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REVEALING NATIONAL E-HEALTH IMPLEMENTATION PROCESSES: STAKEHOLDER ENGAGEMENT AS THE KEY LESSON FROM THE NATIONAL HEALTH SERVICE IN ENGLAND AND WALES

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Abstract. *This research paper reports new insights in relation to national processes of ICT implementation in the healthcare sector. In the context of failing e-Health initiatives, new empirical evidence was derived from a longitudinal case study of the national implementation processes of e-Health strategies in England and Wales. The experience of two different approaches taken by the English Connecting for Health Programme and the Welsh Informing Healthcare Programme suggest the importance of stakeholder engagement in technology-led organisational change in the healthcare sector. Moreover, since stakeholder engagement as such does not necessarily lead to successful outcomes of organisational change initiatives, perspectives on stakeholder engagement strategies and levels are presented using Friedman & Miles ladder of stakeholder management and engagement.*

Keywords: *e-Health, national programmes, healthcare sector, organisational change, stakeholder engagement, change management, innovation and sustainability.*

Introduction

The healthcare sector in Europe is considered as having huge potential for modernisation through the implementation of Information and Communication Technologies (hereafter ICT) in order to increase overall cost effectiveness of the sector and improvement of healthcare services. However it had fallen progressively behind other service sectors in terms of relative levels of investment in this area. Policy developments in individual member states or political commitments made at the EU level are injecting considerable financial resources into healthcare technology. Although appropriate funding is necessary, the experience of some European countries already shows that this does not guarantee the successful delivery of expected benefits, to say nothing of the sustainability of change.

Most large and complex IT projects (such as the national e-Health programmes) involve considerable delays, are over budget and often reduced in scope. Moreover they experience failures because the systems were not used after actually being deployed within an organisational setting. This simultaneously raises questions about whether the current policy preoccupation with technical specifications, interoperability standards or flexibility in procurement requirements are in fact the most important factors for delivering the "seamless and patient-focused healthcare" identified in many national e-Health strategies.

This research paper reports on findings of a longitudinal case study in England and Wales and suggests that stakeholder theory in general and stakeholder engagement in particularly has the power to integrate both the IT project management and organisational change perspectives of technology-led change, and deliver new insights regarding innovation and organisational change sustainability in healthcare sector.

Moreover, as stakeholder engagement does not always lead to successful project outcomes, perspective on stakeholder engagement strategies and levels is presented.

1. The Role of Stakeholder Involvement in Change Processes in the Healthcare Sector: the Case of Technology-Led Organisational Change

There is a growing research body that practical implementation of change in healthcare sector actually requires an extensive clinical engagement to deliver innovations in patient care and achieve sustainability of change.[1] Clinicians can play an influential role both as promoters, and as inhibitors of organisational change.[2] A

1 Buchanan, D. A.; Fitzgerald, L.; Ketley, D. (eds.). *The Sustainability and Spread of Organizational Change*. New York: Routledge, 2007.

2 Fitzgerald, L.; Lilley, C.; Ferlie, E.; Addicott, R.; McGivern, G.; Buchanan, D. A. Managing change and role enactment in the professionalised organisation. Report to the National Co-ordinating Centre for NHS Service Delivery and Organisation R&D (NCCSDO), London, 2006 [interactive]. [accessed 17-08-2011]. <http://www.sdo.nihr.ac.uk/files/project/21-final-report.pdf>.

group of researchers who have explored scepticism and resistance towards changes in working practice designed to achieve service improvement in healthcare, concluded that scepticism and resistance exist in all staff groups, but among medical staff in particularly.[3] Reasons include personal reluctance to change, misunderstanding of the aims of improvement programmes, and a dislike of the methods by which programmes have been promoted.[4]

Among the main underlying causes of resistance to organisational change is linked to power and influence of "professional bureaucracies."[5] Healthcare organisations are considered as being among the best examples of such "professional bureaucracies." According to Mintzberg, a key feature of professional organisations is that professionals have a large degree of control, and then the ability of managers, politicians and others to influence decision-making is more constrained within these organisations than in others. Another important feature of professional bureaucracies is that they are oriented to stability rather than change. Jobs in professional bureaucracies are highly specialised, but minimally formalised.[6] In addition, such organisations are characterised as having strong horizontal linkages, and therefore change must be influenced in a bottom-up way and not just through top-down application of formal authority.[7] Under these conditions clinical staff is usually seen as the only professionals "legitimately" permitted to implement changes in relation to better medical care. Higher success rates are expected, if effective ways to use their capabilities are found.[8] In addition, Bate has developed a theory of "microsystems" i.e. that some organisations are split by sub-cultures which then exist in isolation from each other and hospitals are very typical of those kinds of organisations.[9] Cooperation here means that some of power has to be given up for the sake of cooperation and this is not attractive in professional bureaucracies. This becomes very problematic in cases where change requires cooperation of several departments.[10] It is also recognised that resistance by doctors towards improvement initiatives is common across all countries and health systems.[11]

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3 Gallop, R.; Reynolds, W. Putting it all together: Dealing with complexity in the understanding of the human condition. *Journal of Psychiatric and Mental Health Nursing*. 2004, 11(3): 357–364.

