"Small Fishes in a Big Pond?": An Exploration on the Current Role of the Community Pharmacist and Local Pharmaceutical Services in England

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1. Introduction

A noticeable discrepancy exists between National Health Service England's (NHSE's) plans for preventive care involving community pharmacy and the public perception of community pharmacy and the local pharmaceutical services (LPSs) it provides. This divergence was noticed by the researcher during her work experience in an English pharmaceutical company implementing LPS in community pharmacies. The research aims to investigate initially the current role of community pharmacists (CPs) in relation to NHSE's proposed integration with general practitioners (GPs). Tuten and Urban's[1] framework in business-to-business (B2B) integration has been utilised to compare the relationship between CPs and GPs and to understand how healthcare professionals' relationships differ from business cooperation. Moreover, the researcher decided to explore the topic of innovation in LPS. The framework developed by Omachonu and Einspruch[2] has been the basis for understanding healthcare innovation. However, Rogers's idea of diffusion of innovation (1995) has been considered to assess whether LPS follows the same pattern as business-technology-driven innovation. Finally, since LPSs are commissioned to tackle health disparities and to provide patients with wider choice and easily accessible preventive services, this study investigates whether health inequalities are in fact reduced by the presence of LPSs.

To define more precisely this study's focus, the three kinds of clinical services delivered by community pharmacies must be clarified:

•National commissioned services or national services are terms used to refer to those services commissioned by NHSE nationwide.

•Private services are services offered independently by community pharmacies. Thus, these services are not free of charge to the patients since they are not sponsored directly by NHSE.

•Local pharmaceutical commissioned services (LPSs) is the term used to describe the small-scale services commissioned locally by (mainly) local authorities (LAs) and clinical commissioning groups (CCGs). They are provided in response to local needs, such as the anticoagulation service[a]. Community pharmacies represent the most accessible point of care, with their presence offering support to the NHS to fight health inequalities.

National Health Service England has recognised the positive effect of allowing community pharmacies to provide the above-mentioned services, and it has developed the pharmacy contractual framework for community pharmacies. The Community pharmacists and their teams provide essential, independent checks and balances within the medicines supply chain, intervening to correct prescribing errors and deal with other issues that could otherwise put patient safety or outcomes at risk. They also use their expertise in medicines procurement to deliver purchasing efficiency, helping the NHS manage the total cost of medicines[5]. The community pharmacy is a major setting for health advocacy in the community[6], now delivering a wide range of services from the traditional prescription dispensing to clinical services. National Health Services England is assigning major efforts in preventing avoidable illnesses, improving the health of the nation while sustaining the government's financial austerity policy. To do so, more responsibilities are given to the local health government entities (LAs and CCGs), which aim to offer integrated services for communities by understanding their primary clinical needs. In this context, community pharmacies are regarded as the way to reach more patients and to improve their wellbeing.

Research Questions:

The research questions are based around the researcher's personal experience in dealing with the implementation of LPS, and a review of the existing health literature which does not include discussion on the present role of the community pharmacy and LPS. Therefore, these topics have been explored with the guidance of business concepts, which aim to fully uncover the following research questions:

1. What is the current perspective on the role of the Community Pharmacist in delivering clinical services and the integration with the General Practitioner?
2. In what form is innovation present in Local Pharmaceutical Services (LPSs)?
3. How do Local Pharmaceutical Services (LPSs) support the fight against health inequalities?

In investigating these questions, this study reveals the currently missing integration between healthcare providers, despite NHSE's objectives reported in the "Five-Year Forward View" (5YFV)[7], in implementing integration and ensuring efficient use of the CP in delivering preventive services. It has been discovered that competition in delivering clinical service is one of the reasons for the lack of a strong relationship between CPs and GPs. The concept of innovation in LPS turned out to be linked to the accessibility of new services by the population rather than the introduction of a completely new service derived by technology. However, "technology" has been used as a key term by the interviewees when addressing the issue of integration among healthcare providers: A new form of communication about patients' health driven by technology is suggested to be employed to ensure effective communication among providers. This solution would also support the development of integration among all healthcare providers. LPSs are commissioned to meet the needs of the population, but their variability in regard to what is offered causes them to have a high number of local commissioning services which are not advertised correctly, leaving the public unaware of what is offered in the pharmacy. This widespread lack of knowledge is a further lost opportunity for expanding preventative measures, since they are underutilised as a result.

2. Context

The United Kingdom health care system is characterised by the only state provider named National Health Service (NHS). The NHS health care system makes citizens recipients of free care, regardless of their socioeconomic status, while simultaneously attributing to them the role of contributors to single-payer insurance[8]. NHSE has

