More than Medicine: Pharmaceutical Industry Collaborations with the UK NHS



Mark Scorringe

Abstract This 'critical realist' research paper is an evaluation of collaborative projects between pharmaceutical companies and the British National Health Service (NHS). There is a strong tendency for NHS organisations to regard this industry with considerable caution; nonetheless, the evidence crafted through this undertaking has revealed an environment that is potentially well predisposed towards collaborative partnership. The primary focus of this evaluation is on a single organisation and how this company delivers, and seeks to deliver, Joint Working initiatives. Joint Working represents the most formalised and transparent mechanism for cooperation between the industry and the NHS. The specific aim of this research was to evaluate the level of capability that a specific organisation 'desires' to deliver these types of initiatives and the degree to which it possesses the competencies to deliver them. The findings have been developed employing a mixed method approach using secondary data analysis, case studies and a survey.

1 Introduction

Partnerships, whether they are personal, military alliances or commercial collaborations, can be complex and interesting relationships. This research paper was devised to shed light on a specific type of collaboration between the pharmaceutical industry and the National Health Service (NHS) in the UK. Joint Working is the term used by the Association of the British Pharmaceutical Industry (ABPI), the trade association for pharmaceutical companies operating in the UK (ABPI 2014), and the Department of Health (DOH) to describe a particular type of undertaking in which the NHS and pharmaceutical companies pool resources to deliver projects designed primarily to improve patient health whilst also offering benefits to the participating parties (ABPI 2013). The ABPI, DOH and NHS have cocreated tightly defined criteria, guidance, toolkits and a checklist to formally articulate the factors that must be present for a project to qualify as Joint Working (DOH et al. 2010). This paper has endeavoured to explore and evaluate the use of Joint Working initiatives in the UK

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and sought to understand their potential value to a multi-national pharmaceutical company. Therefore, with the exception of an initial secondary source review of competitor practice, it is principally an intra-organisation appraisal of desired and current organisational performance.

The pharmaceutical industry is one of the most tightly regulated sectors of the UK economy (Mossialos et al. 2004). Research and development (R&D) and commercial activities are regulated by legislation and through various governmental agencies and the ABPI (EMA 2015; MHRA 2015). However, the industry is often perceived to be highly profit-centric with a reputation blemished by controversies ranging from a disregard for patient welfare (Goldacre 2012; Kay 2010), the misrepresentation of data (Goldacre 2012; Kay 2010; Savitz and Weber 2014) and allegations of widespread corruption (Ward 2015; The Guardian 2015). Against this backdrop of misdemeanour and scepticism, there has been a desire within the industry to improve its image as a corporate citizen (Savitz and Weber 2014) and deliver on stakeholder expectations (Wang et al. 2014). In this context, collaborations between the NHS and the pharmaceutical industry-although potentially challenging (Evans 2012)—could offer all participating parties a range of possible benefits (Colquhoun 2012; Farrar 2012, in ABPI 2012; Horton 2009; Whitehead 2012). In recent years the DOH and NHS have proposed a number of policy drivers that have been seen as catalysing a greater degree of partnership working between the private and public healthcare sectors (Sodexo 2012, 2013; Ham and Murray 2015). The DOH 'Innovation Health and Wealth' report states that the NHS should 'utilise partnership and collaborations to encourage and support radical innovation' (DOH 2011, p. 23).

The primary aim of this paper was to evaluate the level of capability that an individual company aspires to within the Joint Working sector and the degree to which it possesses the project management competencies to deliver collaborative initiative of this type. The stimulus for this evaluation was Stephenson's assertion that capabilities and competencies are not the same, as he describes capability as being about 'knowledge, values, self-esteem and capacity for autonomous development of self and context' (Stephenson 1994, p. 4). Stephenson and Yorke (1998) define 'competency' as existing within a familiar state, whereas 'capability' is the ability to strive towards unfamiliar problems within contexts that are unfamiliar. It was hoped that through this research endeavour, this organisation would gain a greater understanding of the capabilities and competencies necessary to deliver high-quality Joint Working collaborations in partnership with the NHS.

2 The Power of Partnership

In an attempt to redefine the relationship between the NHS and pharmaceutical companies, the ABPI has promoted efforts by the industry to move beyond a sponsorship model and towards a model of working in partnership (ABPI 2012; DOH et al. 2010). There are a number of possible partnership interactions between

the NHS and the industry, ranging from simple cooperation and coordination all the way through to formal collaborations. However, in general use, these descriptive terms for partnership types are often used interchangeably and inappropriately which leads to confusion regarding the terminology of 'partnership' (Huxham 2000; Wildridge et al. 2004). Mattessich et al. (2001) offer clarity on the different types of partnership by defining 'cooperation' as being characterised by informal relationships without a common goal, 'coordination' is characterised as more formal with acknowledgement of mutual rewards, whilst 'collaborations' require a collective goal, a pooling of resources and the sharing of risk and reward. Therefore, the term 'collaboration' most accurately describes formal Joint Working initiative taking place between the NHS and pharmaceutical industry. This evaluation focuses only on Joint Working as defined by the ABPI code of practice (PMCPA 2016).

Academic writing regarding collaborative projects is relatively rich, particularly in the engineering and construction industries (Bresnen 2009; Bygballe et al. 2010; Hong et al. 2012; Galliford 1998), where various authors espouse the potential virtues and pitfalls inherent within partnerships (Bresnen 2009; Bresnen and Marshall 2000; Chan et al. 2003). The Association for Project Management (APM) suggests that partnerships may present organisations with opportunities to pool resources and expertise and to increase value whilst spreading risk (APM 2009). Jacobsson and Roth (2014) articulate the view that partnerships are a good platform for engagement, whilst Naoum (2003) propagates them as a vehicle for the development of inter-organisational trust and long-term relationships. Several authors share the view that collaborations offer the possibility of 'win-win' benefits when the participating parties have shared objectives (Austin 2000; Child and Faulkner 1998; Langford and Murray, in Morris and Pinto, Langford and Murray 2004; Naoum 2003). The APM (2009) also considers mutually compatible objectives to be a core component in the delivery of successful multi-owned projects. Gray (1989) proposes a view that the quality of project outputs is improved by interagency partnership due to the deployment of diverse and complementary capabilities.