4 *Ibid.*

5 Mintzberg, H. *The structuring of organisations*. Prentice-Hall, Englewood Cliffs, 1979.

6 Mintzberg, H. Structure in 5s: a synthesis of the research on organization design. *Management Science*. 1980, 26: 322−341.

7 Dickinson, H.; Ham, D. *Engaging doctors in leadership: review of the literature* [interactive]. Health Services Management Centre, University of Birmingham, 2008 [accessed 23-07-2011]. <http://www.hsmc.bham.ac.uk/work/pdfs/Engaging_Doctors_Review.pdf>.

8 Guthrie, M. Engaging physicians in performance improvement. *American Journal of Medical Quality*. 2005, 20: 235−238.

9 Bate, P. Changing the culture of a hospital: from hierarchy to networked community. *Public Administration*. 2005, 78: 485−512.

10 *Ibid.*

11 Shekelle, P. G. Why don't physicians enthusiastically support quality improvement programmes? *Qual Saf Health*. 2002, 11(6).

Moreover, present day reality shows that working across boundaries and within networks is more effective in delivering the changes needed in healthcare sector[12] and clinical leadership and engagement when working in this way, however, is crucial if these changes are to be achieved and sustained.[13] For instance, Milward and Bryan argue that the majority of the government's recent health reforms have an implicit notion that "integrated multi-professional care is only possible to the extent that professional and directorate barriers are broken down, and a culture of shared clinical governance is cultivated in which staff are empowered to accept responsibility and accountability at all levels of the hierarchy."[14] E-Health initiatives are not exceptions. Moreover, they rather all are calling for patient-centric joint up working and service integration across departments and healthcare organisations. According to Dickinson & Ham, in emphasising the role of networks rather than hierarchies and taking in mind the "theory of Microsystems" highlights the importance of involving a large number of people at all levels of the organisation, not just those in formal positions of authority.

Evidence of the need to involve affected parties in organisational change is also found in relation to technology-led changes. For instance, according to Greenhalgh, Stramer, Bratan, Byrne, Mohammad & Russell, shared electronic records are not plug-in technologies.[15] They are complex innovations that must be accepted by individual patients and staff and also embedded in organisational and inter-organisational routines. This process is heavily influenced at the micro-level by the material properties of the technology, individuals' attitudes and concerns, and interpersonal influence; at the meso-level by organisational antecedents, readiness, and operational aspects of implementation; and at the macro-level by institutional and socio-political forces. Another study has concluded that greater integration of services and practice towards the development of person-centred care requires an equal shift in approaches to technology and information management.[16] Person-centred care can only be effectively delivered through access to person-centred records and systems, which will equally require the introduction of person-centred information governance. The challenge lies in managing and redefining boundaries of practice, along with changes in processes, systems and technology, to ensure that developments in integration effectively support the person-centred approach.

Chang highlighted the links between the stakeholder engagement and various aspects contributing to change implementation[17], for instance, that the need for

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12 Goodwin, N.; Perri, G.; Peck, E.; Freeman, T.; Posaner, R. *Managing Across Diverse Networks of Care: Lessons from Other Sectors*. Report to the NCCSDO. London: NCCSDO, 2004.

13 Woodard, F. *How to Achieve Effective Clinical Engagement and Leadership when Working Across Organisational Boundaries. Practical Recommendations*. Guy's St Thomas' Charity, 2007.

14 Millward, L. J.; Bryan, K. Leadership in Health Care: A Position Statement. *Leadership in Health services component of the International Journal of Health Care Quality Assurance*. 2005, 18(1): xiii−xxv.

15 Greenhalgh, T.; Stramer, K.; Bratan, T.; Byrne, E.; Mohammad, Y.; Russell, J. Introduction of shared electronic records: multi-site case study using diffusion of innovation theory. *BMJ*. 2008, 337(7677): 1040−1044.

16 Hill, P. Making it personal: the challenge of multi-agency care. *British Journal of Healthcare Computing & Information Management*. 2007, 24(2): 13−15.