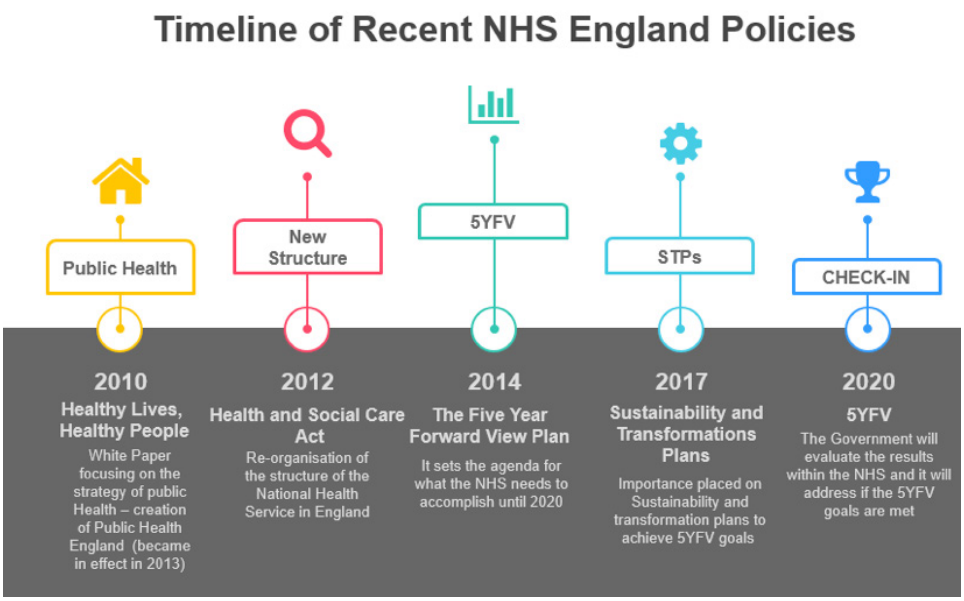

Figure 1. 10-year Timeline of NHS England Policies Changes

encountered many issues, four predominant ones being as follows: financial pressure, an increasingly unhealthy population, rising waiting times, and health inequalities. NHSE was supposed to be a small health care system, but now it has grown, so the short-term financial pressure is a major challenge in NHSE operations. The budget gap increases year over year; it has been forecasted that the gap could deepen to over £10 billion by 2021–2022[9]. The UK is experiencing a huge rise in an ageing and multimorbid[b] population while spending just 8.4% of its GDP to fund NHSE. The Office of National Statistics[11] reported 23% potentially avoidable deaths in England and Wales. These deaths, usually linked to heart disease, stroke, and cancers, can be avoided by the patients' pursuing a healthier lifestyle. Just in England, the costs of 'lost productivity from premature mortality and sickness absence resulting from physical inactivity' has been estimated to be £6.5 billion per year[12]. Moreover, there were 3.8 million patients waiting for treatment in June 2016, the most patients reported waiting since 2007[13]. Queuing is the control element for care access in NHSE. Without it, everyone would have instant access to care at no cost. Arguably, a lack of restraint would lead the UK population to overuse the health care system, broadening the NHS's financial gap even further. However, the presence of such long waiting times does cause mental and emotional distress for patients[14]. Once the element of time is involved, there are accompanying opportunity costs. Improving patients' waiting times leads to better efficiency, thereby reducing negative impacts on patient welfare from queuing and improving their outcome satisfaction[15]. 'One size doesn't fit all'. This simple statement probably best expresses the NHSE's different services, established throughout the counties to deal with health inequalities, which are defined as follows: 'differences between people or groups due to social, geographical, biological factors. These differences have a huge impact because they result in people who are worst off experiencing poorer health and shorter lives'[16].

To overcome the previously mentioned challenges, NHSE has revolutionised its modus operandi, allowing a devolved structure to exist that can effectively meet the clinical needs of a specific area. The NHSE has set up its goals in the 5YFV and plans to receive efficiency savings that will allow it to face the 2020 budget gap by shifting the provision of services to preventive measures and by empowering patients, carers, and communities with their health through accessibility and education about conditions and personalised care budgets. In 2012, the Health and Social Care Act (HSCA)[17] introduced the creation of local bodies across England, called Clinical Commissioning Groups (CCGs). A CCG's role is to improve the health of the area in which they operate while running on efficiency savings in favour of NHSE. The services are commissioned to hospitals, voluntary organisations, and—of central interest to this research—community pharmacies. As NHSE aims to focus on prevention, clinical services in community pharmacies respect NHSE's vision, since they aim to detect illness conditions at an early stage and therefore prevent illness, easing the pressure on GPs and positively reducing the opportunity costs of the GPs. The Community Pharmacy Forward View[18] proposes three core roles indicating what a CP should be:

1.'The facilitator of personalised care for people with long-term conditions',

2. "The trusted, convenient first port of call for episodic healthcare advice and treatment',

3.'The neighbourhood health and wellbeing hub'.

The achievement of the cited goals is an ongoing process supported by the transformation initiatives such as new care and prevention programs developed by NHSE. The Community Pharmacy Forward View is built on the path set by NHSE's 5YFV. The latter argues that change is needed in how healthcare is managed. Preventable illnesses are widespread, and health inequalities are deeply rooted across the country. A new model of care must emerge to ensure that quality care and new and better treatment are available for the population. Thus, pressure on services to meet these demands is building. The primary aim in the 5YFV is prevention, which is an achievable goal if integration of primary care services into the role of CPs is created. NHSE is now working to grant local authorities, CCGs, and local communities more authority and independence in managing the needs of local populations. In this setting, community pharmacies play the critical role of the first point of healthcare advice, where the clinical services delivered aim to prevent illnesses (e.g., flu services), manage chronic conditions (e.g., anticoagulation services), and promote wellbeing (e.g., health check services). In the current context, locally commissioned services ensure that CPs meet the needs of patients by providing well-rounded services. In England, LPSs are free of charge for patients, which should ensure service utilisation and positive health outcomes, such as compliance in disease management in line with NHSE's goals.

3. Review of Relevant Literature

3.1 Developing Integration

Drucker[19] describes difficulties in healthcare management as a 'two-headed monster' to express the idea of conflict between medical and non-medical staff. This idea can be applied to the context of the National Health Service England (NHSE). Since CPs are not directly NHSE's employees, dual complexity in the relationship between GPs and CPs may arise. The two healthcare providers belong to two separate organisations which operate differently, and they offer patients similar clinical services (e.g. Flu vaccination). Therefore, the integration process may result in difficulty if competition is present. For instance, in relation to LPSs,

clinical CCGs and local authorities open the bidding process to any qualified providers (AQPs), either pharmacists or doctors, to increase the patients' choices. Hence, the topic of creating business relationships among healthcare providers is explored in relation with the competition that may exist in this environment.

3.2 Healthcare & Business Innovation

Healthcare innovation framework proposed by Omachonu and Einspruch2 is presented as lens through which to visualise healthcare innovation. The characteristics of innovation are traced as described in certain business models. In this discussion, the healthcare innovation framework is assessed in contrast to business innovation models. It is argued that healthcare innovation follows similar ideas to those expressed in business innovation models. The same aspects are reconsidered in light of the dissertation's findings, specifically in relation to the clinical services delivered by the CP.

The provision of health care must be driven by innovation to ensure effective care for patients, as planned in NHSE's business objectives. This research considers the presence of innovation in clinical services delivered by the CP and their characteristics against the conceptual ideas of healthcare innovation. Innovation is defined 'as those changes that help health care practitioners focus on the patient by helping health care professionals work smarter, faster, better, and more cost-effectively'[20]. The healthcare innovation present in clinical services and delivered by CPs can be conceptualised within the framework of healthcare innovation (Figure 2). This framework pictures health care innovation as the result of two external forces, providers and patients, whose needs and capacity of adaptability are the inputs for innovation. However, their role is reciprocal: They are both the catalysts and the recipients of innovation. Innovation must answer questions about how the patients are seen, how they are heard, and how their needs are met.

Taran et al.[21] stated innovation is the change that occurs in the way businesses operate. Therefore, they analyse the level of change to describe the level of innovation via a three-dimensional approach, first being the innovation's radicality or the level of newness.[c] The second dimension comprises the reach of the innovation. So, it poses the question of whether the innovation is new to the company or to the world. The third and final dimension is an innovation's complexity, which is assessed via the change in the organisation's building blocks. The ideal types of innovation are related to their success rates, and success seems to be determined by radicality and reach. On the contrary, complexity does not admit of strong evidence to explain the differences between success and failure. Taran et al.[21]'s research introduced the concept of successful innovation, linked by evidence based on the radicality and reach of the innovation. This evidence aligns with the healthcare innovation framework, as one of the purposes of healthcare innovation is healthcare outreach. In this case, something is defined as healthcare innovation just when it meets the requirement of accessibility. In fact, if innovation is not made commercially feasible for public use, it can't be deemed innovation as it does not present the characteristic of being utilised by the target group who was supposed to enjoy the benefits.

The cycle of innovation described in this chapter follows process improvements rather than disruptive innovation, as often seen in customer goods. In fact, clinical services provided in pharmacies are based upon existing technologies and never undermine the status quo of the firm. Barras[22] stated that the cycle of innovation in services is the reverse of the product-cycle theory. Therefore, the first stage of service innovation is based on the objective of increasing the effectiveness of existing service delivery by designing new technologies. In the second stage, technology is applied to improve the quality of service; in the third stage, technology is seen as the path to reach fully transformed or new services. For example, the anticoagulation management service provided by CPs in England has now introduced novel oral anticoagulants (NOACs), which has meant that routine coagulation monitoring is no longer needed, resulting in lower costs in the long run for anticoagulation management.