In the UK, collaboration has been a major component of the government's agenda to modernise the public sector, particularly in healthcare (Wildridge et al. 2004). In 2000, the Office of the Deputy Prime Minister and the Nuffield Institute produced a partnership assessment tool in an attempt to improve public services through greater multi-agency collaboration (Hardy et al. 2000). More recently, the NHS's 'Five Year Forward View' (NHS England 2014), the 'Better Procurement, Better Value, Better Care' report (DOH and NHS England 2013) and, perhaps most enthusiastically, the 'Innovation Health and Wealth' report (DOH 2011) have all been espoused as promoters of partnership working (Ham and Murray 2015; Sodexo 2012, 2013). Sodexo (a private sector organisation that manages and delivers a range of services in healthcare) has undertaken research into collaborations in the UK healthcare context (Sodexo 2016). Sodexo's research, although not specific to the pharmaceutical industry, takes the form of two reports, 'Partnership for Healthy Outcomes' (Sodexo 2012) and 'The Power of Partnership' (Sodexo 2013), both offered practical guidance on forming and maintaining partnerships in healthcare. Reassuringly, Sodexo's (2012, 2013) findings, and the 'hallmarks for successful partnership' that they articulate, support the literature from other industrial sectors in regard to the possible benefits to be gained from collaboration. However, as noted by the Audit Commission (1998), it is important to remember that there should not be an assumption that partnership working is guaranteed to be a good thing. Mattessich et al. (2001) warn that collaboration is not necessarily always the ideal way to address issues and accomplish tasks 'any more than a pair of pliers always serves as the best tool for household repairs'.

Nevertheless, the literature provides a reasonably homogeneous view that collaboration on the whole is a positive undertaking that can offer a wide range of benefits to all participating parties. However, the academic literature regarding private/public collaborations in healthcare is very limited; available material tends to be confined to partnerships linked to financing and building healthcare estate (Healthcare UK 2013; Holden 2009) or the R&D environment (Chataway et al. 2012). This raises questions around the potential validity of the available partnership literature in this particular context. This uniqueness is underscored by an ideological polarisation of the protagonists in public/private partnerships, with the pharmaceutical company operating within a commercial capitalist model and their NHS partner within a publicly funded socialised healthcare model. Therefore, it is the intent of this evaluation to add new insights into an area of partnership that has thus far been little explored.

3 Research Methodology and Approach

The choice of methodology for this paper was heavily influenced by Grix's (2002) assertion that our methods should be led by our research question and not the other way around. This ethos served to harmonise my question with my 'weltanschauung'¹ and provided the logic for my choice of research paradigms, methodologies and methods. Consequently, my research question, which concentrates on the 'what' and 'how' of the situation rather than the 'how much', led me towards the pursuit of a retroductive² qualitative methodology. Paradoxically, within my professional environment, research that is quantitative and within the realist epistemology is regarded as having the greatest value. However, as a researcher, I subscribe to Snider's (2010) notion that whilst we may be enthralled by statistical analysis, the numbers can often disguise more than they reveal. Indeed, the numbers can be flawed, or even manipulated, to provide an incorrect answer or skewed to tell a particular story (Somerset House 2016; Rothwell 2016). Consequently, to mitigate these concerns and to satisfy

¹Weltanschauung; translated from German to English to mean the 'world position' or 'worldview' of an individual standpoint.

²Retroduction; imagining possible 'mechanisms' that could explain a given phenomenon if they were real (Bhaskar 2014).

contradictions between professional and personal perspective, it was decided to employ a mixed methodology using complimentary quantitative and qualitative methods, with the additional promise that method diversification may offer the possibility of increased validity and reliability of my research findings (Zohrabi 2013).

According to Smith (2009), all researchers are storytellers. This is an opinion likely to be eagerly received by researchers like Olsen and Morgan (2005) who coined the term 'ficts' to describe a reality that is potentially fictional but nevertheless 'true enough' to be of value. Critical realists accept that beliefs can be false but also that understanding false beliefs may lead to emancipation (O'Mahoney and Vincent 2014). To investigate these beliefs, I have been an active and engaged contributor throughout this research to create a climate for potential change. The framework for this research project has been provided by Greenaway's (1995) fourstage cycle of experiential learning, based on the work of Kolb (1984). The first stage entails the introduction of facts (or perhaps 'ficts') into the system, these facts are reflected upon, and then concepts as to why they exist are developed. These new understandings are then introduced and applied back into the system, thus continuing the cycle and engendering iterative organisational learning. The work of Greenhalgh et al. (2009) in their evaluation of health service modernisation in London helped galvanise the realist approach as a valid paradigm within the healthcare context.

This evaluation has been developed using a mixed method approach deploying secondary data analysis, case studies and surveys. The chosen approach is based on research undertaken by Hurrell (2014) to investigate patterns and reasons for soft skills deficits within the Scottish workforce. The structural design for this research has been modelled on an indicative 'criticalist' example proposed by Hallebone and Priest (2009). This design philosophy was followed as it was expected to provide a platform for colleagues and management to work together in efforts to codiscover and assemble an explanatory model that answers the primary research question. Initially, this project started with a literature review of public/private partnerships and the accumulation of objective data into the use of Joint Working initiatives by companies in the pharmaceutical industry. Data from secondary sources was then introduced to a focus group in an effort to codiscover the mechanism at play in the environment and within a particular organisation's Joint Working initiatives. The output from the focus group was then used to inform a series of case studies developed through semi-structured interviews with four company project practitioners. Analysis of these case studies was then used to confirm and validate the findings from previous steps and also to inform the design of a research questionnaire.

4 Findings: Secondary Research

Secondary research into the Joint Working environment provided the background information on which this project was developed. In an effort to understand the environmental context in which partnerships exist, it was important to establish a baseline regarding the scale of industry investment in partnering. The industry sold US\$25.2 billion (£17 billion³) worth of medicinal product in the UK in 2015, of this total IMS was able to directly attribute \$19.9 billion directly to 485 different pharmaceutical companies (IMS Health 2016). The sales revenue data was employed to reduce this analysis of competitor performance to the 15 largest pharmaceutical companies operating in the UK according to their cash sales in 2015. The 15 organisations selected for more in-depth evaluation accounted for US\$12.9 billion (64.7%) of all pharmaceutical sales in the UK, with the other 470 companies contributing the remaining US\$7.0 billion (35.3%). The selection of only 15 organisations for evaluation was justified due to their market dominance in regard to cash revenue and because this company considered these corporations to be direct competitors. In 2015 the industry spent £340.3⁴ million on working in partnership with healthcare organisations (HCOs) and healthcare professionals (HCPs), £229.3 million (67%) of this expenditure was related to new medicines research and development (ABPI 2016). The remaining £111 million (33%) was invested in non-research and development partnership investment activities such as sponsorship, donations, consultancy fees and Joint Working (ibid.). The amount invested in Joint Working is also revealed by the ABPI to be just $\pounds 3.3$ million (ibid.), thus, only accounting for 3% of the entire non-research and development partnership expenditure. The in-depth analysis into Joint Working projects undertaken by the 15 largest pharmaceutical companies in the UK was used to evaluate a number of factors regarding these types of initiatives. These organisations disclose all of their Joint Working projects as executive summaries that are available in the public domain. These documents were scrutinised, and the information within them was used to build a database of relevant information. These data revealed that in 2013 a total of 42 projects were initiated, in 2014 there were 65 projects and by 2015 it had fallen back to just 43.

