Exploring the role of communications in quality improvement: A case study of the 1000 Lives Campaign in NHS Wales

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Abstract

Introduction: Effective communication is critical to successful large-scale change. Yet, in our experience, communications strategies are not formally incorporated into quality improvement (QI) frameworks. The 1000 Lives Campaign (‘Campaign’) was a large-scale national QI collaborative that aimed to save an additional 1000 lives and prevent 50,000 episodes of harm in Welsh health care over a 2-year period. We use the Campaign as a case study to describe the development, application, and impact of a communications strategy embedded in a large-scale QI initiative.

Methods: A comprehensive communications strategy guided communications work during the Campaign. The main aims of the communications strategy were to engage the hearts and minds of frontline National Health Service (NHS) staff in the Campaign and promote their awareness and understanding of specific QI interventions and the wider patient safety agenda. We used qualitative and quantitative measures to monitor communications outputs and assess how the communications strategy influenced awareness and knowledge of frontline NHS staff.

Results: The communications strategy facilitated clear and consistent framing of Campaign messages and allowed dissemination of information related to the range of QI interventions. It reaffirmed the aim and value of the Campaign to frontline staff, thereby promoting sustained engagement with Campaign activities. The communications strategy also built the profile of the Campaign both internally with NHS organizations across Wales and externally with the media, and played a pivotal role in improving awareness and understanding of the patient safety agenda. Ultimately, outcomes from the communications strategy could not be separated from overall Campaign outcomes.

Conclusion and recommendations: Systematic and structured communications can support and enhance QI initiatives. From our experience, we developed a ‘communications bundle’ consisting of six core components. We recommend that communications bundles be incorporated into existing QI methodology, though details should be tailored to the specific context and available resource.

Keywords: Communications strategy, Evaluation, Patient safety, Quality improvement, Safety culture, Wales

Introduction

Quality improvement (QI) methodology is established and in widespread international use.1–3 Effective communications are a critical aspect of successful QI initiatives4 and, more broadly, delivery of safe and quality patient care.5–8 Previous work has also demonstrated that QI initiatives can – whether intentionally or incidentally – enhance the level of communications within organizations.9,10
The role and contribution of communications in the public health domain is well recognized.\textsuperscript{11-13} However, in our experience, systematic and structured communications strategies are not formally incorporated into QI frameworks. Furthermore, development and subsequent application of a communications strategy to support large-scale change and/or QI initiatives in health care remain unexamined in the peer-reviewed literature. This gap is also recognized across other sectors,\textsuperscript{14} which highlights the wider importance of this issue.

In this context, we refer to communications as a discipline and define it as ‘a strategic... process that builds mutually beneficial relationships between organizations and their publics’.\textsuperscript{15} Effective communication is also recognized as a key component of behaviour change methodology in health care.\textsuperscript{16,17}

Communications strategies should provide the blueprint for how information relating to a particular organization, issue, event, or programme will be communicated to an audience. Communication is often evaluated on an individual basis, for example, assessment of one-to-one interactions between healthcare consumers and providers.\textsuperscript{18,19} The effectiveness of communications in large-scale QI initiatives or other change programmes is more difficult to quantify using traditional measures. In part, this is because use of multiple modes of communication makes it difficult to evaluate the impact of any isolated intervention.

Despite these challenges, measurement and evaluation are of emerging importance in the communications domain.\textsuperscript{20} There is now recognition of the need for both qualitative and quantitative metrics to highlight the impact of communications work. In particular, the Chartered Institute of Public Relations (UK) recommends that inputs, outputs, out-takes, and outcomes are considered. These terms are summarized as follows:

\begin{itemize}
  \item \textit{input} – all background information, planning and research; the measure of what is entered into the communications process;
  \item \textit{output} – quantitative measure of the messages that go out as part of the communications process;
  \item \textit{out-take} – measure of audience awareness, understanding and memory of messages;
  \item \textit{outcome} – measure of the extent to which communications alters or influences knowledge, beliefs and/or behaviours.\textsuperscript{20}
\end{itemize}