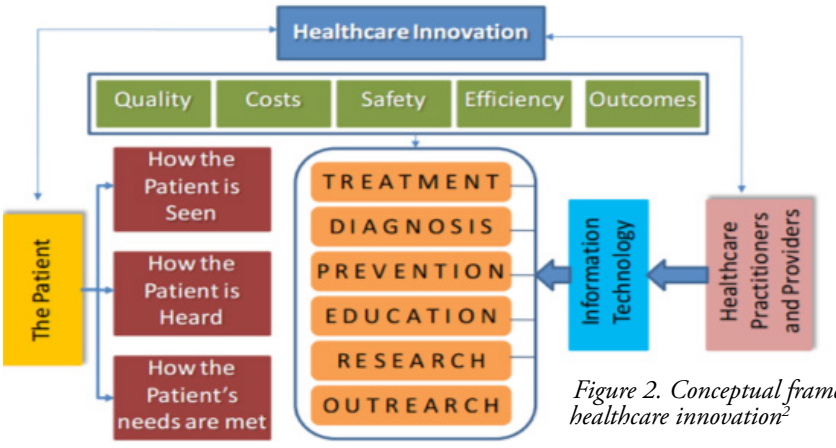

Figure 2. Conceptual framework of healthcare innovation[2]

4. Methodology

The starting point of this research is the experience gained by the researcher working in pharmacy operations and implementing LPS in the community pharmacy stores of a private company, referred to under the pseudonym PharmaOne. This study is rooted in the current community pharmacy and NHSE context. Thus, by analysing the current insights of experienced professionals who cope daily with contextual changes in the community pharmacy field, the lived experiences of the CPs and their employees can be presented.

Interviews were conducted with 11 members of a private pharmaceutical retail company (PharmaOne) and one Clinical Commissioning Group (CCG's senior leader). The primary goal of this research is to evaluate the role of LPS in the current rapidly changing context of NHSE. The topic is mostly unknown by the public and, due to the complexity of NHSE restructuring, is difficult to interpret without first-hand experienced as guidance. As a result, interviews offered the most appropriate method for exploring this low-profile topic. Therefore, the researcher opted for flexible data categorisation using a Thematic Analysis. The emerging themes identified are listed below and are discussed in Chapter 5:

- the role of the CP and their integration with GPs,
- innovation in LPSs, and
- how healthcare inequalities are tackled by LPS.

5. Analysis and Discussion

The NHSE has recently undergone a devolution process aimed at empowering localities to directly address local needs and increase preventive measures, to ensure a healthier population. Within the local needs context, the topic of innovation present in local pharmaceutical services (LPSs) is explored, along with how health inequalities are addressed. Firstly, the discussion will focus on the integration between CPs and other healthcare providers. An account will be provided of the perspective of CPs of their working realities, as seen through the eyes of the interviewees. Secondly, the concept of innovation as an element present in LPSs will be unpacked about how innovation is present in LPSs and how this affects the population. Finally, the topic of health inequalities will

be addressed in relation to the role of LPSs via interviewees' experiences.

5.1 What is the current perspective on the role of the CP in delivering clinical services and the integration with the GP?

As noted in the literature review, the NHSE's plans foresee integration between healthcare providers. There are many advantages to this proposed integration, from reducing service delivery pressure from GPs, to heightened well-being throughout the population via delivery of clinical services in community pharmacies. However, before commenting on provider integration, the role of CPs and how this role supports the NHSE plan in delivering clinical services must be understood. Firstly, the role of the pharmacists will be discussed regarding whether integration is feasible based on their ability to deliver clinical services. A discrepancy has been noted between what CPs can do and the population's perspective of their ability. The presence of integration between healthcare providers, mainly GPs and CPs, will then be assessed via the framework developed by Tuten and Urban1 to recognise whether healthcare integration follows the same antecedents used to build successful 'business to business' (B2B) cooperation.

5.1.1 'People tend to overlook what a community pharmacist can do for them' (Nazli)

Before commencing integration between healthcare providers, such as GPs and CPs, individuals must have a strong confidence in the ability of CPs to deliver clinical services. All interviewees affirmed the ability of the CPs to deliver clinical services. Thus, on the basis of this ability, the NHSE hopes to reduce the pressure that GPs currently face and to simultaneously improve the health of the population by encouraging access to preventive care[23]. Increased responsibility is to be given to the CPs via health policy changes, so that they can offer additional clinical services. This action will also lead the CP to be considered a healthcare provider, and CPs will theoretically be included in the healthcare provider integration process. CPs, via the delivery of clinical services, can offer and promote health screening and overall well-being evaluation. They can form the front line to improve the health of the nation, as described by Roberta:

'I think that's where the way community pharmacy is going, and actually a lot of the pharmacies are looking to almost change the way that we're working and offering more clinical services. Pharmacies made that the right thing for the patient. Second, it makes pretty [sic] much more sense for customers. I guess an example is the many community services delivered which are the same as the ones delivered by GPs, at the moment, and not taking anything away from them'. (Roberta)

In line with Roberta's view, and as expressed in Chapter 2, the role of CPs changed radically, with higher responsibility being placed upon delivering clinical services. Eades, Ferguson and O'Carroll[24] concluded that although health policy changes support increased responsibility being given to CPs, the pharmacists themselves were not confident to deliver the clinical services. However, the present study found complete agreement between all interviewees that CPs are confident, willing and ready to deliver clinical services; 'We're working and offering more clinical services' (Roberta). The ideology behind pharmaceutical care symbolises the holistic nature that pharmacies are trying to achieve. The pharmacist's role, rather than being seen as sharply defined, could support services and the overall well-being of the community. This broadening of the CP's role represents what can be considered a sign of 'professional maturity,' stepping into holistic patient. All the interviewees agreed that the pharmacist is able to take on more responsibility in the aftermath of becoming the frontline of prevention and ensure welfare gain:

'We want to support the NHS agenda. Obviously, we are aware of the ability and challenges within the NHS. They're trying to commission some of the services. I think the pharmacies are relying correctly to [offer] support [in] the way they can […]. I suppose because the pharmacies are open more hours, they are able to reach the population easily. It makes sense for the NHS to commission that services that can be delivered by healthcare professionals. I think at the same time, the pharmacies are really interested in supporting the NHS agenda because community pharmacists have the education and the skills to do so'. (Nazli)

Despite the potential identified in the CP's role, which was shared by all professionals interviewed, the wider population does not hold a similar view. Iversen, Mollison and MacLeod[25] reported, regarding the public view of the role of pharmacists, that while customers seem to appreciate the role of the CP towards a healthy-living plan and supporting the work of GPs, they do not seem to fully appreciate the ability of the CP to provide extra services in relation to medicine management. Over 15 years later, and after all the policy changes implemented by the government, the interviewees agreed that a mismatched perception of the CP's role exists:

'I think a lot of it comes down to letting patients know that pharmacists are capable of doing these things. People see that a pharmacy has different types of medicine, but they don't always realize that they can go there for other things, such as the flu vaccine. I think that it's educating the population: go to your pharmacy for advice and services'. (Leonor)

In summary, a dichotomy exists regarding the CP's role. The evolution of the CP's responsibilities and the changes implemented by the NHSE, both in clinical terms (high numbers of LPSs commissioned and independent prescribing) as well as in the compensation framework implemented, have allowed the role of CPs to be shifted towards patient care. However, this extension has not been fully appreciated by the customers, as they do not realise what the CP can offer them. It has been postulated that the pharmacy culture must adapt in order to foster the implementation of practice change[26]. Thus, although the health policies provide CPs with the opportunity to deliver clinical services, customers and clients have not understood this cultural change and believe the CP is mainly a 'medicine dispenser.' Therefore, prior to addressing the topic of integration, a clear issue must be highlighted from the data, that health policy may change but a shift in patients' perception of the true abilities and readiness of the CPs to support their health is needed to fully prepare for integration. The following section will explore the current situation regarding healthcare provider integration and the key conclusions drawn.

