

The Quality and Outcomes Framework: Body Commodification in UK General Practice

Authors: Norman A.H.,¹ (*corresponding author*)* Russell A.J.,² Merli C.²

1. Health Secretariat of Rio de Janeiro Municipality, Brazil

2. Durham University, Department of Anthropology, UK

*Email address: a.h.norman@dunelm.org.uk

ABSTRACT

The UK's Quality and Outcomes Framework (QOF) is the largest pay-for-performance scheme in the world. This ethnographic study explored how QOF's monetary logic influences the approach to healthcare in UK general practice. From August 2013 to April 2014, we researched two UK general practice surgeries and one general practice training programme. These environments provided the opportunity for studying various spaces such as QOF meetings, consultation rooms, QOF recoding sessions, and the collection of computer-screen images depicting how patients' biomarkers are evaluated and costed through software systems. QOF as a biomedical technology has led to the commodification of patients and their bodies. This complex phenomenon breaks down into three main themes: commodification of patients, QOF as currency, and valuing commodities. Despite the ostensible aim of QOF being to improve healthcare in general practice, it is accompanied by a body commodification process. The interface between patients and care providers has been commodified, with QOF's pricing mechanism and fragmentation of care provision performing an important role in animating the UK economy.

Keywords: Commodification; Pay-for-Performance; Health Technology; Health Policy; Clinical Governance; Audit Culture; General Practice; United Kingdom.

INTRODUCTION

The National Health Service (NHS) has come to symbolise the spirit of solidarity of a nation that chose in 1948 to have a universal health system based on strong primary care services, within which general practice (family medicine) plays a central role. The existing cumulative evidence suggests that countries with these kinds of principles organising health care generally have better health outcomes (McCarthy, 2014). Conceptually, the NHS represents a tax-based third party payment system, which ‘attempts to socialise the financial risks of ill-health by a pooling of risk and of financial provision’ (Harrison, 1998, p.16). This creates a situation that discourages the commodification of health care provision as a ‘product’ to be consumed according to patients’ purchasing power.

In 1991, Margaret Thatcher’s conservative government introduced a division into the NHS, a previously monolithic public structure, by creating a purchaser-provider ‘split’. Self-governing hospital trusts became ‘the providers’, whereas the former health care authorities and General Practice (GP) fundholders became ‘purchasers’ (Laing et al., 1998). In this novel arrangement GPs would receive a budget to buy services on behalf of their patients from any public or private provider (e.g. hospital). The underlying idea was that money would follow the patients, increasing their choices and introducing competition within the system. Currently, the Clinical Commissioning Group (CCG) has

a purchaser role in the NHS. Thus, rather than having an external relation with patients as consumers of health care services, the NHS has a built-in market relation amongst its own competing organisations. This market context provides a fertile ground for the increasing commodification of health and healthcare. According to Polanyi, the ‘commodity concept is a mechanism of the market’ (2001, p.72). Polanyi empirically defines commodities ‘as objects produced for sale on the market; markets, again, are empirically defined as actual contacts between buyers and sellers’ (*ibid.*).

In principle, not all things are alienable for selling due to either their symbolic meaning (Lock & Nguyen, 2010) or their very nature such as land, labour, and money (Polanyi, 2001). For Lukács commodification stems from the relation people assume with ‘the character of things’ (1971, p.83) and is a process of reification, since commodities have a ‘phantom objectivity’. As Lukács contends, a commodity ‘acquires an autonomy that seems so strictly rational and all-embracing as to conceal every trace of its fundamental nature: the relation between people’ (*ibid.*). To regard a commodity as an object possessing intrinsic value is to deny its sociality. Thus, commodities can be considered objects of ‘economic value...based on judgments about them by subjects’ (Appadurai, 1986, p.4). This kind of commodity fiction is an essential step in the market economy to the extent that ‘no arrangement or behaviour should be allowed to exist that might prevent the actual functioning of the market mechanism on the lines of the commodity fiction’ (Polanyi, 2001, p.73).

Echoing this reasoning, Scheper-Hughes states that commodification transforms the body into a ‘highly fetishized’ object, one ‘that can be bartered, sold or stolen in divisible and alienable parts’ (2001, p.1). She argues that commodification encompasses ‘all

capitalised economic relations between humans in which human bodies are the token of an economic exchange that are often masked as something else - love, altruism, pleasure, kindness' (*ibid.*). This definition comprises two important stances when applied to the NHS: first, the notion of the body as a 'token of exchange'; second, the masking discourses around quality of care, health improvements, and disease prevention (Heath, 2010). Mirroring this definition, the introduction of the Quality and Outcomes Framework (QOF) in UK general practice, the largest pay-for-performance scheme in the world (Roland, 2004), represents a step further in the process of health commodification in the NHS. To determine this process, we first present a brief account of 1990 and 2004 contracts followed by the 2013/14 QOF contract to explain the mechanism underpinning QOF's rules. Second, we describe the way we carried out ethnographic fieldwork in two UK general practice surgeries and a GP training programme. We go on to demonstrate that the adoption of QOF has been accompanied by a literal commodification process in the NHS by not only commodifying general practice healthcare but also patients' bodies.

General Practitioner's 1990 - 2004 contracts

Since the creation of the NHS, GPs have managed to maintain the role of independent contractors. This arrangement produced non-homogeneous clinical care standards that challenged the government aspirations to standardise quality across general practice (Pereira Gray, 1977). The 1990 contract increased GPs' accountability by implementing targets to improve quality standards. A greater specification of the terms of services delivered was introduced through a fee-for-service pay modality, built around health promotion activities such as health checks for new patients or those aged between 16 and 74 who have not seen a GP within the previous three years, and regular checks for the

over-75s (Lewis, 1998). GPs' dissatisfaction with the 1990 top-down contract was registered as follows:

[It was] one thing to have clinical advice issued as guidance, but to be told when to measure blood pressure, test a urine sample, or ask for a family history in the regulations of an act of parliament is another dimension altogether. (BMJ, 1989, p.414)

The 1990 contract also reduced the 'practice basic allowance' (a standard salary component) from 60% to 45% in order to increase capitation fees and competition among GPs (Day, 1992, p.168). These changed conditions challenged GPs' professionalism since disagreements persisted between GPs and the government around the definition of quality standards in general practice (Lewis, 1998).

The question then becomes why GPs as a professional body decided, in 2004, to accept QOF in order to be told, as stated above, when 'to measure blood pressure, test a urine sample, or ask for a family history'? The NHS internal market played an important role in this process, alongside a cultural transformation in general practice required to absorb the government's quality aspirations. It took more than 10 years to acculturate GPs to the requirements of an evidence-based medicine (EBM) model of learning and practice (Roland, 2004). EBM allowed the British government to build a strong clinical governance system (Harrison et al., 2002) aiming to reduce variability in clinical care, thereby facilitating the conditions for the introduction of the GPs' 2004 contract.

