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Limited pharmaceuticalisation: a qualitative case study of physiotherapist prescribing practices in an NHS Trust in England following the expansion of non-medical prescribing in the UK.

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**Abstract**

Over the last quarter century, non-medical prescribing in the UK has grown significantly; eight non-medical professional groups now have authority to prescribe a wide range of medicines, suggesting it could be a potent driver of pharmaceuticalisation. In this paper, we present data from a case study of physiotherapists’ prescribing practises. UK physiotherapists have had legal rights to prescribe medicines since 2005, but relatively little is known about the contribution they make to expanding patient access to medicines. We approached our study through a lens of governmentality to capture the mentalities and micro-practices governing physiotherapist non-medical prescribing. Ethnographic methods were used to gather data from an outpatient orthopaedic service in an NHS Trust in England employing physiotherapist prescribers. From the data, we identified a grid of intelligibility - an organising framework formulated by powerful discourses and technologies of government through which physiotherapist prescribing was acted into being. A primary effect of this grid was the constitution of new physiotherapist subjectivities, mostly as *non-prescribers* of medicines contrary to policy intentions, underpinned by a familiar and enduring template of medical professionalism.

**Key words**

UK, non-medical prescribing, physiotherapy, interpretive policy analysis, governmentality, pharmaceuticalisation, medical professionalism.

**Introduction**

In 2010, Busfield (2010) highlighted the influential role of key actors in the expansion of medicines use in England. Through a range of inter-related processes - such as interventionism, medicalisation, biomedicalism, regulatory state policy, marketing and consumerism (Abraham 2010, Busfield 2010) - doctors, the government, the pharmaceutical industry and the public each made their mark. Nurse and pharmacist prescribers, while mentioned, were afforded limited impact due to their ‘restricted’ prescribing powers (Busfield 2010: 937). Since publication of Busfield’s paper, restrictions on nurse and pharmacist prescribing in England have all but been removed, bringing their prescriptive rights into line with those of doctors (Pharmaceutical Services Negotiating Committee n.d.). Additionally, several allied health professions have had their authority to prescribe medicines extended, and recent legislative change has opened the door for paramedic and dietitian prescribers following appropriate training and qualification (Graham-Clarke et al. 2019). These developments suggest that non-medical prescribers, alongside doctors, may now indeed be a contributive force to pharmaceuticalisation – the concept wherein human conditions, capabilities and capacities are translated or transformed into opportunities for pharmaceutical intervention (Williams et al. 2011).

In this paper, we seek to offer insights into the role of one of the allied health professions in expanding access to medicines, by reporting on a case of physiotherapists’ prescribing practises in the English NHS. UK physiotherapists have been able to prescribe medicines since 2005, but relatively little is known about their prescribing practices or their influence on pharmaceuticalisation (Carey et al. 2017, Stenner et al. 2018).

Our study is founded on critical and interpretivist approaches to public policy and practice (Fischer and Forester 1993, Stone 2002, Yanow 2000) that centre on discourse embedded in social practices as constitutive of particular realities (Durnova and Zittoun 2013). We approached our investigation through a lens of governmentality (Foucault 1994) and drew on interpretive policy analysis as our research methodology (Wagenaar 2011). Governmentality sharpens awareness of the collective mentalities and regimes of micro-practices governing human thought and action within institutional or organisational settings (Dean 2010), and offers opportunities to explore how a particular policy or policy programme is ‘acted’ into being (Wagenaar 2011: 126). We used this lens in tandem with interpretive policy analysis; a methodology that presents a clear framework for empirical study of policy implementation that chimes with Foucault’s political influence (Wagenaar 2011, Yanow 2000). Interpretive policy analysis is concerned with meaning making - meaning that shapes action, practice and institutions (Bevir and Rhodes 2004: 130) - that can be captured through a focus on policy-related artifacts that express the values, beliefs and feelings of human actors as they engage and interpret the social world (Yanow 2000).

Our paper is organised into four sections. First, we situate the development and implementation of non-medical prescribing in England within a socio-political perspective and discuss the governmentality lens we adopted to explore physiotherapist prescribing practices. Second, we outline our case study setting and describe the methods we used to identify, gather, analyse and synthesise our data. Third, we present our findings - at the centre of which is a ‘grid of intelligibility’ (Dreyfus and Rabinow 1983: 121) - an organising framework through which human subjectivities are constituted and practices are created. Lastly, we discuss the mechanisms and effect of this organising framework on the construction of physiotherapist prescribing and its influence on pharmaceuticalisation via increasing access to medicines.