5.1.2 'There is a role that is missing to facilitate community pharmacy across primary and secondary care' (Ainhoa)

Healthcare integration is the development and implementation of interconnected working relationships between providers aiming to enhance population health. Schindel et al[27] conducted a study based on the perceptions of the pharmacists in the eye of the community after an extended role, in terms of clinical services delivered, had been implemented. The public embraced the benefits in relation to the CP's ability to perform them due to legislative changes. As discussed in the previous section, the legislative changes desired by the NHSE aim towards healthcare-provider integration. Integration is currently a priority in many countries; however, none have developed a comprehensive model. The clinical benefits of integration have already been studied, from palliative service care[28] to the successful management of dyslipidaemia[29]. Examining the concept of integration purely from the business perspective, it was evaluated whether NHSE healthcare integration was created following the same pathway used for B2B cooperation. Tuten and Urban[1] identified the antecedents of a successful B2B

Tuten and Urban (2001)	Interviewees	
Desire for lower costs, e.g., reductions in duplication of effort, paperwork and inefficiency	'One way to avoid that higher cost is to involve pharmacy more but because of that it means that some of those role boundaries start to blur and GPs are independent contractors to the NHS and pharmacies in the main are mostly run as corporate bodies or private individuals.' (Matthew) 'A lot of services are provided in hospital or provided by a GP surgery, which actually could be provided by community pharmacy. Transforming the way that you provide services and making sure these services are provided where the patients need them, but also by a professional that can provide it, as opposed to getting the most expensive professional to provide it, will free up money for community pharmacy and the services. It's about shifting where services are provided from' (Ainhoa)	✓
Providing increased service—such as meeting customer needs better and increasing convenience	'Pharmacy has been able to show what it can do in terms of being closer to the patient, quicker to respond to health conditions and like doing a bit more around the prevention of the flu vaccination' (Jude) 'I think, well not think, I mean the integration across the whole of the healthcare providers is key, because you can't just in isolation look after an individual. Community pharmacy has probably…. limited access to understanding the whole healthcare needs of that individual. It's actually having that collaborative approach with those healthcare professionals, we need to refer as appropriate and [provide] support for the appropriate' (Stella)	✓
Improving performance indicators—including sales, market shares, and profitability	'When you are delivering service x…there's a commercial reason to do it in a pharmacy you see the till. In a GP's surgery, you don't see the till' (Jack) 'Pharmacists would be looking to increase their commission services, they get remunerated to offer them' (Ainhoa)	✓
Increasing product/service quality	'We also have a local enhanced service for supplying quite unusual drugs for people who are dying, palliative care services. When patients are in their last few days or weeks of life, they need some really quite strong painkillers and some sickness medication and these are products that are normally stocked in pharmacies' (Ben -NHSE) 'There are some services that a pharmacist can do that doctors are doing a lot more of or anyone else in the practices like flu or like anticoagulant, we can do that a lot easier and quicker in our pharmacies. We've proven that and we've got evidence on that and how it's so much easier, more accessible, and frees up the GP's time and actually, in that case, it does make a lot more sense for some clinical services to be done in pharmacy' (Roberta)	✓
Gaining various benefits of a relationship with a partner—synergy between firms, and a trustworthy partner.	'The GP understands, where the pharmacists can really help them and support them with their patients, the GPs are understanding what services are available through the pharmacy like your vaccination service' (Jack) 'That really strong relationship is more complacent. You also have the opposite end of the scale where GPs are there, fully aware of that CPs are there, all those other pharmacists that would have always and historically stayed with them. More of their [CPs'] patients are coming to them, they're probably effective the moment that they have come in to their surgery 'cause CPs and GPs exchange information. There was another side to that where it took a lot of pressure off them [GPs] since that time. Although, yes, they get less flu jabs, but also that they have more appointments available that the next other patient could be sitting in the pharmacy. It depends on the education I think the treatment of patients is getting better when there is this integration present ' (Leonor)	✓
Enhancing competitive advantage—such as maintaining a discernible edge relative to competition	Not mentioned and not applicable to this study	*X*

Table 1. Similarities and Differences between business framework elements regarding B2B relationship[1] and interviewees' responses concerning healthcare providers' integration.

relationship (Chapter 3). Table 1 showcases the elements cited by Tuten and Urban1 necessary to create a successful partnership in parallel with the interviewees' responses when asked about the relationship between GPs sand CPs.

Integration leads to the clinical advantage of patient care, in addition to the benefits of efficient saving. Almost all the antecedents discussed by Tuten and Urban[1] were mentioned in regard to the relationship between CPs and GPs. The business advantages of cooperation between providers are clear to experienced professionals. Interestingly, the interviewees did not mention the final antecedent. The reason for this may lie in the characteristics of the questions asked. This research investigated integration within the healthcare market. In a Beveridge system, as with the English example, competition was introduced by the government based on quality, as quality is higher in competitive markets[30]. Therefore, clinical services (e.g., anticoagulation) will be awarded to the most qualified provider. Thus, gaining a competitive edge when offering clinical services does not fully reflect the business competition characteristic of self-interest. Healthcare in a Beveridge system is seen largely as a right provided by the government rather than goods to be traded. Thus, from a purely theoretical perspective, market competition should not be present in healthcare provider integration, as healthcare providers are working towards the improvement of the country's health.

It was interesting competition between GPs and CP was mentioned. The presence of competition has been suggested to be one of the key obstacles that frustrate integrative development.

'If we can get rid of that competitive nature and integrate the ways of working to make it in a win-win for both'. (Jack)

'You get this sense of tension between the professions that sometimes gets in the way, as everybody's struggling to survive a lot of the funding shortages within the NHS'. (Ainhoa)

[In relation to Any Qualified Provider Contract – LPS] 'Sometimes it could be interpreted as a competitive threat, then that doesn't exactly foster an environment of good relations for the healthcare professionals working together'. (William)

It is evident that the presence of competition between CPs and GPs does affect their working relationship. If tension and threat are experienced, full integration may be a more distant prospect than first thought. Therefore, while the NHSE plan for integration between healthcare providers has been conceived as an effective solution to reduce costs, especially in preventive care,

the reality of competition may undermine this plan.

Two further elements were discovered underlying this competitive feeling. Firstly, competition was presented by the interviewees as a lack of understanding between the support of the CP for the NHSE plan to open up patient choice of provider. The NHSE allows companies to offer clinical services as GPs to open up that patient's choice through enabling a fair way to leave the choice of provider to the patient.