17 Chang, H. Technical and management perceptions of enterprise information system importance, implementation and benefits. *Info Systems J*. 2006, 16: 263–292.

stakeholder dialogue increases with the level of integration complexity; complex ICT solutions usually require accompaniment by business process re-engineering, which is generally acknowledged by systems analysis practitioners to require active stakeholder participation, resulting in shared understanding and user satisfaction and that there are extensive evidence that a shared understanding between business and IT stakeholders promotes IT effectiveness.

A study by Marsden, Taylor, & Coker has also concluded that the meaningful engagement of clinicians throughout the process of the implementation of a new clinical information system has facilitated the success of the intra-organisational multi-departmental change programme.[18] Overall, the information systems (IS) literature suggests that user participation in software development is beneficial because it improves the requirements determination process, leads to greater buy-in, and keeps users informed about progress leading to higher levels of user satisfaction, system quality, and system usage.[19] At the same time, user participation varies widely regarding type (everybody versus representatives), degree, content, extent, formality, and influence.[20] However, the most important fact is that user participation in system development has been one of the most widely researched topics in the IS literature, there is much that we do not know about user participation as such and, according to Gallivan & Keil, it is dangerous to assume that user participation always leads to successful project outcomes.

High failure rates of ICT initiatives[21], however, suggest that an instrumental role of stakeholders in the successful design and implementation of information systems, which was predominating IS research and, more importantly, the practice is also out of date as it does not correspond to the contemporary needs of practitioners.

2. Research Methods Used

This paper is based on the findings from a longitudinal case study research in England and Wales, with a 10 month research stay visit in the National Welsh Programme *Connecting for Health*. Qualitative research methodology was accompanied with onsite observation, semi-structured interviews with experts, action research and extensive document analysis.

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18 Marsden, C.; Taylor, S.; Coker, D. Implementing an electronic patient record for Leicestershire‘s therapists working in the community: 2002-2005. *British Journal of Healthcare Computing and Information Management*. 2005, 22(5): 20−22.

19 Gallivan, M. J.; Keil, M. The user–developer communication process: a critical case study. *Info Systems J*. 2003, 13: 37–68.

20 Scholl, H. J. Involving Salient Stakeholders. Beyond the Technocratic View on Change. *Action Research*. 2004, September(2): 277−304.

21 The Challenges of Complex IT Projects [interactive]. The Royal Academy of Engineering, 2004 [accessed 26-07-2011]. <http://www.bcs.org/upload/pdf/complexity.pdf>; CHAOS Manifesto 2011 report [interactive]. The Standish Group [accessed 16-06-2011]. <http://www.marketwire.com/press-release/new-standish-group-report-shows-more-projects-are-successful-less-projects-failing-1405513.htm>.

3. National Programmes for ICT Implementation in Health

Member states of the European Union were urged to develop and adopt national e-Health strategies and implementation roadmaps back in 2004 when the European Commission (hereafter EC) has adopted e-Health Action Plan. The Plan also directed the EC to regularly monitor the state of the art in deployment of e-Health, the progress made in agreeing on and updating national e-Health roadmaps, and to facilitate the exchange of good practices.[22] Whereas this was a strong incentive for many countries to start strategy development and implementation processes, the developments were already on the way for several years before that in England and Wales.

As a result of political devolution in the UK in 1998, four separate national delivery programmes for IT in healthcare sector were established to reflect the situation of four 'home nations' in the UK, namely England, Scotland, Wales and Northern Ireland: *Connecting for Health* (hereafter CfH) in England, *Informing Healthcare* (hereafter - IHC) in Wales, *Scottish Care Information* (hereafter SCI) in Scotland and *Health and Personal Social Services* (hereafter - HPSS) Programme in Northern Ireland. While former parts of the same National Health Service (hereafter NHS), the experience of ICT implementation in healthcare in England and Wales are demonstrating completely different results.

4. Experience from England and Wales

Two national programmes in the UK in England and Wales, which are analysed here, have taken different approaches towards national ICT implementation in their healthcare sectors. In England, the NHS *Connecting for Health* is part of the Department of Health and is leading the national delivery of the IT strategy for England. Established in 2004, the Programme has spent more than £6 billion on health IT by the end of 2010. It has around 1,100 staff and contractors who are employed on the Programme. The systems and services supplied to the local NHS under the Programme are being delivered by three Local Service Providers (private companies), each responsible for a different region of the country. Multi-year contracts were granted over a central procurement organised by the Programme. Meanwhile Wales is learning from the "English mistakes" the Programme *Informing Healthcare* has around 100 employees and contractors and is based on service improvement projects, with project-by-project funding as they are ready and which are implemented in close cooperation with the national healthcare sector (such as Trusts (healthcare administrative entities), other healthcare organisations and providers of healthcare services, clinicians and other NHS staff and other stakeholders). The Programme also closely works with IT suppliers, but not relying on them like in England.