In 2013 market dominance regarding the number of projects deployed had been very much within the purview of AstraZeneca. However, by 2015 Novartis had become firmly ensconced as the new market leader in Joint Working partnering. This position as market leader goes beyond the absolute quantity of projects they commission, as data (normalised to factor in company revenue) confirms that Novartis initiates considerably more Joint Working than their competitors regardless of company size. In 2015 Novartis initiated one project for every US\$77 million of cash revenue; the next highest ratio of projects to revenue was Eli Lilly at one

³US dollars converted to UK sterling using exchange rate of 0.675 on December 31, 2015.

⁴This figure equates to approximately 1.99% of total cash revenue reinvested into partnerships with HCPs and HCOs.

initiative per US\$122 million. The average ratio among the 15 companies is a single project for every US\$299 million of revenue, representing a rather anaemic level of participation as a collection of organisations. ABPI guidance states that member companies must have written agreements for their Joint Working projects covering a number of factors, including financial arrangements (PMCPA 2016). However, it is not mandated that any of these factors need to be published as part of the publicly available executive summary. Therefore, there is some variability in what is required for governance purposes and what is contained within the published summaries. Financial details are only disclosed in 19 (41%) of the available documents, with the amounts invested per initiative ranging from £4115 to £300,000.

Joint Working projects in 2015 were focused on 14 different areas of medicine, with cancer, diabetes and ophthalmology in combination accounting for 53% of all initiatives undertaken. The high degree of project utilisation in cancer and diabetes can easily be attributable to NHS demand and priorities; however, the quantity of ophthalmological projects is completely disproportionate if assessed in the same way. It could be surmised that project uptake in ophthalmology is indicative of proactive demand creation from industry, particularly as all of the initiatives in this disease area were delivered by a single organisation, Novartis. Novartis is also the only organisation in 2015 to have explored Joint Working projects where the deliverables are based on infrastructure or digital, whilst all of their competitors have delivered projects that are more conservative in nature. It is probably no coincidence that Novartis, as the market leader in this space, commissions projects that are innovative and challenge conventional compliance doctrine. Identification of Novartis as the market 'innovator' is useful as it helps benchmark where this organisation sits on the adoption curve whilst effectively testing and stretching the boundaries for collaborations for all companies if they wish to increase their own capability in this space.

5 Findings: Focus Group

In an effort to codiscover the possible mechanisms influencing Joint Working collaborations in the external and intra-organisational environment, secondary source data were introduced to the focus group through an 'appreciative inquiry' session. Hammond (1998) describes 'appreciative inquiry' as a philosophy of change that focuses on what works, and improving what already works well, rather than the normal starting point of focusing on a problem. The group then undertook an exercise to co-populate a Lewin (1951) force field analysis diagram to articulate the internal and external forces 'driving' and 'restraining' potential Joint Working utilisation. Force field diagrams were used to help identify factors that potentially need to be addressed in order to successfully implement change (Swanson and Creed 2014). When identified, these forces then need to be mitigated or optimised to increase the chances that optimal change will occur. The group created a force field diagram, containing 12 driving factors and 14 restraining factors, and then

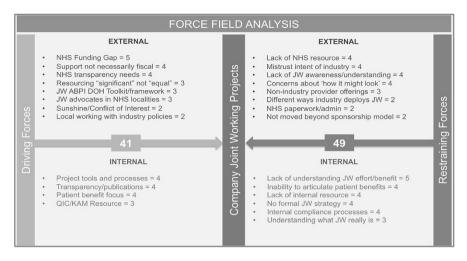


Fig. 1 Joint Working Force-field analysis co-created by the focus group

collectively appointed a number from 1 to 5 to each factor based on its influence within the Joint Working context; the higher the number, the more powerful the influence.⁵ To ease analysis these data factors were segregated into forces that were either internal or external in nature. The analysis provided output that illustrated a situational context in which restraining forces currently have a substantial advantage relative to driving forces (Fig. 1). Interestingly external driving and restraining factors returned combined scores of 26 and 25, respectively, indicating a near equilibrium in their influence on the change equation. It could be postulated that this balancing of forces offers promise, particularly as factors that are external to the organisation would remain somewhat more impervious to change in comparison to internal forces.

Internal forces highlighted by the focus group offer considerable opportunities for the organisation to facilitate a more proactive Joint Working strategy. The factors on the driver side of the change ledger are already relatively strong, but they could be nurtured and made even stronger. In particular a factor described as 'transparency/ publications' could be boosted with relative ease through improved dissemination and a more coherent communication strategy in regard to the projects we undertake. These data could easily be made available for publication, particularly as it is already a mandatory requirement to capture this information within written partnership agreements. Intriguingly, internal factors that constrain collaborative participation were evaluated to substantially outweigh promoting forces. Therefore, the greatest potential for the organisation to create a climate for change in Joint Working resides

⁵The scale used to assess factor influence was 1, weak; 2, mild; 3, moderate; 4, strong; and 5, very strong.

in mitigating the multitude of factors described as powerful internal restraining forces.

The inability to appropriately express realisable benefits for the participants in Joint Working had been a well-acknowledged restraining force throughout the group discussion. These constraints were associated with apprehensions when it comes to describing project benefits that the ABPI 'code of practice' permits industry to acquire through collaborations and anxieties regarding the articulation of patient benefits. Concepts from the literature were communicated to the group in an effort to broaden the discussion and extend the definition of benefit realisation. This was done primarily to extend collective conceptualisation beyond considering projects as essentially a mechanism for organisational value creation that is fixed within a relatively short timeframe. Building on this holistic and longitudinal definition of project benefits ascribed by the literature, the group cocreated an analytical model designed to illustrate the benefits that could be realised through Joint Working. Creation of this model, Fig. 2, gave the group licence to consider a tranche of benefits for patients and healthcare organisations and also illuminated a range of possible tangible and intangible company benefits. The outcome of this exercise was that NHS and patient benefits are relatively easy to express, although, the real challenge is ensuring that they are articulated in a manner that satisfies stringent internal compliance processes. However, benefit realisation for the company from Joint Working is perhaps the element of collaborative project management that is most sensitive to compliance and business function intercession. Projects require backing from sales and marketing functions within the organisation in order to gain funding for implementation, and this support was regarded as only forthcoming if immediate fungible gains are on offer.

