

Communication in a complex world - perspectives for Public Health/ NHS teams

Recently we had a discussion about communication in one of our teams. It's a regular bugbear in any department:

- **Do we miss important messages in the dozens or hundreds of emails we receive in a day?** (Disclosure – I have switched off emails when preparing this blog, so I can concentrate)
- **How should we manage circulars?** (When I started work we used to have a paper system with sign off sheets that took many months to circulate around even a relatively small department. While we don't have paper circulars any more, we still have plenty of emails with links to reports, conferences, consultations, and it remains difficult to keep on top of all this information)
- **Are meetings a waste of time?** (They don't need to be, but frequently are, usually because of problems with communication. Well described by [Guy Browning](#)).
- **How do we update colleagues about our work (i.e. internally)?** (There are lots of different approaches – weekly information exchange, huddles, notice boards, posters, and of course quarterly and annual reports for corporate objectives)
- **How do we communicate with the outside world (i.e. externally)?** (Many public services still don't even have an up to date website, let alone a blog or social media feed; also peer reviewed journals, freedom of information requests, public committees and other forums).

A group of 3 team members met to discuss options. We weren't all sure why we were there as the meeting invite hadn't given context, or if it had it was hidden away. At least had managed to arrive, on time, with only one person missing. We started to explore options. In the spirit of better communication I have written up the meeting as a blog that can be shared on social media.

At this point it is worth exploring ideas around *dialogue* (rather than *debate* or simple *conversation*). This will help us understand how to communicate more effectively, and with meaning. There is a body of literature around such *generative dialogue*.

David Bohm describes the object of dialogue as follows:

The object of a dialogue is not to analyze things, or to win an argument, or to exchange opinions. Rather, it is to suspend your opinions and to look at the opinions—to listen to everybody's opinions, to suspend them, and to see what all that means... We can just simply share the appreciation of the meanings, and out of this whole thing, truth emerges unannounced—not that we have chosen it.

Everything can move between us. Each person is participating, is partaking of the whole meaning of the group and also taking part in it. We can call that a true dialogue.

Dialogue is the collective way of opening up judgments and assumptions. [Bohm. On Dialogue. 1996]

William Isaacs also highlights "meaning" (dia = flow, logos = meaning), but returns to an earlier meaning of "logos" as "to gather together", or "relationship". [Isaacs. Dialogue and the art of thinking together. 1999]

So a dialogue might be described as "a conversation in which people think together in relationship"

<https://www2.clarku.edu/difficultdialogues/learn/index.cfm>

This is potentially important as all too often we meet repeatedly but without communicating effectively, without understanding other people's perspectives. This limits our working relationships. Generative dialogue might offer a way to use time spent in meetings more effectively.

Some of the challenges of communication relate to the **volume of information** that flows around large organisations. We should question the effectiveness of our most basic approaches: for example, writing a strategy and updating an action plan or drafting and sending an email does not mean that a message has been communicated effectively. We can see that all too readily by reading committee reports and responses to emails.

All too often we meet without communicating and read without understanding or acting.

Many people in the NHS have at least two official NHS email addresses (with associated calendars), and may use other methods of communication for specific purposes (e.g. WhatsApp to contact colleagues in an emergency out of hours or for topics of interest). Information is also shared via the intranet, social media and external websites. In the span of a few years methods for disseminating information about new publications or conference reports have changed beyond recognition, though we do still receive old world missives as well, including letters and paper reports. Access to different sources of information may vary depending on device and setting. There is currently little integration across systems, and a blurring of lines between work and personal time when we use devices and accounts at work and home, increasing the risk of so called "[shadow work](#)". At the same time, legitimate concerns about security and confidentiality limit the availability of web-based tools that we might use to manage our personal affairs.

With so much information swirling about multiple systems it is important to use language clearly. Care over the title of an email message will increase its visibility at the time, but also whether it will be retrieved in a search day or weeks later. The same applies to the use of key words and MeSH terms in research papers and hashtags in social media posts. However, the more messages in an email exchange or social media thread, the more difficult it becomes to link to the original topic, content and/or meaning. There is not a single, simple way around this: some people will work their way methodically through a whole thread, others will search for a key word and give up if it is not easily found.

