demonstrates commitment to their work as a member of a team *(to be answered by all respondents)*
(a). respect the skills and contributions of your colleagues	- Involve members of the primary health care team appropriately *(to be completed by clinical staff only)* - Respects other colleagues' roles in the health care team *(to be answered by all respondents)*
(b). communicate effectively with colleagues within and outside the team	- Communicate effectively with colleagues *(to be answered by all respondents)*
(c). make sure that your patients and colleagues understand your role and responsibilities in the team, and who is responsible for each aspect of patient care	
(d). participate in regular reviews and audit of the standards and performance of the team, taking steps to remedy any deficiencies	- Does not shirk his/her responsibility *(to be answered by all respondents)*
(e). support colleagues who have problems with performance, conduct or health.	
42 If you are responsible for leading a team, you must follow the guidance in Management for doctors.	
45 If you have management responsibilities you should make sure that systems are in place through which colleagues can raise concerns about risks to patients, and you must follow the guidance in Management for doctors.	
46. You must treat your colleagues fairly and with respect. You must not bully or harass them, or unfairly discriminate against them by allowing your personal views* to affect adversely your professional relationship with them. You should challenge colleagues if their behaviour does not comply with this guidance.	
54. Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.	
55. Referral involves transferring some or all of the responsibility for the patient's care, usually temporarily and for a particular purpose, such as additional investigation, care or treatment that is outside your competence. You must be satisfied that any healthcare professional to whom you refer a patient is accountable to a statutory regulatory body or employed within a managed environment. If they are not, the transfer of care will be regarded as delegation, not referral. This means you remain responsible for the overall management of the patient, and accountable for your decision to delegate.	
Probity	
56. Probity means being honest and trustworthy, and acting with integrity: this is at the heart of medical professionalism.	
72. You must be honest and open in any financial arrangements with patients	

Conflicts of interest	
Health	
77. You should be registered with a general practitioner outside your family to ensure that you have access to independent and objective medical care. You should not treat yourself.	
78. You should protect your patients, your colleagues and yourself by being immunised against common serious communicable diseases where vaccines are available.	
79. If you know that you have, or think that you might have, a serious condition that you could pass on to patients, or if your judgement or performance could be affected by a condition or its treatment, you must consult a suitably qualified colleague. You must ask for and follow their advice about investigations, treatment and changes to your practice that they consider necessary. You must not rely on your own	

Appendix 8: Mapping Good Medical Practice Duties to Medical 360 Feedback (RMS)

Duties	Medical 360 Feedback
Good Clinical Care	
2(a). adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	1. Is competent in making diagnoses 3. Uses skill when undertaking practical procedures
2(b). providing or arranging advice, investigations or treatment where necessary	
2(c). referring a patient to another practitioner, when this is in the patient's best interests	
3(a). recognise and work within the limits of your competence	
3(b). prescribe drugs or treatment, including repeat prescriptions, only when you have adequate knowledge of the patient's health, and are satisfied that the drugs or treatment serve the patient's needs	5. Prescribes drugs including repeat prescriptions, safely and appropriately
3(c). provide effective treatments based on the best available evidence	2. Uses good judgment and best available evidence to determine suitable treatments and procedures
3(d). take steps to alleviate pain and distress whether or not a cure may be possible	6. Take steps to alleviate pain and distress whether or not a cure may be possible
3(f). keep clear, accurate and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment	7. Keeps clear, accurate, legible and timely records
3(h). be readily accessible when you are on duty	15. Shows respect for other peoples' time by being punctual
3(i). consult and take advice from colleagues, when appropriate	14. Is willing to consult with colleagues and other professionals
3(j). make good use of the resources available to you.	
4. Supporting self care	20. Supports patients in caring for themselves
6. If you have good reason to think that patient safety is or may be seriously compromised by inadequate premises, equipment, or other resources, policies or systems, you should put the matter right if that is possible. In all other cases you should draw the matter to the attention of your employing or contracting body. If they do not take adequate action, you should take independent advice on how to take the matter further. You must record your concerns and the steps you have taken to try to resolve them.	17. Take action where there is evidence that a colleague's conduct, performance or health may be putting patients at risk. 27. Ensures systems are in place for colleagues to raise concerns about risks to patients
7. The investigations or treatment you provide or arrange must be based on the assessment you and the patient make of their needs and priorities, and on your clinical judgment about the likely effectiveness of the treatment options. You must not refuse or delay treatment because you believe that a patient's actions have contributed to their condition. You must treat your patients with respect whatever their life choices and beliefs. You must not unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them or the treatment you provide or arrange. You should challenge colleagues if their behaviour does not comply with this guidance	
Maintaining good practice	
12. You must keep your knowledge and skills up to date throughout your working life. You should be familiar with relevant guidelines and developments that affect your work. You should regularly take part in educational activities that maintain and further develop your competence and performance.	9. Keeps professional medical knowledge and skills up-to-date

14(a). maintain a folder of information and evidence, drawn from your medical practice	
14(b). reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	11. Is active in seeking evidence of own performance as a clinician
14(c). take part in regular and systematic audit	
14(f). help to resolve uncertainties about the effects of treatments	
Teaching and training, appraising and assessing	
Relationships with patients	
20. Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21(a). be polite, considerate and honest	21. Is polite, considerate and honest and respects patients' dignity and privacy
21(b). treat patients with dignity	21. Is polite, considerate and honest and respects patients' dignity and privacy
21(c). treat each patient as an individual	
21(d). respect patients' privacy and right to confidentiality	21. Is polite, considerate and honest and respects patients' dignity and privacy
21(e). support patients in caring for themselves to improve and maintain their health	
21(f). encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. To communicate effectively you must:	
(a). listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	18. Listens to patients and respects their views about their health
(b). share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	19. Gives patients the information they need in order to make decisions about their care in a way they can understand
(c). respond to patients' questions and keep them informed about the progress of their care	
(d). make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
23. You must make sure, wherever practical, that arrangements are made to meet patients' language and communication needs.	
29. You must be considerate to relatives, carers, partners and others close to the patient, and be sensitive and responsive in providing information and support, including after a patient has died. In doing this you must follow the guidance in Confidentiality: Protecting and providing information.	22. Clearly communicates difficult information or bad news to patient and/or patient's relatives
31. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent. You must follow the guidance in Seeking patients' consent: The ethical considerations, which includes advice on children and patients who are not able to give consent	
Working with colleagues	

41. Most doctors work in teams with colleagues from other professions. Working in teams does not change your personal accountability for your professional conduct and the care you provide. When working in a team, you should act as a positive role model and try to motivate and inspire your colleagues	
(a). respect the skills and contributions of your colleagues	
(b). communicate effectively with colleagues within and outside the team	
(c). make sure that your patients and colleagues understand your role and responsibilities in the team, and who is responsible for each aspect of patient care	8. Consults with, and keeps colleagues informed when sharing the care of patients
(d). participate in regular reviews and audit of the standards and performance of the team, taking steps to remedy any deficiencies	28. Ensures that all staff for whose performance they are responsible, including locums and students, are properly supervised
(e). support colleagues who have problems with performance, conduct or health.	16. Supports colleagues who have problems with their performance, conduct or health
42 If you are responsible for leading a team, you must follow the guidance in Management for doctors.	
45 If you have management responsibilities you should make sure that systems are in place through which colleagues can raise concerns about risks to patients, and you must follow the guidance in Management for doctors.	
46. You must treat your colleagues fairly and with respect. You must not bully or harass them, or unfairly discriminate against them by allowing your personal views* to affect adversely your professional relationship with them. You should challenge colleagues if their behaviour does not comply with this guidance.	13. Treats all staff fairly, and with respect for their roles and contributions
54. Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.	
55. Referral involves transferring some or all of the responsibility for the patient's care, usually temporarily and for a particular purpose, such as additional investigation, care or treatment that is outside your competence. You must be satisfied that any healthcare professional to whom you refer a patient is accountable to a statutory regulatory body or employed within a managed environment. If they are not, the transfer of care will be regarded as delegation, not referral. This means you remain responsible for the overall management of the patient, and accountable for your decision to delegate.	
Probity	
56. Probity means being honest and trustworthy, and acting with integrity: this is at the heart of medical professionalism.	31. Conducts themselves in a manner which justifies patient trust and public confidence
72. You must be honest and open in any financial arrangements with patients	33. Is honest and open about financial arrangements and any possible conflicts of interest
Conflicts of interest	
Health	
77. You should be registered with a general practitioner outside your	30. Makes arrangements for accessing

family to ensure that you have access to independent and objective medical care. You should not treat yourself.	independent medical advice when necessary
78. You should protect your patients, your colleagues and yourself by being immunised against common serious communicable diseases where vaccines are available.	
79. If you know that you have, or think that you might have, a serious condition that you could pass on to patients, or if your judgement or performance could be affected by a condition or its treatment, you must consult a suitably qualified colleague. You must ask for and follow their advice about investigations, treatment and changes to your practice that they consider necessary. You must not rely on your own	29. Does not permit their own health to affect in any way their work or the well-being of patients

Appendix 9: Mapping Good Medical Practice Duties to Sample NHS 360

Duties	Sample NHS 360
Good Clinical Care	
2(a). adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	1. Assessing a patient's condition? 2. Diagnosing medical problems?
2(b). providing or arranging advice, investigations or treatment where necessary	3. Providing advice? 4. Instigating appropriate treatment?
2(c). referring a patient to another practitioner, when this is in the patient's best interests	5. Appropriately referring patients to other practitioners?
3(a). recognise and work within the limits of your competence	6. Working within professional limitations?
3(b). prescribe drugs or treatment, including repeat prescriptions, only when you have adequate knowledge of the patient's health, and are satisfied that the drugs or treatment serve the patient's needs	
3(c). provide effective treatments based on the best available evidence	12. Committing to improve all aspects of performance? 16. Showing commitment to patient care?
3(d). take steps to alleviate pain and distress whether or not a cure may be possible	
3(f). keep clear, accurate and legible records, reporting the relevant clinical findings, the decisions made, the information given to patients, and any drugs prescribed or other investigation or treatment	8. Keeping good medical records?
3(h). be readily accessible when you are on duty	9. Maintaining appropriate availability? 27. Managing timescales?
3(i). consult and take advice from colleagues, when appropriate	
3(j). make good use of the resources available to you.	
4. Supporting self care	
6. If you have good reason to think that patient safety is or may be seriously compromised by inadequate premises, equipment, or other resources, policies or systems, you should put the matter right if that is possible. In all other cases you should draw the matter to the attention of your employing or contracting body. If they do not take adequate action, you should take independent advice on how to take the matter further. You must record your concerns and the steps you have taken to try to resolve them.	
7. The investigations or treatment you provide or arrange must be based on the assessment you and the patient make of their needs and priorities, and on your clinical judgment about the likely effectiveness of the treatment options. You must not refuse or delay treatment because you believe that a patient's actions have contributed to their condition. You must treat your patients with respect whatever their life choices and beliefs. You must not unfairly discriminate against them by allowing your personal views to affect adversely your professional relationship with them or the treatment you provide or arrange. You should challenge colleagues if their behaviour does not comply with this guidance	
Maintaining good practice	
12. You must keep your knowledge and skills up to date throughout your working life. You should be familiar with relevant guidelines and developments that affect your work. You should regularly take part in educational activities that maintain and further develop your competence and performance.	11. Maintaining continuous professional development?
14(a). maintain a folder of information and evidence, drawn from your medical practice	

14(b). reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	
14(c). take part in regular and systematic audit	10. Participating in quality audits?
14(f). help to resolve uncertainties about the effects of treatments	
Teaching and training, appraising and assessing	13. Teaching / training others?
Relationships with patients	
20. Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21(a). be polite, considerate and honest	
21(b). treat patients with dignity	
21(c). treat each patient as an individual	
21(d). respect patients' privacy and right to confidentiality	18. Demonstrating high standards of patient confidentiality and dignity?
21(e). support patients in caring for themselves to improve and maintain their health	
21(f). encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. To communicate effectively you must:	
(a). listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	7. Respecting patient choices?
(b). share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	
(c). respond to patients' questions and keep them informed about the progress of their care	
(d). make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
23. You must make sure, wherever practical, that arrangements are made to meet patients' language and communication needs.	
29. You must be considerate to relatives, carers, partners and others close to the patient, and be sensitive and responsive in providing information and support, including after a patient has died. In doing this you must follow the guidance in Confidentiality: Protecting and providing information.	17. Ensuring quality communication with patients and relatives?
31. Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent. You must follow the guidance in Seeking patients' consent: The ethical considerations, which includes advice on children and patients who are not able to give consent	
Working with colleagues	
41. Most doctors work in teams with colleagues from other professions. Working in teams does not change your personal accountability for your professional conduct and the care you provide. When working in a team, you should act as a positive role	19. Maintaining high standards of professional behaviour at all times?

model and try to motivate and inspire your colleagues	
(a). respect the skills and contributions of your colleagues	21. Respecting colleagues' skills and contribution?
(b). communicate effectively with colleagues within and outside the team	22. Openly sharing all necessary information?
(c). make sure that your patients and colleagues understand your role and responsibilities in the team, and who is responsible for each aspect of patient care	23. Strongly communicating roles and responsibilities? 24. Championing effective team work?
(d). participate in regular reviews and audit of the standards and performance of the team, taking steps to remedy any deficiencies	14. Being vigilant in the supervision of others?
(e). support colleagues who have problems with performance, conduct or health.	25. Supporting colleagues having problems with conduct, health or performance?
42 If you are responsible for leading a team, you must follow the guidance in Management for doctors.	
45 If you have management responsibilities you should make sure that systems are in place through which colleagues can raise concerns about risks to patients, and you must follow the guidance in Management for doctors.	
46. You must treat your colleagues fairly and with respect. You must not bully or harass them, or unfairly discriminate against them by allowing your personal views* to affect adversely your professional relationship with them. You should challenge colleagues if their behaviour does not comply with this guidance.	15. Safeguarding honesty in appraising / assessing others performance?
54. Delegation involves asking a colleague to provide treatment or care on your behalf. Although you will not be accountable for the decisions and actions of those to whom you delegate, you will still be responsible for the overall management of the patient, and accountable for your decision to delegate. When you delegate care or treatment you must be satisfied that the person to whom you delegate has the qualifications, experience, knowledge and skills to provide the care or treatment involved. You must always pass on enough information about the patient and the treatment they need.	
55. Referral involves transferring some or all of the responsibility for the patient's care, usually temporarily and for a particular purpose, such as additional investigation, care or treatment that is outside your competence. You must be satisfied that any healthcare professional to whom you refer a patient is accountable to a statutory regulatory body or employed within a managed environment. If they are not, the transfer of care will be regarded as delegation, not referral. This means you remain responsible for the overall management of the patient, and accountable for your decision to delegate.	
Probity	
56. Probity means being honest and trustworthy, and acting with integrity: this is at the heart of medical professionalism.	20. Retaining trust through highest standards of ethical behaviour? 26. Acting with complete integrity at all times? 30. Articulating conflicts of interest?
72. You must be honest and open in any financial arrangements with patients	28. Maintaining accuracy of advertised services? 29. Maintaining accuracy of all financial dealings?

