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Exploring the implementation and evaluation of a distributed leadership model within a Scottish, integrated health and care context

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ABSTRACT

Background Health and care systems are facing unprecedented challenges, exacerbated by wicked issues that have no single solution and are complex to solve. It has recently been suggested that how such systems are structured (ie, in hierarchies) may not be the most effective approach to tackling these issues. Increasing calls have been made for senior leaders within these systems to adopt structures that emphasise leadership as a distributed endeavour as an approach to foster greater collaboration and enhance innovation. Here, the implementation and evaluation of a distributed leadership model within a Scottish, integrated health and care context is described.

Methods Aberdeen City Health & Social Care Partnership's leadership team (N=17 as of time in 2021) have been operating in a flat, distributed leadership model since 2019. The model is characterised by a 4P approach (professional; performance; personal development and peer support). The evaluation approach was a national healthcare survey administered at three time points and a further evaluation questionnaire specifically assessing constructs associated with high-performing teams.

Results Results indicated that staff satisfaction increased 3 years into the flat structure (mean score=7.7/10) compared with the traditional, hierarchal structure (mean score=5.18/10). Respondents were agreeable that the model had increased autonomy (67% agreeableness); collaboration (81% agreeableness) and creativity (67% agreeableness)

Conclusions Overall, results suggest that a flat, distributed leadership model is preferable to a traditional, hierarchal leadership model within this context. Future work should aim to explore the impact that this model has on the effectiveness of planning and delivering integrated care services.

INTRODUCTION

Health and care systems are facing unprecedented challenges. There is a rising demand for care in both hospital and community settings¹ and this is exacerbated by recruitment and retention challenges of key professional groups, particularly in rural, geographical areas.² Challenges such as these epitomise the traits of 'wicked issues', characterised by having no single solution and being influenced and impacted on by a variety of factors, many of which are not controlled by actors within those settings.³ As such, it has been hypothesised that the typical approach taken within health and care organisations to plan and deliver initiatives (ie, through a

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Alternative approaches are needed to address ever increasing health and care challenges. Structures that focus on leadership as a collaborative and distributed endeavour are championed as a novel way to tackle these issues, yet there are few examples of their implementation in practice.

WHAT THIS STUDY ADDS

⇒ The findings indicate that a senior leadership team within a health and care organisation prefer a distributed, leadership model compared with the traditional, hierarchal approach. They cite greater job satisfaction and increases in team collaboration and creativity. This is an important first step towards potentially developing more innovative solutions to tackling the wicked issues the health and care system faces.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ This study demonstrates the potential benefits health and care organisations could gain from developing alternative approaches to how their teams are structured and the leadership styles they adopt.

traditional, hierarchal structure) may not be the most effective way to address these issues.⁴

Increasing calls have been made for senior leaders within health and care systems to not just consider but adopt alternative approaches to how organisations are structured in order to meet these challenges.^{5,6} More specifically, implementing structures that encourage and emphasise leadership as a distributed effort has been demonstrated to increase staff satisfaction and innovation.⁷ Further themes have emerged from English healthcare settings acknowledging that distributed leadership change approaches are linked to the delivery of improved service outcomes in settings that are grounded in good pre-existing relationships and implementing professional and managerial hybrid roles that can effectively work across traditional boundaries.⁸ These contrast to the more bureaucratic structures of leadership that are typically seen within healthcare contexts, whereby leadership is differentiated horizontally by working within a fixed scope of work and differentiated vertically by hierarchies of authority, typically guided by principles



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of standardisation and formalisation (such as general rules and written documents).⁹

Despite more distributed approaches to leadership being championed, questions still exist over challenges regarding their implementation. First, distributed change leadership is weakened in contexts of conflict and poor relationships between colleagues.⁸ Second, these types of approaches are counter-structural and counter-cultural within the context of publicly funded health and care services, meaning they are challenging to embed.^{4 10} This has led to distributed leadership being described as a ‘Catch 22’, that acknowledges the complexities associated with trying to implement distributed leadership structures within broader bureaucratic environments, meaning that competing forces can both promote and inhibit such models and risk their overall implementation being weak.¹¹ Indeed, it is argued that there is still limited, reliable evidence to demonstrate that distributed leadership models actually result in the distribution of leadership.⁹

As such, the purpose of this study is to describe the implementation and evaluation of a distributed leadership model within a Scottish, integrated health and care context.