In this paper, we introduce a large-scale national QI collaborative – the 1000 Lives Campaign (‘Campaign’) in Wales, UK – and use it as a case study to describe the inputs, outputs, out-takes, and outcomes of a communications strategy embedded within a QI initiative. The Campaign provides the setting to examine the impact of the communications strategy across a range of areas, which we categorize using the communications measures described. This approach highlights the possible impact of communications in QI methodology in a public healthcare setting. Our experience in the Campaign led to the subsequent development of a ‘communications bundle’, which is introduced in this paper. This concept was derived from the ‘care bundles’ first defined by the Institute for Healthcare Improvement (IHI).\textsuperscript{3}

\subsection*{Case study}

\textbf{1000 Lives Campaign: Overview}

The Welsh National Health Service (NHS) provides publicly funded health care to 3-million people and employs approximately 72,000 staff.\textsuperscript{21} The Campaign was launched in April 2008 to improve patient safety and increase the quality of health care across Wales.\textsuperscript{22} The Campaign was run as a collaborative and involved the National Leadership and Innovation Agency for Healthcare, National Patient Safety Agency, the National Public Health Service Wales Centre for Health, and the Clinical Governance Support and Development Unit. The concept of the Campaign originated from the IHI 100,000 Lives Campaign in the United States.\textsuperscript{23} The IHI was contracted to support this Campaign.

The Campaign aimed to save an additional 1000 lives and prevent 50,000 episodes of harm in Welsh health care over a 2-year period. The Campaign marked that the first-time harm was measured on a national level in Wales. Every Local Health Board (LHB) and Trust were involved in the Campaign, working on up to seven areas including reducing healthcare-associated infections and surgical complications, and improving critical care and medicines management. A central Campaign team worked in partnership with LHBs and Trusts to guide and support local ownership and implementation of QI interventions.

Final figures from the Campaign estimated that 65,869 episodes of harm were prevented and that there were 1199 fewer deaths compared with the previous baseline in the period between April 2008 and April 2010. More information relating to this Campaign, including detailed description of methods and outcomes is available online.\textsuperscript{22} The Campaign was succeeded by a 4-year improvement programme: 1000 Lives Plus\textsuperscript{24} and the establishment
of the 1000 Lives Improvement service in Public Health Wales in 2013.

**Methods**

Wide-reaching, consistent, and repeated communication is critical to achieving large-scale change.25 Accordingly, the need for a comprehensive communications strategy was acknowledged early in the development phase of the Campaign. A communications strategy was developed and a communications officer was appointed to the Campaign’s senior management team. The communications officer (1.0FTE) led all communications work, with an annual budget of £20,000, which covered promotional activity and included freelance public relations support.

Work related to the Campaign reflected QI activity and, as such, met organizational criteria for exemption from ethics committee review.

Next, we provide an overview of the six components of the communications strategy. Where applicable, communications inputs are included to highlight what was done. We then describe how the communications strategy interacted with other functions of large-scale change in the wider Campaign.

**Aim**

The primary aim of the communications strategy was to engage the hearts and minds of frontline NHS staff and other Campaign audiences in the aims and activities of the Campaign. A further intention was to promote awareness and understanding of specific QI interventions, as well as the wider patient safety agenda. The communications strategy also aimed to ensure that diverse Campaign audiences (detailed further) were kept informed of the progress and impact of the Campaign over the 2-year journey.

**Identifying the audience**

The Campaign had many audiences, each with differing needs. The Campaign’s identified audiences comprised six target groups:

- people leading the Campaign nationally and locally, for example, members of the Campaign team and local Campaign leads;
- people delivering the Campaign, for example, frontline NHS staff;
- people providing direct support to Campaign delivery, including staff from the Department of Health and Social Care, LHB managers, and local communications officers;
- people supporting the Campaign and influencing the public, such as politicians, academics, advocacy groups, and the media;
- people with an interest but no formal role in the Campaign, for example, staff from voluntary organizations and health legal experts; and
- the general public. This group includes patients, families, and friends of patients, and the wider public.