Although portrayed as 'voluntary' (Roland, 2004), the QOF scheme constituted a vertically imposed framework for it represents roughly 25% of GPs' annual income (Checkland et al., 2008). Thus apart from the political and epistemological changes

summarised above, the 2004 contract was financially very attractive to them. It secured both a ‘Minimum Practice Income Guarantee’ (MPIG) – a form of income protection (National Audit Office, 2008, p.15), and money to improve practices’ IT systems in connection with the QOF (Peckham, 2007). Additionally, GPs could opt to renounce the out-of-hours care duty as long as they were willing to lose £6000 year, this despite most of them already paying an average of £13,000 year for a deputising service (National Audit Office, 2008, p.19)! Thus the majority of GPs gave up their 24/7 commitments and obtained an average pay rise of £7000 year. As well as these economic advantages, mechanisms within the QOF scheme enabled further financial gains. For example, in 2006 a major change to QOF raised the number of clinical domain indicators from 11 to 19 clinical areas (BMA, 2006). The average payment to GP partners increased by 58% in the first three years of the new contract (National Audit Office, 2008, p.19).

QOF 2013/14 contract year

In April 2014, QOF marked its tenth anniversary. Although its efficacy remains disputed, as documented in a systematic review (Gillam, 2012) and despite it having cost the NHS an estimated £1 billion a year (Raleigh & Klazinga, 2013), the government renewed its commitment to QOF by producing a sixth edition of the QOF contract. This 2013/14 contract aimed at further improvements to quality by tightening up GPs’ points achievements, reducing the total number of points available, and changing the indicators for which points could be won (Gillam & Steel, 2013). A total of 900 QOF points were available, with each QOF point on average worth £156.92. Table 1 summarises the whole 2013/14 QOF scheme including its four domains and points allocation.

Table 1. 2013/14 QOF domains and points allocation criteria.

Components of total points score	Points	Way in which points are calculated
Clinical Indicators	610	Achieving pre-set standards in management of: <ul style="list-style-type: none"> • Atrial fibrillation • CHD • Heart Failure • Hypertension • Peripheral Arterial Disease • Stroke and TIA • Diabetes Mellitus • Hypothyroidism • Asthma • COPD • Dementia • Depression • Mental Health • Cancer • Chronic Kidney Disease • Epilepsy • Learning Difficulty • Osteoporosis • Rheumatoid Arthritis • Palliative Care
Public Health (PH) domain	113	Achieving pre-set standards in: <ul style="list-style-type: none"> • Cardiovascular Prevention • Blood Pressure • Obesity • Smoking
PH sub-domains	44	Achieving pre-set standards in: <ul style="list-style-type: none"> • Cervical Screening • Child Health Surveillance • Maternity Services • Contraceptive Services
Quality and Productivity	100	Achieving pre-set standards in: <ul style="list-style-type: none"> • A set of management arrangements to reduce patients

domain	avoidable referral to secondary and A&E services	
Patient domain	33	Consultation length (no less than 10 min)
Total possible	900	
CHD = Coronary Heart Disease; COPD = Chronic Obstructive Pulmonary Disease; TIA= Transient Ischemic Attack.		

Source: BMA, 2013.

Being a points-based system, QOF functions as an audit mechanism that sets criteria and standards intended to measure the quality of care (Gillam, 2012). Criteria refer to QOF's clinical indicators (Table 1), and the standards establish a range of point achievements, whose number is set by policy-makers, for each criterion. Due to the amount of money linked to a particular QOF indicator, GP practices can be driven to prioritise certain targets. Table 2, for example, describes the clinical criteria, standards, and points' allocation for hypertension indicators. Note that HYP002 is worth fewer points than HYP003, making the latter financially more significant. Based on two components (ratio and range of achievement) practices can calculate the level of achievement for each QOF indicator. For instance, the desired quality standard for achievement of the newly introduced HYP003 ranges from 40 to 80% of the target registered patients. QOF offers 50 points for this indicator. Thus, if 60% of a practice's registered patients aged 79 or under with hypertension have their last blood pressure reading of 140/90mmHg or less in the preceding nine months the practice will receive 20/40 (i.e. half of the 25 points available, since 20 corresponds to what exceeds 40% which is the lower threshold).

Table 2. QOF indicators for hypertension (HYP): criteria, standards and points allocation.

Indicators for ongoing management	Points	Achievement threshold
HYP002: the percentage of patients with hypertension in whom the last blood pressure reading (measured in preceding nine months) is 159/90 mmHg or less.	10	44-84%
HYP003: the percentage of patients aged 79 or under with hypertension in whom the last blood pressure reading (measured in preceding nine months) is 140/90 mmHg or less. NICE 2012 menu ID: NM 53	50	40-80%

Source: BMA, 2013.

Built into the mathematics of the QOF is exception reporting. Designed as a safeguard for patients, exception reporting aims to avoid ‘harmful treatment resulting from the application of quality targets to patients for whom they were not intended’ (Gravelle et al., 2008, p.1). It recognises that not all patients are suitable candidates for medical interventions, either for clinical reasons (e.g. ‘patient unsuitability’ or ‘on maximum tolerated treatment’) or because patients refuse the treatment offered, referred to as ‘informed dissent’ (Campbell et al., 2011).

The QOF rules permit a flexibility that raised concerns among policy-makers and researchers alike. This leeway allows for manipulation of data in the practice’s pursuit of financial gain, either by changing the numerator or denominator that has elsewhere been referred to as ‘gaming’ (Gravelle et al., 2008, p.2). To reduce the chances of gaming, the Primary Care Trust (PCT) (replaced by the CCG from April 2014) carries out an annual inspection in which a GP with managerial responsibilities is usually included (Roland, 2004). However, the available budget limits thoroughgoing examinations of statistical outliers (Doran et al., 2008, p.283).

METHODS

This ethnographic study explored how QOF's monetary logic influences the approach to healthcare in UK general practice. The main units of analysis were two general practices in Britain and their health staff during the QOF 2013/14 contract year. The selection of research sites was non-probabilistic and pragmatic (Kuper et al., 2008) since the most important priority was to be accepted by the GPs. The strategy adopted to gain access to GP surgeries entailed sifting through a network of potential general practices associated with a GP training programme (GPTP). The time spent in the GPTP resulted in the inclusion of this space as a complementary research site. The main researcher AHN, himself a primary care physician, attended most of the third year GPTP 2013-14 and conducted a focus group. The contacts made and confidence inspired in attendees by this approach gained him access to the two GP surgeries included in the study.