METHODS

Background of case

Aberdeen City Health & Social Care Partnership (ACHSCP) is an integrated care organisation in Scotland. There are 31 health and social care partnerships across the country and were originally established in an attempt to better integrate how care is planned and delivered for the population. Health and social care partnerships have two anchor organisations that they are accountable to, one being local government and the second being a regional health board. At the time of writing, both of these anchor organisations were operating within a traditional, hierarchical leadership model. Each arrangement is unique, and ACHSCP has responsibility and autonomy for the planning and delivery of a variety of delegated services, including adult social care; primary care; community nursing and mental health services. The senior leadership team within ACHSCP is comprised of numerous professional lead roles (such as Leads for Social Work; Allied Health Professionals and a Clinical Lead) and enabling roles (such as a Strategy Lead; Communications Lead and Business Lead).

The Leadership Team in ACHSCP has been operating in a flat, distributed structure since 2019. The decision to adopt such a model was informed by a local pilot study in the region that tested the implementation of self-managing, integrated health and care teams, based on the Dutch Buurtzorg model.¹² The evaluation of this pilot study, known as INCA (Integrated Neighbourhood Care Aberdeen), emphasised the need for a fundamental cultural change from the most senior leaders within systems if such leadership approaches are to be successfully embedded.^{13 14} The implementation of a flat, distributed leadership structure contrasts to the previous, hierarchal model.

Characteristics of leadership model

The model used a 4P’s approach. The approach was cocreated with members of the leadership team, who engaged in a process to understand what the key requirements were for this way of working to be feasible, and as a mechanism to develop buy-in and commitment to the change.¹⁵ These were:

1. Professional—each team member had an independent person they met monthly for discussing, guidance and mentoring on any professional issue. These independent persons could be

from either the Healthboard or from Local Government and were not limited by organisational boundaries.

2. Performance—in addition to individual objectives, team members also had a set of shared objectives, whereby multiple members of the team were responsible for delivering against the same objective. These shared objectives were designed to foster a deeper degree of collaboration between team members. Furthermore, quarterly meetings were held to support individual objectives, and bi-monthly business meetings conducted to review collective objectives.
3. Personal development—each team member had coaching sessions with an external coach. This allowed a focus on their own personal development, particularly regarding key issues and their own performance in a safe, independent space. In addition, personal development objectives were set at each annual review together.
4. Peer support—the team had small action learning sets, which functioned as areas where individuals brought specific problems for discussion in a more focused way with peers. These groups met monthly and were a support, learning and focal area for shared development. In addition, the team had a weekly morning coffee hour for a workfree space, with other social events and activities (including quiz evenings and development meetings) scheduled throughout the year. These were designed to build social capital and trust across team members.

Evaluation approach

Data were collected at baseline during the traditional hierarchal model (in 2018), 1 year (in 2019) and 3 years (in 2021) into the distributed leadership model. Data were not collected in 2020 as prioritisation was given to responding to the first wave of the COVID-19 pandemic in Scotland. Two main data collection methods were used:

1. iMatters survey—this is a staff experience continuous improvement tool widely implemented across the Scottish National Health Service, exploring an individual’s experience in their job role; within their team and their relationship with their line manager. Responses are collected anonymously and the outputs are used to develop improvement action plans. Mean scores are provided out of 100 for all responders as a collective.
2. Evaluation questionnaire—the questionnaire contained two sections. In section 1, responders answered likert-scale questions based on the five guiding principles of the Dutch Buurtzorg model from which the original ethos was derived: trust; autonomy; creativity; simplicity and collaboration.¹² Within this context, it was hypothesised that teams which operate effective distributed leadership structures would report high levels of agreeableness against these constructs. The second section of the questionnaire used key concepts from a process evaluation perspective, allowing analysis of barriers and facilitators to implementing the model, in addition to recommendations to enhance this way of working moving forward. These qualitative responses were analysed thematically. Responses were collected anonymously.