Our main target group was people responsible for delivering the Campaign, particularly frontline NHS staff. In this context, ‘frontline’ means clinical staff members that are directly responsible for delivering care. Effective communication within and between clinical teams is a requirement for safe care,5 and we extended this concept to inform our communications strategy in the Campaign. For this group, our priority was to deliver the message that the Campaign was designed to make their everyday work easier. It was essential that this group understood the principles and key messages of the Campaign, together with the details of QI interventions.

**Building the narrative**

**Language and messaging**

The Campaign was framed around a belief that all staff came to work to do a great job, and that by sharing with them, the opportunity to do even better, that staff would use discretionary effort to prioritize this work. Therefore, the key message of the Campaign was: ‘NHS Wales staff save lives every day. The 1000 Lives Campaign will help them save even more.’ This statement affirmed existing work and presented the Campaign as a positive opportunity to build on this work. All key Campaign statements were formulated and tested with stakeholders. The formulation and testing components included stakeholders from all identified audiences wherever possible with a key focus on frontline NHS staff. Our priority was to create a narrative that individuals could affiliate with, and add to, on emotional and practical levels.

**Branding**

A brand is the image or idea of a product or service that consumers connect with. Branding is the marketing of that image or idea. Branding seeks to influence feelings generated by a brand and, ultimately, behaviours associated with a product or service. The development and subsequent management of the Campaign brand aligned with the narrative described. Branding was an effective tool in promoting recognition of the Campaign and its purpose,
thereby engaging target groups. The Campaign brand was used to encourage interest, involvement and loyalty from those in the six target groups, particularly frontline NHS staff. As an example, one LHB promoted the Campaign brand through its ‘Count me in!’ photo campaign. Here, individuals – including frontline staff and organizational leaders – were invited to be photographed holding the Campaign’s ‘Count me in!’ banner. The success of this at a local level led to the concept being upscaled and applied nationally across NHS Wales.

**Dissemination**
Under this heading, we describe key tools and activities that supported dissemination to Campaign audiences, as well as the main channels for dissemination.

**Partnership with local NHS Wales communications teams**
The Campaign was organized with a central team partnering with NHS Wales LHBs and Trusts and local networks throughout Wales. This approach allowed for close matching between local frontline staff requirements and consistency with the Campaign’s overall communications strategy. In addition to the resources detailed immediately, conference calls and study days were offered to provide an update on progress, showcase work of individual organizations in promoting their staff’s involvement in the Campaign, and consolidate links with local media. This, in turn, linked to the aim of keeping diverse audiences, including those supporting delivery of the Campaign, engaged with and informed of its progress and impact.

**Communication resources**
Assorted resources were provided to local organizations to support and promote their work over the Campaign. Resources included briefings, frequently asked questions documents, template material for introducing and explaining new QI interventions, video interviews, poster campaigns, and promotions for presentations. The deployment of these resources at the local level was facilitated through interaction between the central communications team, local communications teams, and feedback from frontline teams.

**Engaging the Welsh media**
Working with the media provided an opportunity to engage our principal audience. It also allowed us to connect with wider stakeholders, including the general public, to explain how services were being improved and include them in the national focus to drive up levels of safety and standards of care. The idea was that raising and maintaining the Campaign’s profile would reaffirm its value, thereby promoting continued interest and involvement in Campaign activities. A proactive plan was developed that included targeted bilingual press releases, interviews with key spokespeople, and case studies from the Campaign. We also engaged with other publicly influential organizations, including the Welsh branches of the British Medical Association, Royal College of Nursing, and the NHS Confederation.

**Online communication**
The Campaign offered the platform to pioneer new e-communications within NHS Wales. Intranet, English and Welsh language websites, a monthly Campaign e-newsletter, and a YouTube™ page were used to provide regular information.