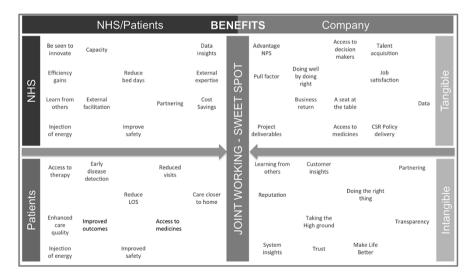


Fig. 2 Benefits for parties to Joint Working as described by the focus group

The perception is that the corporate ethics and compliance (E&C) teams' attitude towards risk is highly restrictive, seeking to ensure risk elimination rather than mitigation, thus ignoring the reality that the aim of risk management should be to contain rather than eliminate uncertainty (Cleden 2014). The cautious argument put forward by the E&C team regarding collaborations is that the organisation's contribution represents a 'transfer of value' that can easily be misrepresented as attempts at 'buying the business'. The counter argument to this would be to ensure that all agreements are above reproach by committing only to projects where benefits to all parties are exceptionally transparent and represent a mutual exchange of value rather than simply a transfer from one party to another. The ABPI code already states that all parties to a Joint Working initiative must make a significant contribution towards the project. Therefore, ensuring that the realisable benefits from projects are equitably balanced for all involved parties and that all of the details are published would do much to alleviate nervousness and accusations that the organisation is simply trying to buy the business. The focus group was able to articulate a very broad range of benefits that the organisation could realise through collaborative partnering. These benefits were segregated into two types, with factors that are relatively easily measurable such as 'data' and 'job satisfaction scores' regarded as tangible benefits. These types of benefits are quantifiable and valuable to the company; therefore, the presence of these elements could offer a reasonably straightforward justification for organisational commitment to a given project. In essence company participation in a project is contingent on the organisation receiving a proportional measurable return on the contribution and investment they have made towards the initiative. It could be argued that the industry is only open to accusations of inappropriate transfers of value (buying the business) if the benefits are disproportionately weighted in favour of their NHS partner. Therefore, ensuring that all foreseeable transfers of benefits are equitable and openly communicated is in the interest of all parties engaged in these collaborations. The group also isolated a number of intangible benefits, factors that although challenging to quantify are nonetheless entirely appropriate as descriptors to justify project participation. The essential finding from the group's analysis of benefits was that transparent and assertive disclosure regarding the value the organisation anticipated realising from Joint Working would be critical if an improved organisational capability in this space was desired.

6 Findings: Interviews

The output from the focus group provided information that was utilised in the development of a series of exploratory semi-structured interviews designed to corroborate earlier research findings and provide additional qualitative detail. The output from these interviews was used to develop four comparator case studies and to inform the questions that were used in the survey that followed. Data from the interview transcriptions had been coded into a list of 91 items and then consolidated into a spreadsheet to provide a descriptive display that could aid pattern recognition and offer a platform for further analytical examination. The items described by the interview participants were consolidated into a series of prominent themes, namely,

		INTERVIEW 1	INTERVIEW 2	INTERVIEW 3	INTERVIEW 4			
INTERVIEW 1	Pearson Correlation	1	.256*	.293**	.198			
	Sig. (2-tailed)		.014	.005	.060			
	N	91	91	91	91			
INTERVIEW 2	Pearson Correlation	.256	1	.175	021			
	Sig. (2-tailed)	.014		.098	.847			
	N	91	91	91	91			
INTERVIEW 3	Pearson Correlation	.293**	.175	1	.180			
	Sig. (2-tailed)	.005	.098		.088			
	N	91	91	91	91			
INTERVIEW 4	Pearson Correlation	.198	021	.180	1			
	Sig. (2-tailed)	.060	.847	.088				
	N	91	91	91	91			

Correlations

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Fig. 3 Correlations between interview participants in answers they provided across 91 codified items. Source: Authors own figure

the participant's general attitude towards Joint Working, their perceptions regarding realisable project benefits for all parties and factors that could act as potential constraints and enablers to collaboration. These data were then further assessed using graphs in an effort to uncover commonly attributed concepts and influential mechanisms. SPSS analytics software was also deployed to evaluate correlations between individuals and how often they expressed ideas relevant to the 91 coded items. The evaluation across all 91 items showed statistically significant bivariate correlations between the coded data for the first interview and the second interview at the 0.05 level (r = 0.256, p, 0.014), and between the first interview and the third interview at the 0.01 level (r = 0.293, p, 0.005), thus demonstrating significant affinity between the answers provided by three of the four participants involved (Fig. 3).

The interviewees all communicated a high degree of optimism for Joint Working that was very similar in tone and content; indeed, the level of enthusiasm was remarkably consistent among all interview participants. The view articulated by the first interviewee was that partnering in these types of collaboration provides individual practitioners and the organisation with a huge amount of value and credibility. In the opinion of the second interviewee, collaborative projects were now considered to be 'game changers' in the relationship between the NHS and industry. Joint Working was described as allowing the company to 'punch above our weight' and to be the conduit through which the organisation could gain significant kudos. The creation of relationships with key personnel within the NHS was a theme reiterated repeatedly throughout all of the interviews. The third interviewee described the opportunity to help the NHS through partnership as highly motivating, and that work to improve local services could be incredibly meaningful and rewarding. This point was echoed by the participants in the first and fourth interviews as they suggested that developing customer trust and gaining a greater understanding into the inner workings of the NHS would lead to a significant boost in their levels of job contentment. There was genuine conviction that Joint Working is a valuable mechanism through which the company can make substantial reputational gains. In addition, an important consideration was voiced during the second interview when it was suggested that NHS efficiencies developed through collaboration could result in increased commercial opportunities due to improved patient throughput. This was an opinion backed by the third interviewee as it was stated that NHS efficiency gains could result in patients securing better access to a wider range of apposite therapies, including pharmaceuticals. The final participant articulated a view that Joint Working could provide the company with valuable data and that partnering would enhance its ability to shape the environment. The concept of Joint Working was described as the 'nirvana of collaboration' with the NHS and that if we were 'open and imaginative', there was substantial promise that an increased utilisation of the approach could lead to genuine competitive advantage.

There was a strongly held belief among all of the interview participants that Joint Working can significantly improve clinical outcomes for patients. Collaborations intended to streamline current processes and improve clinical pathways were proposed as providing particularly useful realisable project benefits to our NHS partners. The suggested benefits for healthcare organisations and patients were actually rather extensive, with numerous references to improvements against indicators for safety, quality and measurable patient outcomes, through to increases in clinical capacity. The first, second and fourth interviewees also stated that the additional project management and facilitation skills provided by industry could be extremely valuable to the health service. Integration across the public and private sector and an exchange of skills and knowledge were also depicted to be mutually valuable to all parties engaged in these types of collaboration. The final interviewee offered a somewhat different narrative into Joint Working compared to the assessments made by their colleagues. This participant suggested a substantially broader range of potential benefits to the NHS relative to those that had been mentioned previously. Two of these benefits had thus far remained unstated throughout the interviews, namely, medicines optimisation and the achievement of personal performance indicators for NHS personnel. Acknowledgement of performance indicators as a potential benefit may well be a significant point, particularly in light of a statement made during the third interview that critical influence on decisions to commission projects often resides with a single stakeholder.