Practice profiles

The two GP practices in this study are practice groups and also training practices. As such, they are required to achieve both pre-established standards of care and high QOF scores. The surgeries provide services to a registered patient population of 15000 and 17000 patients respectively, and hence are considered big practice groups (Checkland & Harrison, 2010).

Focusing on QOF as a biomedical technology, these two surgeries can be regarded as representative of one space: the general practice environment (GPE). Each practice offered complementary inputs regarding QOF in the GPE, since spaces and contexts that

were not covered (or difficult to reach) in one surgery tended to be covered in the other and vice-versa. The main characteristics of both research sites are summarised in Table 3.

Table 3. Practice ‘A’ and practice ‘B’ main characteristics in 2013/14.

Main characteristics	Practice ‘A’	Practice ‘B’
QOF overall achievement 2012/13	98.4%	99.6%
Training practice	Yes	Yes
Population size	15,000	17,000
Personal list of patients	No	No
Branches	Four	Two
Socioeconomic	The main surgery caters for upper economic social class while the remaining three surgeries cover more socio-economically deprived areas.	The main surgery caters for a mix of social economic classes though socio-economically deprived predominates. The second surgery clearly covers a very deprived community.
Business model	Partnership	Salaried
Chronic disease management	Mixed of GPs and nurses led services.	Mainly a nurse team led clinics.

Data collection methods

Fieldwork started in mid-August 2013 in the GPTP, then expanded with the inclusion of the first medical group at the beginning of November and the second medical group at the beginning of December. The research took place during the surgeries’ opening hours from Monday to Friday, apart from Wednesday activities at the GPTP. Fieldwork concluded with preparations for the QOF 2014/15 contract year in April 2014. Methods comprised participant-observation of practice teams’ activities starting with receptionists, administrative and managerial staff and expanding progressively to cover practice meetings in general, meetings about QOF in particular, and observations of clinical

consultations conducted by GPs, nurse practitioners, practice nurses, and health care assistants. A total of 326 GP consultations were observed: 218 (67%) in practice 'A' and 108 (33%) in practice 'B', reflecting the difference in the amount of time spent in each practice.

In both medical groups the following QOF specific activities were recorded: (a) QOF meetings; (b) QOF recoding/amendment sessions (e.g. searching for evidence of miscoding or QOF coding that might damage practices' achievement in a particular QOF indicator); (c) doing QOF tasks over the phone such as asking patients about their smoking status, level of physical activities (GPPAQ), and doing dietary reviews for diabetic patients; (d) private explanations and demonstrations of the QOF operational system; and (e) a training session on QOF for a new member of staff, which was video-recorded. Interviews with the practice team were conducted in their own workspaces such as consultation rooms and offices. Depending on professionals' willingness and time availability the recorded interactions varied considerably from minutes (for a short interview) to hours (in the case of recording consecutive QOF-task activities, such as amending QOF codes). The latter was not fully transcribed as it contained environmental noises, long silences periods, and non-QOF related parallel conversations. A focus group conducted with four GP trainers in the GPTP lasted approximately one hour and was fully transcribed (Table 4).

Table 4. Summary of audio-data collected according to research settings.

Participants	Code	Activity	Duration	Transcription
GPs	GP1	Focus group with GPs in the GPTP	0:56:52	In full
	GP2			
	GP3			
	GP4			
GPs	GP5	Opportunistic interviews & observation and discussion during recoding of QOF amendments	0:25:54	In full
	GP6		0:34:53	In full
	GP7		1:19:13	In parts
	GP8		0:14:38	In full
	GP9		0:15:29	In full
	GP10		0:30:42	In full
	GP11*		8:00:44	In parts
	GP12		0:22:42	In full
	GP13		0:21:22	In full
	GP14		0:12:43	In full
Nurse	N1	Opportunistic interviews	0:20:31	In parts
	N2*		0:53:40	In parts
	N3		0:45:45	In parts
	N4*		2:27:45	In parts
Managerial functions	MF1	Interviews, descriptive interviews or when taking part in QOF meetings	0:44:33	In full
	MF2		0:45:52	In full
	MF3 [#]		1:34:12	In parts
	MF4			
	MF5			
	MF6 [#]		1:10:48	In parts
	MF7 [#]			
	MF8 [#]			
	MF9 [#]			
QOF Meetings	M1	Meeting interaction	0:22:23	In full
	M2		1:22:08	In parts
	M3		0:58:34	In parts
	M4		1:10:48	In parts

*Recorded by more than one encounter. #Recorded as participant in QOF meetings.

The study methods allowed for data triangulation whereby a particular phenomenon could be checked against different sites and along different time-space moments (Reeves et al., 2008). This data collection strategy is a well-known way of improving the reliability of the material gathered (Murphy et al., 1999). For instance, practice meetings' decisions were cross-checked with health staff, in order to verify what was collectively agreed during practice meetings. This approach facilitated a better understanding of QOF

managerial influence over general practice by ‘following the QOF’ through different places (cf. Marcus, 1998). Other data sources included documents such as official statements (GMS contracts), the results of computer screen captures, practice profile booklets, and practice websites.

Data Analysis

Data analysis was an iterative process, whereby the literature and the data collected on the ground were constantly producing mutual feedback loops, in a ‘theme generation cycle’ (Reeves et al., 2008). This led to a refinement and narrowing of the inquiry as fieldwork progressed. The activity of transcribing the recorded material, re-reading, and contrasting it with other empirical evidence strengthened the process of data analysis. By contrasting and comparing the data and elements selected, it was possible to prioritise themes based on their ‘sameness’. As Atwood et al. point out, ‘sameness here does not mean complete identity between objects, just a sufficient similarity’ (1986, p.138). The iterative nature of this ethnographic study combined with the principal researcher’s non-UK family physician status and medical anthropological reflections from AJR and CM enhanced the reflexivity of the data analysis process, shaping the understanding of the QOF managerial environment, and consequently the research results.

Ethics

This research was granted approval by Durham University’s Department of Anthropology Research Ethics and Data Protection Committee in January 2013. The NHS Health Research Authority (HRA) did not request a full ethics committee review since although the protocol stated the principal researcher would sometimes be in the

same room as patients in the course of observing clinicians' management of QOF tasks during their consultations, the HRA deemed our research did not directly involve patients as main research subjects. The required clinical governance approval by a primary care trust (PCT) research department was sought and obtained in February 2013.

RESULTS

There were three themes identified through the data analysis process which we shall use as the framework for presenting our key findings. They were: (1) Commodification of patients; (2) QOF as currency; and (3) Valuing commodities.