It is important to organise and agree terms as clearly as possible – whether they are email titles or folder and file names. Some organisations have laid these conventions down prescriptively. That does not mean, however, that their communications are any more meaningful. Bureaucracy has a nasty habit of killing spontaneity and creativity, both of which are essential to communicate effectively. The methods and purpose of communication need to be reviewed regularly, and folders need to be archived and sorted, as with any other information, whether electronic or paper.

We are living through a nuclear arms race in communication. We struggle to work through all the different methods of communication on different media. However, many organisations and individuals post across these different types of media to increase visibility. A journal, for example, may post an infographic, visual abstract and film to accompany a new paper, sharing the material on Twitter, Facebook and Instagram alongside the table of contents by email. The research paper itself may be published in advance and then in a paper edition a few months down the line. Similar duplication exists in almost all aspects of life, including NHS work. The volume of communication therefore increases even further, as does the feeling of helplessness and the risks of "shadow work", increasing burnout and feelings of helplessness and reducing productivity and efficiency. We worry that an email about a forthcoming meeting has not been read by key participants, and we respond... by sending another email, in the hope that it will be read this time.

In our lives outside work there are lots of different sources of information competing for our attention, with 19th century models jostling incongruously with their 21st century equivalents: newspaper vendors; Big Issue sellers; news, gossip and adverts on radio, TV, in newspapers, and on

social media; updates on our phones; travel updates in our cars; word of mouth from friends, families, fellow commuters and many more. Commercial parties will try to attract our attention using humour, novelty, shock, and sometimes the very obvious.

An electronic billboard in Glasgow on a hi-rise roof, hidden from street level, beams adverts into offices in the surrounding area, aiming to influence lunchtime choices. It feels like [Bladerunner](#). We learn to switch off.

We learn to shut out much of this information. The same is true of information sources at work. Signing up to a regular email update may initially pique interest, connecting with a new topic and new people, but familiarity will then almost certainly kick in and you will start to read the updates less frequently. A reminder email saying that you haven't read an update for a few weeks, nudging you to read this week's message, may spark the opposite response as you click to unsubscribe. The volume, intensity and incessant insistence of modern communication can be a turn off, both at work and outside work. Nonetheless, we rely on email and other forms of communication, and expect our own messages to have an impact. We open our inbox and anticipate information to complete pieces of work, or responses that provide solutions to immediate problems. We have a conflicted relationship with a task that takes up a considerable chunk of the working week.

We need to dip into complexity theory to understand communication within an organisation. If we take a simple "system", such as throwing a rock, then we can use school level maths to predict its basic course. As a rock rather than a ball we can ignore the impact of it being a gusty day, or a rugby ball, or landing on an uneven surface. This is a simple system. Predicting the course of a bird is much more complex and requires "attractors". Again parallels with the commercial world are relevant – the nudges designed to deliver an intended outcome are a form of "attractor". An email passing through an inbox frequently has more in common with the bird than the rock even though the task of sending and reading an email appears to be quite simple. Naming conventions of files and folders will not be enough to ensure successful delivery of content.

Distributed Control

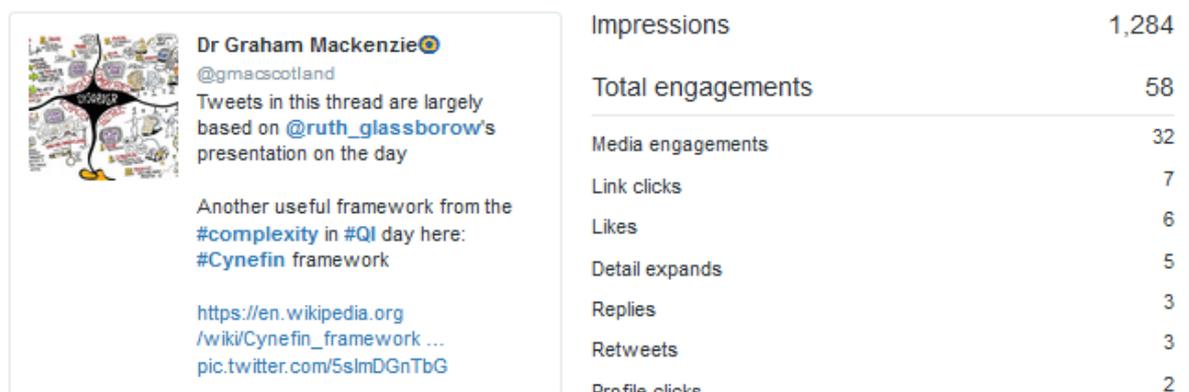
Source: Paul Plsek, based on Richard Dawkins