Conflicts of interest	30. Articulating conflicts of interest?
Health	
77. You should be registered with a general practitioner outside your family to ensure that you have access to independent and objective medical care. You should not treat yourself.	31. Acknowledging the need to role model healthy lifestyle?
78. You should protect your patients, your colleagues and yourself by being immunised against common serious communicable diseases where vaccines are available.	32. Immunising to protect others?
79. If you know that you have, or think that you might have, a serious condition that you could pass on to patients, or if your judgement or performance could be affected by a condition or its treatment, you must consult a suitably qualified colleague. You must ask for and follow their advice about investigations, treatment and changes to your practice that they consider necessary. You must not rely on your own	33. Is not impaired by ill-health?

Appendix 10 Mapping General Medical Council Attributes to CFET

Attributes	CFET
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	7. Punctuality and reliability 12. Use of resources
Attribute: Apply knowledge and experience to practice	1. Clinical Knowledge 2. Clinical ability
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	9. Ability to say "no" 10. Awareness of limitations 11. Team orientation 17.. Trustworthiness /honesty/probity
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	13. Ability to manage stress 16. Respect to their own health
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	3. Communication with patients 4. Compassion /empathy 5. Communication with colleagues 8. Respect for colleagues
Attribute: Work constructively with colleagues and delegate effectively	18. Management /leadership skills
Attribute Establish and maintain partnership with patients	
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	14. Respect for confidentiality with patients and colleagues
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	
Not mapped	

Appendix 11 Mapping General Medical Council Attributes to GP-SPRAT

Attributes	GP-SPRAT
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	1. Make appropriate decisions 6. Manage time effectively /priorities 17. Maintain professional development
Attribute: Apply knowledge and experience to practice	2. Gather relevant data to make a sound clinical judgment 4. Manage complex medical problems 5. Appropriately use resources 7. Respond to psychosocial aspects of illness 8. Refer appropriately to secondary care 9. Coordinate patient care 16. Apply up-to-date /evidence based medicine 15. Use computers appropriately in practice, in seeking to apply evidence based medicine
Attribute: Keep clear, accurate and legible records	11. Keep good medical records
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	10. Provide continuity of care
Attribute: Respond to risks to safety	13. Demonstrate awareness of own limitations 14. Assess risks and benefits when treating patients
Attribute: Protect patients and colleagues from any risk posed by your health	18. Deal appropriately with stress
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	21. Communicate with patients 26. Communicate effectively with colleagues
Attribute: Work constructively with colleagues and delegate effectively	3. Formulate appropriate management plans 19. Be willing and effective in teaching /training colleague 25. Be accessible to colleagues 27. Work cooperatively in a team 28. Demonstrate leadership skills 29. Demonstrate management skills
Attribute Establish and maintain partnership with patients	22. Provide support to family/carers
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	24. Practice with respect for patient's dignity and their right to privacy & confidentiality
Attribute: Treat patients and colleagues fairly and without discrimination	20. Give feedback that is private, honest and supportive
Attribute: Act with honesty and integrity	23. Practice ethically and with integrity
Not mapped	12. Contribute to the health of the local community, beyond the individual patient 30. Overall, how do you rate this GP

Attributes	GP-SPRAT
	compared to other GPs?

Appendix 12 Mapping General Medical Council Attributes to What is a Good GP?

Attributes	What is a Good Doctor
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	- Able to make appropriate decisions - Commitment to continue his/her personal learning - Up-to-date with their clinical knowledge - Able to handle uncertainties of general practice -.Well organized
Attribute: Apply knowledge and experience to practice	- Diagnostically astute - A safe prescriber, particularly with danger drugs - Willing to care effectively for a dying patients e. g., terminal care - An appropriate user of the referral system - Willing to take responsibility for follow-up of patients where necessary
Attribute: Keep clear, accurate and legible records	- Able to record his/her consultations consistently and accurately - Able to write legibly
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	- Willing to listen to patient, colleagues and staff - Willing to learn from mistakes and recognizes his/her limitations approachable
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	- Able to maintain a healthy work-life balance - Able to maintain good health while doing the work of a GP - Calm under pressure
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	- Willing to listen to patient, colleagues and staff - Able to speak good English - Able to use e-mail as deemed appropriate by the practice - Committed to use the telephone as deemed appropriate by the practice - Able to demonstrate a sense of humor where appropriate
Attribute: Work constructively with colleagues and delegate effectively	- Willing to take responsibility for getting his/her share of work done - Enthusiastic about job - Willing to compromise where appropriate - Easily accessible and able to be contacted when necessary
Attribute Establish and maintain partnership with patients	- Able to put patient at ease
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	- Polite to patient and staff

Attributes	What is a Good Doctor
	- Able to demonstrate respect for confidentiality - Sensitive to cultural issues
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	- Honest and trustworthy
Not mapped	- Professional appearance

Appendix 13 Mapping General Medical Council Attributes to EDGECUMBE 360°

Attributes	EDGECUMBE 360°
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	1. Assess patient's history 2. Provide clinical care 3. Maintain good medical practice
Attribute: Keep clear, accurate and legible records	6. Take part in regular and systematic audit 9. Keep patient records
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	12. Act in a clinically safe manner 16. Take appropriate action when patients are at risk 18. Safeguard the health and well-being of vulnerable people
Attribute: Respond to risks to safety	14. Comply with risk management and clinical governance procedures 15. Follow infection control procedures 17. Make sure that all staff for whose performance he/she is responsible are properly supervised.
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	4. Pass on information to colleagues when handing over the care of a patient 20. Listen to patients 23. Communicate effectively with staff 27. Encourage colleagues to contribute to discussions 28. Cope with stress and pressure
Attribute: Work constructively with colleagues and delegate effectively	5. Apply the skills, attributes and practice of a competent teacher/trainer 7. Consult colleagues, or refer patients to colleagues, when this is in the patient's best interests 10. Work as a manager 13. Respond constructively to feedback 22. Show respect for colleagues 24. Give praise where appropriate 25. Provide effective leadership
Attribute Establish and maintain partnership with patients	8. Support patients in caring for themselves 21. Establish and maintain relationships with patients
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	30. Maintain confidentiality 32. Treat each patient as an individual
Attribute: Treat patients and colleagues fairly and without discrimination	31. Treat each patient fairly 33.Respond to patients' complaints and suggestions

Attributes	**EDGECUMBE 360°**
Attribute: Act with honesty and integrity	
Not mapped	

Appendix 14 Mapping General Medical Council Attributes to 360° Clinical

Attributes	360 Clinical
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	2. Performance of practical/technical procedures. 3. Management of complex clinical problems. 4. Appropriate use of resources. 5. Conscientiousness and reliability. 7. Time management. 9. Keeps up-to-date with knowledge and skills.
Attribute: Apply knowledge and experience to practice	1. Diagnostic skill
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	8. Commitment to improving quality of service.
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	11. Spoken English. 12. Communication with colleagues. 13. Communication with patients, families and carers
Attribute: Work constructively with colleagues and delegate effectively	6. Availability for advice and help when needed. 10. Contribution to the education and supervision of students and junior colleagues. 16. Values the skills and contributions of multi-disciplinary team members. 17. Takes the leadership role when circumstances require. 18. Delegates appropriately.
Attribute Establish and maintain partnership with patients	15. Compassion and empathy towards patients and their relatives.
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	
Attribute: Treat patients and colleagues fairly and without discrimination	14. Is polite, considerate and respectful to patients and colleagues of all levels.
Attribute: Act with honesty and integrity	19. Do you have any concerns about the Probity or Health (physical or mental) of this doctor that may impact on patient care?
Not mapped	4. Appropriate use of resources

Appendix 15 Mapping General Medical Council Attributes Colleague Items to GMC

Attributes	GMC
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	8. Keeping knowledge and skills up to date 9. Reviewing and reflecting on own performance 12. Commitments to care and well being of patients
Attribute: Apply knowledge and experience to practice	1. Clinical knowledge 2. Diagnosis 3. Clinical decision making 4. Treatment 5. Prescribing 7. Recognising and working within limitations
Attribute: Keep clear, accurate and legible records	6. Medical record keeping
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	17. I am confident that this doctor's performance is not impaired by ill health
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	13. Communication with patients and relatives
Attribute: Work constructively with colleagues and delegate effectively	10. Teaching (students, trainee, others) 11. Supervising colleagues 14. Working effectively with colleagues
Attribute Establish and maintain partnership with patients	
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	15. I am confident that this doctor respects patient
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	16. I am confident that this doctor is honest and trustworthy
Not mapped	

Appendix 16 Mapping General Medical Council Attributes to 2Q MSF

Attributes	2Q MSF
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	- Manage time appropriately (to be completed by clinical staff only) - Takes responsibility for own learning (to be answered by all respondents) - Does not shirk his/her responsibility (to be answered by all respondents)
Attribute: Apply knowledge and experience to practice	- Conduct a thorough history and physical (to be completed by clinical staff only) - Identify patients' problems (to be completed by clinical staff only - Select appropriate diagnostic tests (to be completed by clinical staff only) - Perform clinical and technical skills skillfully (to be completed by clinical staff only) - Take a diagnostic patient centered approach (to be completed by clinical staff only
Attribute: Keep clear, accurate and legible records	- Learn from clinical practice (to be completed by clinical staff only)
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	- Communicates effectively with patients (to be answered by all respondents) - Speaks good English and at appropriate level for the patient (to be answered by all respondents)
Attribute: Work constructively with colleagues and delegate effectively	- Involve members of the primary health care team appropriately (to be completed by clinical staff only) - Respects other colleagues' roles in the health care team (to be answered by all respondents) - Works constructively in the health care team (to be answered by all respondents) - Demonstrates commitment to their work as a member of a team (to be answered by all respondents
Attribute Establish and maintain partnership with patients	- Is caring of patients (to be answered by all respondents) - Is respectful of patients (to be answered by all respondents)
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	

Attributes	**2Q MSF**
Attribute: Treat patients and colleagues fairly and without discrimination	- Shows no prejudice in the care of patients (to be answered by all respondents)
Attribute: Act with honesty and integrity	
Not mapped	

Appendix 17 Mapping General Medical Council Attributes to Medical 360 Feedback

Attributes	Medical 360 Feedback (RMS)
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	9. Keeps professional medical knowledge and skills up-to-date 11. Is active in seeking evidence of own performance as a clinician
Attribute: Apply knowledge and experience to practice	1. Is competent in making diagnoses 8. Consults with, and keeps colleagues informed when sharing the care of patients 3. Uses skill when undertaking practical procedures 5. Prescribes drugs including repeat prescriptions, safely and appropriately 2: Uses good judgment and best available evidence to determine suitable treatments and procedures 6. Take steps to alleviate pain and distress whether or not a cure may be possible 15. Shows respect for other peoples' time by being punctual 14. Is willing to consult with colleagues and other professionals
Attribute: Keep clear, accurate and legible records	7. Keeps clear, accurate, legible and timely records
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	17. Takes action where there is evidence that a colleague's conduct, performance or health may be putting patients at risk.
Attribute: Protect patients and colleagues from any risk posed by your health	30. Makes arrangements for accessing independent medical advice when necessary. 29. Does not permit their own health to affect in any way their work or the well-being of patients
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	18. Listens to patients and respects their views about their health 22. Clearly communicates difficult information or bad news to patient and/or patient's relatives
Attribute: Work constructively with colleagues and delegate effectively	28. Ensures that all staff for whose performance they are responsible, including locums and students, are properly supervised 27. Ensures systems are in place for colleagues to raise concerns about risks to patients 16. Supports colleagues who have problems with their performance, conduct or health 13. Treats all staff fairly, and with respect

Attributes	Medical 360 Feedback (RMS)
	for their roles and contributions
Attribute Establish and maintain partnership with patients	20. Supports patients in caring for themselves 19. Gives patients the information they need in order to make decisions about their care in a way they can understand
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	21. Is polite, considerate and honest and respects patients' dignity and privacy
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	31. Conducts themselves in a manner which justifies patient trust and public confidence 33. Is honest and open about financial arrangements and any possible conflicts of interest
Not mapped	

Appendix 18 Mapping General Medical Council Attributes to Sample NHS 360

Attributes	Sample NHS 360
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	9. Maintaining appropriate availability? 10. Participating in quality audits? 11. Maintaining continuous professional development? 12. Committing to improve all aspects of performance? 16. Showing commitment to patient care? 19. Maintaining high standards of professional behaviour at all times? 27. Managing timescales? 31. Acknowledging the need to role model healthy lifestyle?
Attribute: Apply knowledge and experience to practice	1. Assessing a patient's condition? 2. Diagnosing medical problems? 3. Providing advice? 4. Instigating appropriate treatment? 5. Appropriately referring patients to other practitioners? 6. Working within professional limitations?
Attribute: Keep clear, accurate and legible records	8. Keeping good medical records?
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	32. Immunising to protect others? 33. Is not impaired by ill-health?
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	17. Ensuring quality communication with patients and relatives? 22. Openly sharing all necessary information? 23. Strongly communicating roles and responsibilities?
Attribute: Work constructively with colleagues and delegate effectively	13. Teaching / training others? 14. Being vigilant in the supervision of others? 15. Safeguarding honesty in appraising / assessing others performance? 21. Respecting colleagues' skills and contribution? 24. Championing effective team work? 25. Supporting colleagues having problems with conduct, health or performance?
Attribute Establish and maintain partnership with patients	
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	7. Respecting patient choices? 18. Demonstrating high standards of patient confidentiality and dignity?
Attribute: Treat patients and colleagues fairly and without	

Attributes	Sample NHS 360
discrimination	
Attribute: Act with honesty and integrity	20. Retaining trust through highest standards of ethical behaviour? 26. Acting with complete integrity at all times? 29. Maintaining accuracy of all financial dealings? 30. Articulating conflicts of interest?
Not mapped	28. Maintaining accuracy of advertised services?