Commodification of patients

The commodification process in general practice became apparent early on. In the focus group, it seemed that GPs perceived as a menace to their business the changes made in the 2013/14 contract. These changes aimed to correct QOF's induced distortions via 10% reduction in GPs' income (Roland & Guthrie, 2016). One GP explicitly expressed this concern, as follows:

'Now patients are walking bags of money that you have to get money off...by doing certain tasks...instead of a patient that you should be just saying: "- We've got [a] problem and we need to..." and that's a danger, you know.' [GP1]

This idea of patients being recast as 'walking bags of money' and its embedded 'danger' refers to potential ethical conflicts of interest that QOF has insinuated into general practice health teams (Pellegrino, 1999). In the initial phase of learning how QOF was organised in the GP surgeries, there was an opportunity to have two separate meetings

with managerial staff lasting roughly 45 minutes each. In these meetings, managerial staff went into detailed explanations about the software package System One's main operational characteristics with regard to QOF and its utility in helping staff keep track of the QOF indicators. The managerial staff used patients' electronic records to clarify some points. What follows shows the role of managerial staff in monitoring QOF targets, and the idiosyncratic nature of QOF's commodification process.

'So, I use these reports quite a lot...it's also good for "target patients", see...you can either sort it by who is the most profitable to us...and we could chase that patient or who has the most [QOF] alerts'. [MF2]

In the above extract, the IT system permits the managerial team to classify patients in terms of profitability, triggering 'a chase' of the selected individuals. Figure 1 is a screen-capture demonstrating the monetary values attached to each patient. It is a powerful reflection of the statement that patients are 'walking bags of money'. The QOF scheme, by pricing patients, allocates each a monetary value, which varies according to the number of disease conditions ascribed to them. This generates 'chasing patients' as a repetitive trope, one of the consequences of the commodification process (McDonald et al., 2007).

Figure 1 shows a list of patients with their corresponding numbers of QOF alerts and their consequent value, collated according to how much a patient was worth to the practice. Furthermore, it highlights the patient with the highest number of QOF alerts (24), totalling £48.04 in value. When this patient was selected, the software automatically displayed the QOF-tasks that needed to be performed. In this case highlighted in a drop-

box on the right-hand side of Figure 1, these QOF-tasks concerned five health-related issues: coronary heart disease (CHD), chronic obstructive pulmonary disease (COPD), diabetes (DM), smoking (SMOK), and stroke and transient ischemic attack (STIA). Hence QOF, structured by such ‘disease management protocols (to improve outcomes, reduce costs, and standardise care), is, in effect, providing programmed service commodities’ (Stoeckle, 2000, p.141), embedded in the special clinics for diabetes, COPD/asthma, and so on.

Patient	Alerts	Pound...	Indicator
Mrs ...	12	£66.52	CHD002 - Missing patients (work to do)
Miss ...	11	£53.91	CHD003 - Missing patients (Work to do)
Mrs ...	24	£48.04	CHD004 - Missing patients (Work to do)
Mrs ...	12	£37.12	CHD005 - Missing patients (Work to do)
Mrs ...	15	£28.78	COPD003 - Missing patients (Work to do)
Mr ...	13	£28.64	COPD004 - Missing patients (Work to do)
Mr ...	13	£28.25	COPD006 - Missing patients (Work to do)
Mr ...	14	£27.68	DM002 - Missing patients (work to do)
Mr ...	19	£26.07	DM003 - Missing patients (Work to do)
Mr ...	11	£24.44	DM004 - Missing patients (Work to do)
Mr ...	17	£22.72	DM005 - Missing patients (Work to do)
Mr ...	12	£22.56	DM007 - Missing patients (Work to do)
Mrs ...	12	£22.32	DM008 - Missing patients (Work to do)
Miss ...	13	£21.50	DM009 - Missing patients (Work to do)
Mr ...	12	£20.00	DM010 - Missing patients (Work to do)
Mrs ...	12	£19.87	DM012 - Missing patients (Work to do)
Mr ...	12	£18.45	DM013 - Missing Patients (Work to Do)
Mr ...	16	£18.35	SMOK001 - Missing Patients (Work to do)
Mr ...	11	£18.23	SMOK002 - Missing Patients (Work to do)
Mr ...	14	£17.07	SMOK004 - Missing Patients (Work to do)
Mr ...	12	£16.74	SMOK005 - Missing Patients (Work to do)
Mrs ...	14	£16.48	STIA003 - Missing Patients (Work to do)
Mr ...	14	£15.74	STIA004 - Missing Patients (Work to do)
Mr ...	13	£15.57	STIA006 - Missing patients (Work to do)
Mr ...	11	£15.37	

Figure 1. List of target patients collated by patients’ monetary value [names removed].

As well as being commodified, patients as units of care become fragmented by the disease-oriented model QOF uses. To summarise, the QOF’s fragmentary approach to health care links GPs’ income to selected portions of general practice activities, divided

into small countable and auditable units. Then, a monetary value is attached to each unit, creating a spectrum of possible financial gains. These units are assembled into several disease management templates, producing a series of small boxes to be ticked or filled up with short pieces of information that allow for easy extraction and/or for an audit to be performed (Checkland et al., 2007). This process of fragmentation was nicely depicted by a GP:

'The problem with this whole area is: it's the classic cliché that we use: "salami slicing work"...[producing] lots of little bits, and we end up with the huge sausage, that's exactly what it is!' [GP1]

As Sharp (2000, p.288) contends, such a conceptualisation of the human body carries the potential for its dehumanisation and decomposition since 'one explores how (literally and symbolically) fragmentation and commodification occur'. Based on the biomedical model, QOF has a very mechanistic approach to the human body (Checkland et al., 2008).

QOF as currency

The whole process of commodification became even clearer later on during fieldwork while witnessing a QOF 'code amendment' (i.e. recoding) activity. This is a new behaviour generated by QOF, and entails GPs or qualified nurses looking at certain targets and checking for coding issues (Swinglehurst & Greenhalgh, 2015). During a recoding session the issue about the QOF points' framework and its translation into monetary units emerged. The following excerpts further illustrate the commodification

process, and the way it turns QOF into a currency:

GP11: *Four pounds per patient...so, if you get 100-point patients, you get £400; so...what 200 patients? You get £800...To get maximum target...we are...[lower voice while making calculations]...£1700 off...No! More than that!...yeah...‘missing patients’...*

AHN: *The total is this? £4700 and you’re currently £3000...*

GP11: *Pounds achieved at the moment [£1700] and pounds achievable is £3000...so, we’re £3000 off...so we could get £3000...*

AHN: *OK...so, a lot of money...*

The discussion above refers to the amount of money involved in each of the QOF clinical domain areas, and the package of commodified services that has been commissioned by the government for GPs to deliver as a quality standard. This can be characterised as ‘government induced demand’ for health services, since patients do not request QOF before, during or after the consultation. Different from a ‘free-market’ self-regulated ideology, the government is animating the UK economy via the QOF biomedical framework. In the continuation of the same dialogue, the GP scans through several QOF clinical areas, not necessarily identifying them singularly:

GP11: *So, it’s really difficult to say how much we can get...so, you know, so £12? I wouldn’t worry about that; £37...hmm? [Hesitating]...you know...it’s in their hundreds that we’ll be looking at...OK, GPPAQ [GP Physical Activity Questionnaire] £3000...this...£1009...£770...[for] risk assessment...and I need to*

look at...and that's only three patients...