**Non-medical prescribing seen through a lens of governmentality**

Non-medical prescribing - the initiation, adjustment or cessation of pharmaceuticals by healthcare professionals other than a doctor - was introduced in the UK in 1992 (Medicinal Products: Prescribing by Nurses, etc, Act 1992), bringing to an end the doctors long-standing near monopoly of prescribing medicines. Although initially limited to a small number of items and simple agents for community nurses in England, non-medical prescribing has grown incrementally over the last quarter century in response to health policy reforms, albeit with opposition from the medical profession (Borthwick et al. 2010; Day 2005). These political reforms reflect the key rationalities of improving patient care through increased access to medicines without compromising patient safety, optimising the skills of non-medical professionals to combat rising demand for healthcare, and increasing efficiency and productivity in response to fiscal constraints (Graham-Clarke et al. 2019).

There are two types of non-medical prescriber in the UK: independent and supplementary - both permitted to access a wide range of medicines. Independent prescribers have full clinical autonomy in prescribing decisions for patients with diagnosed and undiagnosed conditions, while supplementary prescribers prescribe in accordance with a clinical management plan (CMP), agreed in advance by a doctor and the supplementary prescriber. Currently, most non-medical professional groups granted authority to prescribe medicines have progressed from supplementary to independent prescribing, although both mechanisms are utilised in practice (Courtenay et al. 2017). Non-medical prescribing of controlled drugs - drugs controlled under the misuse of drugs legislation - is profession specific, and access requires additional regulatory and legislative change (Pharmaceutical Services Negotiating Committee n.d.; Graham-Clarke et al. 2019).

Our interest in governmentality as a lens through which to explore the influence of physiotherapist prescribing on pharmaceuticalisation stemmed from reports of geographic and specialty variability in prescribing medicines by other groups of non-medical prescribers (Courtenay et al. 2012, Kroezen et al. 2014), and the distributed array of factors cited as influential to practice (Graham-Clarke et al. 2018). Governmentality is concerned with ‘who and what individuals and collectives are and should be’ (Dean 2010: 20), the myriad of distributed micro-practices shaping human conduct towards specific ends and the *how* underlying the ‘inevitable slippage’ between policy as intended and real-world practice (Wagenaar 2011: 126).

As a field, non-medical prescribing cuts across concerns about workforce modernisation, professionalisation and safety of healthcare, reflecting diverse logics from a plurality of institutions, organisations and individuals, as demonstrated by Borthwick et al. (2010) drawing on podiatry as an exemplar. These logics are sustained and enacted through technologies – techniques of discipline that objectify, rank and normalise individuals, and transformational practices, that individuals effect on their own bodies and souls. These techniques, acting through a multiplicity of power relations, govern human conduct and constitute subjectivities (Brodwin 2017, Foucault 1991).

In this paper, we draw on the notion of a grid of intelligibility, conceptualised by Dreyfus and Rabinow (1983) as a way to make visible the technologies of government and circulating rationalities within a particular context. Made up of historically-contingent discourses and non-discursive elements, such as institutions, architectural arrangement and laws (Foucault 1980), the grid when surfaced, forms a tangible map of ‘cultural practices, beliefs, understandings, aspirations, and materials’ in the workplace (Wagenaar 2011:118), which we articulate here.

**The case study setting**

The setting for our study was Central1, a Foundation Trust in England providing both community and hospital-based services. Central had become an integrated organisation in 2011 following the merger of the town’s primary care provider services with the secondary care hospital-based services. It was one of a number of mergers that took place between 2009 and 2012 as part of the Department of Health’s (DoH) Transforming Community Servicesprogramme (DoH 2009), and offered the possibility of reduced hospital admissions and economic gains, whilst reaffirming the position of community services within the NHS (Imison 2009). Accompanying Central’s formation was an amalgamation of services, one of which was the community-based orthopaedic Clinical Assessment and Treatment Service (CATS) with the hospital-based orthopaedic elective and trauma service. The CATS staff, including the physiotherapists in this study, non-operating general orthopaedic consultants and health assessment nurses, joined a team of operating specialist orthopaedic consultants, their trainees and other outpatient staff from the hospital to form a ‘new orthopaedic service’*,* delivering elective outpatient services from a modern health centre in the middle of the town. The orthopaedic service was chosen as a site for this study because it employed four or more physiotherapist non-medical prescribers working with people with musculoskeletal conditions.

**Methods**

The lead author, a physiotherapist non-medical prescriber in the NHS, conducted the study in 2014 in part fulfilment of a doctoral qualification. Approval to undertake the study was obtained (REC reference: 14/ES/0056) and physiotherapists holding a supplementary prescribing qualification for at least six months’ duration at the time of recruitment were eligible for inclusion. Legislation to enable independent physiotherapist prescribing in the UK was introduced in 2013, but linked training for physiotherapists only became available in 2014.

The overarching framework for data gathering and analysis focused on the key rationality of increasing patient access to new medicines (Graham-Clarke et al. 2019). Ethnographic methods included: observations of physiotherapist consultations with patients experiencing a wide range of musculoskeletal conditions; semi-structured interviews with physiotherapists and other healthcare professionals associated with physiotherapist non-medical prescribing practice at the Trust and nationally; and sampling of national and local non-medical prescribing and Trust-related documents via intertextuality.