Appendix 19 Psychometric Assessment of CFET

		CFET
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	The instrument is based on existing literature including Good Medical Practice Guidelines and is designed to be used in primary care settings for GPs.[1]
Scale and Scoring	What do the scales measure?	The 19 items measure responses on individual aspects of professional performance. CFET version 2 includes the added question (Q6) dealing with teaching and training of colleagues.[2] Factor analysis of CFET items identified two components. The first encompassed nine items which might be judged to reflect a doctor's contribution to clinical and team performance while the second encompassed six items relating to personal attributes, self-awareness, and the health status of the doctor being assessed.[1]
	How do the scales measure the construct?	The instrument uses a Likert-type 5 point scale ranging from 1 (poor) to 5 (excellent) with an option of Unable to Comment. Question 19 (Overall ability) is summative.[2]
Publications	Are there publications related to questionnaires and its assessment?	Yes [1]
Item development and assessment of items	What approaches have been used to develop items?	The data was explored at two levels: unaggregated, at patient and colleague levels; and aggregated to the level of the index doctor. The 2nd version included the addition of 1 item dealing with teaching and training [2]
Testing of instrument	Descriptive data (means, SD)	The 19 Likert scale items had a mean of means of 4.32 (minimum mean 3.92 for Q9 Ability to say No; maximum mean 4.66 for Q17 Trustworthiness/Honesty/Probity) [2]
Samples used for testing instrument		General practitioner
	Study Group	32 GPs across two Deaneries in the UK were used to test the revised CFET [3.] This included 450 colleague responses to 32 doctors (minimum 10 responses per doctor, maximum 16, average 14).[3]
Types of Assessors /respondents	(i.e., peers, co-workers)?	For the original version of the instrument respondents identified themselves as doctors, and 1569 (64.8%) reported 'other' occupational status. [1]
Construct validity	Comparison to other instruments	Version 2 of the instrument was compared to version [2]
	Factor analysis	Factor analysis of CFET items identified two components. The first encompassed nine items which might be judged to reflect a doctor's contribution to clinical and team performance while the second encompassed six items relating to personal attributes, self-awareness, and the health status of the doctor being assessed..[1]
Reliability	Cronbach's alpha	Cronbach's alpha reported as 0.899 for all 19 items and remains the same even if Q6 is removed.[2]
	Inter-rater reliability	Not reported
	Test-retest	Not reported
	Inter-item Correlation	Inter-item correlations among all 19 items was 0.524 [2]
	Spearman Brown prophecy formula	Not reported

		CFET
	G-study or D-study	For version 2 at the aggregated level $Ep^2$was 0.80 for 14 raters and 0.86 for 16 [2]
Ability to differentiate sub-optimal performance		Not reported
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	Information on interpreting feedback is provided in writing. The feedback is provided by report that includes a guide for performance reflection. The results of the feedback are examined with a nominated facilitator appraiser

1. Campbell J, Narayanan A, Burford B, and Greco M, Validation of a multi-source feedback tool for use in General Practice. Education for Primary Care 2010; 21:165–79
2. Statistical report on CFET v2
3. Revised CFET (version2)

Appendix 20 Psychometric Assessment of GP-SPRAT

		GP-SPRAT Version 2
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	GP-SPRAT was developed from the established Sheffield Peer Review Assessment Tool (SPRAT) instrument to specifically assess GPs and GP trainees. It is directly mapped to General Medical Council 'Good Medical practice' framework and focuses on primary care settings. [1]
Scale and Scoring	What do the scales measure?	There are 26 questions mapped to 9 domains (Good Clinical Care, Communication and consulting skills, Practising holistically, Primary care administration and information management technology, Working with colleagues and in teams, Community orientation, Maintaining performance, learning and teaching, Maintaining an ethical approach to practice, Fitness to practise) and a global rating scale.[1]
	How do the scales measure the construct?	The rating scale ranges from 1 (very poor) to 6 (very good). All questions have an "unable to comment" option.[1]
Publications	Are there publications related to questionnaires and its assessment?	Yes [1]
Item development and assessment of items	What approaches have been used to develop items?	The GP-SPRAT was updated to versions of GMP for General Practitioners (a specialty specific version of the GMC document and the RCGP Curriculum. This work was undertaken with an expert panel of educationalists and GP examiners at NCAS. For the 2nd version, piloted in 2007, questions 17, 20, 21 and 26 were removed on the basis of their high UC rates and poor correlation. The resulting questionnaire lengthened overall by three questions and introduced domain specific comment areas to encourage more free text responses. [1]
Testing of instrument	Descriptive data (means, SD)	Two studies used 1) Sample from the iMAP scheme (Interim Membership by Assessment of Performance - iMAP is the process by which practising GPs can apply for membership of the RCGP without taking the formal examination route). This study had an overall mean of 5.44 with individual means ranging from 4.48 to 5.89[1] 2) Second study, made up of a volunteer GP sample from a NCAS funded 'normative study, had a mean of 5.39 with a range of 4.0 – 6.0. [1]
Samples used for testing instrument		General Practitioners for both studies[1]
	Study Group	Two study groups using revised instrument were reported 1) 348 GPs from NCAS study had a mean response rate of 76% [1] 2) 246 GPs for iMAP study were used to test version 2 of the instrument This sample had 2174 assessors [1]
Types of Assessors /respondents	(i.e., peers, co-workers)?	For NCAS study respondents were GP Principal, GP Registrar, GP Salaried, F2 Trainee, Medical Student, Health Visitor, Practice Manager, Practice Nurse, Receptionist, Other [1]

Construct validity	Comparison to other instruments	Not reported
	Factor analysis	Four factors were identified explaining 73% of the variance for the NCAS GP study [1] The 4 factors for version one were clinical skills, psychosocial skills, collaborative working & organisational skills
Reliability	Cronbach's alpha	Cronbach's alpha reported as 0.97 for the NCAS GP s.[1]
	Inter-rater reliability	Not reported
	Test-retest	Not reported
	Inter-item Correlation	Item–total correlations were above 0.63 for all questions. [1]
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	For the NCAS study 14 assessors showed a Ep^2 of .0.8. For the iMAP 14 GPs resulted in a Ep^2 of 0.6 [1]
Ability to differentiate sub-optimal performance		NCAS works with health organisations and individual practitioners where there is a concern about the performance of a doctor, dentist or pharmacist. 24 NCAS practitioners had been awarded the lowest cohort score of 4.31 (range 3.54 – 5.62). Five GPs were seen as being below satisfactory overall by their assessors. 9% of practitioners were described as having issues in respect to their health and or probity. [1]
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	Feedback is provided electronically and consists of a graph which compares the doctor's self rating for each question with the mean for that question for all of their assessors combined and the cohort mean ± 2 Drs. Free text is fed back verbatim but the doctor does not know who provided the comments. Feedback is sent to the Appraiser/Trainer to be fed back face-to-face to the doctor to support a facilitative approach. [1]

1. GP SPRAT & SHEFFPAT: Assessing and Informing GPs for revalidation Jan. 2010

Appendix 21 Psychometric Assessment of What is a Good GP?

		What is a Good GP?
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	The aim was to develop an MSF instrument specifically for GP appraisal with an emphasis on trying to determine GP primary health care teams' definition of "the good GP". [1]
Scale and Scoring	What do the scales measure?	The 37 items cover 6 domains: communication skills, professional values, clinical care, working with colleagues, personality issues and duties and responsibilities. [2]
	How do the scales measure the construct?	The instrument uses a Likert-type agreement scale ranging from 1 (Strongly disagree) to 6 (strongly agree). An option of "don't know" is available. Each of the 6 sections includes space for a comment [2]
Publications	Are there publications related to questionnaires and its assessment?	Not reported
Item development and assessment of items	What approaches have been used to develop items?	Fifty one members of primary health care teams (PHCTs) of ten GP practices, including 6 physicians who were receiving help and support from their PCT, were asked to provide written comments in response to the question "What is a good GP?". 1588 statements were then analysed for content by two independent researchers who reduced and coded them to identify emerging themes. All members of the PHCTs were then asked to rate each item for relevance to the overall domain and comment on the wording of statements. The accepted standard was 80% agreement scoring 3 or 4 for each statement [1.]
Testing of instrument	Descriptive data (means, SD)	Not reported.
Samples used for testing instrument		General practitioners[3]
	Study Group	12 volunteer doctors completed the MSF process and recruited 7 appraisers.[3]
Types of Assessors /respondents	(i.e., peers, co-workers)?	Raters consisted of ten or more members of the primary healthcare team who were nominated by the GP.[3]
Construct validity	Comparison to other instruments	Not reported
	Factor analysis	Not reported
Reliability	Cronbach's alpha	Not reported
	Inter-rater reliability	Not reported
	Test-retest	Not reported
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	Not reported
Ability to differentiate sub-optimal performance		Not reported
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	A study was carried out using the instrument to established a web-based multi-source feedback process for general practice appraisal in Scotland. [3]

		What is a Good GP?
		Feedback is provided using a website to collate questionnaires which are completed on-line by the GP and their raters – ten or more members of the primary healthcare team who are nominated by the GP. Training for appraisers who facilitate feedback is provided [3]

1. What is a good GP - Developing the content for a multi-source feedback instrument for GP Appraisal
2. What Is a Good GP Instrument
3. What is a good GP - What is a good GP? Evaluating a multi-source feedback instrument for GP Appraisal

Appendix 22 Psychometric Assessment of EDGECUMBE 360°

		EDGECUMBE 360°
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	The aim was to highlight doctor's strengths and developmental areas by looking at competencies and behaviors that are key to their role, including teamwork, communication and consultation skills.[1]
Scale and Scoring	What do the scales measure?	There are 33 items set out under each of the four headings of good medical practice (Domain 1: Knowledge, Skills and Performance, Domain 2: Safety and Quality, Domain 3: Communication, Partnership and Teamwork and Domain 4: Maintaining Trust) plus sections on Professional Integrity and Health. The scales measures how effectively the physician performs on each item. [2]
	How do the scales measure the construct?	The rating scale ranges from 6 (Extremely effective) to 1(Not effective) with the option 'Cannot Comment'. There is also the option to add comments in each section to judge how well a particular behavior is performed. [2]
Publications	Are there publications related to questionnaires and its assessment?	Yes [3]
Item development and assessment of items	What approaches have been used to develop items?	A process of peer review, using a web-based discussion forum to consult a range of experts from different medical specialties including GPs. Dr Julian Archer helped to draw together the various comments in order to reach the current updated version of the questionnaire for colleagues. The revision made to this instrument, in 2009, reflect the four core domains more accurately. The questions for which 20% or more respondents did not answer, or answered "Don't Know". were removed. Also removed was the word "overall" from the original questions. Questions were excluded where inter-correlations were more than .80. [4]
Testing of instrument	Descriptive data (means, SD)	Not reported
Samples used for testing instrument		Accident & Emergency, Anaesthetics, Cardiology, Gastroenterology, General Practice, Geriatric, Haematology, Neurology, Obstetrics and Gynaecology, Ophthalmology, Paediatrics, Pathology, Psychiatry, Radiology, Rheumatology, Surgery, Other [5]
	Study Group	Two study groups using the revised instruments were reported 603 physicians received 5343 colleagues responses (not all GPs)[4] and as of Feb 2009, 134 GPs with 488 peer surveys returned [5]
Types of Assessors /respondents	(i.e., peers, co-workers)?	Peers and other staff including support or junior staff that the physicians has currently (or recently) work with.[1]
Construct validity	Comparison to other instruments	Not reported
	Factor analysis	Not reported for new version
Reliability	Cronbach's alpha	Cronbach's alpha reported as 0.938 but data included all physicians studied as well as 6 GPs[6]
	Inter-rater reliability	Not reported
	Test-retest	Not reported

		EDGECUMBE 360°
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	0.890 from 5343 colleague (Not just GPs) [6]
	G-study or D-study	Not reported
Ability to differentiate sub-optimal performance		Not reported
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	Appraisers give feedback using the report in an appraisal meeting. In special circumstances Edgecumbe Health consultants may also provide discussion/feedback around 360 reports. Edgecumbe provides appraiser training for new and experienced appraisers, including specific training on giving 360 report feedback during appraisal meetings using the 360 report. A new feedback process has been developed which consists of a two part reporting system. This process separates the numerical data from the ratings, and the qualitative data from the free text. The appraiser receives this first so that he or she can decide how best to present it to the appraisee if any of the comments are particularly negative or written in a potentially destructive way. This is seen as an important feature by the developers.[5]