Shared by Ruth Glassborow at Complexity workshop, 30 October 2018
See also: <https://www.ncbi.nlm.nih.gov/books/NBK222267/>

As an example of how such information can be shared, have a look at this [tweet thread](#), summarising ideas from Ruth Glassborow's workshop on complexity (30 October 2018). The tweets include a summary image, a reflection and a link to further reading. They are attractive, capturing

images from Ruth and colleagues' presentations, but also contain useful information for CPD. The act of posting this information was a useful way of cementing these ideas. However, as a method of sharing the information it is quite inefficient: of around 12,000 followers, just over 1,000 people had Twitter enabled when the most "popular" tweet in this thread was posted ("impressions" in Twitter terminology), and 3 people retweeted the post to their followers. A few minutes after posting it is very unlikely that the tweet will be seen and shared, unless somebody actively searches for terms such as #complexity or #QI.

Tweet Activity



Source: [Twitter Analytics](#) (31 December 2018). View original [tweet](#), posted 15 November 2018.

In order to keep on top of and make sense of all the information that passes through our organisation we need to consider the curation of information. We can organise distribution of information in any number of ways for example:

- **time** (e.g. a calendar showing forthcoming deadlines – corporate objectives, abstract deadlines for conferences)
- **topic or theme** (e.g. newsletters about communicable disease)
- **person or team** (e.g. communicating directly to a press officer, or a personal assistant who is more likely to be in the office than the person they support)
- **location** (e.g. library, newsagent for a book or newspaper; a bowling club for a screening programme for the over 65s; a departmental notice board for a forthcoming course)
- **method and medium** – e.g. word of mouth, post, phone, email (even now certain information – e.g. appointment letters and results – are shared by post as they are considered more secure, so we may expect a letter to contain an appointment, or perhaps a bill or fine).

Some of these approaches remain as relevant now as they were when developed for sharing physical information such as newspapers and leaflets. They need updating though. There are lessons here about digital curation. We already deploy simple approaches in the way that we sort through information – e.g. choosing a distinctive acronym for a meeting that makes finding emails easy when we have been out of the office for a few days, or searching for a contributor with a distinctive name. However important messages slip through (e.g. if acronym is mistyped or not included in the email subject, or the subject is missed entirely in the hurry to post before another meeting). This is inevitable when emails accumulate so quickly.

Plsek (see rock and ball figure above) introduces ways of managing complex adaptive systems. One approach: "Complex outcomes can emerge from a few simple rules that are locally applied". This principle applies, for example, to rules-based management of email inboxes (though initially the rules have to be learnt and settings changed).

- Simple conventions could change attitudes towards email – for example a department-wide rule not to send emails after 5PM; or a personal approach to email that limits emailing to half an hour in the morning and half an hour in the afternoon. Methods to reduce the number of emails may improve communication – both by email and in face-to-face discussions.
- Other simple approaches would allow a Public Health department to quickly identify opportunities to disseminate information in a structured fashion – deadlines for conferences, local newspapers and board papers could be entered into a departmental calendar a year in advance.
- [Social network analysis](#) can be used to produce a concise conference summary from thousands of posts using a few simple rules based on the number of times a post has been shared; it can also record the number of people sharing a public health message (or the opposite – e.g. antivaxx posts) and quantifying this as part of the wider body of tweets on the topic. The #complexity #QI tweet shown above, “lost” in a sea of other tweets, becomes potentially useful information that can be found and summarised using these methods, assuming that the search terms match the content of the tweet.