Observations took place over a four-week period, incorporating general and spinal clinics and one elective orthopaedic sub-specialty surgical outpatient clinic (in which one of the physiotherapists worked alongside a consultant orthopaedic surgeon). The lead author acted as a participant observer during the study (Flick 2009). Forty-six physiotherapist-patient consultations were audio-taped with permission (average duration 23 minutes) and supplemented with fieldnotes. Informal conversations with the physiotherapists were also captured via audio-recording and/or fieldnotes.

Eleven semi-structured face-to-face interviews with professional staff were conducted, including: five physiotherapists; four orthopaedic consultants - three subspecialty-operating consultants originally from the acute Trust, and one non-operating orthopaedic consultant originally from the CATS; one pharmacist; and one senior manager - both of whom had worked with the physiotherapists in the CATS and subsequently transferred to Central on integration. In addition, one allied health professional involved in national non-medical prescribing policy was interviewed. A topic guide, including questions about experiences of prescribing, factors influential to practice, governance and support systems for prescribing medicines and future physiotherapist prescribing, sensitised the interviews. Interviews lasted on average 73 minutes and audio-recordings were transcribed verbatim. Transcripts were supplemented with contemporaneous fieldnotes.

A range of documents were accessed, and thirteen selected because of their relevance to the physiotherapists’ prescribing practices, Central’s ‘new’ orthopaedic service, and regulatory and governance arrangements at the Trust. These documents [D1-13], along with twelve anonymised interview transcripts and forty-six observation transcripts were uploaded to NVivo 10 (QRS International) software and organised. Coding of data was initially undertaken in an open manner, but successively focused on the symbolic artifacts - the languages, objects and acts relating to increasing patient access to medicines. Subsequently, circulating discourses, conceptualised as sets of statements homologous with a particular knowledge system (Foucault 2002) were identified and examined (Yanow 2000, Figure 1).

1. Identify the policy-related symbolic artifacts (languages, objects, acts) that carry significant meaning for the communities interpreting them.
2. Identify the different interpreting communities for each policy-related symbolic artifact.
3. Identify the discourses emerging through the policy-related symbolic artifacts.
4. Identify the points of struggle reflecting the different meanings interpreted by the different communities.

Figure 1: Yanow’s steps of interpretive policy analysis

 (modified from Yanow 2000: 22)

**Findings**

At the time of data collection, the five physiotherapists participating in this study were working as supplementary prescribers, requiring development of an individualised patient CMP prior to prescribing taking place. All the physiotherapists were preparing to convert to independent prescribing, welcomed as an opportunity to *write more prescriptions [physiotherapist 2]*. Yet the absence of some commonly used analgesics from the list of controlled drugs put forward for use by physiotherapist independent prescribers, and the reclassification of Tramadol in 2014 to a schedule 3 controlled drug, signalled that independence might be more challenging than originally anticipated.

*So the major ones that we prescribe …Co-codamol, Codeine phosphate …*

*Tramadol …because it’s controlled …we won’t be able to … [so] it’s going to have to be a supplementary prescribing role rather than independent. [physiotherapist 4]*

Only seven controlled drugs had been submitted for regulatory approval to the Commission of Human Medicines by physiotherapy’s professional body, which one interviewee involved in the development of physiotherapist prescribing policy recalled was largely *…for fear that to ask for too much might jeopardise the whole process [allied health professional]*. While this strategy can be understood in the light of previous medical resistance to the introduction of independent prescribing by nurses and pharmacists (Day 2005), the profession’s reluctance was significant given the contingency of list based prescribing rights (Millett 2015) and the cumbrous nature of amending controlled drug legislation (Drug Strategy Unit 2007; Griffith and Tenghah 2012).

Originally, support for the physiotherapists to develop as prescribers had been made available in the CATS *…to make sure all sensible, conservative measures had been tried before the patient was referred onto [orthopaedic] surgery [physiotherapist 1]*. In the new orthopaedic service, medicines continued to play a part in diverting people away from the operating orthopaedic consultants, as highlighted in this observation:

**Patient:** *So, I was thinking a knee replacement …would just sort it …*

**Physiotherapist 2:** *In your case, you don’t have to have an operation …there are other things. …You could …take more medication; you could try more physio; you could lose some weight; and you could wait and see.*

Consistent with other groups of non-medical prescribers (Lewis-Evans and Jester 2004; Weiss et al. 2006), the physiotherapists valued the contribution non-medical prescribing made totimely and convenient patient care, and perceived increasing access to medicines as a task firmly within their jurisdiction:

*It’s wrong to send them [patients] back to the GP to have a prescription done when they’ve come for an orthopaedic appointment …we should be dealing with that if pain is their problem. [physiotherapist 3]*

Yet observations of practice during fieldwork highlighted that writing a prescription was infrequent - a finding that was confirmed during interview *…oh, probably* *no more than one [prescription] a month, really [physiotherapist 2]*.

