A Rapid Review of Interventions to Increase Staff Uptake of Seasonal and Pandemic Influenza Vaccination: What Can Be Learned for Vaccination During Times of Other Pandemic?

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Background: The UK National Health Service has the largest workforce in Europe, and the fifth largest in the world, with an estimated 1.3 million employees. Attention to staff health and well-being is a critical aspect of effective care delivery, and is of even more importance for maintaining services during periods of high demand. In most countries guidance for healthcare workers recommends annual influenza vaccination to prevent ill health during times of seasonal and pandemic influenza. However, research has frequently highlighted that uptake of influenza vaccination amongst healthcare workers is low. This rapid review focused on the literature relating to the vaccination of staff during times of seasonal and pandemic influenza, with a view to examining what might be learnt for vaccination during times of other pandemic.

Methods: We searched Medline, EMBASE, the Cochrane Database of Systematic Reviews, the Cochrane Central Register of Controlled Trials, CINAHL, HMIC (Health Management Information Consortium) and Web of Science in October and November 2020. Brief inclusion criteria were as follows: staff employed in healthcare organisations; studies evaluating interventions with the aim of increasing the uptake of influenza vaccination during periods of seasonal or pandemic influenza; studies which reported factors influencing the outcomes of interventions; and studies carried out in healthcare services in any high or middle income country. We included literature published since 2002 reporting empirical data. We prioritised examination of other systematic reviews, and supplemented this with scrutiny of abstracts of primary studies, in particular studies published more recently than the review sources. We performed a narrative and framework synthesis of the included studies.

Results: From a database of 1065 studies we included 13 reviews and 85 primary studies. The review found that interventions to increase the uptake of influenza vaccination amongst healthcare staff results in small to moderate increases in uptake for non-mandatory actions. Interventions which include mandatory requirements (such as completing formal opt-out declarations or compulsory vaccination) are more effective, but have issues of acceptability in many countries. Interventions which include multiple elements are more effective than single actions. These elements should include evidence-based information regarding level of personal risk, methods of virus transmission, and efficacy and safety of the vaccine. Information should be specific to healthcare workers (rather than aimed at the general population), and address individual barriers reported. Vaccinations should be freely available to staff via on-site or mobile clinics, with peer-to-peer vaccination having potential. Managerial support and the involvement of staff in planning programmes may be helpful, in particular those groups who are known to have low uptake (females, and nursing staff). Interventions during times of pandemic require the same elements as those at other times, although additional attention to communications regarding vaccine safety and personal risk may be beneficial, as well as extra measures to extend convenient access to vaccination.

Implications: Non-mandatory interventions to increase uptake of influenza vaccination amongst healthcare staff have small to moderate effectiveness, with rates often remaining low. Mandatory measures are more effective, but require ethical debate. Interventions with multiple strands have greater effectiveness than single components and should include actions to increase convenient access, and evidence-based messages regarding safety, efficacy, and personal risk. This is recommended both during periods of seasonal influenza and times of pandemic. There should be additional exploration and addressing of factors influencing uptake in groups which are least likely to be vaccinated.

‘The Way We Do Change Around Here’ Implementing Culture Change in The England NHS

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Background: The case for an inclusive and compassionate organisational culture within the NHS has been described in recent publications (Kline 2019, West et al 2017) and is said to be integral to the NHS Long Term Plan (2019) as the means to achieve high quality patient care. The NHSE&I’s Culture and Leadership Programme (CLP) is a phased organisational approach to shape leadership and culture, which has become mandated for NHS trusts requiring fundamental performance improvement. CLP focuses on five cultural elements, with a view to realising a sustained culture of *compassion and inclusion*, for all leaders and staff. Healthy, flourishing and engaged staff, continuous improvement and high quality care should then follow.

A team from the Universities of Manchester and Birmingham scoped and conducted a formative evaluation of CLP between October 2019 and April 2020.