22 EC (The). E-Health action plan COM (2004) 356 final. E-Health—making healthcare better for European citizens: An action plan for a European e-Health Area" (eH-AP) [interactive]. [accessed 14-07-2011]. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52004DC0356:EN:NOT>.

4.1. Differences and Similarities of the Approach

By using an opportunity to cross and compare and follow the processes for a longer time period, the following features were singled out as characterising the national ICT in health implementation processes in England and Wales:

- A top-down vs bottom-up change implementation approaches;
- A technocratic view vs comprehensive organisational change approach towards ICT-led organisational change;
- Unbalanced power of large IT suppliers and management consultants vs and the end user in the NHS;
- "Big bang" approach and "rip and replace" strategy vs incremental change implementation approach;

Lack of stakeholder engagement vs an extensive work with stakeholders.

Regarding the top-down vs bottom-up change implementation approaches, this was among the main differences between the ways being taken in England and Wales. Contrary to the Welsh approach, the national process of ICT implementation in health in England was led by large IT companies rather than facilitated by the National Programme and the government in close cooperation with the healthcare sector. Among the main responsibilities that the national Programme had in England was to organise the procurement process. Although required to contribute financially and being the ultimate users of newly developed systems, Trusts had no formal contractual relationships with IT suppliers to be able to manage this relationship more effectively.[23] Moreover, with the majority of contracted IT suppliers experiencing considerable difficulties and delays in delivering the products and partly because of that downsizing the specifications of the IT systems, the individual NHS Trusts or NHS as a whole were legally exposed to face financial penalties, if not enough of them choose to take the information systems and meet the contract.[24] The Welsh Programme IHC was based on service improvement projects, where the Programme has provided platform for an extensive working with various stakeholders and operational involvement of end users. This has also contributed to the aspect of technocratic view vs comprehensive organisational change approach towards ICT-led organisational change. In the case of NPfIT, IT suppliers were advising government and therefore had control of both the programme and operational delivery, but also imposed a very technocratic approach towards organisational change. Centralised procurement has also contributed to the approach by putting commercial value of the Programme before specific requirements of the healthcare sector. As a result, newly developed IS were mainly providing administrative benefits (process efficiently, if at

23 *The National Programme for IT in the NHS: Progress since 2006*. The National Audit Office: The Stationery Office, 2008; *The National Programme for IT in the NHS: an update on the delivery of detailed care records systems*. Report by the Comptroller and Auditor General HC 888 SesSIon 2010–2012, 18 May 2011, National Audit Office, Department of Health.

24 Bruce, S. NHS could still be penalised under NPfIT [interactive]. *eHealth Insider*, 1 October 2010 [accessed 14-05-2011]. <http://www.ehi.co.uk/news/ehi/6287≥.

all), rather than the expected clinical ones (process effectiveness and quality of patient care).[25]

Unbalanced power of large IT suppliers and management consultants and the end user in the NHS is not a single-case issue, which was typical for CfH only, on the contrary this is a much larger issue in England's public sector.[26] In addition to high costs and inability to manage them effectively, they also do not deliver value for money. Moreover, the Welsh approach also demonstrated that by close involvement of stakeholders the Programme and the NHS as such has accumulated enormous amount of crucial learning, that otherwise could be taken away by management consultants. "Big bang" approach and "rip and replace" strategy vs incremental change implementation approach was also the specifics that distinguished the English and Welsh approaches. In cases systems were indeed delivered, more risky—rip and replace strategy and big bang adoption, with aims to replace all existing systems and the switch between using the old and the new systems happens at one single date was extensively used by the English Programme. As acknowledged several years later, this didn't take into account the specifics of each healthcare organisation and the fundamental changes in work organisation that ICT deployments bring along. Moreover, in some cases this caused major rejections among staff, because the majority of new systems were of lesser or of inadequate functionality than the ones they have replaced.[27] By applying incremental step by step change implementation approach and technological adjusting to the specific needs of healthcare organisations this kind of situation was avoided in Wales. Lack of stakeholder engagement vs an extensive work with stakeholders was and still is a cross-cutting aspect in failing national ICT implementation process in NHS England and more sustainable changes that are achieved in Wales. It seems that the involvement of those who would eventually use the systems is crucially important for a useful change delivery in healthcare sector. Checking the box marked "users consulted," as required by the official procurement rules, was only a formal requirement in England. Even in 2008 the examples of improvements that were named by the representatives of the NHS included in relation to CfH were limited to "more open communications and providing clinicians with more advance notice of events to make it easier for them to attend."[28] Whereas NHS staff in Wales was participating at every stage of the operational delivery of service improvement projects in Wales, starting from the conception of ideas on how the needs for healthcare service improvement might be satisfied right to the very end of the delivery of the IT solution.