AHN: *So, three patients are worth more than...*

GP11: *£259 per patient, if I can get those three...*

AHN: *Wow! It's quite an imbalance!*

GP11: *Hmm, yeah, so...you know, there are some we get a lot more for and some we don't get much at all...OK...*

AHN: *How do they decide how...this condition's worth more than the others?*

GP11: *I have no idea...I've got no idea...OK, so that £1300 to review...OK...so...it's achievable...this one we're very annoyed about it: how do we not get the cholesterol under five...for secondary prevention for heart disease?!...We have to get that...so people are not acting...on the blood results.*

The above quotation illustrates the imbalances in QOF's value allocation. This partly reflects the extent to which the points allocated to each 'package service' do not necessarily match health staff workload outputs. There is a detachment from what is called 'socially necessary labour-time' in commodity production that aggregates value to a commodity, i.e. 'the amount of labour-time necessary for the production of each', which refers to the 'use value' of a commodity (Timmermans & Almeling, 2009, p.23). Thus, the disproportion in the allocation of value, and who decides upon a target's relevance for general practice, is a completely alien dimension for health staff. The QOF points' allocation fluctuates

according to what policy-makers want practice teams to concentrate on. By analysing what is being exchanged and its attached value, it is possible to ‘argue that what creates the link between exchange and value is politics, construed broadly’ (Appadurai, 1986, p.3).

In the previous dialogue, one can assess, read and sense the monetary currency exchange of QOF: A form of ‘QOF money’ (which we propose to identify as £-QOF) has been put in circulation within UK general practice. This £-QOF is then linked to body biomarkers and health conditions.

Valuing commodities

The recoding sessions can sometimes seem a ‘waste of time’, but are equally a ‘money-making’ opportunity, as a GP was explaining to managerial colleagues during one QOF meeting [M1].

‘There’s not many things in QOF where your limited number of patients buys you so many points; and I’ve managed to pick up lots of ones like...cardiovascular, there’re 8.5 out of 10 [points now] and [it] was actually zero, but we were only dealing with 17 patients. So, I managed to get...this...you know, whom I said, you know, whom I said sometimes...I’m bragging, I’ve said: - “I can make you £4000 in one session” [gently laughing]...you can, if you go from nil to ten [QOF points]...So...my time so far it’s been really good value, but unfortunately it gets less and less...but I’ve picked up the learning disability...the Down Syndrome...we’ve got one patient and he’s worth...three points.’ [GP5]

The above extract illustrates that attaching money is a powerful tool for reshaping healthcare services by ‘commodifying’ patients themselves or their biologically extracted by-products. The QOF commodification mechanism attaches points to patients’ bodily biomarkers (i.e. level of cholesterol, blood pressure, and haemoglobin A1c). This procedure results in token-information that is exchanged for pounds.

The £-QOF conditions things that practices must do in order to generate their revenue. This potentially distorts healthcare services, as targets become highly fetishized proxies for bodies and body parts. Scheper-Hughes (2001) revealed the harvesting, trade and commoditization of organs and body parts in the global economy. We contend that although our case study does not deal in actual tissues’ and organs’ removal and marketization, the patient’s body undergoes a comparable type of mining activity to extract a monetary value that is attached to its component parts, albeit electronically stored and exchanged. The following utterance highlights this process:

‘There’s osteoporosis, we haven’t hit it [yet], diabetes, we’ve still only got three greens [out of 13], so we haven’t hit it; we need 130 patients for blood pressure, 286...Oh! We only need four microalbumin! Oh, we’ve done well on that, then, you know, that’s a protein but we need 211 urine tests, to get the money or otherwise we don’t get it! [...] And this time of the year it’s an absolutely nightmare for us, because...this time of the year it’s almost like: “-We haven’t hit the QOF, we haven’t hit the QOF, we haven’t done this, we haven’t done [that]!”’

[N4].

The above utterance underscores two points: (1) the need to chase patients for clinical review and to extract their by-products, which are then transformed into ‘QOF-bytes’, stored as backup information to be exchanged at the end of each financial year in order to generate practice revenue; (2) the fluctuation of QOF requirements throughout the financial year. The QOF’s financial deadline at the end of March triggers a ‘nightmare climate’ as the pressure increases to accommodate the remaining patients and QOF tasks from December onwards:

‘This happens every year as soon as Christmas is over, it’s like: - “The QOF is coming! The QOF is...” or “-How many points are we at? How many?” you know?’ [N4]

‘I think you really need to keep things on a month-to-month basis...but no matter how much you try to do that it always has...it always seems to build up at back end of the [financial] year.’ [MF5]

‘And we get a “mad panic” ... from about February to April...because we haven’t documented things appropriately in previous parts of the year.’ [GP12]

General practice teams are more affected by QOF demands towards the end of financial year, i.e. 31st March. This seasonality represents an ‘anomaly’ or a ‘noise’ produced by QOF’s asymmetry with reality. This is portrayed as a ‘time of madness’, ‘panic’ and ‘nightmare’, pushing practice teams to behave almost like ‘data harvesters’, to borrow a

term used by Loxterkamp (2013). This fiscal seasonality reveals QOF's artificiality, bringing with it several interconnected problems, since in a short period of time the practice has to undertake an enormous number of consultations, clinical reviews, and laboratory tests in order to achieve QOF targets. Despite health staff's enduring commitment to providing the best care, QOF challenges their autonomy (Campbell et al., 2008), holism (Checkland et al., 2008) and longitudinal approaches to patient care as practice teams reach QOF's financial year deadline.