We identified two key logics to explain our observation. First, for several patients attending the elective orthopaedic service, medication for their musculoskeletal condition had been initiated in general practice. Second, service integration was perceived as a limiting factor, as one physiotherapist stated:

*To actually prescribe a medicine, I think that has dropped …it’s been more difficult …since we moved.* *[physiotherapist 4]*

In the following section, we explore the effect of service integration on the physiotherapists prescribing practices and construct a grid of intelligibility anchored by four symbolic acts. These acts entwined with policy-related objects and languages to reconfigure the division of labour within the new orthopaedic service and change the physiotherapists’ established ways of working.

***The grid of intelligibility***

*Getting authorisation to prescribe*

While supplementary prescribing is commonly cited as a barrier to non-medical prescribing, partly due to difficulties accessing a doctor to agree a CMP (Courtenay et al. 2007), the physiotherapists had found the process seamless in the CATS. Following integration however, gaining authorisation to prescribe became challenging, as one physiotherapist explained.

*It’s becoming an increasing problem, …at one point we worked with two orthopaedic consultants who worked full time; we were all in the same building on the same floor …and they were accessible …you could leave your room, knock on another room and discuss the case and ask for the CMP to be signed …instantaneous really. [physiotherapist 2]*

Incongruously, while the number of doctors potentially now available to the physiotherapists to authorise a CMP had increased following integration, persisting post-merger organisational and cultural divisions between the CATS and hospital orthopaedic staff constrained collaboration:

*...the thing is, they [the operating consultants] are quite busy, [the] door is closed ...they don’t encourage people to knock on the door …[so] you’ve just got to wait ...in a corridor ...outside a closed door …it’s just not an appropriate system. [physiotherapist 2]*

The roots of these divisions were traceable to the relative independence of the two services, in part due to national policy drives to divert work into the community (DoH 2006). The CATS had provided specialist assessment, diagnosis and treatment planningfor patients previously referred to the hospital-based outpatient orthopaedic service and had been established to help meet the 18-week referral to treatment target (18-week RTT). However, the effect of this gatekeeping role on referrals to the hospital orthopaedic service was highly problematic. The non-operating consultant explained the issue.

*…for every 100 patents we saw [in the CATS] …80% we could treat ...in primary care; of the 20% who needed surgery, half were unfit or did not want surgery …[of the] 10% that would benefit, only half of that was actually delivered [at the hospital]. So for the orthopaedic department at the hospital, their referrals fell from one hundred to five …*

Thus, for the hospital orthopaedic service, the CATS had presented *challenges* *[operating consultant 1]*, not least *depleting referrals [D 3]* to the hospital, leading on occasions to tensions between acute and community staff. These tensions can be understood if we accept Abbott’s (1988) thesis, namely that competition for jurisdiction lies at the heart of professional life.

In the ‘new’ orthopaedic service, physiotherapist observations of the operating consultants’ work practices had impressed on them that prescribing was not a task they commonly undertook e.g. …*they don’t really mention medication* *[physiotherapist 5],* which one surgeon explained was because people attending the service would *…have gone through all …that* *[operating consultant 3]*. Thus, for the surgeons, prescribing medicines for patients in the elective service in the absence of a surgical intervention was the jurisdiction of the patients’ general practitioner: …*by offloading a lot of the practice to GPs …we’re not really involved in that [operating consultant 3]*. This behaviour also aligned with perceptions about the management of non-surgical musculoskeletal conditions, notably that …*the GPs’ the best place to manage that patient longer term* *[operating consultant 1]*.

These representations about current and future work practices could be considered as a language of disconnect between the operating consultants and the physiotherapists, leading to reticence among the physiotherapists to engage the operating consultants in conversations about prescribing developments. One physiotherapist expressed his concern.

*I would be worried [about discussing developments] …because I’ve heard them* *say …we don’t need …any of our nurses to prescribe [physiotherapist 1]*.

This concern was not without some foundation as one operating consultant stated that he was *… not sure that it would greatly disadvantage patients if they [the physiotherapists] didn’t [prescribe] [operating consultant 1].*

Therefore, by and large, authorisation for physiotherapist prescribing remained with one of the non-operating consultants, seen as …*the only person who will really sign it off [physiotherapist 5]*. However, service integration and the move to the new health centre restricted proximity to this doctor, as one physiotherapist explained.