1. Guidance for PCT communication GP version.doc
2. New Edgecumbe Colleague 360 questionnaire 2009.doc
3. Griffin E, Sanders C, Craven D, and King J, A computerized 360^{0} feedback tool for personal and organizational development in general practice. Health Informatics Journal 2000: 8, 71-80
4. EDGECUMBE 360° Assessment March 8 with comments
5. E-Mail with added info.docx
6. Reliability Analysis Report 1

Appendix 23 Psychometric Assessment of 360 Clinical

		360 Clinical
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	The aim was to make this an education exercise for doctors while being able to reliably identify the few who may have performance issues. It is formative and linked in with appraisal but allows poor results to trigger further scrutiny.[1]
Scale and Scoring	What do the scales measure?	20 items within ten domains cover elements of professional behaviour, humanistic qualities and clinical competence.
	How do the scales measure the construct?	The scale measures assessors' perceptions of the assessed physicians ranging from 1 (I have concerns) to 4 (Outstanding). The scales also include an option of "Unable to Comment". A free textbox for comments is also available.
Publications	Are there publications related to questionnaires and its assessment?	Not reported
Item development and assessment of items	What approaches have been used to develop items?	The 360^0 Clinical was developed after an extensive literature review and consultation with over 100 consultants from many specialties.[1] For version 2 of this instrument, revised in 2009, the original compounded items were split. [2]
Testing of instrument	Descriptive data (means, SD)	Not reported
Samples used for testing instrument		General practitioners [2]
	Study Group	205 GPs participated with 2125 assessors who returned 2789 forms (this include self assessments) [2]
Types of Assessors /respondents	(i.e., peers, co-workers)?	Admin/managerial, AHP/podiatrist, consultant, other grade of doctors, GP, Student nurses [2]
Construct validity	Comparison to other instruments	Version 2 of the instrument was compared to the version 1 [1]
	Factor analysis	Version 2 successfully separated out 'humanistic' and 'non-humanistic' factors explaining 56% of variance [2]
Reliability	Cronbach's alpha	Not reported
	Inter-rater reliability	Not reported
	Test-retest	Not reported
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	12 provided a $Ep^2$of 0.67; 13provided a $Ep^2$of 0.69 and 14 provided a $Ep^2$of 0.71. [2]
Ability to differentiate sub-optimal performance		"I have concerns" reported for 63 GPs rated below expectation on one or more areas by 2 or more respondents. 34 GPs rated below expectation on one or more areas by 3 or more respondents. 17 GPs rated below expectation on one or more areas by 4 or more respondents [2]
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	Doctor undergoing the MSF was asked to nominate an appraiser who was responsible for checking the 'mix' of assessors and feeding back the results at a designated meeting at the end of the process. Final report detailed individual scores for each domain and also how many

		360 Clinical
		assessors scored each item rather than just feeding back the aggregate scores [3]

1. Royal College of Physicians Colleague MSF Report
2. 360 Clinical GP Report (2009)
3. Academy of Medical Royal Colleges. Project to develop multi-source feedback questionnaires for revalidation. Final Report, Sept 2007

Appendix 24 Psychometric Assessment of GMC

		GMC
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	The instrument was developed using the principles and criteria based on Good Medical Practice for General Practitioners.[1]
Scale and Scoring	What do the scales measure?	18 items measure colleagues' satisfaction with the assessed doctor's medical practice[2]. The items relate to the seven domains of Good Medical Practice[4]
	How do the scales measure the construct?	The measure uses a Likert-type scale from "poor" to "very good" for the first 14 of 18 items. Items 15, 16 and 17, are measured with a Likert type scale of agreement ranging from "Strongly disagree" to "Strongly agree". The last question has a "yes"/no" response. The option of "don't know" is available for all items. As well a comment section is available.[3]
Publications	Are there publications related to questionnaires and its assessment?	Yes .[4]
Item development and assessment of items	What approaches have been used to develop items?	A working party devised the colleague surveys specifically for use in revalidation, building on earlier work in the field. The face validity was established by Market and Opinion Research International (MORI) through a series of focus groups. Preliminary assessment of the properties of the questionnaires were undertaken by the University of Leeds. [1] No changes have been made to this instrument since the last report
Testing of instrument	Descriptive data (means, SD)	A mean range for the 17 items was 4.45 (SD=0.37) to 4.86 (SD=0.17) out 5. For the comment section a total of 38.3% of colleagues recorded free-text comments. Most were unequivocally positive. Only 7.8% were negative. Doctors' overall mean Colleague Survey performance scores were significantly correlated with the numbers of colleagues recording positive and adverse comments. The authors conclusion was that there was an inevitable tradeoff between the capturing of indicators of problematic performance and the ease with which such statements can be identified. It was suggested that there was little benefit in routinely analysing narrative comments for the purposes of revalidation.[3] The mean score (range) across the 17 items was 4.71 (4.50–4.90) out of a maximum possible score of 5.00.[4]
Samples used for testing instrument		Doctors from acute and primary care settings including 5 acute and 11 primary care trusts, 1 mental health trust, and general practice (GP), registrars from a deanery. These included prison doctors, occupational physicians, out-of-hours primary care medical practitioners, locum doctors, independent practitioners, and doctors undergoing GMC performance review. [4]
	Study Group	309 index doctors had 4269 colleague responses. 288 had >8 colleague responses [3]
Types of Assessors /respondents	(i.e., peers, co-workers)?	Doctors, registered nurses, allied healthcare professional, healthcare assistant, practice manager, administrator, pharmacist or one of around 300 free text

		GMC
		descriptors submitted by participants.[3] Half of Colleague respondents were doctors (2107/4236, 49.7%) [4]
Construct validity	Comparison to other instruments	Not reported
	Factor analysis	Three components accounted for 61.0% of the total variance in the sample. [4]
Reliability	Cronbach's alpha	Cronbach's alpha for the 17 performance evaluation colleague questionnaire items was 0.922. [4.] A revised alpha formula resulted in an alpha of 0.85 was for colleagues [1]
	Inter-rater reliability	Inter-item correlation of 0.418 (range 0.189–0.725).[4]
	Test-retest	Not reported
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	The Spearman Brown prophecy formula identified that acceptable reliability 29 (alpha 0.85) was achieved with a minimum of 8 completed colleague questionnaires per doctor. [1]
	G-study or D-study	Revised coefficient shows at least 12 colleagues are required for a doctor's assessment to be Ep^2 =0.80. [1]
Ability to differentiate sub-optimal performance		Adverse statements clustered on a subset of doctors (27%), over half of these doctors received only one adverse comment. Thus, high overall scores are associated with greater numbers of positive comments, whereas lower overall scores are associated with greater numbers of negative comments. [3]
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	Yes

1. Generalisability for unbalanced, uncrossed and fully nested studies
2. Colleague Questionnaire for Dr Anonymous Example
3. Richards SH, Campbell JL, Walshaw, E, Dickens A, Greco, M. A multi-methods analysis of free-text comments from the UK GMC Colleague Questionnaires Medical Education 2009 43 757-766.
4. Campbell J L, Richards S H, Dickens A, et al. Assessing the professional performance of UK doctors: an evaluation of the utility of the General Medical Council patient and colleague questionnaires. *Qual Saf Health Care* 2008 17: 187-193

Appendix 25 Psychometric Assessment of 2Q MSF

		2Q MSF
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	The development of the instrument used the research in medical MSF tools that suggested that raters appear to consider colleagues in two broad dimensions; clinical ability and professional behaviour.[1]
Scale and Scoring	What do the scales measure?	2 items allow for global ratings plus specific comments in key guided areas of clinical ability and professional behaviour. [1]
	How do the scales measure the construct?	The measurement scale consists of a seven point Likert scale ranging from 1 (very poor) to 7 (outstanding).[2]
Publications	Are there publications related to questionnaires and its assessment?	Yes [3]
Item development and assessment of items	What approaches have been used to develop items?	Not reported
Testing of instrument	Descriptive data (means, SD)	Mean =5.59 (CI=5.45-5.73) (SD=0.49) [3]
Samples used for testing instrument		GP Registrars [3]
	Study Group	46 GP Registrars[3]
Types of Assessors /respondents	(i.e., peers, co-workers)?	Clinical peers and non-clinical colleagues (practice managers, secretaries, receptionists)[3]
Construct validity	Comparison to other instruments	Compared to 5 other measures (criterion audit, patient feedback (the CARE Measure), referral, letters, significant event analysis, and video analysis of consultations). Results show that this method of assessment rated lowest for acceptability, feasibility and educational impact.[3]
	Factor analysis	Not reported
Reliability	Cronbach's alpha	Cronbach's alpha reported as 0.79 [3]
	Inter-rater reliability	0.30 (clinical raters) and 0.31 (non-clinical raters) [3]
	Test-retest	0.29 (clinical raters) and 0.34 (non-clinical raters) [3]
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	6 responses = Ep^2 0.80 (clinical raters) and 5 responses = Ep^2 0.81 (non-clinical raters) [3]
Ability to differentiate sub-optimal performance		Not reported
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	Feedback was provided as part of the evaluation of using this method compared to the other methods of assessment (criterion audit, patient feedback (the CARE Measure), referral, letters, significant event analysis, and video analysis of consultations). [3]

1. E-mail from David Bruce Tuesday Dec 1, 2009
2. Multi Source Feedback Questionnaire 2Q MSF

3. Murphy DJ, Bruce DA, Mercer SW, Eva KW. The reliability of workplace-based assessment in postgraduate medical education and training: a national evaluation in general practice in the United Kingdom. Advances in Health Science Education 2009; 14(2): 219-232. http://dx.doi.org/10.1007/s10459-008-9104-8 .

Appendix 26 Psychometric Assessment of Medical 360 Feedback

		.Medical 360 Feedback (RMS)
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	The questionnaire and reporting format had already been applied successfully to Hospital Doctors over a 2 year period. The aim was to test the format on GP;s using revised questionnaire content [1]
Scale and Scoring	What do the scales measure?	33 items measure colleagues' rating of physicians' performances [1] and are divided into 8 headings: 1:Good Practice (current clinical work), 2:Maintaining Good Practice (keeping up to date), 3:Working With Colleagues (team work), 4:Relationships With Patients, 5:Teaching and Training, 6 Management/Leadership. 7:Health 8:Probity [2]
	How do the scales measure the construct?	A six point performance scale is used for this instrument ranging from 1 (I Have Real Concerns), 2 (Needs Attention), 3 (Adequate, Can Be Improved), 4 (Competent Performance), 5 (Strong In This) and 6 (Outstandingly Effective) [1] After each section respondents have the opportunity to provide qualitative responses [1]
Publications	Are there publications related to questionnaires and its assessment?	Not reported
Item development and assessment of items	What approaches have been used to develop items?	The questionnaire was created by practicing medical staff based on the GMP guidelines. The system was trialled for one year after which participants were surveyed for their thoughts on the process. As a result of this review the questionnaires were re-structured and the process re-launched in 2008. [1]
Testing of instrument	Descriptive data (means, SD)	Not reported
Samples used for testing instrument		Coventry PCT GP staff. [1]
	Study Group	33 GP's have completed the process with a response rate of 84% overall [1]
Types of Assessors /respondents	(i.e., peers, co-workers)?	The same format, with slight variations on the questions have been applied to Physicians, Anaesthetics, Obstetrics and gynaecology, Paediatrics, Radiology, Pathology, Surgery, RGN.s, Managers [1]
Construct validity	Comparison to other instruments	Not reported
	Factor analysis	Factor analysis shows that all items load onto one factor [1]
Reliability	Cronbach's alpha	Not reported
	Inter-rater reliability	Not reported
	Test-retest	Not reported
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	GP's were asked to choose a minimum of 3 GP Colleagues, 3 Other Practice Colleagues and 3 Other NHS colleagues. More of each category could be selected if required. [1]
Ability to differentiate		Not reported

		.Medical 360 Feedback (RMS)
sub-optimal performance		
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	For the GP pilot the report went directly to the GP. They were then encouraged to review the report with their Annual Appraiser. [1]

1. RCGP Performas.doc
2. RMS Instrument for Medical 360 Feedback

Appendix 27 Psychometric Assessment of Sample NHS 360

		Sample NHS 360
Measuring aim or construct of Survey	Is there a conceptual basis for the instruments' development and measurement constructs?	The aim of the instrument was to 1. Understand the impact of participant's personal contribution. 2. Assist participants to identify specific strengths and development needs. 3. Enable participants to take personal responsibility for their own development plan. 4. Support actions arising from strategic PCT / Practice succession plans. 5. Encourage feedback and communication between colleagues. 6. Support the decisions around PCT / Practice succession plans. 7. Fit with and support NHS culture, values and strategy. 8. Provide collective data on strengths and development needs across the organization (RCGP) (e.g. a PCT could use the amalgamated anonymous group results to inform training spend). [1]
Scale and Scoring	What do the scales measure?	33 draft question banks have been developed [1]
	How do the scales measure the construct?	For each question the candidate will be rated against a suitable descriptive scale and scoring mechanism, e.g. 1 to 6, which the company will devise in keeping with the RCGP's wishes. [1]
Publications	Are there publications related to questionnaires and its assessment?	Not reported
Item development and assessment of items	What approaches have been used to develop items?	Not reported
Testing of instrument	Descriptive data (means, SD)	Not reported
Samples used for testing instrument		Not reported
	Study Group	Not reported
Types of Assessors /respondents	(i.e., peers, co-workers)?	Not reported
Construct validity	Comparison to other instruments	Not reported
	Factor analysis	Not reported
Reliability	Cronbach's alpha	Not reported
	Inter-rater reliability	Not reported
	Test-retest	Not reported
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	Not reported
Ability to differentiate sub-optimal performance		Not reported
Feedback to assessed physicians	Has the data been used to provide feedback to the sample under study?	Example of how feedback report would be provided