DISCUSSION

The NHS, formerly the product of a strong welfare state aiming to protect UK citizens and residents when they fell sick, is insidiously becoming a space for a market economy logic for healthcare provision. The NHS's approach to health discouraged the functioning of the market mechanism with its associated 'commodity fiction' (Polanyi, 2001). Nevertheless, since the initiation of the internal-market in 1991 this protective bubble has shifted towards a slicing process, framed within a market economy of 'buyers and sellers'. The intention was that the purchaser-provider split would self-regulate prices and the demand for health services. This scenario would, inevitably - so the argument went - drive quality standards up through competition between providers. The internal market can be seen as the first step to treating health as a 'commodity' regulated by a purchaser/provider framework within the NHS.

The QOF scheme has added a further tier of sophistication to the commodification process in the NHS, at least in primary care. This financial incentive framework treats

health as a commodity based on patients' token-information exchange linked to each QOF indicators' criteria. To commoditise the relation between patients and health care providers, a classificatory normative system has developed. This clusters unique cases in order to provide a pattern against which the health staff's output can be measured, assessed or audited (Harrison, 2009, p.191). This is what QOF does, supported by EBM's high population-based level of abstraction (Lambert et al., 2006). QOF's reductionist, 'tick box' approach to patient care reframes human-related health conditions into 'QOF-able' entities by selecting bits of complex realities and reifying them as commodities. These are then launched as a point-based system into the UK primary care economy, offering a QOF currency that can be converted into sterling pounds.

Therefore, QOF distorts the fundamental relation health professionals assume with people (echoing Lukács, 1971) since it overrides (and/or substitutes) patients in this relational process in favour of the token information provided by their body biomarkers (e.g. level of cholesterol, haemoglobin A1c, proteinuria, blood pressure, FVE 1 [Forced Expiratory Volume in One Second]) or their disease conditions (e.g. breathlessness score check, feet-check, eye-check). This token-information is reified as a commodity to be first stored (alienated) in computer hard driver backups and later traded (exchanged) with a third part within a bio-managerial 'quality' framework.

Social scientist Stephen Harrison (2009, p.193) framed QOF as an example of 'conceptual' commodification in the NHS, suggesting that it could potentially lead to a literal commodification process. The present anthropological investigation confirms Harrison's predictions by demonstrating the 'literal' commodification process at work in UK general practice. Literal commodification entails that goods must be 'real' to allow

for exchange, alienation, and decommodification (Harrison, 2009). The QOF scheme produces token-information (i.e. real ‘goods’) that can be ‘alienated’ and ‘exchanged’, and does not simply frame healthcare as a service for ‘consumption’ (Harrison 2009, p.190). Their ‘virtual’ existence as bio-bytes does not make these goods ‘less real’. Additionally, policy-makers can ‘decommodify’ particular ‘bits’ of patients’ care by removing QOF indicators from the NHS’s internal-market. For instance, several QOF indicators were eliminated (‘decommodified’) including screening depression in patients with chronic disease, the compulsory use of formal questionnaires (e.g. PHQ-9) for assessing patients’ depression severity status (BMA, 2013), checking for erectile dysfunction in male diabetics (BMA, 2014), and screening for dementia due to the potential harms to patients’ well-being (Roland & Guthrie, 2016). This contributes to the perception that criteria for adopting QOF indicators might reflect more a blend of different principles and political agendas than EBM best practice ideal (Ashworth & Marshall, 2015).

In QOF commodification, trade is internally oriented between government and GPs, bypassing the users of general practice services. By ‘salami-slicing’ what used to be a more holistic type of care and pricing patients’ body-component parts, the government opened up a ‘Pandora’s box’, which is the capitalist approach to health. This tendency has meaningful and striking parallels with a more general proclivity for body parts commodification, a process whereby ‘the human body has attained medical and commercial value as a mine for spare parts for research and as a therapeutic tool’ (Lock & Nguyen, 2010, p.208). The parallelism to the body-mining enterprise in QOF refers to data extraction of token-information (through urine, blood, questionnaires) about

patients' biomedical parameters within a standardised quality framework.

Previous GMS contracts lacked a detailed and monetarily linked biomedical framework based on robust IT surveillance systems for controlling GPs' financial gains. This raises at least two ethical dilemmas: (a) the induction of biomedicalization processes in primary care; and (b) the conflict of interests when linking clinicians' activities with money and 'quality' standards.

The QOF scheme epitomises a biomedicalization process as its scope 'includes conceptual and clinical expansions through the commodification of health, the elaboration of risk and surveillance, and innovative clinical applications of drugs, diagnostic tests, and treatment procedures' (Clarke et al., 2003 p.165). The treatment of health as commodity has benefitted the market for existing drugs: between 2004 and 2011 'prescriptions for statins doubled, for angiotensin converting enzyme inhibitors (for blood pressure control) and diabetic drugs nearly doubled, for antidepressants rose 60%' (Spence, 2013, p.f1498). In the 2012/13 QOF contract year, the expenditure on screening for depression in CHD and diabetic patients accounted 'for \$6 million per annum in the context of the \$1 billion total estimated cost of QOF each year' (McLintock et al., 2014, p.7). Despite this sharp increase in medicine use (National Statistics, 2014), cardiovascular mortality has not diminished during the QOF's 10 years of existence (Kontopantelis et al., 2015).

The UK bio-market and pharmaceutical industries seem to have benefited with QOF as general practice might have become 'overactive', consuming enormous amount of NHS resources as well as overmedicalizing patients. In this arrangement, GPs have represented

a ‘big market’ target for biomedical industries as they have been providing the daily care for the bulk of the UK population. This context has intensified the capitalisation within the NHS, clearly depicted by its ‘criteria for reimbursement, and in general, the treatment of health and illness as merely another field for calculations of corporate profitability’ (Rose, 2006, p.11).

In terms of payment mechanism, QOF raises ethical concerns at the interface between health professionals and patients. Traditionally, GPs wanted to remain independent contractors to avoid the excesses of the NHS’s bureaucratic structure, fearing losing their autonomy and patients’ advocate role, although behaving as salaried individuals rather than businessmen (Lewis, 1998). General practice’s tradition was the pursuit of financial security through a mix of capitation with a salaried component (*ibid.*). Being paid to care for patients by administering limited budgets is quite different from ‘making’ money by exploiting potential economic gains, i.e. doing certain things instead of others because they are more lucrative. QOF fosters the latter, more profit-oriented approach to healthcare in general practice. Thus, QOF is different from previous contract arrangements.