**Telling the story**
We gathered and shared stories from patients and staff to win the hearts and minds of frontline NHS staff and demonstrate how the Campaign, and the wider patient safety agenda, was relevant to their everyday work. Stories were also used to illustrate the impact of the Campaign. Individual stories were matched to their target audience group, though key messages around patient safety remained consistent.

The majority of stories were captured as short written interviews to illustrate examples of frontline staff engagement and communicate evidence of progress driven by the Campaign. We focussed on sharing stories that allowed us to recognize and thank frontline staff. Stories were shared across a range of communication channels, including local and national media releases, website news items, the Campaign’s e-newsletter, and other printed materials and reports. Stories were also captured on video and shared through the Campaign’s YouTube™ channel and websites. Over 60 Campaign-related videos were uploaded to the dedicated YouTube™ page.

**Review**
Review of the Campaign’s communications strategy incorporated monitoring of communications outputs, such as website page visits, e-newsletter distribution, and the number of press cuttings relating to the Campaign. In line with new approaches to measure the impact of communications work, outcomes and outcomes were also examined. Inclusion of these measures allowed us to review how the Campaign’s communications work influenced
engagement with and knowledge of the patient safety agenda.

Communications strategy and wider Campaign
The communications strategy played a central role in the wider Campaign, working alongside and interacting with other functions of the Campaign, including science development, measurement, and local field operations. Specifically, the evidence base for QI interventions was shared in various Campaign publications, and publication of mortality and harm figures supported the measurement element of the Campaign. Also, when local field teams developed new ideas, communications staff rapidly distilled, re-packaged, and redistributed the idea (for example, the 'Count me in!' photo campaign). Overall, communications work was intended to support the wider Campaign without altering underlying QI methodology.

There were no significant changes to the communications strategy over the period of the Campaign. However, in October 2009, there was a major reorganization of NHS Wales that saw a reduction in the number of health organizations. The central Campaign team worked with local communications teams to use the focus on patient safety as a launch message for the new integrated organizations.

Results
Results are presented under three headings: outputs, out-takes, and outcomes.

Outputs
As of the end of the Campaign in April 2010, approximately 700,000 page views were recorded on the Campaign’s Intranet and two Internet websites. Campaign-related videos on the dedicated YouTube™ page received more than 5000 views. Media coverage of the Campaign was extensive, with 214 articles appearing in 61 different print and online media over the course of the Campaign. Media coverage was supportive and presented the Campaign in a positive light. The Campaign’s monthly e-newsletter was distributed to approximately 3000 unique recipients. In the context of a relatively small national population, figures associated with communications outputs were substantial. The Campaign also led to development of a monthly patient safety column in the Welsh national newspaper, The Western Mail. Furthermore, the Campaign featured in top television and radio news items on BBC and ITV Wales.

Out-takes
The communications strategy played a pivotal role in improving awareness and understanding of the interventions and wider patient safety agenda. A basic measure of engagement was the number of Trusts and LHBs that signed up to, and maintained their participation in, the Campaign. Following the reorganization of NHS Wales in 2009, all LHBs \( (n = 7) \) and Trusts \( (n = 3) \) remained involved in the Campaign.

The development and management of the Campaign brand meant that the brand was perceived to be widely known and respected across NHS Wales. For example, the Campaign was supported by senior politicians in the Welsh Assembly Government and the senior leadership of local NHS organizations, Public Health Wales and NHS Wales, among others. Strong attendance, as evidenced by representation from every involved organization, was reported for all national learning events. Intervention-specific learning sets and WebExs were also well attended, though exact figures are not available. The number of monthly e-newsletter recipients \( (\sim 3000) \) was a further measure of Campaign awareness.

Outcomes
Communications work was ultimately used to promote behaviour change, meaning that wider Campaign outcomes were inextricably linked to communications outcomes. Summary figures related to main Campaign outcomes were outlined earlier. The Campaign also raised the profile of patient safety in every health organization in Wales, thereby contributing to a wider, positive culture shift within NHS Wales.