1. Royal College of General Practitioner's - 360 / MSF Tailored Solution - January 2010 Worthy Associates Ltd.

Appendix 28 Mapping Good Medical Practice Duties to IPQ

Duties	IPQ
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	18. This doctor's consideration of my personal situation in deciding a treatment or advising me was…
2b. Providing or arranging advice, investigations or treatment where necessary	
3e. Respect the patient's right to seek a second opinion	27. The practice's respect of your right to seek a second opinion or complementary medicine was…
3(h) be readily accessible when you are on duty	1. Your level of satisfaction with the practice's opening hours 3. Satisfaction with the day and time arranged for your appointment. 4. Chance of seeing a doctor/nurse within 48/24 hours 2. Ease of contacting the practice on the telephone 6. Opportunity of speaking to a doctor/nurse on the telephone when necessary 8. Length of time waiting in the practice 17. The amount of time given to me for this visit was…
4. Supporting self care	25. The information provided by this practice about how to prevent illness and stay healthy (e.g. alcohol use, health risks of smoking, diet habits etc)
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21. Doctor-patient partnership	
(a) be polite, considerate and honest	
(b) treat patients with dignity	
(c) treat each patient as an individual	19. The doctor's concern for me as a person on this visit was…
(d) respect patients' privacy and right to confidentiality	16. The respect shown to me by this doctor was... 22. Respect shown for your privacy and confidentiality
(e) support patients in caring for themselves to improve and maintain their health	
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	10. The warmth of the doctor's greeting to me was... 11. On this visit I would rate the doctor's ability to really listen to me as... 13. The extent to which I felt reassured by this doctor was… 15. The opportunity the doctor gave me to express my

	concerns or fears was…
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	12. The doctor's explanations of things to me were...
(c) respond to patients' questions and keep them informed about the progress of their care	
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	24. The opportunity for making compliments or complaints to this practice about its service and quality of care
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	
Probity	
NOT MAPPED	7. Comfort level of waiting room (e.g. chairs, magazines) 9. My overall satisfaction with this visit to the doctor is... 14. My confidence in this doctor's ability is... 20. The recommendation I would give to my friends about this doctor would be… 21. The manner in which you were treated by the reception staff 23. Information provided by the practice about its service (e.g. repeat prescriptions, test results, cost of private certificates etc) 26. The availability and administration of reminder systems for ongoing health checks is…

Appendix 29 Mapping Good Medical Practice Duties to DISQ

Duties	DISQ
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	10. This doctor's consideration of my personal situation in deciding a treatment or advising me was…
2b. Providing or arranging advice, investigations or treatment where necessary	
3e. Respect the patient's right to seek a second opinion	
3(h) be readily accessible when you are on duty	9. The amount of time given to me for this visit was
4. Supporting self care	
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21. Doctor-patient partnership	
(a) be polite, considerate and honest	
(b) treat patients with dignity	
(c) treat each patient as an individual	11. The doctor's concern for me as a person on this visit was…
(d) respect patients' privacy and right to confidentiality	8. The respect shown to me by this doctor was…
(e) support patients in caring for themselves to improve and maintain their health	
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	2. The warmth of the doctor's greeting to me was… 3. On this visit I would rate the doctor's ability to really listen to me as… 5. The extent to which I felt reassured by this doctor was… 7. The opportunity the doctor gave me to express my concerns or fears was…
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	4. The doctor's explanations of things to me were…
(c) respond to patients' questions and keep them informed about the progress of their care	
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You	

Duties	DISQ
must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	
Probity	
NOT MAPPED	1. My overall satisfaction with this visit to the doctor is… 6. My confidence in this doctor's ability is… 12. The recommendation I would give to my friends about this doctor would be…

Appendix 30 Mapping Good Medical Practice Duties to CARE

Duties	CARE
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	
2b. Providing or arranging advice, investigations or treatment where necessary	
3e. Respect the patient's right to seek a second opinion	
3(h) be readily accessible when you are on duty	
4. Supporting self care	
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	6. Showing care and compassion…
21. Doctor-patient partnership	
(a) be polite, considerate and honest	1. making you feel at ease
(b) treat patients with dignity	
(c) treat each patient as an individual	4. Being interested in you as a whole person…
(d) respect patients' privacy and right to confidentiality	
(e) support patients in caring for themselves to improve and maintain their health	9. Helping you to take control 10.Making a plan of action with you …
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	2. Letting you tell your story 3. Really listening 5. Fully understanding your concern
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	8. Explaining things clearly
(c) respond to patients' questions and keep them informed about the progress of their care	
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	

Duties	CARE
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	
Probity	
NOT MAPPED	7. Being Positive…

Appendix 31 Mapping Good Medical Practice Duties to CSQ

Duties	CSQ
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	2. This doctor was very careful to check everything when examining me 9. This doctor examined me very thoroughly
2b. Providing or arranging advice, investigations or treatment where necessary	
3e. Respect the patient's right to seek a second opinion	
3(h) be readily accessible when you are on duty	5. The time I spend with the doctor was a bit too short 11. The time I was allowed to spend with this doctor was not long enough to deal with everything I wanted 16. I wish it had been possible to spend a little longer with the doctor.
4. Supporting self care	
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	3. I will follow this doctor's advice because I think he/she is absolutely right. 14. This doctor knows all about me
21. Doctor-patient partnership	
(a) be polite, considerate and honest	
(b) treat patients with dignity	
(c) treat each patient as an individual	10. I thought this doctor took notice of me as a person 13. This doctor was interested in me as a person not just my illness
(d) respect patients' privacy and right to confidentiality	4. I felt able to tell this doctor about very personal things 8. There are some things this doctor does not know about me 18. I would find it difficult to tell this doctor about some private things
(e) support patients in caring for themselves to improve and maintain their health	
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	15. I felt this doctor really knew what I was thinking
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	6. This doctor told me everything about my treatment 12. I understand my illness much better after seeing this doctor
(c) respond to patients' questions and keep them informed about the progress of their care	

Duties	CSQ
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	
Probity	
NOT MAPPED	1. I am totally satisfied with my visit to this doctor. 7. Some things about my consultation with the doctor could have been better 17. I am not completely satisfied with my visit to this doctor.

Appendix 32 Mapping Good Medical Practice Duties to SHEFFPAT

Duties	SHEFFPAT
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	
2b. Providing or arranging advice, investigations or treatment where necessary	
3e. Respect the patient's right to seek a second opinion	
3(h) be readily accessible when you are on duty	
4. Supporting self care	5. How confident do you feel in looking after your medical condition(s) now you have seen the practitioner?
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	1. How much chance were you given to discuss or to do the things you wanted during consultation? 6. How good with people is this practitioner?
21. Doctor-patient partnership	
(a) be polite, considerate and honest	
(b) treat patients with dignity	
(c) treat each patient as an individual	
(d) respect patients' privacy and right to confidentiality	12. How well did the practitioner respect your right to privacy, respect and confidentiality?
(e) support patients in caring for themselves to improve and maintain their health	2. How happy are you to follow the practitioner's suggestions and treatments?
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	7. How much was the practitioner interested in your point of view when he/she was asking questions? 9. How well do you feel the practitioner listened to you? 10. How well do you think the practitioner understood you?
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	3. How well do you think you understand your condition(s) now you have seen the practitioner? 4. How well do you understand your) treatment(s) now you have seen the practitioner? 8. How much was the practitioner interested in your point of view when he/she was planning and explaining things? 11. How well did the practitioner explain things?
(c) respond to patients' questions and keep them informed about the progress of their care	
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an	

explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	
Probity	
NOT MAPPED	13. Overall how satisfied are you with the practitioner in this consultation?

Appendix 33 Mapping Good Medical Practice Duties to EDGECUMBE 360°

Duties	EDGECUMBE 360°
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	7. taking account of your medical history? 10. ensuring you get the advice/investigation or treatment needed?
2b. Providing or arranging advice, investigations or treatment where necessary	
3e. Respect the patient's right to seek a second opinion	
3(h) be readily accessible when you are on duty	4. giving you enough time
4. Supporting self care	9. involving you in deciding how to handle the problem(s) you discussed?
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21. Doctor-patient partnership	
(a) be polite, considerate and honest	2. being polite and considerate?
(b) treat patients with dignity	8. treating you with dignity?
(c) treat each patient as an individual	
(d) respect patients' privacy and right to confidentiality	
(e) support patients in caring for themselves to improve and maintain their health	11. checking with you that you are happy with the planned treatments or tests?
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	16. allowing you to make up your own mind?
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	1. making you feel at ease? 5. doing their best to find out what you might be worried about? 6. listening to you? 14. understanding your needs and worries?
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	3. speaking to you in a way that is easy to understand 13. making sure you understand? 15. explaining any risks to the treatment?
(c) respond to patients' questions and keep them informed about the progress of their care	12. encouraging you to ask questions? 17. keeping you informed about the progress of your care?
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You	

Duties	EDGECUMBE 360°
must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	
Probity	
NOT MAPPED	19. Overall how effectively did the doctor meet your needs as a patient?

Appendix 34 Mapping Good Medical Practice Duties to 360 Clinical

Duties	360 Clinical
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	
2b. Providing or arranging advice, investigations or treatment where necessary	
3e. Respect the patient's right to seek a second opinion	
3(h) be readily accessible when you are on duty	
4. Supporting self care	
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	7. Did you have confidence in this doctor
21. Doctor-patient partnership	
(a) be polite, considerate and honest	1. Was the doctor polite and considerate?
(b) treat patients with dignity	9b. If the doctor examined you, did he or she respect your privacy and dignity?
(c) treat each patient as an individual	
(d) respect patients' privacy and right to confidentiality	
(e) support patients in caring for themselves to improve and maintain their health	
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	6. Are you involved as much as you want to be in the decisions about your care and treatment? 10. By the end of the consultation did you feel better able to understand and/or manage your condition and your care?
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	2. Did the doctor listen to what you had to say? 8. Did the doctor respect your views?
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	5. Did the doctor explain things in a way you could understand?
(c) respond to patients' questions and keep them informed about the progress of their care	3. Did the doctor give you enough opportunity to ask questions? 4. Did the doctor answer all your questions?
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an	

Duties	360 Clinical
explanation and, if appropriate, an apology. You must not allow a patient’s complaint to affect adversely the care or treatment you provide or arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	9a. If the doctor examined you, did he or she ask your permission?
Probity	
NOT MAPPED	11. Overall, how satisfied were you with the doctor you saw?

Appendix 35 Mapping Good Medical Practice Duties to GMC

Duties	GMC
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	3d. Assessing your medical condition 5. I am confident about this doctor's ability to provide care
2b. Providing or arranging advice, investigations or treatment where necessary	3g. Providing or arranging treatment for you
3e. Respect the patient's right to seek a second opinion	
3(h) be readily accessible when you are on duty	
4. Supporting self care	
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21. Doctor-patient partnership	
(a) be polite, considerate and honest	3a. Being polite 3b. Making you feel at ease in his / her presence
(b) treat patients with dignity	
(c) treat each patient as an individual	
(d) respect patients' privacy and right to confidentiality	4a. I am confident that this doctor will keep information about me confidential
(e) support patients in caring for themselves to improve and maintain their health	
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	3f. Involving you in decisions about your treatment
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	3c. Listening to you
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	3e. Explaining your condition and treatment
(c) respond to patients' questions and keep them informed about the progress of their care	
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or	

Duties	GMC
arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	
Probity	4b. I am confident that this doctor is honest and trustworthy
NOT MAPPED	6. I have no reservations about seeing this doctor again

Appendix 36 Mapping Good Medical Practice Duties to Medical 360 Feedback

Duties	Medical 360 Feedback (RMS)
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	- Makes me feel comprehensively investigated
2b. Providing or arranging advice, investigations or treatment where necessary	
3e. Respect the patient's right to seek a second opinion	
3(h) be readily accessible when you are on duty	
4. Supporting self care	
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21. Doctor-patient partnership	
(a) be polite, considerate and honest	
(b) treat patients with dignity	
(c) treat each patient as an individual	
(d) respect patients' privacy and right to confidentiality	
(e) support patients in caring for themselves to improve and maintain their health	
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	- Includes my opinions when making decisions with me
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	- Asks me about my points of view - Listens well to what I say-
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	Speaks clearly and in terms that I can understand
(c) respond to patients' questions and keep them informed about the progress of their care	- Provides useful information when I need it or ask for it
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or arrange.	