*[The non-operating consultant] has dropped his hours significantly …he does all his [speciality] clinics in a different building …and he’s our main …go-to guy …so I’ve got six clinics a week [and] the only time I’m in clinic jointly with him is on a Monday morning. [physiotherapist 2]*

Consequently, the physiotherapists developed a new system. Now, they telephoned the community consultant to gain authorisation prior to prescribing. Although this was perceived as working well by some of the physiotherapists, most found the process disruptive and time-consuming which led to non-prescribing and the re-direction of prescribing work to the GP:

*...you have to go out of the room …you’re trying to get hold of him …if he’s got a patient he can’t always speak to you and the clock’s ticking all the time.* *[physiotherapist 4]*

*[It’s]* *easier to say ...I’ll mention that to your GP in my letter*… *[physiotherapist 5]*

The loss of non-surgical medical hours within the service is traceable to a symbolic object, a notification from Monitor, the independent regulator of Foundation Trusts. Not long after integration, Central failed to meet two key performance targets: the 18-week RTT (admitted) and the A&E 4-hour wait, prompting the Primary Care Trust (PCT) to raise concerns with the regulator. Monitor subsequently informed the Trust that it was in *significant breach* of the terms of its conditions and requested regular progress reports [D 7]. However, the operational performance problems at the Trust caused other difficulties, as one senior surgeon stated:

*...we threw money at it, at those operational things, which then caused us to tip over financially. I don’t think we had as clear a financial grip, and it was as a consequence of merging two finance departments, two information departments, restructuring the divisions [...]. A financial black hole appeared really. [operating consultant 1]*

As the fiscal position of the Trust became increasingly difficult, Central implemented a cost savings plan, from which *no department [was] immune [D 9]*. For the orthopaedic department, this resulted in workforce reconfiguration that included a reduction innon-operating consultant hours.

*Moving into fracture clinic*

*A capacity and demand evaluation* *[D 10]* had revealed excess capacity in the orthopaedic non-surgical workforce, and to mitigate, several physiotherapists moved into the fracture clinic at the hospital to help manage the low-level trauma workload that *absolutely swamped* the service *[operating consultant 2]*. The fracture clinic work was perceived by the operating consultants to be …*well within the remit of* *[the physiotherapists],* as one surgeon explained.

*Most of the stuff we see in fracture clinic is relatively minor …needs a bit of time in a splint or a plaster …and it gets better …so it doesn’t matter who sees the patient, almost. [operating consultant 2]*

Consequently, a physiotherapist training post within the fracture clinic assuaged pressure on the medical workforce and provided career development opportunities for the senior orthopaedic surgical trainees.

*So some of our registrars, […] we tried to pull them out of fracture clinics, doing routine, lower-level stuff, to doing …more operating and …making their CV a bit more up to spec in time for their consultant appointment. …So if we can offer that to them …people want to come [to work at Central]. [operating consultant 2]*

For the physiotherapists, fracture clinic offered a new area of work in which to advance practice, including non-medical prescribing:

*...we’re kind of on the registrar rota …so assessing whatever comes through...deciding on the management plan ...ordering investigations and referring on for surgery …[and prescribing] maybe once a fortnight … [physiotherapist 3]*

Being able to prescribe medicines was …*a* *handy thing* in fracture clinic, *[operating consultant 2,]* valued by the surgeons for its contribution to the treatment of acute conditions.

*For me its post-op pain and post-trauma pain …you can’t say ‘Go and see your GP’, it would be terrible to do that [sic]. [operating consultant 1]*

However, such prescribing opportunities were not available to all the physiotherapists as a plan for a rotational post stalled:

*Twelve months came and went, and then it got to two years and still nobody has rotated in …maybe the surgeons …got comfy with the clinicians …because …why train anybody up when we’ve got two that are working quite nicely … [physiotherapist 4]*

Despite curbed opportunities to increase patient access to medicines within the fracture clinic, the tacit knowledge embodied in routine healthcare hospital practices helped resolve another challenge to physiotherapist prescribing, namely the lack of the ‘right’ prescribing pad**.** A prescription pad is an essential tool within the legal and organisational framework of prescribing, and crucially hospital outpatient prescriptions avoid a dispensing fee. However, in the period following integration, the physiotherapists reported uncertainty about which prescription pad to use.

*We … physically moved buildings, and employer …and we were never issued with any other forms. Then we were issued with some pink forms, but they were still PCT forms …and we debated could we use those as we don’t work for the PCT …we weren’t sure what to do. So for a full 12-month period I did not issue a single prescription, and to my knowledge none of my mates did either. [physiotherapist 2]*

Delays in newly qualified prescribers receiving pads have been reported elsewhere (Courtenay et al. 2007) and are usually resolved at an organisational level. However, in this case, it was one of the physiotherapists working in fracture clinic that acted as the conduit for organisation-specific knowledge to cross the boundary between the hospital and community setting.

*When Ann1 was working in fracture clinic she said ‘Oh, I just write these out …the hospital prescriptions, A4 pads, duplicate copy …’ [so] I wrote a prescription …and the patient went to our pharmacy and no one’s ever come back. [physiotherapist 2]*

*Moving into the elective surgical clinics*

In addition to the fracture clinic work, some of the physiotherapists took on work in the elective surgical outpatient clinics alongside the orthopaedic consultants as … *the 18-week targets weren’t being met* *[physiotherapist 4]*. This move was underpinned by the operating consultants’ belief that …*if they [the physiotherapists]* *embedded in our …clinics we could see more patients …and speed up the time … [operating consultant 3]*. A rhetoric of 18-weeks, impelled by Monitor’s requirement that the Trust report regularly on its progress towards delivery of the target, circulated within the new orthopaedic service, and led to staff involvement in weekly service manager meetings during which …*things like 18-weeks … [were looked at] very closely* *[physiotherapist 1]*.