Usually, three ways exist for paying doctors that reward some aspects of their activities such as time (salary), workload (capitation, which is based on doctors’ list of patients), and procedures (fee-for-service). The caveats of these types of payment include: (a) salary may foster laziness and undermine productivity; (b) capitation, though more cost-conscious form of production, may stimulate clinicians to avoid the ‘difficult’ patients and those with chronic conditions, hence narrowing the scope of general practice; and (c) fee-for-service may stimulate inadequate service provision, fraudulent codification, and

networks of mutual referral among professional colleagues (Robinson, 2001). A blend of these three payment modalities is usually preferred. However, on top of these, the 2004 contract introduced a pay-for-performance modality (QOF), which has parallelism with fee-for-service schemes as both payment modalities link money with doctors' activities. Thus, QOF carries the potential to induce unnecessary demands (clinical and bureaucratic), data manipulation (e.g. gaming), and may divert practice staff's activities to concentrate on the most profitable bits of healthcare, especially by the end of financial year.

The current context makes QOF symbiotic and vital for the NHS's internal-market and the UK economy. In this market environment, health as a commodity has insinuated itself further into the NHS through QOF's detailed pricing mechanism based on the exchange of patients' token information. In other words, QOF's fragmentary approach to bodily processes commodifies patients' bodies, behaviours, and parts into things to be traded within the UK internal bio-market.

The present research provides a unique account of QOF's literal commodification mechanism, highlighting important changes in UK general practice. Given the introduction of the internal market, it can be argued that commodification of health in the NHS is nothing new. However, this research is the first to demonstrate how commodification in general practice is occurring at the interface between patients and general practice health staff. Hence, the QOF scheme has pushed further a commercial type of medicine that produces ethical dilemmas for general practice and policy-makers.

The researched sites are training practices, hence the phenomenon observed happened in what are considered practices with high quality standards. The QOF scheme's successful

implementation across the country and the high levels of QOF points GPs have achieved (Campbell et al., 2008), suggest a consistent and effective use of this managerial tool. Although general practices tend to be culturally diverse environments, this cannot be inferred from QOF managerial strategies, which all seem to adhere quite strongly to the scheme's rules. Thus, focusing on QOF as a biomedical technology permits case-to-case transference and generalisation of the main research findings with a reasonable degree of confidence (Murphy et al., 1999), despite limiting the number of surgeries for this present study to two.

The present research was completed under the influence of the 2013/14 contract, covering a particular period (from November 2013 to April 2014) of the overall QOF financial year. Thus, participants' narratives in this ethnography more compellingly reflect this period of the year, a time of great pressure to achieve QOF targets, and do not necessarily represent overall health staff's attitudes towards QOF-tasks. This research did not comprise practices with personal lists of patients, small practices (single handed or two-to-three partners), and low-score QOF practices. These might deal with QOF requirements in a different way, opting for a more patient-focused approach balancing potential economic gains/losses against patients' responses to clinical reviews (Alderson et al., 2014). Additionally, general practice allows for more nuanced approaches to patients' care, accommodating different organisational logics such as population-based management of chronic conditions (e.g. QOF) and individualised patient care such as patients with medically unexplained symptoms (McDonald et al., 2013). Our study has focused on the former rather than on the latter aspect of clinical care. Both researched practices used the same software package and some of the features illustrated here might

be peculiar to System One. However, Swinglehurst and Greenhalgh (2015)'s study suggests that QOF induced behaviours are not software dependent.

The present research suggests that QOF's commodification process is an important unintended consequence, which further questions its continuity (Checkland et al., 2008; Ryan et al., 2016). For instance, the NHS Scotland has substituted QOF entirely by "quality circles" schemes. These are collaborative working groups comprising 10 to 15 practices that together identify and develop areas that need further quality improvements (Roland & Guthrie, 2016). Therefore, alternative quality assurance programmes are required that dialogue with complex clinical care scenarios encountered in general practice.

CONCLUSION

The QOF scheme has favoured the objectification, fragmentation, and standardisation of the human body for quality care management in the name of improvement in health provision. This has forged a literal commodification process in UK general practice at the interface between patients and care providers. Within the NHS internal market, QOF's insidious pricing mechanism and fragmentation has performed an important role in animating the UK economy.

Sponsorship: the first author received financial support by CAPES Foundation, process number 1032/12-7.

REFERENCES

- Ashworth, M. & Marshall, M. (2015). Financial incentives and professionalism: another fine mess. *British Journal of General Practice*, 65(637), 394–395.
- Alderson, S. L., Russell, A. M., McLintock, K., Potrata, B., House, A., & Foy, 590 R. (2014). Incentivised case finding for depression in patients with chronic heart disease and diabetes in primary care: an ethnographic study. *BMJ Open*, 4, e005146.
- Appadurai, A. (1986). *The social life of things: commodities in cultural perspective*. Cambridge University Press.
- Atwood, J. R., Hinds, P., Benoliel, J. Q., & Artinian, B. M. (1986). Heuristic heresy: Application of reliability and validity criteria to products of grounded theory. *Western Journal of Nursing Research*, 8, 135–154.
- BMA & NHS Employer. (2006), *Revisions to the GMS contract 2006/07 delivering investment in general practice*. London: Department of Health.
- BMA, NHS Employers, & NHS Commissioning Board (2013). *The Quality and Outcomes Framework guidance for the GMS contract 2013/14*. London Department of Health.
- BMA, NHS Employers, & NHS Commissioning Board (2014). *2014/15 general medical service (GMS) contract: Quality and Outcomes Framework (QOF). Guidance for the GMS contract 2014/15*. London: Department of Health.
- BMJ (Ed.). (1989). Clarke's juggernaut rolls on. *BMJ*, 299 (6696), 414-414.
- Campbell, S., Hannon, K., & Lester, H. (2011). Exception reporting in the quality and outcomes framework: views of practice staff – a qualitative study. *British Journal of General Practice*, 61, e183–e189.
- Campbell, S. M., McDonald, R., & Lester, H. (2008). The experience of pay for performance in English family practice: A qualitative study. *The Annals of Family Medicine*, 6, 228–234.
- Checkland, K., & Harrison, S. (2010). The impact of the quality and outcomes framework on practice organisation and service delivery: summary of evidence from two qualitative studies. *Quality in Primary Care*, 18, 139-146.
- Checkland, K., Harrison, S., McDonald, R., Grant, S., Campbell, S., & Guthrie, B. (2008). Biomedicine, holism and general medical practice: responses to the 2004 general practitioner contract. *Sociology of Health & Illness*, 30, 788–803.