Duties	Medical 360 Feedback (RMS)
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	
Probity	
NOT MAPPED	- Makes me feel well looked after - Is friendly and easy to approach - Offers me reassurance when I need it

Appendix 37 Mapping Good Medical Practice Duties to Sample NHS 360

Duties	Sample NHS 360
Good Clinical Care	
2a. Adequately assessing the patient's conditions, taking account of the history (including the symptoms, and psychological and social factors), the patient's views, and where necessary examining the patient	3f. Issuing advice / treatment 4b. Diagnose the problem
2b. Providing or arranging advice, investigations or treatment where necessary	3d. Assessment of symptoms 3h. Provision for treatment
3e. Respect the patient's right to seek a second opinion	
3(h) be readily accessible when you are on duty	
4. Supporting self care	
Relationships with patients	
20 Relationships based on openness, trust and good communication will enable you to work in partnership with your patients to address their individual needs.	
21. Doctor-patient partnership	
(a) be polite, considerate and honest	3a. Politeness
(b) treat patients with dignity	
(c) treat each patient as an individual	
(d) respect patients' privacy and right to confidentiality	4a. Keep matter confidential
(e) support patients in caring for themselves to improve and maintain their health	
(f) encourage patients who have knowledge about their condition to use this when they are making decisions about their care.	
22. Communicate effectively	
(a) listen to patients, ask for and respect their views about their health, and respond to their concerns and preferences	3c. Attentiveness
(b) share with patients, in a way they can understand, the information they want or need to know about their condition, its likely progression, and the treatment options available to them, including associated risks and uncertainties	3e. Explaining the problem 3g. Checking your agreement 3i. Follow up agreed 3j. Prognosis 4c. Explain what needs to be done
(c) respond to patients' questions and keep them informed about the progress of their care	
(d) make sure that patients are informed about how information is shared within teams and among those who will be providing their care.	
31. Open and honest with patients if things go wrong Patients who complain about the care or treatment they have received have a right to expect a prompt, open, constructive and honest response including an explanation and, if appropriate, an apology. You must not allow a patient's complaint to affect adversely the care or treatment you provide or	

Duties	Sample NHS 360
arrange.	
36. You must be satisfied that you have consent or other valid authority before you undertake any examination or investigation, provide treatment or involve patients in teaching or research. Usually this will involve providing information to patients in a way they can understand, before asking for their consent.	
Probity	
NOT MAPPED	3b. Approachability 4d. Provide quality care

Appendix 38 Mapping General Medical Council Attributes to IPQ

Attributes	IPQ
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	14. My confidence in this doctor's ability is … 17. The amount of time given to me for this visit was .. 18. This doctor's consideration of my personal situation in deciding a treatment or advising me was…
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	10. The warmth of the doctor's greeting to me was... 11. On this visit I would rate the doctor's ability to really listen to me as... 12. The doctor's explanations of things to me were... 13. The extent to which I felt reassured by this doctor was… 15. The opportunity the doctor gave me to express my concerns or fears was…
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	19. The doctor's concern for me as a person on this visit was 25. The information provided by this practice about how to prevent illness and stay healthy (e.g. alcohol use, health risks of smoking, diet habits etc)
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	16. The respect shown to me by this doctor was... 22. Respect shown for your privacy and confidentiality
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	
NOT MAPPED	1. Your level of satisfaction with the practice's opening hours 2. Ease of contacting the practice on the telephone 3. Satisfaction with the day and time arranged for your appointment 4. Chances of seeing a doctor/nurse within

	48/24 hours 5. Chances of seeing a doctor/nurse of your choice 6. Opportunity of speaking to a doctor/nurse on the telephone when necessary 7. Comfort level of waiting room (e.g. chairs, magazines) 8. Length of time waiting in the practice 9. My overall satisfaction with this visit to the doctor is... 20. The recommendation I would give to my friends about this doctor would be… 21. The manner in which you were treated by the reception staff 23. Information provided by the practice about its service (e.g. repeat prescriptions, test results, cost of private certificates etc) 26.The availability and administration of reminder systems for ongoing health checks is… 27.The practice's respect of your right to seek a second opinion or complementary medicine was…

Appendix 39 Mapping General Medical Council Attributes to DISQ

Attributes	DISQ
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	6. My confidence in this doctor's ability is … 9. The amount of time given to me for this visit was .. 10. This doctor's consideration of my personal situation in deciding a treatment or advising me was…
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	2. The warmth of the doctor's greeting to me was… 3. On this visit I would rate the doctor's ability to really listen to me as… 4. The doctor's explanations of things to me were… 5. The extent to which I felt reassured by this doctor was… 7. The opportunity the doctor gave me to express my concerns or fears was…
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	11. The doctor's concern for me as a person on this visit was
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	8. The respect shown to me by this doctor was…
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	
NOT MAPPED	1. My overall satisfaction with this visit to the doctor is …

Appendix 40 Mapping General Medical Council Attributes to CARE

Attributes	CARE
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	1. Making you feel at ease… 2. Letting you tell your "story"… 3. Really listening… 5. Fully understanding your concerns… 8. Explaining things clearly…
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	4. Being interested in you as a whole person… 9. Helping you to take control 10. Making a plan of action with you …
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	6. Showing care and compassion…
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	
NOT MAPPED	7. Being positive

Appendix 41 Mapping General Medical Council Attributes to CSQ

Attributes	CSQ
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	2. This doctor was very careful to check everything when examining me. 9. This doctor examined me very thoroughly.
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	4. I felt able to tell this doctor about very personal things. 6. This doctor told me everything about my treatment. 8. There are some things this doctor does not know about me. 12. I understand my illness much better after seeing this doctor. 15. I felt this doctor really knew what I was thinking. 18. I would find it difficult to tell this doctor about some private things.
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	3. I will follow this doctor's advice because I think he/she is absolutely right. 14. This doctor knows all about me.
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	10. I thought this doctor took notice of me as a person. 13. This doctor was interested in me as a person not just my illness.
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	
NOT MAPPED	5. The time I was able to spend with the doctor was a bit too short

Attributes	CSQ
	7. Some things about my consultation with the doctor could have been better 8. There are some things this doctor does not know about me 11. The time I was allowed to spend with the doctor was not long enough to deal with everything I wanted 16. I wish it had been possible to spend a little longer with the doctor 17. I am not completely satisfied with my visit to the doctor

Appendix 42 Mapping General Medical Council Attributes to SHEFFPAT

Attributes	SHEFFPAT
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	1. How much chance were you given to discuss or to do the things you wanted during consultation? 3. How well do you think you understand your condition(s) now you have seen the practitioner? 4. How well do you understand your treatment(s) now you have seen the practitioner? 7. How much was the practitioner interested in your point of view when he/she was asking questions? 8. How much was the practitioner interested in your point of view when he/she was planning and explaining things? 9. How well do you feel the practitioner listened to you? 10. How well do you think the practitioner understood you? 11. How well did the practitioner explain things?
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	2. How happy are you to follow the practitioner's suggestions and treatments? 5. How confident do you feel in looking after your medical condition(s) now you have seen the practitioner?
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	12. How well did the practitioner respect your right to privacy, respect and confidentiality?
Attribute: Treat patients and colleagues fairly and without discrimination	6. How good with people is this practitioner?
Attribute: Act with honesty and integrity	
NOT MAPPED	

Appendix 43 Mapping General Medical Council Attributes to EDGECUMBE 360^{0}

Attributes	EDGECUMBE 360°
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	7. taking account of your medical history? 10. ensuring you get the advice/investigation or treatment needed?
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	1. making you feel at ease? 3. speaking to you in a way that is easy to understand 5. doing their best to find out what you might be worried about? 6. listening to you? 12. encouraging you to ask questions? 13. making sure you understand? 14. understanding your needs and worries? 15. explaining any risks to the treatment? 17. keeping you informed about the progress of your care?
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	2. being polite and considerate? 11. checking with you that you are happy with the planned treatments or tests? 16. allowing you to make up your own mind? 9. involving you in deciding how to handle the problem(s) you discussed?
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	8. treating you with dignity?
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	
NOT MAPPED	

Appendix 44 Mapping General Medical Council Attributes to 360 Clinical

Attributes	360 Clinical
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	2. Did the doctor listen to what you had to say? 3. Did the doctor give you enough opportunity to ask questions? 4. Did the doctor answer all your questions? 5. Did the doctor explain things in a way you could understand? 8. Did the doctor respect your views? 9. If the doctor examined you, did he or she ask your permission?
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	6. Are you involved as much as you want to be in the decisions about your care and treatment? 10. By the end of the consultation did you feel better able to understand and/or manage your condition and your care?
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	1. Was the doctor polite and considerate? 9. If the doctor examined you, did he or she respect your privacy and dignity?
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	
NOT MAPPED	7. Did you have confidence in the doctor? 11. Overall, how satisfied were you with the doctor you saw?

Appendix 45 Mapping General Medical Council Attributes to GMC

Attributes	GMC
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	3d. Assessing your medical condition 3g. Providing or arranging treatment for you
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	3c. Listening to you 3e. Explaining your condition and treatment
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	3b. Making you feel at ease in his / her presence 3f. Involving you in decisions about your treatment 4a. I am confident that this doctor will keep information about me confidential
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	3a. Being polite
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	4b. I am confident that this doctor is honest and trustworthy
NOT MAPPED	5. I am confident about this doctor's ability to provide care 6. I have no reservations about seeing this doctor again

Appendix 46 Mapping General Medical Council Attributes to Medical 360 Feedback

Attributes	Medical 360 Feedback
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	- Makes me feel comprehensively investigated - Makes me feel well looked after
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	- Asks me about my points of view - Listens well to what I say - Provides useful information when I need it or ask for it - Speaks clearly and in terms that I can understand - Offers me reassurance when I need it
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	- Includes my opinions when making decisions with me - Is friendly and easy to approach
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	
NOT MAPPED	

Appendix 47 Mapping General Medical Council Attributes to Sample NHS 360

Attributes	Sample NHS 360
Domain 1 – Knowledge, Skills and Performance	
Attribute: Maintain your professional performance	
Attribute: Apply knowledge and experience to practice	3d. Assessment of symptoms 3f. Issuing advice / treatment 3h. Provision of treatment
Attribute: Keep clear, accurate and legible records	
Domain 2 – Safety and Quality	
Attribute: Put into effect systems to protect patients and improve care	
Attribute: Respond to risks to safety	
Attribute: Protect patients and colleagues from any risk posed by your health	
Domain 3 – Communication, Partnership and Teamwork	
Attribute: Communicate effectively	3c. Attentiveness 3e. Explaining the problem 3g. Checking your agreement 3i. Follow up agreed 3j. Prognosis 4b. Diagnose the problem 4c. Explain what needs to be done
Attribute: Work constructively with colleagues and delegate effectively	
Attribute Establish and maintain partnership with patients	3a. Politeness 4a. Keep matter confidential
Domain 4 – Maintaining Trust	
Attribute: Show respect for patients	
Attribute: Treat patients and colleagues fairly and without discrimination	
Attribute: Act with honesty and integrity	
NOT MAPPED	3b. Approachability 4d. Provide quality care

Appendix 48 Psychometric Assessment of IPQ

		IPQ
Measuring aim or construct of survey	Is there a conceptual basis for the instrument's development and measurement constructs?	Based on commonly agreed standards for general practice as determined by the RCGP.
Scale and Scoring	What do the scales measure?	27 questions focus on two main components: the doctors' interpersonal skills (capability) and the environment and systems of the general practice (capacity).[1.]
	How do the scales measure the construct?	Uses a Likert 5 point scale ranging from poor to excellent with space for 2 comments. [2] Scores are converted from the response scale to percentages where a poor response = 20% and an excellent response = 100% [3]
Publications	Are there publications related to the questionnaire and its assessment?	Yes[1].
Item development and assessment of items	What approaches have been used to develop items?	The IPQ is based on the Practice Accreditation and Improvement Survey used in Australia. Only one item needed adaption and the title was changed after discussion with patients, general practice staff and clinical governance leads.[3]
Testing of instrument	Descriptive data (means, SD)	The overall mean raw scores was 3.90 [4]
Samples used for testing instrument		General Practitioners
	Study Group	425 GPs received responses from 21045 patient in the most current study [4]
Type of assessors / respondent		Patients
Construct validity	Comparison to other instruments	Not reported
	Factor analysis	Two components emerged labeled 'Doctor evaluation' (43% of variance) and 'Practice experience' (40% of variance [4]
Reliability	Cronbach's alpha	The alpha was 0.93 for all 27 items [4]
	Inter-rater reliability	Not reported
	Test-retest	Internal consistency supported by T-test-retest r=.75 [3]
	Inter-item Correlation	Inter-item correlations of 0.554 (minimum 0.37, maximum 0.87) was reported for most current study [4]
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	Found to have an Ep^2=0.70 for 42 raters For repeat studies about 15 raters per ratee are required to return a Ep^2 of 0.81 for all 27 items [4]
Ability to differentiate sub-optimal performance		In focus groups, registrars could understand their results and plan education intervention as a result [2]
Feedback to Assessed Physicians	Has the data been used to provide feedback to the sample under study?	In their 2006 study of the impact of patient groups on quality improvement issues in primary care, the feedback from patients focused on environment and systems issues of the general practice such as privacy at

		IPQ
		the reception desk and waiting time to see the doctor. [1]

1. Greco M, Carter M, Powell R, Sweeney K, Jolliffe J, Stead J, Impact Of Patient Involvement In General Practice Education For Primary Care 2006; 17: 486–96
2. Mike Pringle's Review Report date: 17th August 2002. Patient Questionnaires in General Practice
3. Greco M, Powell R, Sweeney K, The Improving Practice Questionnaire (IPQ): a practical tool for general practice seeking patient views. Education for Primary Care 2003; 14 440-448.
4. Narayanan A, Greco M, Campbell JL, Generalizability in unbalanced, uncrossed and fully nested studies, Medical Education 2010; 44:367-378

Appendix 49 Psychometric Assessment DISQ

		DISQ
Measuring aim or construct of survey	Is there a conceptual basis for the instrument's development and measurement constructs?	This instrument aims to assess the quality of doctors' interpersonal skills within the consultation.[1]
Scale and Scoring	What do the scales measure?	12 items measure the patient's opinion
	How do the scales measure the construct?	Uses a 5 point Likert type scale from poor to excellent with an option of "Don't know". The DISQ also contains a free text section in which patients are prompted to make comments on how the service provided by the doctor could improve[.2]
Publications	Are there publications related to the questionnaire and its assessment?	Paper has been submitted for most current study[1]
Item development and assessment of items	What approaches have been used to develop items?	Items were developed as a result of piloting 3 patient feedback instruments and using focus groups of patients and doctors to identify items. [3]
Testing of instrument	Descriptive data (means, SD)	Mean ratings for unaggregated data ranged from 3.98 to 4.40, with an overall mean of 4.25 (standard deviation 0.85).[1] For aggregate data item means were 4.24 (minimum 4.00 and maximum 4.40) [1]
Samples used for testing instrument		General Practitioners
	Study Group	170 physicians with 8474 patient responses were reported for the aggregated data [1] A mean of 47 questionnaires were completed by patients for 179 doctors (minimum 39, maximum 68).for the unaggregated data [1]
Type of assessors / respondent		Patients
Construct validity	Comparison to other instruments	Yes [3] There was a highly significant correlation between DISQ ratings and the Falvo–Smith Interaction Scale ($r = 0.77$, $p < .0001$)[3]
	Factor analysis	Only one factor was found which accounted for 94% of the variance. [1.]
Reliability	Cronbach's alpha	For 7839 fully completed DISQ questionnaires alpha = 0.95 [1]
	Inter-rater reliability	Inter-rater test r=0.75[3]
	Test-retest	Test-retest three months apart r=0.75 [3]
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	R of 0.81 based on 22 raters (D study); [1]
Ability to differentiate sub-optimal performance		Not reported
Feedback to Assessed Physicians	Has the data been used to provide feedback to the sample under study?	A report is generated and returned to the doctor for self-appraisal. [3.] All evaluation scores are benchmarked against other participating clinicians. All patient