Data collection for this study fell within the parameter of a service evaluation, as such ethical approval was not sought. However, ethical standards were adhered to, including confidential treatment of data at each stage of the process and ensuring no individuals were identifiable when presenting the findings.

Table 1 'Staff governance standards' constructs derived from iMatters reports

Question	2018 mean (N=12)	2019 mean (N=19)	2021 mean (N=17)
Well informed	71	81	88
Appropriately trained and developed	58	70	78
Involved in decisions	65	76	84
Treated fairly and consistently with dignity and respect, in an environment where diversity is valued	71	73	82
Provided with a continuously improving and safe working environment, promoting the health and well-being of staff, patients and the wider community	69	76	80

RESULTS

iMatters surveys

Table 1 shows the mean scores within the staff governance standards constructs. Scores from 2018 reflect staff working in the hierarchal model, with scores from 2019 and 2021 reflecting staff working in the flat, distributed model for 1 and 3 years, respectively. The scores demonstrate a mean increase in all scores between 2018 and 2021.

Table 2 shows the mean scores within the individual experience constructs. Scores from 2018 reflect staff working in the hierarchal model, with scores from 2019 and 2021 reflecting staff working in the flat, distributed model for 1 and 3 years, respectively. The scores demonstrate a mean increase in all scores between 2018 and 2021.

Table 3 shows the mean scores within the my team/direct line manager constructs. Scores from 2018 reflect staff working in the hierarchal model, with scores from 2019 and 2021 reflecting staff working in the flat, distributed model for 1 and 3 years, respectively. The scores demonstrate a mean increase in all scores between 2018 and 2021.

Table 4 shows the mean scores within the my organisation constructs. Scores from 2018 reflect staff working in the hierarchal model, with scores from 2019 to 2021 reflecting staff working in the flat, distributed model for 1 and 3 years, respectively. The scores demonstrate a mean increase in all scores between 2018 and 2021.

Table 2 'Individual experience' constructs derived from iMatters reports

Question	2018 mean (N=12)	2019 mean (N=19)	2021 mean (N=17)
I am clear about my duties and responsibilities	73	82	86
I get the information I need to do my job well	62	73	85
I am given the time and resources to support my learning growth	61	78	75
I have sufficient support to do my job well	50	63	77
I am confident my ideas and suggestions are listened to	64	74	82
I am confident my ideas and suggestion are acted on	61	72	78
I feel involved in decisions relating to my job	62	72	82
I am treated with dignity and respect as an individual	76	80	87
I am treated fairly and consistently	73	78	85
I get enough helpful feedback on how well I do my work	62	67	77
I feel appreciated for the work I do	61	71	81
<i>My work gives me a sense of achievement</i>	70	74	77

Table 3 'My team/direct line manager' constructs derived from iMatters reports

Question	2018 mean (N=12)	2019 mean (N=19)	2021 mean (N=17)
I feel my direct line manager cares about my health and well-being	68	82	85
My direct line manager is sufficiently approachable	77	89	92
I have confidence and trust in my direct line manager	64	86	93
I feel involved in decisions relating to my team	71	78	84
I am confident performance is managed well within my team	64	72	80
My team works well together	79	65	85
I would recommend my team as a good one to be a part of	82	71	86

Table 5 shows the mean scores within the overall satisfaction constructs. Scores from 2018 reflect staff working in the hierarchal model, with scores from 2019 to 2021 reflecting staff working in the flat, distributed model for 1 and 3 years, respectively. The scores demonstrate a mean increase in overall satisfaction between 2018 and 2021.