'At the end of the day, it is patient's choice whether they go to a GP, whether they go to a health store, whether they go to a local pharmacy. I think with any clinical service, it is tried to be done on [the basis of] fairness, so actually it's not direct referrals to a pharmacy or direct referrals to hospital or GP, but it's done in a fair way for both the provider as well as the patient'. (Roberta)

'I think any qualified provider [contract] (AQP) allows patient choice. It's a mechanism for providing greater choice to patients for the services they need. By qualifying as an AQP provider in accessing services, you are then able to advertise your services to patients. I guess the GP is providing the service and providing the script, so the patient may feel more loyalty to remain with surgery, and it's up to the other providers to sell in the benefits of why the patient could choose [them]'. (Ainhoa)

Opening up patient choice regarding provider has been seen as a way to encourage providers to be more responsive to patient preferences about how and where health care is delivered[31]. Moreover, allowing patients to choose their providers encourages these same providers to respond in improving their quality in order to remain in the market and attract and retain patients[32]. Therefore, allowing patient choice is beneficial to patients, providers and to social welfare gained thanks to the quality improvement of service delivery. Indeed, community pharmacy is transforming, but it still sits in the shadows, and is not taken account of in the national plans.

'Right, community pharmacy is—there's somewhat on the periphery of these changes, GP services are included, but the other three independent contractors' services and primary care are currently not included, although we are just at a point now where we're reaching out to them and starting to have conversations with community pharmacy about how we can bring them in'. (Ben)

"I don't think the NHSE team was planned; they fully realized what pharmacy can do for them. I think very much it's still the primary and secondary care and trying to manage everything through or as much as possible for GPs and the various other ins and outs, secondary care. However, there are some areas that the pharmacy has been able to show what it can do in terms of being closer to the patient, quicker to respond to health conditions and like doing a bit more around the prevention of the flu [with] vaccination'. (Jack)

The interviewees agreed that considering the national plans of the NHSE, community pharmacy potential is being lost since no holistic plan exists to promote its role. When examining the reasons for not including CPs in the wider plans for a primary role, the unhealthy financial state of the NHSE was blamed. The funding priority is the hospitals. To increase the services delivered in pharmacy, a proportion of the budget must be taken from hospital services by, for instance, a diversion of funding that England is unable to afford. Integration may seem an impossible goal to achieve in the short term. However, thanks to insights from an experienced professional working in relation with Manchester Devolution ('Manc Dev'), attaining integration appears to be closer. Manc Dev allows the area of greater Manchester to be in charge of the social and healthcare budget. Due to this responsibility, the commissioner in charge has called for integration between hospitals, GPs and CPs in providing services such as social prescribing and well-being plans. Manc Dev may appear to be the path to efficiently manage integration, offering a way to use underlying assets such as CPs. However, Mach Dev is the only example of healthcare devolution now present in the UK, and it is only now actionable after years of planning. The road to integration may require years; therefore, a short-term solution must be found, especially when Brexit consequences may negatively affect NSHE research and development, as well as its budget[33]. A short-term funding solution may be found to overcome the budget gap; however, this may involve a tax increase, which according to the new government plans will solely support NHS operations[34].

In conclusion, the data obtained here indicates that the path towards integration is more complex than simple policy implementation. Although the benefits of partnerships are appreciated, the presence of competition between GPs and CPs is an obstacle for strong working relationships. While the NHS is attempting to broaden patient choice by assigning clinical services to CPs, this action may unintentionally lead to competition to obtain patients, rather than appreciation for the benefits in terms of service quality and reduction in delivery pressure from a GPs perspective. Moreover, it has been noted that community pharmacies remain in a peripheral planning position. Therefore, integration between GPs and CPs may involve a greater use of resources, either money and time, than originally forecasted by the NHSE.

5.2 In which forms is innovation present in LPSs?

In business services, market orientation impacts the innovation process[35]. This insight also holds true when considering the healthcare environment, as highlighted by the healthcare innovation framework conceptualised by Omachonu and Einspruch[2]. After some consideration of the role of integration, the topic of innovation in clinical services delivered by the CPs was discussed with the interviewees. Interviewees agreed that innovation is present in LPSs and stated the logic behind their answers. It is generally believed that local pharmaceutical services allow innovative treatments to be widely accessible to the population.

'I think locally commissioned service [Local pharmaceutical services] and private services allow for more innovation because they have developed locally. They meet local needs. What you need to remember with the NHS is that it is formed at a local level, and a lot of the care pathways between localities are so different. Rather than changing everything and having a blank sheet of paper, you build care pathways on what's there currently and what the patients are used to, and you try to improve them. Therefore, local commissions and private services can enable you to do that and provide the local flexibility to meet local needs". (Ainhoa)

Ainhoa's claim is supportive of the conceptual framework of healthcare innovation[2], since the role of patients is cited as the reason for why innovation is strongly present in private services and in LPSs. In fact, the framework clearly shows that innovation is driven by how the patient is seen, is heard and how his/her needs are met. Moreover, the idea of clinical services provided by a CP following a service improvement path was confirmed: 'You build care pathways on what's there currently and you try to improve them' (Ainhoa). Therefore, the first stage of the reverse cycle of service innovation (see 22 Chapter 3) is fulfilled. The effectiveness of the service is in fact increased by adding improved elements (applying new technologies) to the existing service rather than via a completely disruptive innovation.

'They [LPSs] absolutely are innovative, […] like self-testing. That I believe, that I'm aware of, is only operated in Bucks field, but as that grows over yet, learns a lot, it may turn out to be the best thing for the patient; it empowers the patient'. (Leonor)

'I think the biggest thing we've seen in regards to innovation is things like our anti-

coag services. In a GP surgery or hospital you have to have a full phlebotomy, blood test, and then the test results get sent off and it could take a couple of days, sometimes maybe even a couple of hours, but [after] a couple of days it comes back, and by then your INR could be over or under and that, [which] could be life-risking. Whereas in pharmacy now, you can go in, have a blood sample taken and get your INR tested there and then within seconds. It's a (sic) 100% proven, so I think that's innovation. I don't think we do enough of it, I think there are so many other things that we could potentially do, whether it's around diabetes or other tests that we can do in community pharmacy that we just haven't gotten quite there yet, but there are other things we can do, and I think anti-coag is a great example of what community pharmacy can achieve. I think independent prescribers in a walk-in clinic in a community pharmacy is an excellent idea, and we'll be doing that, for example, in the anti-coag, but I think we could do it in more. We do offer minor ailment schemes where we can offer antibiotics which is [sic] usually prescribed by a doctor, but you can do it on specific tests. Other services that we do are the throat test and treatment service, which is very new; it was a trial done in London'. (Roberta)

Independent prescribing (IP) and patient empowerment have been mentioned as the most common elements of innovation in LPSs. Empowerment is considered successful in managing long-term conditions in patients with diabetes mellitus, which also positively affects the psychology of the patients[36]. Empowerment is an effective philosophy, yet few programs implement it. Moreover, the innovative aspect of allowing CPs to be prescribers further integrates with the practical necessity of efficient GP time management and improved patient care. Although IP and patient empowerment are innovative elements, the technology behind innovative services in pharmaceutical services is already present. Innovative elements allow service quality to be improved, completing the second stage of reverse service innovation22. LPSs and private services allow technological drive to be provided to the population due to the accessibility of pharmacies. However, the two types of service appear to follow different diffusion curves based on the health policy upon which they rely.