Regular monitoring of the 18-week RTT had been a familiar practice for the physiotherapists in the CATS. One physiotherapist recalled that …*week to week …you’d be presented with a list of your patients, …patients …in green …meant that you were hitting targets …if they were amber then they were close [physiotherapist 5].* This surveillance had resulted in behaviour change that aligned with the rapid access ethos of the community service as the manager explained: …*once they saw the status at a glance …the clinicians …started to take ownership … “I’ll flex, I’ll do another”*.

In the new orthopaedic service at Central, the physiotherapists’ connection with the 18-week target remained strong. One physiotherapist expressed the target as being …*in our core*, even though feedback about the physiotherapists’ performance had become more distant following integration.

 *We don’t really get the data …that we used to … [physiotherapist 1]*

The physiotherapists move into the elective outpatient surgical clinics …*probably reduced everyone’s capacity [to do work in the general triage clinics] by …15% … [physiotherapist 2]* and impacted on another physiotherapist prescribing practise - reviewing patients for whom prescribing had been initiated. The physiotherapists had been asked to *…prescribe and review …[physiotherapist 1]* during their prescribing training, but this created a tension for some: *…my follow-up slots are very scant, I only have two a week …[physiotherapist 4]*, leading to prescribing work sometimes being re-directed to the service pharmacist:

*…a lot of the neuropathic agents[drugs to treat neuropathic pain associated with musculoskeletal conditions] patients are referred to me ...I think they [the physiotherapists] perhaps feel that it’s easier for me to see that patient …because …I can see them and …follow them up [sic]. [pharmacist]*

Target pressures within the service meant that the service manager was …*not* *happy to give …more follow-up appointments* *[physiotherapist 4],* although for one physiotherapist non-prescribing worked well alongside a limited number of follow up appointments.

*It’s not a problem …having one follow-up a week …most of my patients I only see once because …if there’s not any orthopaedic intervention I usually ring them …so if I’m never going to see them again I write to the GP and ask them to do their meds review [sic]. [physiotherapist 3]*

This practicealigned well with the prescribing beliefs of the acute consultants as one surgeon stated:

*I don’t go round prescribing Gabapentin or Amitriptyline [individual medicines used to treat neuropathic pain]*, *[the physiotherapists would]* *be mad if they did.* *[operating consultant 3]*

One operating consultant described the nature of the tasks in the surgical outpatient clinics.

*The* *decision-making is* …*about is this patient a surgical candidate …seeing people post-op …dealing with complications …higher level stuff that we’re used to dealing with as consultants and our senior team [sic].* *[operating consultant 2]*

In this setting, prescribing a new medicine was a practice that happened *not very often at all* *[physiotherapist 3].* One physiotherapist found the pace of the elective surgical clinics constrained prescribing: …*it’s all so fast and furious …the nurses are pushing ‘em through the door at you […] the thought of trying to undertake that in that clinic would be a nightmare [sic]* *[physiotherapist 4]*. For another, the different configuration of workspaces and the distribution of staff facilitated more traditional prescribing behaviours, including getting the doctor to sign a script and non-prescribing.

*There could be two or three doctors in the same room as me …might as well get a doctor to sign the prescription … [physiotherapist 2]*

*A young lad I listed for a scope of his knee … said I’ve run out of Co-codamol. I said … you’ll have to see your GP, ’cos I know that’s what [the acute consultant] would have said … [physiotherapist 2]*

The isomorphism identified in this last extract is common in organisations (DiMaggio and Powell 1983) and leads to a homogeneity of practice. For example, Mizrachi et al. (2005) observed practitioners of complementary medicine taking on biomedical behaviours when interfacing with biomedical practitioners in order to gain legitimacy and acceptance, even though these contrasted with their own beliefs about patient care. In our case study, physiotherapist isomorphic behaviour was governed by normative orthopaedic surgical practices, prompted in its expression by uncertainty over prescribing:

*What am I supposed to do? Am I required to write prescriptions for …patients, or should I send every one of them back to their GP? Should I do what the consultants do? Should I not really enter into prescribing at all*? *[physiotherapist 2]*

*Starting a new spinal pathway*

The final act anchoring the grid of intelligibility was the instigation of a new spinal pathway at Central, initiated by one of the physiotherapists with a sub-specialism in spinal pain. The pathway sought to direct urgent patients with benign spinal pain to the non-surgical arm of the service, as …*a fifth of …the urgent call-outs from the orthopaedic team to A&E were spines [and]* …*nobody at the hospital* *does* *spines [physiotherapist 1]*. The non-operating consultant explained.