The external constraints identified during the interviews repeated many of those suggested during the focus group, including confusion within the NHS regarding what Joint Working actually defines and low awareness that it even exists. Lack of trust and viewing the industry as a provider of sponsorship rather than as credible partner in healthcare were consistently affirmed as significant barriers to access for collaboration. Multi-corporation projects were considered to be extremely challenging, with a strong preference for undertakings managed by an individual company in harmony with NHS organisations. The third interviewee felt that the health service hindered collaboration by being overtly tribal and paternalistic, although it was acknowledged that this was primarily due to their mistrust of the pharmaceutical industry. In addition, there is a perception that the NHS is generally unaware of, or simply fails to fully understand, the potential that could be unleashed through

partnering with industry. However, it was felt that this situation might change significantly as demands for greater openness in the relationship between the NHS and industry could potentially provide the platform for an increase in transparent project partnerships. A number of external enablers for increased collaboration were portrayed throughout the interviews; these included the current drive from within the NHS for greater transparency (NHS England 2016) and the Joint Working guide-lines and checklists published by the ABPI (PMCPA 2016). These formalised processes and governance structures were described as potential catalysts for increased demand for collaboration as the NHS endeavours to adapt to a relationship with the pharmaceutical industry that is more rigorously monitored.

The interviewees offered a number of attributes within this business that act to enable collaboration. Individual confidence to competently execute projects of this type and a thorough understanding of the paperwork and procedures required to implement Joint Working were specified as particularly important. The availability of template paperwork for much of the project documentation needed for implementation was also considered to provide significant assistance to practitioners wishing to undertake Joint Working. The participant in the second interview identified a number of internal enablers to project implementation, including Lean Six Sigma⁶ Green Belt training the individual had recently received. There were a number of internal constraints to Joint Working suggested throughout the interview discussions; three of the four interviewees provided very consistent commentaries linked to this particular issue (Fig. 4). The current business need for the team to

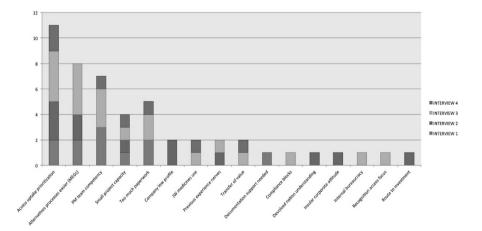


Fig. 4 Interviewee perceived internal constraints to Joint Working projects. Source: Authors own figure

⁶Lean Six Sigma is a technique used to manage process efficiency (George et al. 2004).

prioritise their time on achieving clinical access for new pharmaceutical products was a factor regarded as monopolising so much time that they would only have enough capacity to engage in relatively small Joint Working projects. The administrative burden associated with the paperwork needed to undertake Joint Working was also considered a disincentive to implementation by three of the four participants. The same number of interviewees also regarded the lack of project management competencies among their peer group as a significant barrier to uptake. Two of the participants revisited this theme several times, underlining their perception that this factor constitutes a substantial obstacle to operational practice. Interestingly, one individual held a belief that an insular corporate attitude meant there was no clear route to investment for collaborative projects. This interviewee hypothesised further that in order to get projects commissioned internally, it would normally be more effective to avoid 'cumbersome' internal hierarchy and garner support through informal networks within other divisions of the company. This statement offered insight into what Egan (1994) terms the 'shadow side' of the organisation, whereby covert channels are used in order to circumvent the official corporate structure.

7 Findings: Survey

The survey was completed by all 24 people in the organisation that have responsibility for the delivery of Joint Working as part of their job role. The survey questions were each linked to specific topics that had emerged throughout the subsequent research as the most salient themes when evaluating individual opinions regarding collaborative partnering. The overarching themes covered by the survey were professional experience, Joint Working perceptions, environmental perceptions, relevant ABPI knowledge, internal process assessment and a series of questions linked to the International Project Management Association's (IPMA) competency baseline. Thirty-two of the 35 questions were posed using a five-point 'strongly agree' to 'strongly disagree' ordinal Likert scale.⁷ In total, there were 700 and 68 answers provided through the responses to the 32 'strongly agree' to 'strongly disagree' questions. Calculations showed that 25.3% of these answers were given as 'strongly agree', 44.6% were 'agree', 12.8% were 'neutral', 14.1% were 'disagree', 2.01% were 'strongly disagree', and 'no opinion' accounted for the remaining 0.9% responses. These data showing a high proportion of confirmative responses would appear to support the assertion from Saris et al. (2010) that 'acquiescence response bias', whereby there is a tendency towards 'agree' answers, is common in these types of survey. However, even though in all probability this bias is present, and there can be a high degree of variation of 'acquiescence' between responders, it is likely to have been a phenomenon that is uniformly expressed across all of the individual answers (ibid.). This inspired confidence that significant variations and correlations

⁷The three questions related to the 'experience' theme were numerical (i.e. time/quantity related).

between responses, and patterns within these data, could represent inferential points of interest requiring further investigation. In order to further evaluate the survey responses using statistical methods, the ordinal response categories were recoded into a logical 1–5 ranking scale, with 'strongly disagree' being equal to 1 through to 'strongly agree' being equal to 5. When the 32 ordinal responses were quantified using this scale, these data were calculated and showed the average response value to be 3.747 (thus, the mean response is effectively just short of an 'agree'), with a standard deviation of 0.657.

The primary rationale for commissioning the survey as part of this project was to establish a baseline regarding the current competencies of field-based practitioners to manage Joint Working projects. In addition, it was anticipated that the survey would shed light on to factors that are acting to restrict or encourage any efforts the organisation might make to increase its capability as a collaborative partner. The first set of questions sought to provide an understanding into perceptions about the environment in which we operate. Encouragingly, Q4 in the survey, which states 'achieving good patient outcomes is the fundamental purpose of healthcare', received a 100% response rate of strongly agree and agree. The renowned Harvard economist, Michael Porter (2010), states that the fundamental purpose of healthcare is the achievement of good patient outcomes. Responder agreement with Porter regarding the strategic intent of healthcare is reassuring, particularly as alignment of 'vision' between partners is one of the cornerstones of collaboration (Galliford 1998; Austin 2000; Mattessich et al. 2001). However, paradoxically there was a relatively low level of agreement to the statement in Q5 that the NHS, industry and patients often share objectives (mean response 3.33). O7 asks the responders to assess their NHS customer's appetite for collaboration with industry. Somewhat disturbingly, the mean response to this question is very low with an average answer of just 2.75. Q5 and Q7 share a close correlation (r = 0.566, p < 0.004); consequently, the attitude towards mutually shared objectives could well be a reflection on the perception that demand for partnering in the NHS is very modest. Indeed, when the questioning becomes more specific in Q11 and asks if there is a high degree of awareness in the NHS that Joint Working exists, the opinion expressed is even more depressed, registering the third lowest mean (2.58) of any question in the questionnaire. The answers to Q7 and Q11 are both statistically significant; however these negatively held perceptions are potentially also operationally significant. Q11 also has a very close affinity with Q13 (r = 0.536, p < 0.007), which asks whether leadership within the organisation is highly engaged with the concept of Joint Working, with the average given slightly below 'neutral' at just 2.79.8 The correlation between these answers is hardly surprising; why would company management be enthusiastically engaged with Joint Working when their field-based teams hold a view that demand from the NHS is light and awareness is limited?

⁸The average rating of 2.79 for Q11 is also of statistical significance.