Evaluation questionnaires

Table 6 shows respondent agreeableness against the five guiding principles of the Buurtzorg model, the presence of which can be viewed as a metric of effective distributed leadership within teams. The results demonstrate that the majority of staff were agreeable that the distributed leadership model had resulted in the manifestation of all constructs.

In the 2019 data collection period, the most commonly reported benefit to this model was interpersonal factors, such as relationship building, with respondents reporting *that relationships are improving across the team*. With regards to barriers, it was acknowledged that the team size was very large *which can make it more challenging to work as well as possible*. The most commonly reported future recommendation was to be patient with reference to the implementation of the model, with respondents noting this was a fundamental cultural change and

Table 4 "My organisation" constructs derived from iMatters reports

Question	2018 mean (N=12)	2019 mean (N=19)	2021 mean (N=17)
I understand how my role contributes to the goals of my organisation	79	84	89
I feel my organisation cares about my health and well-being	71	78	79
I feel senior managers responsible for the wider organisation are sufficiently visible	62	75	82
I have confidence and trust in senior managers responsible for the wider organisation	65	81	85
I feel involved in decisions relating to my organisation	71	72	82
I am confident performance is managed well within my organisation	65	69	75
I get the help and support I need from other teams and services within the organisation to do my job	68	69	78
I would recommend my organisation as a good place to work	70	79	84
I would be happy for a friend or relative to access services within my organisation	83	89	85

Table 5 'Overall satisfaction' constructs derived from iMatters reports

Question	2018 mean (N=12)	2019 mean (N=19)	2021 mean (N=17)
Overall satisfaction	5.18	6.74	7.70

thought it will take time for us to maximise the benefit of this arrangement.

In the 2021 data collection period, the most commonly reported benefit to this model 3 years into implementation was improved collaborations, with respondents citing *cross system working on key priorities has been the key benefit*. With regards to barriers, respondents suggested that additional work was required in understanding processes, stating that *you really require a clear programme governance process which include clear escalation points*. The most reported future recommendation was providing further *sessions to build more connected, authentic relationships* between team members.

DISCUSSION

The purpose of this paper was to describe the implementation and evaluation of a flat, distributed leadership model within a Scottish, integrated health and care setting. Increasing calls are being made for health and care organisations to repurpose how they are structured to foster the types of innovation and creativity that are required to meet wicked issues such as rising demand and staffing challenges.⁴ Flat, distributed leadership models while showing promise with regards to improving innovation and staff satisfaction are counter-cultural to traditional, hierarchal structures within health and care organisations, thus making them challenging to embed.⁷ Here, the findings suggest that staff prefer working in a flat, distributed leadership model when compared with a hierarchal model, with overall satisfaction increasing. Furthermore, the majority of staff reported agreeableness against all measured constructs that assess principles of high-performing teams (such as improved creativity; collaboration and trust), suggesting this model improves how the team functions. However, some findings to signify that there may be particular challenges during the initial phases of implementing a new leadership model that require particular attention. For example, while self-reported team collaboration increased from 2018 (mean score=79%) to 2021 (mean score=85%), this did reduce during the early phases of implementation in 2019 (mean score=65%), providing an important finding regarding the need to consistently monitor the impact of new models on staff, so the appropriate interventions can be embedded to minimise any unintended consequences.