Three further outcomes of the communications strategy were evident. While these outcomes do not link to pre-defined aims of the communications strategy, they were important observed consequences of communications work. First, communications work in this Campaign allowed reflection on, and recognition of, the role of communications in the QI domain. Second, the Campaign’s communications work has been presented at healthcare and QI forums in multiple international settings. This work was also acknowledged by professional communications and marketing bodies in the UK. Third, the approach to communications used in the original Campaign was adopted by the national QI programme: 1000 Lives Plus and its successor, 1000 Lives Improvement. The latter two findings reflect measures of how the Campaign’s communications work influenced knowledge and actions, respectively.
Discussion

Outside the health arena, research indicates that effectiveness of communications is the ‘single most powerful determinant of relationship commitment’ in consumer and professional services.26 There is substantial literature that examines communication in healthcare settings; this discussion is typically focussed on one-to-one interactions in a clinical environment. Communication is also recognized as an element in the Framework for Spread described by Nolan et al.27 However, to our knowledge, this is the first paper to explore the use of a systematic and structured communication strategy to support and enhance QI methodology. We used the case study of the Campaign in Wales, UK, to describe the development, application, and impact of a communications strategy embedded within a large-scale QI initiative.

The principal question examined by this work is ‘does planned, organized, systematic and strategic communications improve outcomes from QI initiatives?’ There was no control group in this Campaign, meaning that it is difficult to quantify the independent contribution of communications to the overall Campaign outcomes. This is no different from the problem that besets most improvement work: it is not possible to evaluate a single intervention under experimental conditions.

The communications strategy was integrated with the approach of the broader Campaign. It facilitated positive, clear, and consistent framing of key messages, which reaffirmed the aim and value of the Campaign and supported creation of a community of change. Focussed communications work also ensured that progress and other updates related to the Campaign were shared with frontline staff and other Campaign audiences, thereby illustrating what was possible and helping maintain momentum and engagement over the 2-year journey. Many of these results can be placed under the overarching heading of ‘network building’, which is recognized as an area essential to achievement of large-scale change.28 From our experience in this Campaign, we conclude that communications work supported achievement of overall Campaign outcomes.

Diffusion of Innovation theory attests that leaders of change seek out early adopters to promote the speed of distribution of a new process or innovation.29 Accordingly, project champions are often chosen from the early adopters group. In this Campaign, we worked with early adopters to tell their story and share their successes to encourage others to do the same.

On the other hand, activities within the communications strategy were designed to reach a broad audience from the outset of the Campaign. Therefore, we also deliberately involved a wide group of frontline staff in communications activities to promote engagement and ownership of the Campaign’s key purpose and objectives. Our view was that there are difficulties associated with distinguishing between so-called early adopters and those that simply know about an innovation or change process. Consequently, we hypothesized that a wide-reaching communications strategy in QI initiatives presented an alternative method to increase early uptake of change processes. Our results support this hypothesis, though more research is required.

This work also highlighted a question around the optimal rhythm and volume of communications activity in large-scale initiatives. Our experience with the Campaign suggested a simple answer: there is no such thing as too much activity. Further basic principles reinforced by our experience are that communications activity should be conducted regularly, using consistent messages. A range of routine high-profile communications outputs, for example, monthly e-newsletters and media features on Campaign progress, meant that there was a steady rhythm to the communications work. This rhythm was important as we sought to maintain the momentum of the Campaign.

Challenges

The communications strategy faced a number of significant challenges over the course of the Campaign.