'We take technology which is already developed, where we improved, where we innovate is when we put it in a pharmacy. […] The services which are publicly funded always bring big volumes. In flu vaccination or MUR[d] in the UK where they are publicly fund community fund services, we saw the number of flu vacs. done in-pharmacy multiply by 10%, 20%, 30%. Those are people, so it is multiplied by 10 or 20. It has a huge impact when the service is free or paid by the privileged health system; you really see the number of services delivered increase by a significant amount of time in the population. When you move to policy-based service, you have the typical curves of people who are using your service'. (Nathan)

Therefore, publicly-founded services, as they eliminate any financial barrier in accessing the innovation, see high number of customers utilising the service. It can be argued that, from the moment a service is publicly funded, the patients belong to the majority phase, if compared to Rogers' diffusion theory[37], with no innovators or early adopters. On the contrary, private services, as they are not free of charge, experience that the patients behave in the same way as the customers described by the diffusion of innovation curve by Rogers.

When the topic of innovation was raised in the context of LPSs, the technological advancement of communication between healthcare providers was highlighted. Local pharmaceutical services, such as the anticoagulation service or health checks, require the two healthcare providers to communicate the health records of the patients. There is currently no digital form of efficient communication between providers except for the proposed EMIS[e] solution for GPs. Zerfass and Huck[38] argued that communication is a key factor to innovation management promotion. Being a communication promoter would lead to the simplified sharing of new ideas, technologies, products and services with followers.

'So, you have currently a shift in the population in favour of digital changing the channel. So, the pharmacist has to be part of this shift, or they can really improve their position in the community by being part of this move. If they are not, if they don't do the work, we can imagine that it won't be the GPs, it won't be the pharmacists, but it will be the digital platform that will deal with the health of patients. At the moment, I'm not so sure that it will be beneficial for patients'. (Nathan)

'We're going to use them to do some health checks, take blood pressure, maybe do a diabetes test. Currently, the only way for the pharmacy to add that information to the record is to basically send a piece of paper back to the general practice, and that's not helpful to anybody, really. We do need to progress nationally to a point where community pharmacies can not only access the record but can amend the record or update the record'. (Ben – NHSE)

The pressure to deliver clinical services calls for an effective and technology-driven method of communication. In this era of technological processes, using 'a piece of paper back to the general practice' to update patient records is not only open to breaches of confidentiality, but can also be considered a waste of time for the healthcare professional. Drucker[39] advanced the importance of effective information sharing for healthcare professionals, as they work in a high-level information-based field. Despite CPs delivering clinical services, they are not granted access to patients' health records to adjust their care accordingly, ensure that correct patient health-related information is exchanged, or ensure up-to-date records. The desired technological process would support information-sharing and improved communication between CP and GP, reducing inefficiency and driving innovation.

5.3 How do LPSs support the fight against health inequalities?

Health inequalities have been a topic of health policy discussion for over a century with no optimal solution found yet. The Acheson Report[40] documented the presence of health inequalities in England, which were derived from social inequalities (income, social status). Bambra et al.[41] suggested that social interventions based on promoting the greater well-being of disadvantaged groups may reduce the health gap. LPSs have been contracted to tackle the specific needs of the population, and thus to reduce health inequalities in given communities.

'They tend to find that the local commission services are commissioned in response to a local need, and therefore, by their very nature they're addressing health inequalities. By addressing that need, if you just think of emergency hormonal contraception, that service's very often formation (sic) is in response to high levels of teenage pregnancy in a particular area. To make access to that contraception easier to people, and help contribute to reduce teenage pregnancies, just the standards of very common pharmacy services like that over two years are impacting local health inequality'. (Jack)

The health needs of an area must be understood by the NHSE to allow proper services to be commissioned. For this reason, the devolution action has been significant, as clinical commissioning groups (CCGs) are now in contact with the need of their localities. This has allowed preventive measures to be built that ensure that necessary services are appropriately commissioned. Further, the reasoning behind the concept of LPSs addressing health inequalities is related to the accessibility argument presented by CPs.

"I think one of the key things is—when we talk about inequalities—is the

accessibility, the accessibility of the services, because of the location for pharmacy within, whether it's deprived locations, whether it's here. The different locations, they are literally more accessible to a broader level of the population. That was one of the real key benefits the pharmacy has over [other] settings, whether that's GP practices which are in certain locations, or like literally in certain locations, where you have one large GP practice which actually fulfils the requirements of a significant geographical area. Actually, it may not be convenient for people to get to that, whether it's because of the cost of the travelling, the ease of the travelling, the health issues that they have in getting there, community pharmacy and a larger location just give that accessibility convenience". (Stella)

The accessibility argument referred to by the interviewees is the geographical accessibility to care, which moves further from the health economics access to care hypothesis. This hypothesis, advanced within health economics, relates to the price of accessing healthcare in other countries[42]. As England belongs to a universalised free healthcare system, the access to care hypothesis does not provide a solution to the current health inequalities present in the system. Therefore, the introduction of the geographical accessibility argument in this study may be an additional hypothesis to explore in the fight against health inequality.

Murray's review[43] champions the role of the CPs in enhancing the healthcare of the population, mainly due to their easily accessible presence in deprived areas. The accessibility argument in healthcare suggests that health inequalities are determined by differences in access to care. In countries with universal healthcare, such as England, the accessibility argument may not unequivocally apply[44]. However, the presence of CPs in the consideration of health inequalities and access to care has yet to be studied. Recently, the positive results of better care have been shown via the utilisation of LPSs, such as lowering the rate of teenage pregnancy by introducing an emergency contraception service. Despite the paradigms of the accessibility of pharmacies and the role played by LPSs in focusing on local health needs, health disparities persist, and further reasons for these inequalities have been identified. The first factor relates to the financial pressure the NHSE is facing:

'[Local pharmaceutical services] will certainly help, but they're not going to be the magic bullet that kills the issues that we face. So, it will need a team-based approach from all parts of the system really. […] but the investment in well-being services and prevention services has been shrinking nationally. The changes in 2013 certainly didn't help because public health budget nationally has reduced. What we're grappling with locally is finding ways to use NHS money that's previously been used for care, illness services, and freeing that money up to pay for well-being prevention services. That's the right thing to do, but it does mean that we have to stop doing some things that we currently do. Good examples of that are in prescribing, we've implemented normal policies in last year where we're actually stopping giving certain medications because we've decided they are not a priority and that it upsets people. We deal with complaints frequently about it, but we have made a decision that we're going to dis-invest in some things in order to reinvest in other things, which are of higher priority. That's essentially what commission needs. Commission is about deciding what are our priorities and then put[ting] in contracts and finance and all the support in place so that the priorities that we've decided are the ones that are provided. It actually means stopping doing other things'. (Ben – NHSE)

The financial pressure the NHSE is currently under undermines the commission of preventive services. Simultaneously, the budget will be prioritised to short-term goals, e.g., chronic condition management rather than investing in long-term solutions such as preventive services commissioned to the pharmacies (e.g. LPSs).