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25 The National Programme for IT in the NHS: an update on the delivery of detailed care records systems, *supra* note 23.

26 Central government's use of consultants and interims [interactive]. Report by the Comptroller and Auditor General, H C 488, Session 2010–2011, 14 October 2010, The National Audit Office [accessed 14-07-2011]. <http://www.nao.org.uk/publications/1011/use_of_consultants.aspx>.

27 *Department of Health The National Programme for IT in the NHS: an update on the delivery of detailed care records systems*, *supra* note 23.

28 *The National Programme for IT in the NHS: Progress since 2006*, *supra* note 23.

4.2. Obstacles Encountered

Due to an ability to observe the process from inside out over a longer period of time and be able to cross and compare with the experience of other home nations and countries there are many obstacles that could be distinguished in connection with the English Programme CfH. Among the most prominent ones was the fact that delivered systems were difficult or not possible to use; there was high resistance towards change from NHS staff and an overall lack of local change ownership and commitment by the end users and other stakeholders as they were neglected throughout the entire Programme implementation process; the process was led by large IT companies rather than the needs of the NHS, where IT suppliers were hiding their difficulties for as long as possible and the Programme not able to assess the viability of plans and deadlines; locally accumulated knowledge and skills were disappearing, because they were not used, instead relying on private consultancy services; contrary to the Welsh approach, where becoming a so called "intelligent client" in dealing with IT suppliers was among the greatest benefits of an extensive work with the NHS Wales and other stakeholders, this was not possible in England where IT suppliers and associated management consultants have retained that knowledge themselves. This resulted in hindered NHS' capabilities to innovate, service fragmentation instead of cooperation and integration, but most importantly changes didn't deliver value for money and innovations in patient care, yet in some cases ICT failures hurting, not delivering innovations in patient care. On the contrary the Welsh approach demonstrates lower operational costs and value for money; developed ICT systems are suitable and are used by those they were intended for; an extensive stakeholder engagement has stimulated an increased internal cooperation among healthcare organisations, which is an obligatory pre-condition to create a patient-centric healthcare system; moreover, the accumulated information and knowledge has enabled to become an intelligent client, which lowered the Programme's dependency on IT suppliers, but most importantly resulted in more sustainable changes in work organisation because of stakeholder commitment to change.

5. The Role of Stakeholder Engagement

Referring back to the literature, user participation in software development is beneficial because it improves the requirements determination process, leads to greater buy-in, and keeps users informed about progress leading to higher levels of user satisfaction, system quality, and system usage.[29] However, it is dangerous to assume that user participation always leads to successful project outcomes. The fact that "ticking the box marked "users consulted" in the procurement process" was not an appropriate way of engaging stakeholders in relation to the English Programme CfH, there is a question on what is the level of stakeholder engagement to make their worthwhile contribution to the national process of ICT implementation in health.