The answer to the conundrum mentioned above is encapsulated within the responses given to the series of questions specific to the benefits the industry could gain through Joint Working. There was a very high level of agreement with the statement in Q10 that these initiatives offer industry a valuable platform to share experience and learning with the NHS, with a mean response of 4.46; this was the survey's fifth highest ranked question. Q21, which asserted that these types of projects provide partners with the opportunity to share ideas and drive innovation, was the sixth highest ranked question with a mean of 4.33. This grouping of three statements focusing on industry benefits also contained Q19, which declared that Joint Working provides industry with an opportunity to acquire deep customer insights. The responders consistently agreed with this statement, with the question receiving the seventh strongest level of agreement in the questionnaire, at a mean of 4.21. The sponsor organisation regards the acquisition of customer insights to be critical to decision-making in its attempts to fulfil a corporate ambition to be regarded as experts in commercial innovation. The generally held belief among this team that Joint Working is a channel for securing this knowledge is accordingly a very important point to consider when engaging with senior management to align proactive collaborations with corporate strategy. The five questions posed regarding project benefits are distinct from each other but share similarities in composition; therefore, in an effort to encourage responders to consider each question in isolation, they were intentionally segregated in the electronic survey. However, these responses still tended to be remarkably similar, with the level of highly confirmative responses mirroring the positive perceptions that had been articulated in the answers to Q4 and Q6 in the environmental section. In addition, this encouraging level of enthusiasm also serves to triangulate the extremely positive views so eloquently described by the participants in the exploratory interviews. The benefits described throughout the interviews, and ratified through this survey, would certainly appear to endorse greater organisational investment in Joint Working. Current perceptions of relatively poor leadership engagement could easily be parlayed if management were exposed to the benefits that enhanced deployment could potentially offer. Endorsement from leadership to increase investment and proactively promote greater engagement would in turn lead to improved customer awareness that Joint Working may well represent an opportunity for NHS organisations to achieve their goals.

The reality still remains that if there is an organisational desire to increase corporate Joint Working capability and capacity, there is a need to address a significant number of issues that are currently retarding engagement. In this regard, the survey acted to reaffirm issues that were well documented during the focus group and interviews. Q20, for example, asks if the internal paperwork needed for Joint Working is very simple and straightforward. This statement received the second lowest mean rating of any question in the survey, significantly below the lower limit of standard deviation, with a mean score of only 2.54. Therefore, issues with paperwork would appear to be a real barrier to any efforts to improve organisational uptake. Much of the documentation required for collaborations is designed to ensure adherence to internal governance processes and also the ABPI code of practice. There was above-average agreement (4.13) with Q20, which states that the

corporation's compliance processes significantly reduce risk associated with Joint Working. However, if these processes were acting to significantly reduce risk to the point where they strangle collaboration opportunities altogether, this would be highly problematic. Unfortunately, the indications are that these processes do indeed hamper utilisation of Joint Working. Q24, which asks if compliance processes enable increased utilisation, was refuted by 50% of the responders, with a further 37% providing neutral response. Therefore, it would only be fair to say that these processes are acting to dissuade individuals from engaging in collaboration, particularly as this question received the lowest mean score (2.46) in the questionnaire.

In an effort to understand the mechanisms influencing the organisation's capability to deliver collaborative projects, the individuals completing the survey were asked to provide an assessment into their own project management competencies. These survey questions were based on version 4.0 of the IPMA's Individual Competence Baseline (ICB) for project, programme and portfolio management (IPMA 2015). The 13 statements posed in this section of the questionnaire were selected in consultation with the interview participants as they considered them to be the most important project management IPMA ICB competencies within the context of Joint Working. Eleven of these statements asked responders to assess their own level of general project management competence; only two of the statements asked for an evaluation of competencies specific to Joint Working. The two specific statements inquired into competence elements that the IPMA defines as 'compliance' and 'governance', both of which reside within the 'perspective' area of the ICB (ibid.). This framework is made up of three distinct areas; the 'perspective' competencies encompass the tools, methods and techniques that an individual must possess in order to understand the environmental context in relation to their own projects (ibid.). The 'compliance' question, Q16, asked individuals if they possess a good understanding of the ABPI code of practice, 8 responders 'strongly agreed' and 13 responders 'agreed' with this statement. However, what makes the answers to the compliance question particularly interesting is that it shares a very tight correlation with numerous other responses throughout the questionnaire. There is a highly significant relationship between an individual's perceived understanding of compliance procedures and their perceptions that Joint Working provides an opportunity to develop 'deep customer insights' and to 'share ideas' with the NHS (Q19 and Q21). This suggests that the more confidence an individual has in matters related to compliance, the more positive their opinions in regard to this pair of highly desirable benefits that could be gained through Joint Working.

The part that self-appraised 'compliance' and 'governance' competencies play in Joint Working becomes increasingly pervasive when interrelationships with the other competencies are analysed. In addition to 'perspective', the other areas that the ICB framework describes are 'people' and 'practice'; these areas are then each subdivided into an array of competency elements (IPMA 2015). The 'people' competencies consist of the interpersonal skills individuals need in order to successfully manage projects (ibid.). The 'practice' area of this competency framework defines an individual's ability to utilise the methods, tools and techniques of project management (ibid.). What is immediately noticeable when reviewing the results

		Q16	Q32	Q33	Q34
Q16	Pearson Correlation	1	.523**	.700**	.751**
	Sig. (2-tailed)		.009	.000	.000
	Ν	24	24	24	24
Q32	Pearson Correlation	.523**	1	.839**	.710**
	Sig. (2-tailed)	.009		.000	.000
	N	24	24	24	24
Q33	Pearson Correlation	.700**	.839**	1	.744**
	Sig. (2-tailed)	.000	.000		.000
	N	24	24	24	24
Q34	Pearson Correlation	.751**	.710**	.744**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	24	24	24	24

Q16 - Compliance

Fig. 5 Bivariate correlations between survey Q16, Q32, Q33 and Q34. Source: Authors own figure

from the survey is that the responses to the 'practice' element questions are all marked appreciably lower than any of the other elements in either of the other competency areas. This is of interest as it highlights a potential area where competencies among the group probably require some attention if the organisation were to increase focus on Joint Working. The questions covering the 'practice' competencies asked individuals to evaluate their skills in four project management techniques and tools. Three of these questions, Q32 (quality), Q33 (planning) and Q34 (design), independently have highly significant correlations to Q16 (compliance). These correlations are shown alongside in Fig. 5. The 'governance' question (Q22), which specifically asked if responders were confident in their ability to write the project initiation documentation required to commence Joint Working, also had a high degree of affinity with a number of elements among the 'practice' competencies. Q22 (Fig. 6) has highly significant correlations with Q33 (planning), Q34 (project design) and Q35 (risk). It would be reasonable to assume that confidence in writing project initiation documents is contingent on the practitioner having a reasonable understanding of these particular techniques and tools. Consequently, training that addresses any competency shortcomings related to planning, project design and risk could be anticipated to improve governance processes in relation to project documentation. The need to address 'practice' competencies is also highlighted by the fact that the number of 'strongly agree' answers to the questions in this section was strikingly low. The average number of 'strongly agree' responses