"I think this variability—I think they (LPSs) adds costing to the NHS. I think there should be some standard contracts that you can cut and paste clauses [from]. dependent on your specific needs. I think that could be facilitated as a higher level within the NHS. You haven't got people developing contracts up and down the country for the same sort of thing". (Ainhoa)

"The inequality's often associated sort of with schooling, education, and those other areas, or possibly the long you have to wait to see your GP; Those are more extreme, I think, than the actual physical access to the services that typically pharmacies do at a local level. I don't think it's -- because though most of the big four or five local services are done in most of the areas because they're done all in a slightly different way. I think it adds more inequality to it because they're not all judging each patient on the same merits, even though the attempt was to remove inequality". (Matthew)

"That can be quite a confusing picture, but just so, that exposes some of the counter-arguments against having lots of different locally commissioned services. Because the public awareness of what is available then can be confused because you can go from one pharmacy to the next, and different services [are] available. That's where national services come in. It would make a sense to have national services because then the public can really understand what is available through pharmacy and all the pharmacies, and therefore access that more routinely'. (Jude)

In addition to the lack of funding issue, two major issues arose when considering the role of LPS and health inequalities: LPS variability and the lack of public knowledge on LPS. Firstly, LPS responds to the need of the population. However, each commissioning group provides contracts with different eligibility criteria for the patients of an area, which differ from other areas. Therefore, there is contra-logic in the accessibility aspect. Although a service is accessible, if the eligibility criteria are different, the level of care varies, and thus health inequalities may rise even further as Matthew stated 'they are all done in a slightly different way. it adds more inequalities". Furthermore, this variability may not only raise heath inequalities, but the administrative cost from the NHSE as Ainhoa's interview draw attention to. For instance, the Anticoagulation service can have many variations depending on the drugs the CCG commissioned, the eligibility criteria of patients and whether the service would include independent prescribing by CPs. The number of variations implies that for every anticoagulation service commissioned the costs for the NHSE will differ. On the contrary, a homogenous service throughout the nation would mean less administrative costs to maintain as expenses will be kept low.

Secondly, variability in providing services causes a lack of knowledge about which services are provided. The lack of awareness of the services is determined by two factors: the lack of focus on advertising in the community pharmacies and the lack of national coverage. According to Grönroos and Ravald[45], potential clients gather information about the services, while the organisation exposes itself in a proactive manner via advertising, personal selling efforts. When dealing with customers' services, the two parties actively engage in information sharing. However, this double action may not appear in the LPS field, as there is a lack of awareness of what is offered in the pharmacies.

"NHS Choices website, as long as that's available from the pharmacy point of view that could tell what the national, local services or other services are available from that pharmacy. Does the patient know what to look at that? Probably not. If you were to Google, depending what you Google, 'what services available from my pharmacy?' I don't know what comes up. Or if you thought I've got a backache and you put in 'I've got

a backache, what do I do?' I don't know if pharmacy would score in that. So, it's a hard one to answer, hard, because I know where you could look, if I wasn't in this role would I know to look at NHS Choices and things like that? No, I wouldn't". (Matthew)

The first website that interviewees stated they referred to for information was NHS Choices. However, they agreed there is a lack of information in the absence of a national, comprehensive, information-based website on LPSs. Moreover, Grönroos and Ravarld[45] suggested that in the climate of competitiveness, companies should not just apply traditional service marketing, but rather an interactive marketing function, in which every component of the service process (organisations, sellers, buyers) interacts not just in the selling encounter but also in the consumption process. By allowing information to be found, customers' needs are best met, and a relationship is created with the customers that continues after the moment of purchase. Therefore, creating a website for clinical services offered by CPs would be beneficial to both the NHSE, as it would allow patients to easily access information, and to private retail pharmacies, as it would drive sales.

While NHSE plans are directed towards CPs assuming increased responsibility, there is a lack of confidence by the public regarding the capacity of the CP. Simultaneously, the integration path is challenged by the competition arising between CP and GPs in providing clinical services and by the competitive nature of service delivery. LPSs are seen as introducing elements of innovation, which are characterised by pre-existing technology made easily accessible to the community. Furthermore, the role of technology innovation in relation to providing improved information sharing between CPs and GPs in delivering clinical services is needed. Finally, while LPSs may be contracted to address health inequalities and ensure prevention services, financial pressure and variability may negatively affect the NSHE plan and budget. LPS variability may appear to have the unintended consequence of leaving patients unaware of the available services. Neither CPs nor the NHS seem to have implemented an effective way of communicating which LPSs are available. The following chapter will present a summary of the findings that emerged from the collected data.

6. Conclusion

This research also exposes issues around the gaps in the process of the integration of healthcare providers. Moreover, it shows how LPS may be the right way to tackle health disparities. However, due to NHSE's financial pressure, and the lack of exposure, LPS may remain an afterthought rather than being at the forefront of illness prevention.

6.1 Core Findings

The interviews made clear that the research questions offered a conversational starting point with industry experts. In fact, the research questions allowed the interviewees to freely share their thoughts and insights on the topic in question, but they also took the time to explore the topics and the current reality in more depth. The data gathered interestingly challenge assumptions on the role of the CP and LPS and show the gaps in the implementation process of the national plans.

'Relationships between the two [CPs and GPs] are hit and miss.' (Matthew)

From the interviews, it is apparent that there is a discrepancy between what CPs can do and what the public perceives they can do. Moreover, while NHS's plan is to integrate the role of healthcare providers to open the path to complete care, the competitiveness of offering clinical services may limit the national plan. As cited by Matthew, CP and GP is a 'hit and miss', meaning that while the two healthcare providers are supposed to cooperate in widening patient's choices, their cooperation is not fully developed nationwide, thus missing the opportunity to provide better care.

'It's not a brand-new innovation that you do, that there is already some proof of the interest in that innovation from a purely pharmaceutical, general perspective.' (Nathan)

The role of innovation in LPS is completely different from the idea of pure novelty usually experienced in other sectors, as clearly stated by Nathan's comment that 'It's not a brand-new innovation'. LPS allows clinical services to be accessible to the population. Patient-empowerment clinical services such as self-testing anticoagulation or LPSs supporting CPs to take on the role of independent prescribers (IPs) have been cited as an example of innovation introduced in the community pharmacy. These two elements were suggested to be more inclusive when the NHSE commission a LPS. Moreover, since enhanced services (e.g. anticoagulation) necessitate the patients' health records to be updated, communication between GPs and CPs is necessary. It has been found that there is no system in place to ensure that the CP tracks patients' health information and health records. It has been noted that technology-driven system encouraging GP and CP communication about health records could not only represent an innovative element for LPS, but could also enhance the integration among the providers:

'LPS will certainly help, but they're not going to be the magic bullet that kills the issues that we face.' (Ben)

Local pharmaceutical services are commissioned to answer the local need and to reduce health inequalities in specific areas. However, it has been highlighted how their variability may not only increase health inequalities, but also induce confusion to patients. There is no national website clarifying which LPSs are provided where, and which eligibility criteria are included. The most cited website to support health decisions in relation to access to care is NHS Choice. However, this site does not allow a comprehensive view of LPS. Hence, while LPS are directly commissioned to promote health equity, the lack of awareness by the public of what is offered causes a loss of welfare, as patients in needs will not utilise the services. Moreover, the variability among LPS creates different eligibility criteria for patients to access the service, which may result in a rise in inequality.