- Checkland, K., McDonald, R., & Harrison, S. (2007). Ticking boxes and changing the social world: Data collection and the new UK general practice contract. *Social Policy & Administration*, 41, 693–710.
- Clarke, A. E., Shim, J. K., Mamo, L., Fosket, J. R., & Fishman, J. R. (2003). Biomedicalization: technoscientific transformations of health, illness, and U.S. Biomedicine. *American Sociological Review*, 68(2), 161–194.
- Day, P. (1992). The state, the NHS, and general practice. *Journal of Public Health Policy* 13 (2): 165–179.
- Doran, T., Fullwood, C., Reeves, D., Gravelle, H., & Roland, M. (2008). Exclusion of patients from pay-for-performance targets by English physicians. *New England Journal of Medicine*, 359, 274–284.
- Gillam, S., & Steel, N. (2013). The quality and outcomes framework—where next? *BMJ*, 346.
- Gillam, S. J. (2012). Pay-for-Performance in the United Kingdom: Impact of the Quality and Outcomes Framework A Systematic Review. *Annals of Family Medicine*, 10, 461–468.
- Gravelle, H., Sutton, M., & Ma, A. (2008). Doctor behaviour under a pay for performance contract: further evidence from the Quality and Outcomes Framework. (No. 034 CHE research paper).
- Harrison, S. (1998). The politics of evidence-based medicine in the United Kingdom. *Policy & Politics*, 26, 15–31.
- Harrison, S., Moran, M. & Wood, B. (2002). Policy emergence and policy convergence: the case of scientific-bureaucratic medicine in the United States and United Kingdom. *The British Journal of Politics & International Relations* 4 (1): 1–24.
- Harrison, S. (2009). Co-optation, commodification and the medical model: Governing UK medicine since 1991. *Public Administration*, 87, 184–197.
- Heath, I. (2010). Person-centred prevention and health promotion. *International Journal of Integrated Care*, 10.
- Kontopantelis, E., Springate, D. A., Ashworth, M., Webb, R. T., Buchan, I. E., & Doran, T. (2015). Investigating the relationship between quality of primary care and premature mortality in England: a spatial whole-population study. *BMJ (Clinical Research Ed.)*, 350, h904.

Kuper, A., Lingard, L., & Levinson, W. (2008). Critically appraising qualitative research. *BMJ*, 337.

Laing, A. W., Cotton, S., Joshi, R., Mornach, G., & Kee Lorna, M. (1998). The buying centre: Patterns of structure and interaction in primary health care. *The Service Industries Journal*, 18, 20–37.

Lambert, H., Gordon, E. J., & Bogdan-Lovis, E. A. (2006). Introduction: Gift horse or Trojan horse? Social science perspectives on evidence-based health care. *Social Science & Medicine*, 62, 2613 – 2620.

Lewis, J. (1998). The medical profession and the state: GPs and the GP contract in the 1960s and the 1990s. *Social Policy & Administration* 32 (2): 132–150.

Lock, M., & Nguyen, V. K. (2010). *An anthropology of biomedicine*. John Wiley & Sons.

Loxterkamp, D. (2013). Humanism in the time of metrics - an essay by David Loxterkamp. *BMJ*, 5539, 1–4.

Lukács, G. (1971). *History and class consciousness: Studies in Marxist dialectics*. volume 215. Mit Press.

Marcus, G. (1998). *Ethnography Through Thick and Thin*. Princeton paper-backs. Princeton University Press.

McCarthy, M. (2014). Health system report ranks UK first, US last. *BMJ*, 348.

McDonald, R., Harrison, S., Checkland, K., Campbell, S. M., & Roland, M. (2007). Impact of financial incentives on clinical autonomy and internal motivation in primary care: ethnographic study. *BMJ (Clinical research ed.)*, 334, 1357.

McDonald, R., Cheraghi-Sohi, S., Bayes, S., Morriss, R., Kai, J., (2013). Competing and coexisting logics in the changing field of English general medical practice. *Social Science & Medicine*, 93, 47–54.

McLintock, K., Russell, A. M., Alderson, S. L., West, R. et al. (2014) The effects of financial incentives for case finding for depression in patients with diabetes and coronary heart disease: interrupted time series analysis, *BMJ Open*, 4, 8.

Murphy, E., Dingwall, R., Greatbatch, D., Parker, S., & Watson, P. (1999). Qualitative research methods in health technology assessment: a review of the literature. *Health Technology Assessment*, 2, 276.

National Audit Office. (2008), *NHS pay modernisation: New contracts for general*

practice services in England. London: National Audit Office.

National Statistics and Prescribing and Primary Care Health and Social Care Information Centre. (2014). *Prescriptions Dispensed in the Community: England, 2003-13*.

Peckham, S. (2007). The new general practice contract and reform of primary care in the United Kingdom. *Healthcare Policy*, 2(4), 34–48.

Pellegrino, E. D. (1999). The commodification of medical and health care: the moral consequences of a paradigm shift from a professional to a market ethic. *The Journal of Medicine and Philosophy*, 24, 243–66.

Pereira Gray, D. J. (1977). General practitioners and the independent contractor status. *The Journal of the Royal College of General Practitioners*, 27 (185): 746–752.

Polanyi, K. (2001). *The great transformation: The political and economic origins of our time*. Beacon Press.

Raleigh, V. S., & Klazinga, N. (2013). Future proofing the quality and outcomes framework. *BMJ*, 346.

Reeves, S., Kuper, A., & Hodges, B. D. (2008). Qualitative research methodologies: ethnography. *BMJ*, 337.

Robinson, J.C. (2001). Theory and practice in the design of physician payment incentives. *Milbank Quarterly*, 79(2):149–77, III.

Roland, M. (2004). Linking physicians pay to the quality of care - a major experiment in the United Kingdom. *New England Journal of Medicine*, 351, 1448–1454.

Roland, M. & Guthrie, B. (2016) Quality and Outcomes Framework: what have we learnt? *BMJ*, 354, i4060.

Rose, N. (2006). *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century*. Princeton: Princeton University Press.

Ryan, A.M., Krinsky, S., Kontopantelis, E., & Doran, T. (2016). Long-term evidence for the effect of pay-for-performance in primary care on mortality in the UK: a population study. *Lancet* 388, 268–274.

Scheper-Hughes, N. (2001). Bodies for sale whole or in parts. *Body & Society*, 7 (2-3), 1–

8.

Sharp, L. A. (2000). The commodification of the body and its parts. *Annual Review of Anthropology*, 29, 287–328.

Spence, D. (2013). Kill the QOF. *BMJ (Clinical Research Ed.)*, 346(March), f1498.

Stoeckle, J.D. (2000). From service to commodity: corporization, competition, commodification, and customer culture transforms health care. *Croatian Medical Journal*, 41(2), 141–3.

Swinglehurst, D., & Greenhalgh, T. (2015). Caring for the patient, caring for the record: an ethnographic study of 'back office' work in upholding quality of care in general practice. *BMC Health Services Research*, 15, 177.

Timmermans, S., & Almeling, R. (2009). Objectification, standardization, and commodification in health care: a conceptual readjustment. *Social Science & Medicine* (1982), 69, 21–7