Implementing flatter, organisational structures are not without their critics. For example, it has been hypothesised that flat structures limit opportunities for career progression, providing fewer opportunities for individuals to advance from their current

and future roles become wider, requiring a larger gap to bridge regarding responsibilities and accountabilities.¹⁶ Furthermore, it is argued that hierarchies are effective in organisations, whereby the work is ordered hierarchically as so to ensure distinction between accountabilities at different levels.¹⁷ However, a recent school of thought has challenged these assumptions within the context of health and social care settings. This advocacy takes cognisance that such contexts should be viewed as complex adaptive systems, which embody traits less of those synonymous with a machine and more akin to a living organism.¹⁸ Within these contexts, self-organising and emergent behaviours are evident; the activities within those settings are influenced by numerous interdependent facets; and the number of actors and connections that exist within these settings are considerable.¹⁸ Thus, it has been argued that discourses aligned to an Eco-leadership paradigm (ones that emphasise greater importance on the ability to collaborate and influence horizontally to break down traditional hierarchies and develop more innovation solutions to complex problems) are more appropriate for implementation within health and care systems.¹⁰

While flatter management structures that emphasise leadership as a distributed endeavour have been championed as a way of developing more innovative solutions,⁵ this paper does not explore the impact of such innovations with regards to the planning and delivery of health and care services. While this was not the primary aim of this article, it may be helpful to explore how the findings within may contribute towards improving traditional performance metrics within this context. For example, the mean overall satisfaction score of team members was 7.7, a score 0.9 points (equivalent to 9%) higher than the Scottish average for health and care staff for the same time period,¹⁹ and there is a well-established relationship between staff satisfaction and staff recruitment and retention rates.²⁰ Furthermore, autonomy and collaboration (constructs that both appeared to increase within as a result of the new leadership model) have been identified by national bodies as key enablers towards improving the quality of both care and services.²¹ Using this information, a logic model (see figure 1) below helps explain the mechanisms by which the implementation of a flat, distributed leadership structure within health and care settings may contribute towards improvements in health and care service provision.²²

It was interesting to note that all constructs increased between 2018 (when the team was operating in a hierarchal structure) and 2021 (when the team was 3 years into operating in a flat, distributed structure). When comparing the 2019 to 2021 data,

Table 6 Perceived agreeableness of manifestation of distributed leadership principles

Construct	2019 scores (N=19)			2021 scores (N=17)		
	% Agreeable/strongly agreeable	% Neutral	% Not agreeable/strongly disagreeable	% Agreeable/strongly agreeable	% Neutral	% Not agreeable/strongly disagreeable
Autonomy	71.43	14.29	14.28	66.66	26.66	6.66
Collaboration	62.5	18.75	18.75	81.25	12.5	6.25
Creativity	62.5	18.75	18.75	60	33.33	6.66
Trust	56.5	37.5	6.25	66.66	33.33	0
Simplicity	50	18.75	31.5	62.5	25	12.5