29 Gallivan, M. J.; Keil, M., *supra* note 19.

Taking Friedman & Miles'[30] ladder of stakeholder management and engagement, which is based on Arnstein's ladder of participation (1969) (Annex 1), the English approach could be placed only on the two lower levels of the ladder, using manipulation and therapy as a stakeholder management tool. As empirical evidence suggest, the main intention of "engagement" in the very beginning was to mislead stakeholders, attempting to change stakeholder expectations or "cure" stakeholders of their ignorance and preconceived beliefs. According to Friedman & Miles, they do not advocate that all stakeholder relations be conducted at the highest level (Level 12), or at any particular level, but levels 1 and 2 represent bad practice and if organisations either neglect important stakeholders or treat them with contempt, this will hurt the organisation in the long run in terms of its reputation and ultimately its sustainability.[31] In England stakeholders were complaining that the CfH merely informed them even about decisions that have already taken place, to say nothing about an advanced information giving or participation. The style of management was autocratic and did not involve any form of participation between the organisation and certain groups of stakeholders namely the users and the service as a whole. Moreover, the English approach had some features that Friedman & Miles described as cynical, but common for the lower two rugs of stakeholder management and engagement ladder.[32] Here attempts were contrived to appear to be indicative of true participation, but in fact were mere public relations attempts at changing stakeholder expectations. The power was firmly on the side of the CfH along with IT suppliers and associated management consultants, but not the NHS. There was no dialogue, merely a one-way communication process blended with features of manipulation such as control, skilful management, and manoeuvring of opinion. Friedman & Miles a similar situation call "PR management," which exists to "enable power-holders to educate or cure, not to enable participants in planning or delivering the initiatives." There were also attempts to stakeholder brainwashing—a feature that is typical for the therapy rug in the stakeholder management and engagement ladder.[33] Stakeholders were intensively attacked with self-laudatory corporate information. However, contrary to the expectations, clinicians and the NHS was a stakeholder group, which was difficult to "indoctrinate" with the principles the NPFIT was keen to manipulate with. The changes that have started in 2009 provide an indication that the approach towards stakeholder engagement may change, but for a number of years have not reached a higher level than the first rung of tokenism—informing (Annex 1). For instance, in 2008 clinicians and other NHS staff were asked to provide examples on how NHS CfH has improved its approach towards the service. Examples of improvements that were suggested by the NHS included more open communications from NHS CfH and providing clinicians with more advance notice of events to make it easier for them

30 Friedman, A. L.; Miles, S. *Stakeholders. Theory and Practice*. Oxford: Oxford University Press, 2006, p. 162−163.

31 *Ibid*.

32 *Ibid*.

33 *Ibid*., p. 165.

to attend.[34] Although current developments suggest considerable improvements in this respect, it is unlikely that the approach of the CfH towards stakeholder engagement will exceed the highest level of tokenism in the ladder of stakeholder management, here token engagement allows the "powerless" to have a voice, but they lack the power to ensure their voices are heeded. This approach however is not likely to change in the nearest future as well as this kind of process takes time, requires dedication and skills and most importantly the vision on how to drive the process.

The "Welsh approach," on the contrary, could be placed on more proactive and trusting degrees of involvement and stakeholder power in the Friedman & Miles' ladder of stakeholder management and engagement and even reaching Level 11: Delegated power, where joint decision-making power is shared with stakeholders (i.e. the end users of the information systems, healthcare organisations, clinicians and their associations) in variety of Programme's activities, ranging from service improvement projects to participation in project boards and the management level of the Programme. In Wales the level of stakeholder engagement is exceeding the level of collaborations in stakeholder management and engagement toolkit. Collaborations are more focused on working groups and joint outcomes (e.g. product development), whereas the Programme has involved the NHS staff in more substantial joint activities and was focused not only on joint outcomes, but also joint processes leading to them like agreeing on strategy, strategic directions and the ways forward. This proved to be more sensible strategy in an environment, such as healthcare, is very complex with constantly changing networks of interdependence among its stakeholders. In such circumstances collaborative, not competitive, strategies are critical in order to build on interdependences rather than buffering them. According to Friedman & Miles'[35] such techniques are known as bridging or boundary spanning. They helped the Programme to accumulate knowledge on end users' needs and to reduce uncertainties arising from unpredictable demands and pressures from high levels of interdependences among various stakeholders by increasing the level of control that each party has over the other's activities and their ownership over the multi-level (such as national, local, organisational and workplace) change process. The process is time and energy consuming, because it requires high levels of trust between parties, which take time to develop. However it pays off in the longer term of organisational change in terms of innovation in patient care, delivered expected benefits and achieved sustainability of organisational change.

Conclusions

The article has demonstrated that the organisational change is complex as such and the more so because of the specifics of healthcare sector. Mintzberg's "professional bureaucracy" does partly explain why changes in healthcare organisations are difficult

34 *The National Programme for IT in the NHS: Progress since 2006*, *supra* note 23.

35 Friedman, A. L.; Miles, S., *supra* note 30, p. 167.

to implement and require particular approaches. Technology-led organisational changes in healthcare sector do accommodate even greater challenges. The more so, if they have to "cross" organisational and professional boundaries, such as many e-Health initiatives usually require. Available evidence suggests that such innovations are complex and must be accepted by individual patients and staff and also embedded in organisational and inter-organisational routines and therefore require more human-focused approaches.

Experience of the EU members states in relation to implementation of national e-Health strategies committed under the European e-Health Action Plan suggest that practical implementation of such initiatives pose even greater challenges. Most large and complex IT projects (such as in national e-Health programmes) usually involve considerable delays, are over budget, and relatively often experience failures because deployed information systems were not used by those they were intended for.