*A&E had nobody to send them to …quite often …they end up in the middle of the night, they get seen by a very junior doctor who …admits them and they don’t really need to be admitted, so they were blocking beds.*

The spinal pathway was successful in reducing hospital admissions for back pain and added to the portfolio of services offered by the new orthopaedic department. However, while this redirection of work eased tension in one part of the service, it accentuated pressures in another. Capacity In the non-surgical arm of the service was stretched *…so today I’m overbooked …tomorrow I’m overbooked [physiotherapist 1]*, and the number of complex patient presentations was perceived by the physiotherapist to have*…become more concentrated*,causinggreater dependence on the service’s prescribing pharmacist, particularly when controlled drugs were involved.

**Physiotherapist 1**: *…because …you’re using morphine [Butrans patches] I would like the help of our pharmacist …would you be alright to see … our pharmacist?*

Similar to other non–medical prescribers, the physiotherapists expressed concerns about addiction to, and dependence on, strong prescription opioids (Tilley et al. 2019), and perceived prescribing practices relating to these drugs to be beyond their scope of practice: *If it goes up to Morphine, I absolutely pass it to* *[the pharmacist] [physiotherapist 1]*. One physiotherapist stated that *you’d have to know what you were doing [physiotherapist 2]* to reduce a patient’s dose of morphine, although the service pharmacist reported it was the physiotherapist’s lack of familiarity that encouraged onward referral:

*…they are concerned that patients are on really high doses of opiates …but sometimes it’s just they’re not familiar with the patches and they’re actually quite a low patch …in strength, or it might be that they’re on it for other pain reasons. [pharmacist]*

Previous studies have highlighted the importance of supportive work inter-relations to nurses prescribing for people in pain, with physician and pharmacist contact highly valued (Stenner and Courtenay 2008). Mentorship of the physiotherapist prescribers had originally been provided by the non-operating consultants in the CATS, but following service integration there was a perception that the role should transfer to the operating consultants, as the non-operating consultant explained.

*The [operating] consultants feel that now we’re integrated they [the physiotherapists] should go to each consultant for the specific problem*.

The orthopaedic surgeon acting as clinical lead in the service had taken over the physiotherapists’ competencies with the move of some of the physiotherapists to the fracture and elective clinics.

Although professional development sessions were still timetabled, they were less frequent and the physiotherapists perceived them to be less useful.

*When we were [in the CATS] … everything was focused towards our type of area…now...I go to an audit meeting at the hospital and …sit and listen to a talk about paediatric hip fractures that isn’t …relevant to me in my job. [physiotherapist 5]*

This change in training emphasis appeared to align with the surgeons’ ideas about the future role of the physiotherapists within the service.

*They [the physiotherapists] should be in our fracture clinics, elective clinics. Potentially they could have a role on the wards …a role as surgical assistants …so they could really become a major part of …a hip …or …knee unit. [operating consultant 3]*

While there was an intention that prescribing support would be available from the operating consultants: .*..we’re there, you know. I wouldn’t be expecting them to do it in isolation,* it was anticipated that this support would be predominantly about surgery rather than prescribing medicines:

*It’s difficult to think of a scenario where there would be a difficulty with prescribing per se; it would be more about decision-making for surgery …and that’s the discussion that they need to have with you rather than should we be prescribing this drug or not. [operating consultant 2]*

Prescribing support for the physiotherapists therefore came predominantly from the specialist pharmacist. She had worked with the physiotherapists in the CATS and was the *person you go to if you’re not sure [physiotherapist 3],* providing feedback to the physiotherapists about the patients they had referred. For the physiotherapist doing the spinal clinic work, time with the pharmacist provided opportunities to develop prescribing knowledge, although this was timetabled during administration sessions …*as we don’t have a clinic slot like that* *[physiotherapist 1].* However, integration had also changed the pharmacist’s role within the organisation, leading to new perceptions about who should be supporting the physiotherapists.

*I don’t feel that that’s necessarily my role any more …while we were in …the PCT, I was happy to advise them [the physiotherapists] because I was the only one there for them … now if they ask me certain questions I just refer them [the physiotherapists] back to* *[the non-medical prescribing lead at the Trust].* *[pharmacist]*

One physiotherapist, summed up the current state of play:

*I’m not sure…that it [physiotherapist prescribing] will be going anywhere within this service, the way it is run now …we need ...more follow-up capacity and prescribing slots, we need …more support mechanisms and governance …and ...until controlled drugs can be signed off by independents then we’re going to need support still in a supplementary role [sic]. [physiotherapist 4]*

**Discussion**

Pharmaceuticalisation is both a component and an outcome of a pharmaceutical regime within which prescriber subjectivities are highly influential (Moloney 2017). Factors shaping these subjectivities extend from the macro to the micro-level of healthcare, but appear to vary between doctors and non-physicians. For example, Ali Murshid and Mohaidin (2017) emphasise interactions between marketing, drug characteristics, cost/benefit ratios and patient characteristics, in addition to pharmacist factors, as influential in physician prescribing practises, while for physiotherapists, time constraints, limited capacity to follow patients up and restrictions in controlled drug prescribing have been reported (Carey et al. 2017). Yet how these factors emerge and intertwine to exert their effect on practice and affect pharmaceuticalisation has to date remained largely invisible. In this study, we unveil a complex web of historically-contingent discourses, inter-related actors, institutions and artifacts governing and shaping physiotherapist prescribing of medicines in an orthopaedic service in an English NHS Trust.