		DISQ
		comments are provided in their entirety apart from the removal of personal identifiers.[2]

1. Campbell J, Narayanan A, Burford B, Greco M, Validation of a multi-source feedback tool for use in General Practice. Education for Primary Care 2010; 21: 165–79
2. The DISQ Flyer
3. Greco M, Brownlea A, McGovern J, Cavanagh M, Consumers as educators: Implementation of patient feedback in general practice training. Health Communications 2000; 12(2); 173-193.
4. 360i Guidelines for general practitioners

Appendix 50 Psychometric Assessment of CARE

		CARE
Measuring aim or construct of survey	Is there a conceptual basis for the instrument's development and measurement constructs?	The measure is designed to be holistic/patient-centred so that it is meaningful to patients irrespective of their socioeconomic position. [1]
Scale and Scoring	What do the scales measure?	10 items measure patients' assessment of physicians' communication and empathy.[1]
	How do the scales measure the construct?	Uses a 5 point Likert type scale ranging from poor, to excellent
Publications	Are there publications related to the questionnaire and its assessment?	Yes [3]
Item development and assessment of items	What approaches have been used to develop items?	Pilot studies with patients followed by interviews analyzed data using grounded theory. Interviewed 20 physicians. Sought opinion of experts in research. [3] Changes were made as a result of 3 pilots in early stages of instrument development [2]
Testing of instrument	Descriptive data (means, SD)	2006 study reports a mean score of 43.0 out of 50 for summary score for 75 GPs. [3]
Samples used for testing instrument		General Practitioners [1]
	Study Group	The instrument has been applied in over 3,000 general practice consultations in areas of high and low deprivation in the west of Scotland. [5] In a 2006 study 52 (58%) of the patients completed and returned the baseline questionnaire. Of these 41 (79%) completed and returned the follow-up questionnaire at 2months.[4] For the most current study 659 patients completed a CARE questionnaire for a response rate of 70%. [8]
Type of assessors / respondent		Patients [1]
Construct validity	Comparison to other instruments	The final version of CARE showed strong correlations with the Reynolds empathy measure ($r = 0.85$, $n = 10$, $P \leq 0.001$) and the BLESS Barrett-Lennard empathy Subscale ($r = 0.84$, $n = 10$, $P \leq 0.001$). [2]
	Factor analysis	Confirmatory factor analysis confirmed the construct validity of the CARE Measure.[6]
Reliability	Cronbach's alpha	Cronbach's alpha 0.94 [7]
	Inter-rater reliability	Number of raters required to achieve inter-rater reliability of 0.7=24, 0.8=41, and 0.9=92. [3]
	Test-retest	Not reported
	Inter-item Correlation	Overall CARE measure score correlated with overall satisfaction ($r=0.7$, $p<0.0001$),

		CARE
		whether patients would recommend the doctor (r=0.6, p<0.0001), and satisfaction with consultation length (r=0.6, p<0.0001).[7]
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	Ep^2= 0.82 for 45 patients raters [3]
Ability to differentiate sub-optimal performance		In a high deprivation setting, GP empathy is associated with patient enablement at consultation, and enablement predicts patient-rated changes 1 month later. Further larger studies are desirable to confirm or refute these findings.[6]
Feedback to Assessed Physicians	Has the data been used to provide feedback to the sample under study?	A web-based feedback system is now available from RCGP Scotland. [3]

1. The CARE Measure – summary of research and current use (2009)
2. Mercer SW, Maxwell M , Heaney D, Watt G, The consultation and relational empathy (CARE) measure: development and preliminary validation and reliability of an empathy-based consultation process measure Family Practice 2004; Vol. 21, No. 6
3. Murphy DJ, Bruce DA, Mercer SW, Eva KW, The reliability of workplace-based assessment in postgraduate medical education and training: a national evaluation in general practice in the United Kingdom. Advances in Health Sciences Education 2009; 13: 219-232
4. Price S, Mercer SW, McPherson H, Practitioner empathy, patient enablement, and health outcomes: a prospective study of acupuncture patients. Patient Education and Counseling 2006; 63 (1-2), 239-245
5. Care Measure for Patients
6. Mercer SW, Neumann M, Wirtz W, Fitzpatrick B, Vojt G, Effect of General Practitioner empathy on patient enablement, and patient-reported outcomes in primary care in an area of high socio-economic deprivation in Scotland - A pilot prospective study using structural equation modelling. Patient Education and Counseling 2008; 73; 240-245
7. Mercer SW, Murphy DJ, Validity and reliability of the CARE Measure in secondary care, Clinical Governance: An International Journal, 2008; Vol. 13 Iss: 4, pp.269 – 283

Appendix 51 Psychometric Assessment of CSQ

		CSQ
Measuring aim or construct of survey	Is there a conceptual basis for the instrument's development and measurement constructs?	This instrument is designed to measure patient satisfaction with recent consultations with general practitioners in British general practice [1]
Scale and Scoring	What do the scales measure?	The scale measures the patient's agreement with18 statements which are made up of four factors: general satisfaction, professional care, depth of relationship, and length of consultation.[1]
	How do the scales measure the construct?	Uses a four point Likert type scale from strongly agree to strongly disagree[1]
Publications	Are there publications related to the questionnaire and its assessment?	Yes [1]
Item development and assessment of items	What approaches have been used to develop items?	CSQ was developed systematically. The issues important to patients were identified through a review of published research. A preliminary list of issues was converted into questions and submitted to pilot tests, with the addition of open questions to elicit new issues. The pilot tests involved administration of the questionnaire to samples of patients. Analysis sought to identify questions that patients found difficult to answer (were left unanswered or patients wrote comments on the questionnaire about the question). Poor questions were removed or reworded. Questions that attracted a predominantly positive or negative response were reviewed and reworded as necessary to attract a wider response range. Principal components analysis was used to check the scale structure, ensuring that the scales covered the issues identified as important to patients. The final version of the questionnaire was submitted to testing for evidence of validity and reliability. [1]
Testing of instrument	Descriptive data (means, SD)	6 studies reported means for domains and for the combined scale between 60. 0 and 83.7 [1] The means and standard deviation for 126 GPs were: 'General satisfaction' - 80.5 (3.8), 'Professional care' - 82.6 (3.5), 'Depth of relationship' - 73.6 (4.3) and 'Length of Consultation' - 72.4 (4.0) [1] The range of GP mean scores were reported by *Shum et al, 2001 to be* 64.2 to 76.7, *Mead et al, 2002 to be* 77.8 and *Middleton et al, 2006 to be* 74.2 to 83.7 [1]

		CSQ
Samples used for testing instrument		General Practitioners [1]
	Study Group	CSQ was used for 126 general practitioners who each administer the questionnaire to 75 consecutively patients. The overall response rate was 76.6% (SD 17.8). [1] For patients attending a consultation the response rate ranged from 75% to 100% For a postal distribution the response rate was 85.4% in one practice and 83% in a 2nd practice [1]
Type of assessors / respondent		Patients [1]
Construct validity	Comparison to other instruments	A comparison of CSQ with qualitative interviews was undertaken. The findings from these interviews were found to align closely with CSQ subscales. CSQ and Medical Interview Satisfaction Scale were compared twice. Moderate correlation of the professional care, depth of relationship and length of consultation with the general satisfaction scale of CSQ were found [1]
	Factor analysis	Four domains were found: general satisfaction, professional care, depth of relationship, and length of consultation.[1]
Reliability	Cronbach's alpha	Four studies tested Cronbach's reliability of the four scales: General Satisfaction ranged from 0.66 to 0.73 Professional care ranged from 0.78 to 0.91 Depth of Relationship ranged from 0.79 to 0.84 Length of Consultation ranged from 0.80 to 0.82 [1]
	Inter-rater reliability	Not reported
	Test-retest	Measured 131 patients twice (2-3 weeks apart Pearson product moment: General satisfaction (0.82), Professional care (0.93), Depth of relationship (0.88), Length of consultation (0.87) [1]
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	A sample size of 50 patients would be sufficient to give 95% confidence of the sample score being within 4 points of the true scale score for general satisfaction and 5 points for length of consultation. [1]
Ability to differentiate sub-optimal performance		It has been widely used in this context. It has been shown to be both reliable and valid, and sufficiently sensitive to detect differences in patient satisfaction consequent on changes in service delivery

		CSQ
		or consulting behaviours.[1]
Feedback to Assessed Physicians	Has the data been used to provide feedback to the sample under study?	It has been used in GP training (http://www.gp-training.net/training/tools/csq.htm). [1]

1. The CSQ Report and Tool by Richard Baker, July 2008

Appendix 52 Psychometric Assessment of SHEFFPAT

		SHEFFPAT
Measuring aim or construct of survey	Is there a conceptual basis for the instrument's development and measurement constructs?	This measure is designed to assess a doctor's communication skills specifically from the patient perspective. [1]
Scale and Scoring	What do the scales measure?	The instrument contains 13 questions It asks about consultation quality; opportunity to shape discussion; quality of explanation and advice; patient's understanding of condition and treatment; confidence in self-care; interpersonal skills; the doctor's interest in the patient's point of view; respect; confidentiality; overall satisfaction [2]
	How do the scales measure the construct?	The instrument uses a 5 point Likert type scale ranging from 1(Not at all/least I can imagine) to 5 (best/most I can imagine) with an N/A option [1]
Publications	Are there publications related to the questionnaire and its assessment?	Yes [1]
Item development and assessment of items	What approaches have been used to develop items?	The instrument was designed building on a conceptual framework which arose from an extensive literature review of published and unpublished papers and a nominal group consensus exercise [1]
Testing of instrument	Descriptive data (means, SD)	NCAS GPs scored a cohort mean of 4.32 on the 5 point scale (range 2.0 to 4.94) [1]
Samples used for testing instrument		General Practitioners [1]
	Study Group	Sixty seven GPs (identified nationally as potentially being poor performers) have been assessed over the last 2 years using SHEFFPAT 1524 patient responses were returned [1]
Type of assessors / respondent		Patients
Construct validity	Comparison to other instruments	Recent work exploring SHEFFPAT and SPRAT data in potential poor performers (doctors) found no correlation between the two instruments [1]
	Factor analysis	Carried out but not published
Reliability	Cronbach's alpha	Not reported
	Inter-rater reliability	Not reported
	Test-retest	Not reported
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	Five patients were required to achieve adequate reliability. Using 95% CI and assuming five patients and therefore a 95% CI of 0.6, a GP would need to achieve an aggregate score of 3.6 or more to be 95% confident that they had truly "passed". [1] A previous study reported D study results

		SHEFFPAT
		that suggested 15 ratings for a $Ep^2 = 0.70$ and 30 ratings for an $Ep^2 = 0.82$[3].
Ability to differentiate sub-optimal performance		Not reported
Feedback to Assessed Physicians	Has the data been used to provide feedback to the sample under study?	Feedback is provided electronically and consists of a graph which compares the doctor's self rating for each question with the mean for that question for all of their assessors combined and the cohort mean ± 2SDs. Free text is fed back verbatim but the doctor does not know who provided the comments. Feedback is sent to the Appraiser/Trainer to be fed back face-to-face to the doctor to support a facilitative approach. Feedback is provided in 6 weeks [1]

1. GP SPRAT & SHEFFPAT Assessing and informing GPs for revalidation January 2010
2. Chisholm A, Askham J, What do you think of your doctor? A review of questionnaires for gathering patients Feedback on their doctor. Picker Institute Europe, September 2006
3. Crossley J, Eiser C, Davies H, Children and their parents assessing the doctor-patient interaction: a rating system for doctors' communication. Medical Education 2005; 39; 820-828

Appendix 53 Psychometric Assessment of EDGECUMBE 360°

		EDGECUMBE 360°
Measuring aim or construct of survey	Is there a conceptual basis for the instrument's development and measurement constructs?	This instrument conforms to Good Medical Practice for General Practitioners.
Scale and Scoring	What do the scales measure?	Seventeen items rated to what extent the doctor displayed the behaviour described. Item 18 asks for comments and item 19 is an overall rating. [1]
	How do the scales measure the construct?	The rating scale ranges form 6 (Extremely effective) to 1 (Not effective) with an added option of C/C = Cannot Comment [1]
Publications	Are there publications related to the questionnaire and its assessment?	Not reported
Item development and assessment of items	What approaches have been used to develop items?	1. Conducted a factor analysis on all 40 questions. 2. Looked at answerability of all the questions 3. Removed the word "overall" from original questions 4. Excluded questions where inter-correlations were more than .80. 5. Re-inserted a question on "Listening to Patients" 6. Where other areas within the Core Domains were not covered by existing questions, some new questions were added 7. A forum of expert panel was held facilitated by Dr. Julian Archer who made changes and comments 8. These new items were again circulated to the panel 9. The resulting question set was then further vetted by Drs Jenny King and David Pendleton 10. The original scale was altered in response to feedback from the panel, in order to make it more positively skewed. 11. Health and Probity changed to "Professional Integrity" 12. Free text was encouraged in the hope that any reservations could be explained in more detail for such sensitive domains.
Testing of instrument	Descriptive data (means, SD)	Not reported for new version of patient instrument
Samples used for testing instrument		General Practitioners
	Study Group	250 doctors received 1811 patient surveys [2]
Type of assessors / respondent		Patients
Construct validity	Comparison to other instruments	Not reported for new version of patient instrument
	Factor analysis	Not reported for new version of patient instrument
Reliability	Cronbach's alpha	Patient data produced an overall