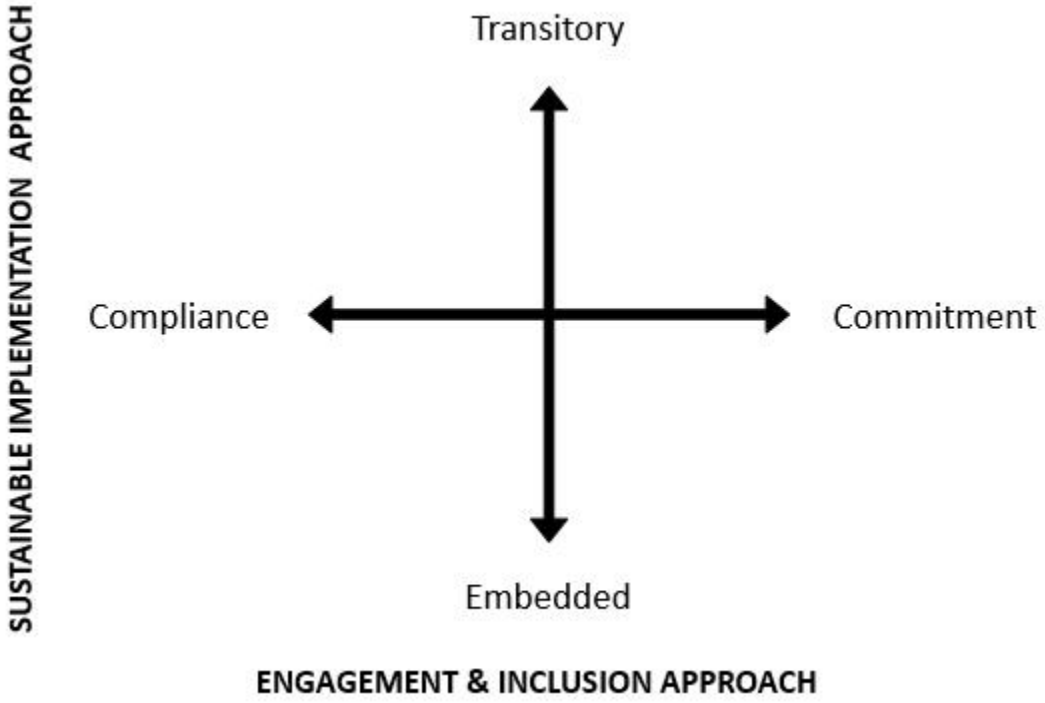
Methods: We adopted a realist evaluative framework to explore the underlying “mechanisms” that the CLP activates. Drawing on a wide body of literature on leadership, culture, the sustainability of large scale change, as well as findings from the scoping phase, we developed six hypotheses about contextual factors which may influence the programme outcomes:

- external status and credibility;
- the purpose and destination of the culture change;
- the approach to programme implementation;
- support and resources available;
- programme fidelity; and
- diversity and inclusion.

These hypotheses guided the specific evaluation questions.

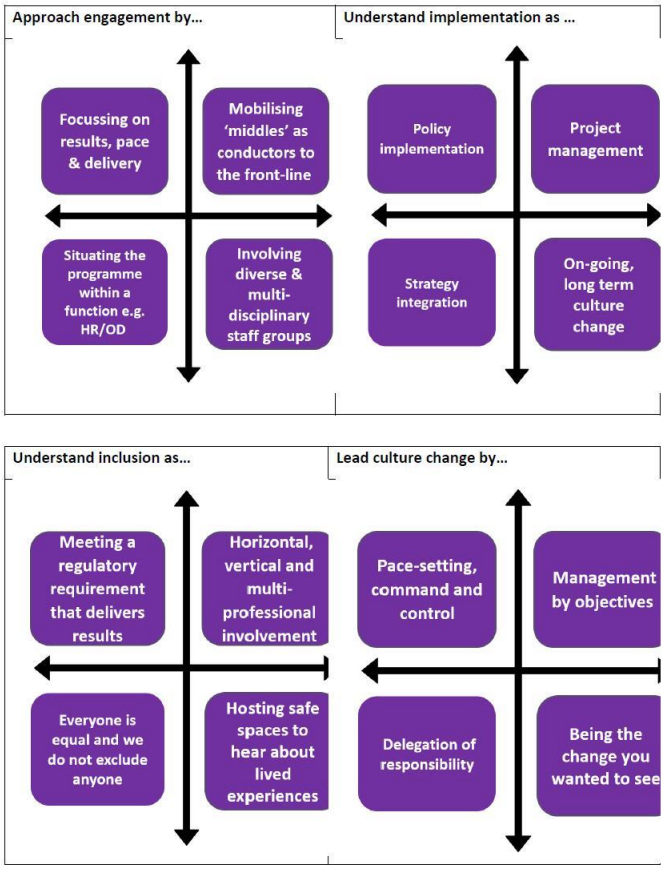
Our mixed methodology comprised surveys, workshops, site visits, interviews and documentary analysis across a sample of 20 NHS organisations engaged in different phases of the CLP programme. Data was analysed, synthesised and triangulated through a formative process of peer collaboration, and with commissioning representatives and a wider network of academic advisors.

Findings: We identified a conceptual framework consisting of two interdependent dimensions that appeared to be central to the way leadership and culture change was approached:



We developed a series of *schemas* utilising this framework, to characterise how different trusts approached, conceptualised and enacted: organisational leadership, implementation, engagement, inclusion, programme support, and ways of embedding the change. In this presentation, we focus on the first four of these.