First, the Campaign carried a potentially controversial message: the need to improve our record on patient safety. The risk of controversy arose because in recognizing the need for improvement, the message risked challenging the frontline workers that were needed to deliver the Campaign. The message was also sensitive from a political standpoint as it implied that healthcare delivery might not be as safe as believed. We had to address fear of senior management that a focus on improvement could lead to media coverage that included stories that threatened or damaged reputations. We tested key Campaign statements with all stakeholders to minimize the risk of alienating frontline staff by appearing to criticize them. From our experience, we learnt that developing case studies for the media is useful to demonstrate how improvements from Campaign activities positively impact on patient outcomes. These case studies serve to explicitly highlight how Campaign outcomes are relevant to the general public.
Second, the Campaign was delivered during the reorganization of NHS Wales in 2009. This timing could have negatively affected the profile and prioritization of Campaign activities, given competition for staff, media, and public attention. Instead, we used the reorganization as an opportunity to place patient safety at the heart of the changes. This was achieved by working with local communications teams to include key Campaign messages in media releases and other communications activity announcing the launch of new LHBs.

A further challenge was the scarcity of financial and other resources available to market the Campaign.

Communications bundle
The communications strategy was prepared prior to the formal Campaign launch in 2008. The concept of a communications bundle was developed following our experience with the Campaign.

We define a communications bundle as a small, specific collection of communication components that enhances engagement with a programme and promotes awareness, understanding, and adoption of change. The idea is informed by IHI’s ‘care bundles’ and the communications bundle shares a number of features with the original concept. In particular, the development of our communications bundle was grounded in the notion that communications activity that is conducted using a small number of structured components in a defined order, with attention paid to all components, will lead to more successful outcomes.

Our proposed communications bundle incorporates the following six components:

1. **Aim**: What do you want to achieve?
2. **Audience**: Whom do you need to engage?
3. **Message**: What do you need to say?
4. **Channels**: How will you reach your audience?
5. **Story**: How will you engage your audience?
6. **Review**: What was the impact, and what will you learn for next time?

These six components align with those used in the Campaign communications strategy described. The communications bundle captures core features of an effective communication strategy that can be used for all QI initiatives. Note that, while all components of the proposed communications bundle can be replicated across QI initiatives, details of these components should be tailored to the specific cultural context and available resource.

**Limitations**
There are certain limitations associated with the results and recommendations arising from this work.

Ideally, all components of a communications bundle should be supported by Level 1 evidence. However, there is currently a paucity of supporting evidence in this area. The situation arises for a number of reasons including the relative novelty of this discipline in the health domain.

The communications strategy included multiple modes of communication. However, social media was not incorporated into the strategy. This was primarily because the use of social media in health care was not widespread at the time of the Campaign launch in early 2008. New communications mediums, together with diverse and changing audience characteristics, must be considered as they have implications for engagement and evaluation of the impact of activities in the communications domain.

Review of the communications strategy was limited by the lack of defined and agreed measures of success for communications-related interventions conducted at scale. We also recognize that communications sits within a broader improvement framework: more research is required to define the full scope of its contribution to QI work. Finally, the inclusion of a communications bundle may require certain trade-offs in resources available to QI initiatives. Of note, a communications bundle is not intended to replace any existing component of QI methodology.

**Conclusion and recommendations**
The role and contribution of large-scale communications is under-examined and under-utilized in the QI arena. Through the example of the Campaign in Wales, this paper has introduced and illustrated the development and deployment of a communications strategy in QI work. The Campaign’s communications strategy promoted engagement with, as well as awareness and understanding of, the patient safety agenda, thereby contributing to the Campaign’s overall success. Consequently, the approach to communications used in the original Campaign was adopted by the new national QI programme. Our proposition is that systematic and structured communications can support and enhance QI initiatives.

From our experience, we make the following recommendations:
1. Effective communications should be recognized as one component of standard best practice in QI;
2. Communications bundles should be formally incorporated into existing QI frameworks;
3. Communications bundles should include six core components: aim, audience, message, channels, story, and review;
4. Communications bundles should be tailored to the specific cultural context and available resource;
5. Evaluation of a communications strategy should incorporate review of inputs, outputs, out-takes, and outcomes to assess dissemination of communications messages and materials, stakeholder engagement, and overall impact.

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