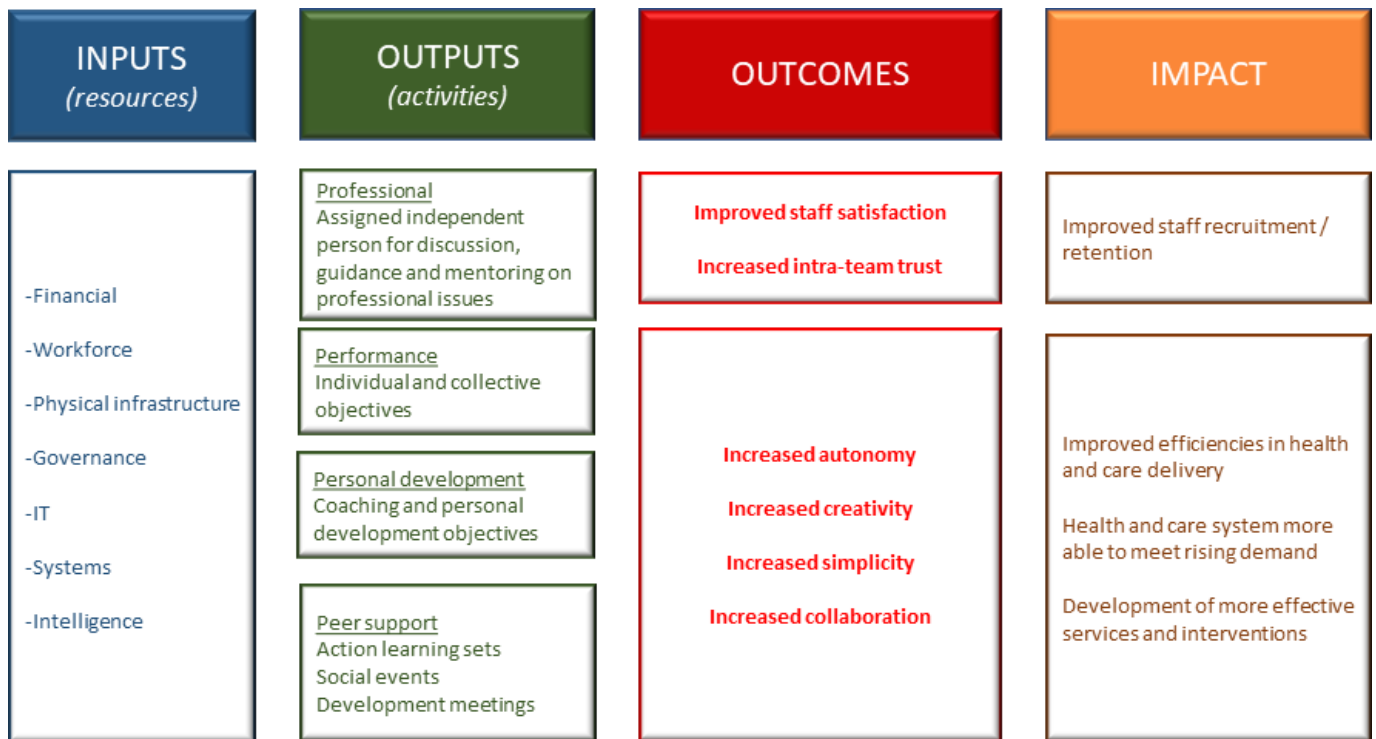


Figure 1 Logic model of flat, distributed leadership model within a Scottish integrated care setting.

there was an increase in all but two constructs: the first being *I am given the time and resources to support my learning growth* (decreasing from 78 to 75) and *I would be happy for a friend or relative to access services within my organisation* (decreasing from 89 to 85). While these figures still remain positive, their reduction can likely be explained by the well-documented COVID-19 pandemic and the impact this had on the team. The pandemic has directly impacted on the services the team provide, for example, the continued postponement of some non-urgent care services, and operating under an emergency footing requiring the immediate demands of COVID infections needing met.¹ This has also meant that professional development opportunities had been deprioritised too, providing context as to the directionality of the findings within. As health and care systems move out of emergency response, it will be interesting to review these findings again to see what differences emerge. It is likely that other potential influences on the above scores, such as staffing changes, are unlikely given that 16 individuals remained constant throughout the 3 years of data collection.

There are some limitations that require acknowledgement. First, the number of respondents at each time frame is variable and is subjected to variances associated with small sample sizes. However, given this was an evaluation of a real-world organisational change, this paper was not designed to account for such sensitivities. While there were 16 members of the leadership team who were present throughout the data collection period, a small degree of staff turnover is likely to have an impact on the results that cannot be quantified. Furthermore, as aforementioned, this paper does not report on improvements in traditional performance metrics as a result from this change, and future work should examine this more specifically. Finally, participation in the data collection methods was voluntary, meaning that the findings are not necessarily representative of all team members.

To conclude, it appears the leadership team within the integrated care context described is agreeable and satisfied with the

implementation of a flat, distributed leadership model. Team members report greater autonomy, collaboration and satisfaction in this approach when compared with their experiences of working in a traditional, hierarchical structure. Future work should aim to explore the impact such models have on the effectiveness of care planning and delivery.

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Patient consent for publication Not applicable.

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Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available.

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