Four Approaches to Implementing Leadership and Culture Change



The positions of trusts within these schemas could change as the worked through the programme, with some trusts moving through different positions over time, or coming to straddle more than one position. Although conceptualised as distinct, in practice, approaches associated with different positions can be pursued simultaneously and enhance outcomes. Privileging one particular quadrant over others may be limiting. Furthermore, it is also important to balance

a focus on culture and leadership with other dimensions of change, including good governance, systems and processes.

Key Implications for implementing leadership and culture change

We believe that the four schemas and the six hypotheses have potential to be used to support trusts in their leadership and culture change work: as a developmental tool to facilitate reflection on procession, and as a local evaluation tool, to track outcomes. Drawing on the evaluation findings, a set of principles to guide implementation has been developed.

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Impact of Implementation Strategies Adopted in Oral Health Interventions for Older People in Long-term Care Facilities: A Systematic Review

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Background: People living in care homes are at greater risk of oral health problems. There is a high prevalence of poorer oral health and hygiene in older people in care home settings. Care home residents often have difficulty carrying out their own mouth care and so, they must rely on staff to do this for them. However, research suggests that carers do not always give adequate mouth care to their residents due to a lack of knowledge, skills and/or confidence. In order to address these barriers to implementation of oral care in care homes, oral health educational training programmes with multiple components (e.g. educational videos, practical demonstrations, group work, written information, workshops, flyers, leaflets, modelling etc.) were recommended to sustain effective practice in care homes. Although such programmes report some improvement on staff knowledge, they are inconclusive in terms of impact in residents' oral health. To address this, this review examines the implementation approaches of oral care programmes that contribute to improving oral health outcomes of residents, as well as changing the attitudes of care home staff relative to delivering oral care services.

Methods: The databases of MEDLINE and CINAHL have been searched from publication date of 2000 up to June 2020. Peer-reviewed studies set in the UK, Canada, New Zealand, and Australia investigating the effectiveness of implementation strategies in improving oral health of older people in care homes were screened (KL) and included (LW, EB). Study characteristics, including components of the implementation strategy, were extracted (KL) and verified (LW, EB). Vote counting method was used to synthesise evidence of effectiveness. Barriers and facilitators were classified according to the Theoretical Domains Framework.

Results: Fifteen papers were included in this review. Implementation of oral care training programmes were led primarily by dental health academics, and a combination of dental hygienist/therapists, clinicians, and oral health promoters. Majority of the studies did not involve steering groups or evidence-based planning, and some collaborated and engaged with the care homes as part of the implementation process. The most common type of component in the training programme is skills instruction delivered via face-to-face seminar, followed by distribution of oral educational resources, oral health assessment to residents, and practical demonstrations. Key factors to implementation addressed the knowledge, environmental context and social influences behavioural domains. Some of the barriers included gaps in pre-existing oral care knowledge of care home staff, poor workload management and leadership in the care homes, and carers' diverse beliefs in oral care. Meanwhile, facilitators were access to support staff in delivering oral care, staff ownership in providing care, and varying formats of the training programme.

Implications: Our evidence suggests that incorporating evidence-based planning and engaging with key stakeholders into the implementation process have some positive effect in clinical and process outcomes. Although these training programmes had some positive effects in improving implementation of oral care, a shift towards a carer-led perspective and focus on role of carers as leaders is needed to deliver and maintain effective practice and have a significant positive impact on care residents' oral health.

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Guidance On the Adaptation of Evidence-Based Interventions: Relevance to Health Services Research

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Background: Using interventions with a prior evidence base in new contexts may be more efficient than developing new interventions for different contexts. Policymakers, service providers and researchers sometimes identify an intervention that has been shown to be effective in one context and want to use it in another context. They face questions about the cultural relevance of the intervention in a new context, how to adapt it to fit the new context without damaging fidelity, and whether they need to evaluate it fully in the new context. This 'adaptation of existing interventions' is common in public health and health promotion. It may be highly relevant to Health Services Research (HSR) because models of care in one country might be valuable to adopt in another country, or new workforce roles in one service might be potentially valuable for a different service. The UK Medical Research Council funded the ADAPT study to develop guidance for adapting evidence-informed interventions in population health. We aim to discuss dilemmas faced in adaptation (such as maintaining fidelity while adapting to context), describe the key content of the guidance, and explore the relevance of the guidance to HSR.