Such approaches need time, skill and energy, and therefore resourcing. They also become just more information, so we need to build “attractors” into the approach. Digital curation should add value to the basic information – for example additional reflections that will help colleagues think more broadly; opportunities to disseminate information and contribute to CPD (e.g. blogs and publications), and to receive feedback directly from colleagues and a wider audience (e.g. comments in blogs, responses on social media). This blog is one example of such an approach in action – until we have shared them we won’t know whether these ideas connect with people, or whether others have ideas that could contribute to discussion, or whether they are just too obvious, longwinded, simplistic or over-complicated. At that point lessons on generative dialogue will be important.

Wider engagement in this way will increase transparency and help collect responses in a structured way. Developing and reporting on corporate objectives in this way, for example, would require simpler language – but that needn’t detract from the message. The [Millennium Development Goals](#) were elegant in their simplicity and therefore easy to communicate – e.g. “eradicate extreme poverty and hunger”. [Quality improvement \(QI\) methodology](#) provides a way to break down such high level aims into achievable tests – think big, start small, test fast – using the Model for Improvement. High level goals such as ending child poverty can be broken down into [ideas that can be tested immediately](#), informed process, outcome and “balancing” measures (the latter monitoring unintended consequences). QI work is planned in a project charter, with data collated and shared in a QI platform (eg QI Life), and ideally published in a QI journal. These approaches can provide clarity of purpose and reduce email communication. QI work needs to consider relationships – both between clinician and patient, and colleague to colleague. Acknowledging this, Deming’s lens of profound knowledge has human/ factors as one of the four domains (the others are understanding variation, building knowledge, and appreciation of the system). Relationships depend on trust, understanding and communication, and this again takes us back to dialogue.

By making small but readily communicated advances, social media posts and blogs that describe such quality improvement work could become an important part of sourcing and writing the annual Director of Public Health report.

Communication in and from a Public Health department is arguably more complex than some other NHS teams. Communication is required within the team, between teams and organisations, and with patients and public. Though some Public Health roles appear to follow a clear structure – for example the work of a Health Protection Team in communicable disease control, or a screening team in running a screening programme – there are still areas of unpredictability, and the work of

the department is shaped by societal change, politics, emerging technology and new threats to health. Often decisions have to be made before detailed data are available to shape these decisions. Communication about a novel infection needs to be rapid, clear and informative, even when we are still finding out some of the basics about the bug. Tackling “wicked issues” such as inequalities, obesity or poverty require clarity about evidence-based approaches (e.g. the Marmot review on inequalities, the Foresight report on obesity), what they might mean for the local service and population, and also about areas of uncertainty, but they are frequently shaped by level of politics/economics/ public opinion that are well outside the influence of a Public Health department, even when the NHS works with a wide range of partners. Sometimes these goals will link directly to NHS corporate objectives (which are necessarily focused on ill health and measures such as waiting times), and sometimes the goals will be broader, with a focus on social determinants of health.

Given these complexities, a Public Health team needs ways to communicate the big picture in simple language, akin to the language and messages familiar from the original Millennium Development Goals. These should be stated clearly on the front page of the department’s website. We need to remember why the word “Public” appears first in our name.

For each of these big goals there should be aims that are achievable within a 1-year time frame. These aims should be worked up and reported on using Quality Improvement methods. There should only be a small number of aims for any given period, perhaps themed around a single topic (e.g. air quality could encompass a wide range of topics from active travel, green space, food, community safety, obesity, mental health, environmental health, economy and more).

For publicly facing messages it would be appropriate to have rolling news on the website, or a side panel showing social media messages from a department account or – building on the “simple rules” idea - a Twitter feed that features posts with a hashtag specific to our work and that is unlikely to be used by others. Tweets could include, for example, links to public reports, displaying infographics.

The same approach could be used on the department intranet site for messages that are specific to the team (e.g. conference deadlines). This would require less maintenance than posting and updating messages on the intranet site itself, and would gather information together in a single place, fulfilling the function of a notice board, library and broadcaster. Key information and deadlines could be listed in a department calendar.