6.2 Core Contributions

Although earlier research into the role of the CP has been conducted (25,46), the majority of the literature is dated over three years ago. It does not capture the current climate of the community pharmacy. In fact, 2013 marks a devolution action by the NHS, when more responsibility was given to local teams. The commissioning of services to community pharmacies has increased since 2014. Despite the programs of NHSE to consolidate the role of CP as a healthcare advisor, there are issues related to public perception. Moreover, whereas healthcare-provider integration has been considered a priority in healthcare efficiency, it does not appear to be a simple process, as elements of competition arise in the relationships between GPs and CPs when delivering clinical services. The relationship between the two healthcare providers has been analysed via the B2B framework[1]. The antecedents described in the framework have been confirmed to be present in the relationship between CPs and GPs, proving that

1. integration is a feasible goal in community healthcare. However, it is necessary to ensure competition is mitigated; and

2. the competition among GPs and CPs can be analysed via business framework. Although, the topic on the research is relevant to the healthcare market, further research to alleviate the competitive nature of their relationship could be explored, conceiving them as two business operating rather than as healthcare providers.

This research offers a small-scale exploration into the role of community pharmacies and local pharmaceutical

services in the currently changing context. This exploration could be potentially useful for policy when looking at the goals to be achieved in relation to prevention and integration. The path to prevention includes:

- patients actively seeing CPs as the first point of advice and service delivery;
- GPs and CPs effectively communicating and exchanging information; and
- accessible and clear information about preventive services.

Despite the NHSE's efforts, the data suggests these objectives have not been achieved. However, further research must be conducted to appreciate fully the issues and current progress toward solving them. It could be useful in performing nationwide independent research aiming to showcase national spending differences in health care, the services provided, and population health outlooks. This action would lead to further transparency in NHSE operations and a clear picture for health policy decision-makers. Since the Dartmouth Atlas project was firstly published in 1988, it has been used as a tool for American health policy, as it acknowledges the fragmentation of the health care system[47]. A similar and consistent approach may be used by the NHSE to support their decisions and policy goals.

Investigation of the role of LPS in the community environment has highlighted the benefits of the geographical accessibility of the services as determinants to reduce health inequalities. This argument introduces the logistic of service providing rather than the costs associated to accessing care, which is one of the hypotheses often mentioned in health economics when exploring health inequalities[42]. The geographical accessibility of LPS has been cited as one of the reasons these services are determined by innovation, as they allow innovation to spread further into the community. The 'outreach aspect' is an element used to describe the process of innovation in healthcare of the both healthcare innovation framework[2]. However, the process of innovation spread follows a different diffusion curve, depending on the health policy it relies upon. Rogers' diffusion theory[37] is in compliance with how private services are accessed; on the contrary, LPSs and national services, as they are free of charge, attract patients independently and do not respond to the same diffusion theory as private services.

Finally, this research has been carried out in 2016/2017, allowing it to consider the effect of the devolution action started in 2014 and to explore the recent changes in health care management (e.g. Manchester Devolution[48]). However, 2016 marks also the confirmation of article 50 for Brexit. Brexit will likely affect the way NSH operates, the funding and the research development available for the United Kingdom[49]. It would be useful to consider whether Brexit will have repercussions and if so, how these repercussions affect the field of clinical commissioned services within pharmacies once negotiation is over and Article 50 is fully implemented.

6.3 Core Recommendations

To ensure providers understand that the delivery of services relates to the advantage of opening patients' choices, there should be double the effort from CCGs and local authorities in partnership with the CP to ensure collaboration is present among the CPs and GPs. The authority of the NHS and the pro-activeness of CPs may lead GPs to entrust CPs and to ensure proper referral of patients to CPs. In this way, patients will recognise the role of the CP in delivering clinical services, and simultaneously, the GPs will be able to effectively see more urgent cases. Nutbeam[50] showed that the first step towards higher health policy goals, such as prevention programs and patient empowerment, is the transmission of healthcare information. Creating a communal platform allowing the sharing of the availability of services may be the right way to tackle the gap between what is offered and what people know is offered. Moreover, due to the pattern of how we access information, promotion of health prevention programs should be considered, with use of multichannel platforms, such as social media, via companies' pages (e.g. PharmaOne). Furthermore, since NHSE is currently encouraging the use of the summary care record, the same electronic record should be opened to CPs to ensure precise judgement when delivering clinical services and to update patients' information. Interviewees agreed that this particular data-sharing method could improve the effectiveness of communication among healthcare providers, although they also raised concern for patient's privacy and ensuring that the patient understands the role of CP. Data-sharing tools are controversial, and a security policy must be in place before fully developing such a system. However, it has been proven to be extremely effective in Australia[51].

The recommendations would need a double-effort of development and implementation from both private companies, such as PharmaOne, and NHSE. To improve the health and wellbeing of the population, the NHS tries to activate prevention programmes and to place greater responsibility on the CP. However, due to their limited resources, the budget is still streaming to hospitals and GPs. Prevention assumes a peripheral position. To overcome the budget gap, funding is needed. One possible short-term solution would be to set an "NHSE tax" determined by each CCG. The NHS was originated after World War Two and did not forecast over 60 million people utilising it.

Throughout the research, the potentials of the CP and LPS to tackle the local needs, promote wellbeing and innovation have been shown and supported via business frameworks, which have been found applicable in the healthcare market. However, these potentials are not completely achieved due to lack of a fully integrated healthcare providers' system and the low-profile role of LPS. There is a lack of awareness about what the CP can provide and the accessibility of LPS. Therefore, although CP and LPS could be key players in supporting NHSE's higher goal of prevention, they are shadowed by the role of GPs. Despite NHSE's plans directed towards prevention, efficiency and integration, CPs and LPS are still small fishes in the big pond of the NHS market.

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Footnotes

[a]Anticoagulation is the 'process of hindering the clotting of blood'[3]. The anticoagulation services ensure patients with blood-clotting issues to be monitored and managed in the community pharmacy. Around 1.3 million patients are prescribed anticoagulant therapy in the UK[4].

[b]Multimorbid is commonly defined as the presence of two or more chronic medical conditions in an individual, and it can present several challenges in care, particularly with higher numbers of coexisting conditions and related polypharmacy[10].

[c]In the business model developed by Taran et al.[21], 'radicality' is a critical variable which determines how much an innovation has departed from what was present before.

[d]MUR, the Medicine Usage Review, is a nationally-commissioned service in which the CP completes an adherence-centre review on the medicines prescribed to patients with polypharmacy, to determine whether the patient complies with the medication use and that there are no concerns arising from their use.

[e]EMIS (Egton Medical Information Systems) is a web system mainly used by physicians to update electronic patient health records. It also allows patients to book GP appointments online and order repeat prescriptions.

[f]Summary care record is an electronic health record containing all the clinical information about the care a patient has received.

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