Delivering integrated care has been a key driver in English health policy for several decades (Hughes 2017). Yet in Central’s new orthopaedic service, this rationality was constrained by deep-rooted and dominant discourses: target driven productivity and fiscal restraint, sharpened by Monitor’s performance management of the Trust in response to its deviation from normative authorisation procedures. This finding concurs with Jones (2017), who observed the resurgence of pernicious central targets when attempts to enact integrated care policy in the NHS in England were undertaken. The discourse of targets at Central was propagated and sustained by surveillance of the 18-week RTT; a disciplinary technology that traversed the space between the state and the clinic to govern conduct towards greater productivity. For the physiotherapists, this was government at a distance (Dean 2010), a diffuse form of surveillance optimised in its effect through physiotherapist beliefs and past working behaviours that inculcated a professional duty to enhance productivity (Moffatt et al. 2014). For the acute surgeons, surveillance of the surgical end of the pathway was direct, and effected a move of the physiotherapists from general triage clinics to surgical elective clinics. Once in these surgical spaces, new practices could be formulated, supported and encouraged by another disciplinary technology - normalising judgement (Foucault 1991). Time pressures, reduced follow up capacity, limited dialogue about prescribing between the physiotherapists and operating consultants, and the expectation of a surgical outcome, were overlain with uncertainty about the ‘correct’ prescribing behaviour. This led to the task of prescribing medicines being passed to the GP, thus confirming their traditional practise signature (Norris 2001). Crucially, this limited non-medical prescribing in the orthopaedic service, running counter to the policy agenda and expectation.

Superimposed on the economic and productivity discourses in circulation within the new orthopaedic service was a tributary discourse of safe prescribing; constituted through knowledge about risk associated with the supply of prescription opioids and normative beliefs about human health and productivity (Duff 2015, Shapiro 2015). Sustaining this discourse was a technology of the self – a self-imposed distancing of the physiotherapists from these pharmaceuticals founded in ‘opiophobia’ (Bennett and Carr 2002), underpinned by beliefs that opioid prescribing practises were too risky. Douglas (2002) argues that the concept of risk is socially, historically and culturally influenced. Its meaning is often taken for granted and unproblematised in healthcare settings, although when shared, effects normative practice. Yet opioid prescribing for long-term musculoskeletal pain in the UK is commonplace (Ashaye et al. 2018) and opportunities for improved pain management through healthcare professional exposure to, and experience of, opioid prescribing do exist (Gooberman-Hill et al. 2011).

These discourses and governing technologies described above can be comprehended by using a grid of intelligibility to make visible divergent professional beliefs and understandings about physiotherapist non-medical prescribing, nuanced professional ambitions and historically-specific cultural practices, and the instruments of everyday work through which physiotherapist subjectivities are formed. In Central’s new orthopaedic service, these new physiotherapist subjectivities were mostly *non-prescribers*, contrary to national and local policy intentions.

Underscored in our grid is evidence of medical professionalism - an enduring template in which physicians dominate and acute hospitals take precedence over primary care organisations (Battilana 2011). Medical professionalism has been identified in other instances of non-medical prescribing (Borthwick et al. 2010; Day 2005; Kroezen et al. 2014) and requires both professional and institutional work to preserve privilege. This work was exemplified in this case study through demarcatory strategies - the appropriation of the physiotherapist’s competencies by the operating orthopaedic surgeons, and an educational focus on surgery; exclusionary tactics such as limiting physiotherapist opportunities to work in the fracture clinics; and knowledge claims about ‘higher level’ work in the surgical orthopaedic outpatient clinics. These coalesced to demarcate the ‘correct’ knowledge base and jurisdictional boundaries of the physiotherapists work, thereby weakening the link between the physiotherapists and the practice of prescribing medicines.

**Conclusion**

Despite legal jurisdiction for physiotherapists to prescribe medicines, our case study paints a picture of limited pharmaceuticalisation following the expansion of physiotherapist non-medical prescribing in the UK. This runs against expectation, and the prevailing debates about pharmaceuticalisation that suggest that physiotherapist non-medical prescribing should support increased use of pharmaceuticals in society. We propose that Foucault’s notion of governmentality, and the concept of a grid of intelligibility, can usefully be employed to trace the capillarisation of power circulating between organisations and the professions working within them and show both the mechanisms and effect of discourse in the constitution of prescribing practice. Our case study provides an interesting counter example of the limits to the expansion of prescribing and pharmaceutical use in an NHS setting in England.

**Footnotes**

1Pseudonym

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