Q22 - C	Governance				
		Q22	Q33	Q34	Q35
Q22	Pearson Correlation	1	.572**	.600**	.559**
	Sig. (2-tailed)		.003	.002	.004
	Ν	24	24	24	24
Q33	Pearson Correlation	.572**	1	.744**	.451*
	Sig. (2-tailed)	.003		.000	.027
	Ν	24	24	24	24
Q34	Pearson Correlation	.600**	.744**	1	.263
	Sig. (2-tailed)	.002	.000		.215
	Ν	24	24	24	24
Q35	Pearson Correlation	.559**	.451*	.263	1
	Sig. (2-tailed)	.004	.027	.215	
	N	24	24	24	24

Fig. 6 Bivariate correlations between survey Q22, Q33, Q34 and Q35. Source: Authors own figure

was 25% across the whole questionnaire; however, for the 'practice' competency questions, this figure plummeted to just 11% of responses. This would appear to signal that whilst practitioners may generally think they have these competencies, their relative reluctance to 'strongly agree' indicates a comparative lack of confidence regarding technical practices.

The 'people' competency from the IPMA ICB provided this survey with a series of six questions that were adapted directly from definitions this framework uses to describe key competence indicators within each element (IPMA 2015). The specific elements the questionnaire covered were communication, integrity, leadership, resourcefulness, teamwork and negotiation. The responses to the 'people' competencies were remarkably consistent and relatively high across all six of these elements. Of these questions, the statement regarding negotiation (Q31) and resourcefulness (Q29) received the lowest mean scores at 3.92, with communication (Q28) receiving the highest mean score at 4.04.⁹ Two of the elements within this area of competency are worthy of additional investigation due to the high degree with which they are interrelated with other project management competencies. Q29, which refers to 'resourcefulness', asks if responders are skilled at analysing complex

⁹The mean for all questions in the survey was 3.747. The answers to the 'people' competency questions were all considerably higher than this mean; however, this is not statistically significant.

Q29 - R	Resourcefulness				
		Q29	Q25	Q28	Q35
Q29	Pearson Correlation	1	.560**	.689**	.561**
	Sig. (2-tailed)		.004	.000	.004
	N	24	24	24	24
Q25	Pearson Correlation	.560**	1	.486*	.317
	Sig. (2-tailed)	.004		.016	.131
	Ν	24	24	24	24
Q28	Pearson Correlation	.689**	.486*	1	.556**
	Sig. (2-tailed)	.000	.016		.005
	Ν	24	24	24	24
Q35	Pearson Correlation	.561**	.317	.556**	1
	Sig. (2-tailed)	.004	.131	.005	
	Ν	24	24	24	24

Fig. 7 Bivariate correlations between Q29, Q25, Q28 and Q35. Source: Authors own table

problems and finding agreeable solutions, and the results share a very strong correlation (Fig. 7) with Q25 (strategy), Q28 (leadership) and Q35 (risk).

Resourcefulness is defined by the IPMA as conceptual and holistic thinking that focuses on optimising the creative environment needed for idea generation (IPMA 2015). In essence, this element encompasses entrepreneurship and creativity, and the evidence suggests that such skills could enhance a practitioner's ability to operationalize corporate strategy (Q25), take the initiative (Q28) and identify risk and opportunities (Q35). In a similar vein, the 'negotiation' element shares a large number of highly significant interconnections with a wide array of other relevant competencies. Negotiation is covered by Q31, which asks individuals to assess their ability to identify trade-offs, options and alternatives that are highly attuned to the needs of other parties. The responses to this question were very closely correlated to the responses to Q25 (strategy), Q27 (integrity), Q28 (leadership) and Q30 (teamwork). These significant interrelationships (Fig. 8) suggest that as practitioners' confidence in their ability to negotiate increases, so too does the ability to integrate NHS and company strategy (Q25) and their willingness to proactively promote sustainability in their projects (Q27). Similarly, increased negotiation ability is also associated with increased confidence in taking initiative and coming up with new ideas (Q28) and when working in a group actively encouraging people to contribute their own ideas (Q30). Consequently, any training initiative designed to holistically improve practitioner competencies should focus on 'resourcefulness' and 'negotiation' due to the promising level of influence they are likely to provoke among a range of other competence elements.

Q31 - F	Negotiation	Q31	Q25	Q27	Q28	Q30
Q31	Pearson Correlation	1	.745**	.455*	.595**	.617**
	Sig. (2-tailed)		.000	.025	.002	.001
	N	24	24	24	24	24
Q25	Pearson Correlation	.745**	1	.376	.486*	.510*
	Sig. (2-tailed)	.000		.070	.016	.011
	Ν	24	24	24	24	24
Q27	Pearson Correlation	.455*	.376	1	.520**	.316
	Sig. (2-tailed)	.025	.070		.009	.132
	N	24	24	24	24	24
Q28	Pearson Correlation	.595**	.486*	.520**	1	.457*
	Sig. (2-tailed)	.002	.016	.009		.025
	N	24	24	24	24	24
Q30	Pearson Correlation	.617**	.510*	.316	.457*	1
	Sig. (2-tailed)	.001	.011	.132	.025	
	N	24	24	24	24	24

Fig. 8 Bivariate correlations between survey Q31, Q25, Q27, Q28 and Q30. Source: Authors own figure

8 Conclusions

In order to reflect the diverse multilayered evaluation that has taken place, the conclusions are grouped at sector level (macro), company level (meso) and finally at leadership/practitioner level (micro). The evidence from both primary and secondary sources reiterate authentic optimism that Joint Working offers substantial 'win-win' benefits for patients and all project partners. However, the resounding deduction from the findings of this research is that the potential benefits of engagement in partnering with the pharmaceutical industry are generally not well recognised by the NHS. The uptake of Joint Working is exceptionally low, with the 15 largest pharmaceutical companies initiating just 43 projects in the UK in 2015. To illustrate this point further, the industry sold $\pounds 17$ billion worth of medicinal products in the UK in 2015 (IMS Health 2016) whilst invested just £3.3 million undertaking Joint Working projects. The level of investment in these collaborations is trivial when compared to the overall income of the industry. However, there is hope; the interviewees and the survey participants provided data that employees in the NHS are often unaware that formal mechanisms for collaboration even exist. Furthermore, data from a competitor organisation indicates that uptake of Joint Working in ophthalmology (Novartis 2016), a relatively niche disease area, is reasonably substantial lending weight to an argument that the industry is failing to realise the full potential of partnership opportunities that exist in other clinical areas. The fact that Novartis commissioned 17 projects across all disease areas certainly

shows a respectable level of NHS partnering by this particular organisation. Needless to say, Novartis is actively promoting demand, and as such they offer an exemplar that proactive engagement in this space can lead to the establishment of projects that are significant in scale and ambition. There is also merit in statements made by several research participants that demand from the NHS for greater transparency could well lead to a surge in more formalised partnership arrangements. Therefore, the conclusions that can be reached pertaining to macro factors in the Joint Working arena are that even though the environment is still embryonic and in need of nurturing, the opportunities for partnering in the future could prove plentiful.