Empirically derived insights from the case studies in England and Wales suggest that stakeholder engagement is of crucial importance in technology-led organisational change process in healthcare sector. At the same time stakeholder engagement as such does not always lead to successful project outcomes. Using Friedman & Miles' ladder of stakeholder management and engagement, it can be concluded that only upper levels of stakeholder engagement may result in greater buy-in, change ownership, mutual respect and trust and multi-dimensional organisational learning that seem to be very important for a successful technology-led organisational change in healthcare organisations.

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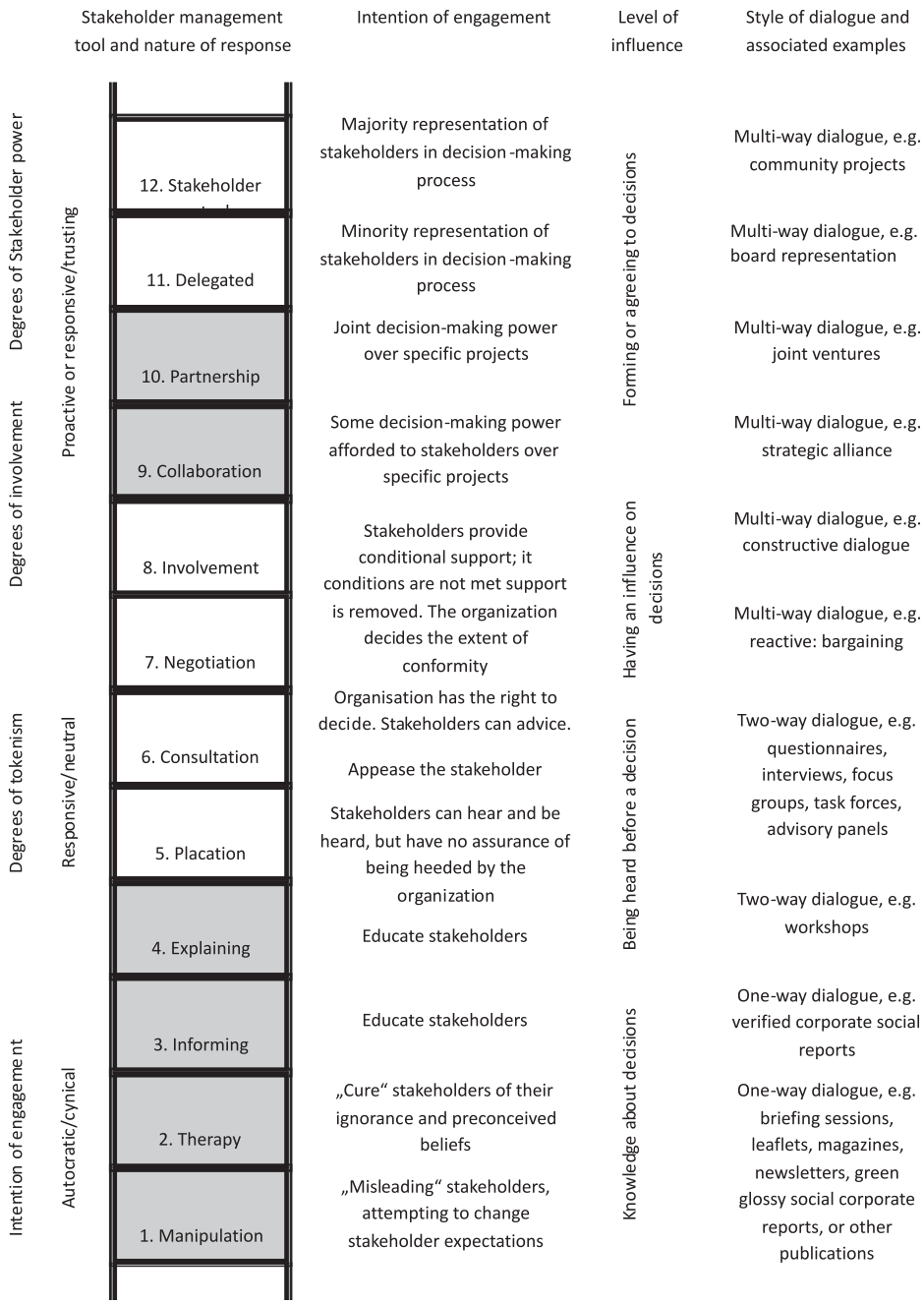
Annex 1. Adapted from Friedman & Miles' ladder of stakeholder management and engagement (2006)