		EDGECUMBE 360°
		Cronbach's Alpha of 0.908. [3]
	Inter-rater reliability	Not reported for new version of patient instrument
	Test-retest	Not reported for new version of patient instrument
	Inter-item Correlation	Not reported for new version of patient instrument
	Spearman Brown prophecy formula	0.858 [3]
	G-study or D-study	Not reported for new version of instrument
Ability to differentiate sub-optimal performance		Not reported for new version of patient instrument
Feedback to Assessed Physicians	Has the data been used to provide feedback to the sample under study?	Not reported for new version of patient instrument For the previous version appraisers gave feedback using the report in an appraisal meeting. In special circumstances EDGECUMBE Health consultants would also provide discussion/feedback around the 360^0 reports. EDGECUMBE provided appraiser training for new and experienced appraisers, including specific training on giving 360^0 report feedback during appraisal meetings using the 360^0 report. EDGCUMBE has developed a two-part reporting system, which separates the numerical data from the ratings and the qualitative data from the free text. The appraiser receives this first so that he or she can decide how best to present it to the appraisee if any of the comments are particularly negative or written in a potentially destructive way. EDGCUMBE sees this as an important feature. [5]

1. EDGECUMBE Patient Questionnaire 2010.
2. EDGECUMBE 360° - tool developer contact Sarah George.eml
3. EDGECUMBE Doctor 360° Feedback: Reliability Tests. September 2009
4. Guidance for PCT Communication GP Version
5. Correspondence with Dr. Jenny King

Appendix 54 Psychometric Assessment of 360 Clinical

		360 CLINICAL
Measuring aim or construct of survey	Is there a conceptual basis for the instrument's development and measurement constructs?	The aim of this measure is to make the assessment an educational exercise for doctors while being able to reliably identify the few who may have performance issues. It is formative and linked in with appraisal but allows poor results to trigger further scrutiny. [1]
Scale and Scoring	What do the scales measure?	The scale measures the patient's agreement with 10 items. Functions as a two-domain measure that separates a 'humanistic' domain from a 'non-humanistic' domain. [1]
	How do the scales measure the construct?	Uses a 4 point Likert type scale ranging from 1 (yes, definitely) to 4 (definitely not). Also includes "Does not apply" option. It has 1 overall satisfaction measure and 3 patient characteristics items [1]
Publications	Are there publications related to the questionnaire and its assessment?	Not reported
Item development and assessment of items	What approaches have been used to develop items?	The patient MSF was developed with extensive input from The Royal College Of Physicians' Patient and Carer Network (PCN). A one-day focus group was run in March 2006 from which the first draft was produced. The draft was then sent by e-mail to another set of PCN members and this consultation exercise was repeated four times until there were no more comments. During this consultation exercise, the question content, rating scale, layout and, administration and distribution of the questionnaire were discussed and agreed upon.[1]
Testing of instrument	Descriptive data (means, SD)	3.94 out of 4 [1]
Samples used for testing instrument		General Practitioners
	Study Group	78 from GP practices with 517 patient forms;
Type of assessors / respondent		Patients
Construct validity	Comparison to other instruments	Not reported
	Factor analysis	All items loaded on two factors (for the total sample of 517 career grade doctors)[1]
Reliability	Cronbach's alpha	Not reported
	Inter-rater reliability	Not reported
	Test-retest	Not reported
	Inter-item Correlation	Not reported
	Spearman Brown prophecy formula	Not reported
	G-study or D-study	Ep2 = .59 for 20 raters. [1]
Ability to differentiate sub-optimal performance		Not reported for patient instrument
Feedback to Assessed Physicians	Has the data been used to provide feedback to the sample under	Yes, with a facilitator who has been trained [1]

		360 CLINICAL
	study?	

1. 360 Clinical GP Report (2007)
2. Mackillop L, Parker-Swift J, Crossley J, Getting the questions right: comparing compound questions and pure questions on matched multi-source feedback instruments. Draft Manuscript. Submitted to a peer review publication, 2010.

Appendix 55 Psychometric Assessment of GMC

		GMC
Measuring aim or construct of survey	Is there a conceptual basis for the instrument's development and measurement constructs?	This instrument relates to the seven domains of Good Medical Practice,[1]
Scale and Scoring	What do the scales measure?	The patient questionnaire is comprised of 18 items of which 3 are contextual; 11 are performance evaluations; 3 are descriptive of the respondent; and 1 is free-text. [1]
	How do the scales measure the construct?	The scale measures responses on a five-point Likert type scale with descriptive of poor to very good. Two patient questionnaire item responses consist of binary (yes/no) evaluation. [1]
Publications	Are there publications related to the questionnaire and its assessment?	Yes [1]
Item development and assessment of items	What approaches have been used to develop items?	A working party devised the patient questionnaire specifically for use in revalidation, building on earlier work in the field. The face validity of the questionnaire was established by Market and Opinion Research International (MORI) through a series of focus groups. Preliminary assessment of the properties of the questionnaire was undertaken by the University of Leeds.[1]
Testing of instrument	Descriptive data (means, SD)	A mean (SD) range of scores 4.68 (0.66) to 4.88 (0.42) out of a maximum possible score of 5. The overall mean was 4.80 [1]
Samples used for testing instrument		General practitioners
	Study Group	380 doctors received 13,754 patient surveys. [1]
Type of assessors / respondent		Patients
Construct validity	Comparison to other instruments	Not reported
	Factor analysis	Two components were identified that together accounting for 76.8% of the variance in the sample. The first component comprised the first seven of the performance evaluation items whereas the second component comprised the last two of the performance evaluation items. [1]
Reliability	Cronbach's alpha	The reliability coefficient was found to be 0.898 in 2008 study [1] and 0.81 in current information provided [2]
	Inter-rater reliability	.526 [1]
	Test-retest	Not reported
	Inter-item Correlation	An average inter-item correlation coefficient of 0.526 (range 0.260–0.855) was reported [1]

		GMC
	Spearman Brown prophecy formula	Application of the Spearman Brown prophecy formula identified that acceptable reliability ($\alpha > .0.85$) was achieved with a minimum of 22 completed patient questionnaires[1]
	G-study or D-study	Twenty-three patient ratings resulted in a Ep^2 of 0.65, whereas 36 patient ratings resulted in Ep^2 of 0.75 [1.] The most current information provided a Ep^2 of 0.93 for 16 patient ratings [2]
Ability to differentiate sub-optimal performance		GMC is suggested by authors to be capable of discriminating a range of professional performance among doctors, and potentially identifying a minority whose practice should to subjected to further scrutiny. [1]
Feedback to Assessed Physicians	Has the data been used to provide feedback to the sample under study?	Yes [3]

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2. Narayanan A, Greco M, Campbell JL, Generalizability in unbalanced, uncrossed and fully nested studies, Medical Education 2010; 44:367-378
3. Richards SH, Campbell JL, Walshaw, E, Dickens A, Greco, M, A multi-methods analysis of free-text comments from the UK GMC Colleague Questionnaires Medical Education 2009; 43 757-766.

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Information Provided for Review

COLLEAGUE INSTRUMENTS

Appendix 19 Psychometric Assessment of CFET Version 2
1. Campbell J, Narayanan A, Burford B, and Greco M, Validation of a multi-source feedback tool for use in General Practice. Education for Primary Care 2010; 21:165–79
2. Statistical report on CFET v2
3. Revised CFET (version2)
4. Lockyer J, Fidler H, Comparison of multisource feedback instruments designed for GPs in the UK, Report commissioned by the Royal College of General Practitioners, February 2009 http://www.rcgp.org.uk/PDF/PDS_Comparison_of_MSF_Instruments_Report_for_RCGP_Lockyer_and_Fidler.pdf

Appendix 20 Psychometric Assessment of GP-SPRAT Version 2
1. GP SPRAT & SHEFFPAT: Assessing and Informing GPs for revalidation Jan. 2010

Appendix 21 Psychometric Assessment of What is a Good GP?
1. What is a good GP - Developing the content for a multi-source feedback instrument for GP Appraisal
2. What Is a Good GP Instrument
3. What is a good GP - What is a good GP? Evaluating a multi-source feedback instrument for GP Appraisal

Appendix 22 Psychometric Assessment of EDGECUMBE 360° Version 2
1. Guidance for PCT communication GP version.doc
2. New Edgecumbe Colleague 360 questionnaire 2009.doc
3. Griffin E, Sanders C, Craven D, and King J, A computerized 360^0 feedback tool for personal and organizational development in general practice. Health Informatics Journal 2000: 8, 71-80
4. EDGECUMBE 360° Assessment March 8 with comments
5. E-Mail with added info.docx
6. Reliability Analysis Report 1

Appendix 23 Psychometric Assessment of 360 Clinical Version 2
1. Royal College of Physicians Colleague MSF Report
2. 360 Clinical GP Report (2009)

Appendix 24 Psychometric Assessment of GMC

1. Narayanan A, Greco M, Campbell JL, Generalizability in unbalanced, uncrossed and fully nested studies, Medical Education 2010; 44:367-378
2. Colleague Questionnaire for Dr Anonymous Example
3. Richards SH, Campbell JL, Walshaw, E, Dickens A, Greco, M, A multi-methods analysis of free-text comments from the UK GMC Colleague Questionnaires Medical Education 2009 ; 43 757-766.

4. Campbell J L, Richards S H, Dickens A, et al. Assessing the professional performance of UK doctors: an evaluation of the utility of the General Medical Council patient and colleague questionnaires. *Qual Saf Health Care* 2008; 17: 187-193

Appendix 25 Psychometric Assessment of 2Q MSF

1. E-mail from David Bruce Tuesday Dec 1, 2009
2. Multi Source Feedback Questionnaire 2Q MSF
3. Murphy DJ, Bruce DA, Mercer SW, Eva KW. The reliability of workplace-based assessment in postgraduate medical education and training: a national evaluation in general practice in the United Kingdom. Advances in Health Science Education 2009; 14(2): 219-232. http://dx.doi.org/10.1007/s10459-008-9104-8 .

Appendix 26 Psychometric Assessment of Medical 360 Feedback

1. RCGP Performas.doc
2. RMS Instrument for Medical 360 Feedback

PATIENT INSTRUMENTS

Table 48 Psychometric Assessment of IPQ

1. Greco M, Carter M, Powell R, Sweeney K, Jolliffe J, Stead J, Impact Of Patient Involvement In General Practice Education For Primary Care 2006; 17: 486–96
2. Mike Pringle's Review Report date: 17th August 2002. Patient Questionnaires in General Practice
3. Greco M, Powell R, Sweeney K, The Improving Practice Questionnaire (IPQ): a practical tool for general practice seeking patient views. Education for Primary Care 2003; 14 440-448.
4. Narayanan A, Greco M, Campbell JL, Generalizability in unbalanced, uncrossed and fully nested studies, Medical Education 2010; 44:367-378

Appendix 49 Psychometric Assessment DISQ

1. Campbell J, Narayanan A, Burford B, Greco M, Validation of a multi-source feedback tool for use in General Practice. Education for Primary Care 2010; 21: 165–79
2. The DISQ Flyer
3. Greco M, Brownlea A, McGovern J, Cavanagh M, Consumers as educators: Implementation of patient feedback in general practice training. Health Communications 2000; 12(2); 173-193.
4. 360i Guidelines for general practitioners

Appendix 50 Psychometric Assessment of CARE

1. The CARE Measure – summary of research and current use (2009)
2. Mercer SW, Maxwell M , Heaney D, Watt G, The consultation and relational empathy (CARE) measure: development and preliminary validation and reliability of an empathy-based consultation process measure Family Practice 2004; Vol. 21, No. 6
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5. Care Measure for Patients
6. Mercer SW, Neumann M, Wirtz W, Fitzpatrick B, Vojt G, Effect of General Practitioner empathy on patient enablement, and patient-reported outcomes in primary care in an area of high socio-economic deprivation in Scotland - A pilot prospective study using structural equation modelling. Patient Education and Counseling 2008; 73; 240-245
7. Mercer SW, Murphy DJ, Validity and reliability of the CARE Measure in secondary care, Clinical Governance: An International Journal, 2008; Vol. 13 Iss: 4, pp.269 – 283

Appendix 51 Psychometric Assessment of CSQ

1. The CSQ Report and Tool by Richard Baker, July 2008

Appendix 52 Psychometric Assessment of SHEFFPAT

1. GP SPRAT & SHEFFPAT Assessing and informing GPs for revalidation January 2010
2. Chisholm A, Askham J, What do you think of your doctor? A review of questionnaires for gathering patients Feedback on their doctor. Picker Institute Europe, September 2006
3. Crossley J, Eiser C, Davies H, Children and their parents assessing the doctor-patient interaction: a rating system for doctors' communication. Medical Education 2005; 39; 820-828

Appendix 53 Psychometric Assessment of EDGECUMBE 360° Version 2

1. EDGECUMBE Patient Questionnaire 2010.
2. EDGECUMBE 360° - tool developer contact Sarah George.eml
3. EDGECUMBE Doctor 360° Feedback: Reliability Tests. September 2009
4. Guidance for PCT Communication GP Version
5. Correspondence with Dr. Jenny King

Appendix 54 Psychometric Assessment of 360 Clinical

1. 360 Clinical GP Report (2007)
2. Mackillop L, Parker-Swift J, Crossley J, Getting the questions right: comparing compound questions and pure questions on matched multi-source feedback instruments. Draft Manuscript. Submitted to a peer review publication, 2010.

Appendix 55 Psychometric Assessment of GMC

1. Campbell J L, Richards S H, Dickens A, et al, Assessing the professional performance of UK doctors: an evaluation of the utility of the General Medical Council patient and colleague questionnaires. Qual Saf Health Care 2008; 17: 187-193
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