Methods: The guidance was based on: a systematic review of existing guidance; a scoping review of empirical adaptation studies; qualitative interviews with researchers, funders, journal editors and policy and practice stakeholders; and a DELPHI exercise with an expert panel. The ADAPT Study was funded by the MRC-NIHR Methodology Research Programme [MR/R013357/1].

Results: The key actions proposed in the guidance are: 1. Form a working group of stakeholders to guide all stages of the work. 2. Assess the rationale for the intervention and consider intervention-context fit of the existing intervention. 3. Plan for and undertake adaptations, including adapting the intervention model (e.g.manual, protocols, delivery plan, programme theory), considering potential for unintended consequences, and considering costs and resources needed for the adapted intervention. 4. Plan for and undertake evaluation, including considering the value of new information to decision-makers, and the resources available for evaluation. 5. 'Scale out' the adapted intervention and maintain it at scale including establishing data monitoring systems.

In our review of empirical adaptation studies we did not find adaptation of health services e.g. adapting the UK telephone triage service NHS 111 for use in Australia. The literature largely addressed public health, health promotion, and improving access to screening. We ask whether HSR is fundamentally different from public health, or whether language or who does the adapting affects what is published as adaptation.

Implications: The guidance can be used when policymakers, service providers or researchers find interventions that are effective in a different context and want to implement those interventions in new contexts. It does not solve dilemmas; rather it describes the dilemmas and ways of thinking them through.

Implementing Major System Change in Specialist Surgical Services for Urological Cancers: Cross-Case Qualitative Analysis of Differing Progress of Change

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Background: 'Major system change' (MSC) refers to planned reorganisation of specialist healthcare services, involving multiple organisations serving large populations. MSC has been associated with significant improvements in specialist care delivery and outcomes; such changes can be cost-effective and sustained long term. However, there is limited evidence about how MSC is implemented, and how implementation approaches influence the progress and outcomes of change.

We studied efforts to reorganise specialist surgery for different cancers across two large areas of the English NHS (each serving over 3 million people): London Cancer (LC), covering North Central and North East London and West Essex, and Greater Manchester Cancer (GMC), covering Greater Manchester and East Cheshire. These change programmes sought to concentrate specialist cancer surgery services into fewer centres.

While changes to specialist surgery for urological (bladder, prostate, and kidney) cancers in LC were completed in 2016, equivalent changes in GMC made limited progress. In this paper, we present a qualitative analysis addressing the following questions:

1. How did GMC and LC approach reorganising specialist surgical services for urological cancers?
2. Which factors help explain why changes were implemented in LC, but not (to date) in GMC?

Methods: We analysed interviews with clinicians, managers, patient representatives, and system leaders in both areas (GMC, n=75; LC, n=60), including perspectives from specialist centres, non-specialist centres, and the wider systems. We also analysed observations of planning and oversight activities (e.g. meetings and events) and associated documentation (e.g. plans, meeting minutes, and public reports).

Our analysis used a previously-developed framework describing the relationship between key stages of MSC and its outcomes.

Results: There were several parallels across GMC and LC. Both change programmes sought to achieve international surgical standards, address local variations in care, and improve patient outcomes; this case for change was accepted in both areas.

GMC and LC faced similar challenges. Regarding the service model, clinicians questioned the extent of centralisation and workforce implications. Regarding implementation, there were impassioned debates over GMC's and LC's recommended locations of specialist centres, and how changes should be put into action.

Against this backdrop, several factors influenced the differing progress of change in GMC and LC. The GMC programme took place concurrently with several related initiatives, including devolution, acute care reorganisation, and hospital organisation mergers: these altered the local balance of power and made decision-making on service recommendations more complex. While an integrated partnership of payers and providers led these recommendations, local power imbalances remained influential. GMC clinicians cited previous unsuccessful change efforts and little consistency in change recommendations, and reported that change planners did not address key concerns about the implications of change. These issues contributed to a lack of system-wide ownership of the recommendations – amongst both organisations and clinicians – and limited progress of change.

The LC programme also faced important contextual shifts (e.g. changes to NHS commissioning) and local clinician concerns. However, LC's governance – e.g. senior management of all participating trusts signed up formally to the LC change process, delegating responsibility to the LC programme to decide service recommendations – created system-wide momentum for the changes. This made the recommendations more resilient to clinical resistance and limited the influence of local power imbalances.

Implications: Support for MSC in principle is insufficient: many factors influence whether change is implemented, and the form it takes. Contextual factors are highly influential and prone to shift over the lifespan of a change programme: they may alter both the organisational players and the arenas in which decisions are made. Governance mechanisms

that build ongoing system-wide commitment to both the principles and processes of a change programme may make such programmes more resilient to local resistance and contextual challenges.