NACIONALINIO E.SVEIKATOS PLĖTROS PROCESO ANALIZĖ: SUINTERESUOTŲ ŠALIŲ ĮTRAUKIMAS KAIP VIENAS PAGRINDINIŲ VEIKSNIŲ ĮGYVENDINANT ANGLIJOS IR VELSO SVEIKATOS SEKTORIŲ TECHNOLOGINIŲ POKYČIŲ PROGRAMAS

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Santrauka. *Straipsnyje analizuojamas nacionalinis e.sveikatos plėtros procesas, jo iššūkiai ir priemonės, kurios leistų sumažinti nepageidaujamų pasekmių tikimybę. Tai darosi ypač aktualu, kai 2004 metais Europos Komisija priėmė Europos e.sveikatos veiksmų planą ir paragino Europos Sąjungos šalis nares parengti ir pradėti įgyventi nacionalinius e.sveikatos veiksmų planus. Kaip rodo praktinė daugelio šalių patirtis, panašūs procesai susiduria su įvairiais sunkumais. Daugelis didelių ir kompleksinių informacijos ir komunikacijos technologijų projektų, o tokie dažniausiai ir būna nacionaliniai e.sveikatos plėtros projektai, vėluoja, gerokai viršija biudžetus, bet, svarbiausia, yra didelė tikimybė, kad gali žlugti net jau įdiegti organizacijose. Viena pagrindinių žlugimo priežasčių yra tai, kad įdiegtomis informacinėmis sistemomis dėl vienų ar kitų priežasčių nesinaudoja tie, kurių poreikiams jos sukurtos.*

Mokslinės literatūros analizė rodo, kad apskritai pokyčių diegimas organizacijose yra sudėtingas procesas. Tokie procesai tampa dar sudėtingesni, jei yra įgyvendinami sveikatos priežiūros įstaigose, pirmiausia dėl šio sektoriaus kompleksiškumo ir specifiškumo. Mintzbergo „profesinės biurakratijos" teorija iš dalies paaiškina sunkumus, su kuriais susiję organizaciniai pokyčiai sveikatos priežiūros įstaigose, kiti autoriai taip pat pabrėžia būtinybę į procesą įtraukti juo suinteresuotas šalis. Tai aktualu ypač tais atvejais, kai iniciatyvos siekia peržengti profesines ar organizacines ribas. Tuo tarpu tęstinė (angl. seamless) ir į pacientą orientuota (angl. patient-focused) sveikatos priežiūros sistema, nepaisanti profesinių ir organizacinių „sienų", dažnai yra daugelio e.sveikatos nacionalinių iniciatyvų deklaruojama siekiamybė. E.sveikatos inovacijos yra kompleksinės, nes turi atitikti ne tik pacientų bei sveikatos priežiūros specialistų poreikius, bet ir būti integruotos kasdieniuose darbo organizavimo procesuose tiek organizacijų viduje, tiek tarp sveikatos priežiūros įstaigų.

Straipsnyje pateikta dviejų atvejų – Anglijos programos Connecting for Health (CfH) ir Velso programos Informing Healthcare – lyginamoji analizė leidžia teigti, kad suinteresuotų šalių (angl. stakeholder) įtraukimas (angl. engagement) yra veiksnys, lemiantis tachnologinių pokyčių sveikatos priežiūroje sėkmę.

Pagrindinė straipsnio išvada yra ta, kad į technologinių pokyčių diegimo, ypač sveikatos priežiūros sistemoje, procesą nuo pat pradžios būtina įtraukti suinteresuotas procesu šalis (pavyzdžiui, medikus, kitus sveikatos priežiūros įstaigų darbuotojus, sveikatos priežiūros paslaugų teikėjus, kt.), tačiau labai svarbu yra ir strategijos, būdai bei įtraukimo laipsnis. Suinteresuotų šalių, ir ypač kuriamų informacinių sistemų naudotojų, įtraukimas efektyvus tik tuomet, kai jie įtraukiami į sprendimų priėmimo procesą. Toks inovacijų diegimo procesas reikalauja daugiau laiko ir pastangų, bet e.sveikatos atveju tai yra labai svarbu, nes didina

suinteresuotų šalių atsakomybę ir įsipareigojimus organizaciniams pokyčiams, o tai lemia organizacinių pokyčių sėkmę ir jų tvaros aspektus ateityje.

Reikšminiai žodžiai: *e.sveikata, nacionalinės programos, sveikatos priežiūros sektorius, organizaciniai pokyčiai, suinteresuotų šalių įtraukimas, pokyčių vadyba, inovacijos ir tvara.*

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