Alternatives include “platforms” where the functions of storage, messaging, scheduling and wider dissemination (eg blogs) are contained within a single website.

The most obvious example of a platform for the public sector is [KHub](#) (Government commissioned and delivered, but with advertising by sponsors). This provides all of the above functions, including tagging of content for easy retrieval. Content can be public or private, with blogs providing opportunities for public sharing even within a closed group.

An alternative for meeting and coproduction, using virtual meeting spaces and tools, is provided by [QUBE](#) (by Pentacle). This requires installation and an external microphone +/- camera.

While these platforms might save time in the long run (fewer and/or shorter meetings, information stored in shared areas, productivity tools and methods for dissemination built in), the process of moving across to this way of working would take time and support. There are also questions about security, sustainability and integration (eg with the emails and scheduling that would no doubt continue via existing routes).

For such an approach to work we would need to incorporate learning about generative dialogue as introduced above. That dialogue would include professionals from a range of backgrounds, public and patients. This process would take time, curation and leadership – it would not be achieved by traditional approaches of drawing up a paper strategy and action plan, or at a traditional away day. It would push us beyond the usual objectives and indicators that appeared in most Public Health and

community planning documents year after year. It will be a more fluid process, that acknowledges and embraces complexity and produces something new. As with a good research paper, we would end up with some aims that are deceptively simple to describe, will make us wonder why we had not thought of them before, but will generate many more questions through testing: there are rarely simple solutions to complex problems. The process of generating and developing these ideas, from the initial aim to the further testing, relies on dialogue. Linking the ideas with corporate objectives, and understanding gaps in existing corporate objectives, will emerge from such dialogue.

The process of sharing information around this work, which I would argue should be through more public facing methods – reports and summaries shared on social media, reflections shared in blogs – will be informed by “attractors”. It will be obvious when ideas have been well received, through sharing, feedback, and invitations to discuss further, sometimes with unexpected audiences. With clarity around a few simple ideas, and where that information is held – both internally and for sharing externally – there will be less need for the type of sharing that occurs currently, through emails and large meetings. With a more practical (QI) focus there will be more hands-on work between smaller groups of individuals, sharing interim findings as described, collating that information for larger reports. The progress achieved will become an “attractor” in its own right, as observed in Quality Improvement work and in recent examples of collaboration between centres on research papers via social media. These and other ideas are further explored in [“Joy in Work”](#).

To conclude:

- Communication in a modern organisation – both internally and externally – is complex
- Working with complexity can, however, be aided by some **simple rules, clearly communicated** (Plsek).
- **Generative dialogue** moves beyond debate or conversation, building relationships, establishing meaning and helping to develop aims for our work (Isaacs).
- Some of the lessons are a simple matter of time, organisation and allocation of resources. Files and folders that we work on, and the information that we share in email, reports and social media, need organisation and curation, which requires time, but will also save time. It will also help link our work back to our aims and objectives. Simple naming conventions will help, including in the tags that we use when sharing information. Such information can help generate “feeds” about the work, both for internal and external use, learning from **social media** approaches.
- Some of the resulting outputs will change the nature and presentation of the way we communicate internally and externally. Social media has features that act as **attractors** that help in the dissemination, understanding the reception and feedback of information, and we can incorporate these approaches into our work, and communication internally and externally.
- Ultimately, however, effective communication requires meaning, and that will only come from different relationships with colleagues, external organisations and the general public, and different approaches to work. **Quality Improvement** provides a suitable approach - starting small, testing throughout, keeping an eye carefully on the big picture, and considering relationships throughout. This fits well with a Public Health approach, and is particularly suitable when there are obstacles (eg uncertainty, inequalities, a roadblock, or a gap). Steering such an approach through a large organisation with fixed corporate objectives and a desire for immediate results remains a major challenge. Working out how best to deal with that challenge is a matter for discussion (or ideally Generative Dialogue)...

Dr Graham Mackenzie (@gmacscotland), 31 December 2018