The external context offers promise that there is some potential for a substantial uplift in Joint Working partnering between the NHS and industry. Leadership in this organisation has expressed a desire for their company to become a more prominent player in the field of Joint Working; however, as of yet, there has been no definitive commitment towards becoming a more proactive corporate participant. The unwillingness to act was anticipated as this organisation is highly conservative and decision-making only tends to occur when the evidence for action is overwhelming. In truth, transformative changes in procedures governing transparency between the NHS and pharmaceutical industry are a significant unknown and could potentially represent the death knell for all inter-organisational interactions. However, if any mechanism for cooperation between the health service and industry is to survive, it's likely to be the one that is the most formalised in terms of governance and the most open to public scrutiny. Consequently, Joint Working as a process cocreated by the NHS, ABPI and DOH, with formal guidance and tightly defined deployment criteria (PMCPA 2016), is potentially the only activity currently deployed by the pharmaceutical industry that will have discernible longevity. Nonetheless, there are also a number of significant operational factors severely limiting the organisation's ability to fully engage in these activities. The supposition made by the focus group when creating the force field analysis diagram was that there is an appreciable imbalance in internal factors that are acting to restrict engagement. Therefore, the greatest potential to effect Joint Working engagement is within this organisation's direct control and resides primarily in mitigating the multitude of factors that are currently acting as dominant internal restraining forces. The most powerful of these identified by the group were a lack of internal awareness regarding the benefits in Joint Working, lack of resource to undertake and support projects and compliance procedures that are difficult to navigate. The analysis from the interviews and surveys also corroborated the validity of these findings, with those involved in the interviews offering additional insights into a number of critical internal barriers. The crucial restrictions they identified were the lack of capacity and competing priorities within their role and a deficit of project management skills among their peer group. These barriers (with the exception of awareness of benefits and competency deficits) are attributes of organisational structure and an entrenched dogmatism regarding regulatory requirements. These characteristics would require significant effort to change and as such would necessitate a steadfast commitment to Joint Working in order to justify the transformation needed.

The trade-offs required to transform this company into a more collaborationorientated organisation would be significant. Therefore, the benefits that could be realised through more proactive engagement in Joint Working would need to be compelling in order to establish the business case for change. The findings from all of the methods used in this research offer a range of views that support a case that greater investment in formal partnering could stimulate disproportionate returns in realisable benefits for patients, the NHS and this company. The participants in the focus group and interviews articulated a consistent and comprehensive collection of benefits that the NHS and patients could achieve as outcomes from Joint Working initiatives. This underscores the importance of broadening discussions into project benefits beyond the fiscal and short term before attempting to assess the real value of collaborations. The participants in the focus group agreed unanimously that Joint Working could act as a major driver for the improvement of patient's outcomes—a view strongly endorsed by the participants in the interviews. The benefits of collaborative engagement with NHS partners were believed to act as a 'force multiplier' when it comes to the health service making efficiency gains and cost savings. Mattessich et al. (2001) suggest that, through shared expertise and reduction in duplication, improvements of this type occur commonly in partnerships. The tendency for collaboration to stimulate the development of creative solutions (through the deployment of diverse complementary capabilities) was offered as a factor that would benefit all parties. However, whilst the potential benefits for the organisation's NHS partners are compelling, Joint Working is not a philanthropic activity. Consequently, there is a need to provide legitimate benefits to the company involved for it to be a commercially viable undertaking.

The conclusion that can be reached from this research is that the business case for engagement in Joint Working is extremely robust. The benefits offered by the focus group participants and interviewees were almost identical in content and emphasis. The strongest factors articulated were the establishment of relationships with key personnel in the health service and significant gains for the company in regard to reputation and trust with its NHS partners. In the opinion of one of the participants in the interviews, Joint Working had enabled the individual to become 'massively embedded' within the organisation of his healthcare service partner, whilst another considered these partnerships to be 'game changers' in the relationship between the NHS and industry. The results from the survey also confirm that field-based practitioners in this company strongly believe that Joint Working provides an opportunity for the company to acquire deep customer insight. There was also a case put forward that NHS efficiencies developed through collaboration could generate increased commercial opportunities due to improved patient throughput. In addition, the participants in the focus group and interviews also stated a number of benefits from Joint Working that are quantifiable and as such may satisfy demands from the business for returns from partnership that have an easily measurable value. The benefits described included increases in employee job satisfaction scores,

improvements in Net Promoter Score¹⁰ and the use of particular company medicine in specific cases if agreed by the NHS.¹¹ This comprehensive range of benefits would appear to represent a compelling business rationale for enhanced capability in Joint Working; however, two major issues at micro level still need to be addressed.

The final influences that require summarising are those pertinent to the individual decision-makers and practitioners employed by the organisation. The evaluation offered by the group and those interviewed was that generally individual practitioners currently possess an adequate level of project management competencies to participate in Joint Working projects if delivered on an ad hoc basis. However, if it were decided to increase capability and be more proactive in partnering, it was felt that there would be a significant deficit in the skills required to undertake more sophisticated and ambitious projects. Therefore, if increased organisational capability is indeed desired, the principal conclusion that can be made from the findings at micro level is that any efforts to improve competencies need to be directed towards three main areas. The first of these areas, and arguably the most important, is that practitioners need to have an excellent knowledge of the ABPI compliance regulations in relation to Joint Working. The evidence from all of the research methods used indicates that a thorough understanding of compliance and governance processes is essential if practitioners are to actively engage in Joint Working activities. The next area of focus is related to the ability of the team to utilise the tools and techniques of project management. In particular there is potentially a significant deficit in competencies when it comes to planning, designing and managing risk within projects. The final major conclusion that can be reached from the practitioner survey is that the 'resourcefulness' and 'negotiation' competencies could significantly enhance the ability of individuals to deliver Joint Working in practice. This is primarily due to the fact that both of these competencies share a very high degree of interrelatedness across a broad spectrum of other project management competency elements. Nonetheless, the primary factor acting as a barrier to Joint Working is that leaderships in the business currently perceive these types of project as somewhat peripheral activities that are of little commercial value. Therefore, there will be a need for a groundswell in managerial desire to commit wholeheartedly to Joint Working ventures in order to justify the investment needed to address the deficit of practitioner skills that has been exposed. Thereafter, the findings from this research offer valuable insights into the competencies the organisation would need to acquire in order to enhance its capability to work in 'beyond the pill' partnerships with the NHS.

¹⁰Net Promoter Score (NPS) is an index used to measure customer loyalty to a company (Reichheld 2003).

¹¹This is permissible within the provisions of the ABPI code of practice, but only in circumstances where the parties to the Joint Working have satisfied themselves that the use of the medicines will enhance patient care (ABPI 2016).

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