

MORE VIEWS FROM ELSEWHERE

As this Issue of HindSight has shown, there are differences between different 'varieties of human work'. Some work is imagined or prescribed but not done. Other work is done but not imagined and perhaps not even disclosed. Still other work is done as imagined and as prescribed.

The following vignettes have been provided by healthcare professionals to illustrate some of the relationships between the different varieties of work shown in Figure 1.

As you read the vignettes, consider your own work. Do any similar situations come to mind?

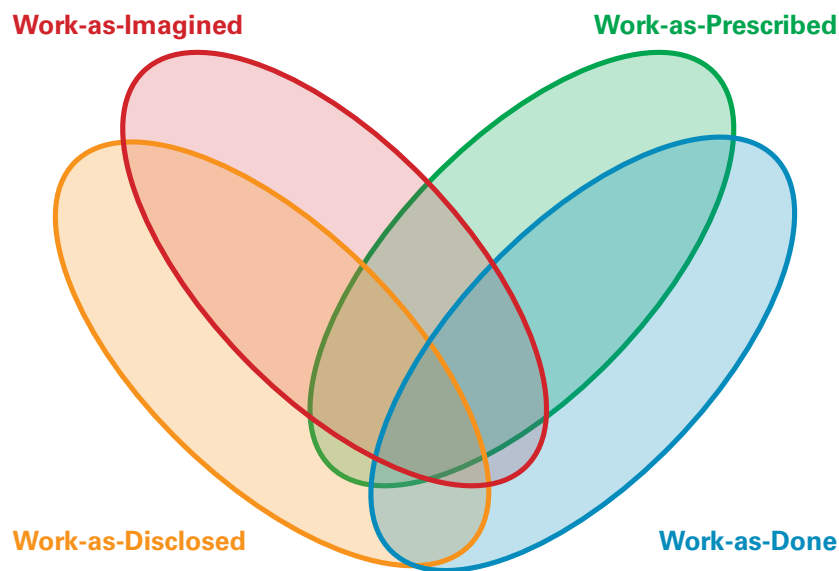


Figure 1. The varieties of human work (From <http://bit.ly/TVOHW>)

How do work-as-imagined, work-as-prescribed, work-as-done, and work-as-discovered interact in aviation?

If you would like to submit a vignette that may be published anonymously in future editions of HindSight, please contact **steven.shorrock@eurocontrol.int** with a vignette of 200 words or less.

Of the 2184 policies, procedures and guidelines (PPGs) in my organisation, 28% are currently out of date and may therefore not reflect current practice. More interesting still, are the nearly 19% of PPGs that have been opened less than 5 times in total, including by their authors. These documents are often written to meet the requirements of external agencies with the idea that not having a policy leaves the organisation vulnerable to criticism. These documents remain unopened, unused and unrelated to daily work but may be used after incidents as a form of organisational protection: “yes, we had a policy for that”.

Carl Horsley, Intensivist,
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In operating theatres that use lasers, certain rules and safety precautions have to be in place. Part of this is to have a risk assessment and standard written laser protection policy. This risk assessment is normally carried out by a laser protection supervisor from a distant site who has no knowledge of local practice. In addition, this tends to be written when a new laser is purchased and then is never updated. While work-as-imagined would be following the policy to the letter, if the policy is impractical for the local use of the laser, the local team will tend to develop workarounds. When there is a site visit by the laser protection supervisor, work-as-disclosed will follow work-as-imagined – as they are reassured that everyone follows all the rules to the letter. If a laser protection incident does however occur, the local team would all be held to account by the defunct laser protection rules.

Craig McIlhenny, Consultant Urological Surgeon,
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The computerised estimation of the time it will take to perform a case in theatre can be an example of ‘projection’. Theatre scheduling uses the average time that similar cases have taken in the past to predict how long a case will take in the future. Individual patient, surgical and anaesthetic factors are not considered. Sometimes this is accurate, but other times it is not. It is therefore a crude system, although it is the best that we have at present. The problem comes when staff feel they have failed when cases take longer than the projection and theatre over runs. This is inevitable given the nature of the system.

Emma Plunkett, Anaesthetist,
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The WHO Surgical Safety checklist was introduced into the National Health Service following the release of Patient Safety Alert Release 0861 from the National Patient Safety Agency on 29 January 2009. Organisations were expected to implement the recommendations by February 2010 including that “the checklist is completed for every patient undergoing a surgical procedure (including local anaesthesia)”. All organisations have implemented this Patient Safety Alert and the WHO Surgical Safety checklist is an integral part of the process for every patient undergoing a surgical procedure. Whilst the checklist appears to be used in every patient, there is clear evidence that there is variability in how the checklist is used both within an organisation and between organisations. Within an organisation, this variability can occur between teams with differences in the assumed value of using the checklist and within a team between individuals or professional groups. Its value can degrade to a token compliance process to ‘tick the box’. The assumption within an organisation at ‘the blunt end’ is that it is done on every patient.

Alastair Williamson, Consultant Anaesthetist,
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There are high levels of burnout. A target-driven culture is exacerbating this problem. A typical example was when the government seemingly became convinced by poor quality data which suggested that dementia was under diagnosed. So it decided to offer GPs £55 per new diagnosis of dementia. Targets were set for screening to take place – despite the UK National Screening Committee having said for years that screening for dementia was ineffective, causing misdiagnosis. And when better data on how many people had dementia was published – which revised the figures down – it was clear that the targets GPs were told to meet were highly error-prone. The cash carrot was accompanied with beating stick, with the results – naming and shaming supposedly poorly diagnosing practices – published online. Setting doctors harmful tasks, leading them almost to “process” patients, fails to respect patient or professional dignity, let alone the principle of “do no harm”. [Extract from article ‘The answer to the NHS crisis is treating its staff better’, New Statesman, 13 Feb 2017]

Margaret McCartney, General Practitioner,
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When preparing intravenous injections for a patient, guidelines (e.g., NMC medicines management guidelines) and procedures require that the injection must be prepared immediately before it is due to be given, and not prepared in advance of this time. However, under current service pressures, including staff shortages and high acuity, doses may be prepared in advance to save time, or if prepared on time and then for some reason not given, may be stored to one side for later use, instead of being disposed of and re-made at a later time.

Anonymous, Pharmacist

A Do Not Attempt Resuscitation (DNAR) form is put into place when caregivers feel that resuscitation from cardiac arrest would not be in the patient's best interests. These forms have received a significant amount of bad press, primarily because caregivers were not informing the patient and/or their families that these were being placed. Another problem with DNAR forms is that some clinicians feel that they are being treated as "Do Not Treat" orders, leading (they feel) to patients with DNAR forms in place receiving sub-standard care. This means that some patients who would not benefit from resuscitation are not receiving DNAR forms. As a result, when these patients have a cardiac arrest they are subjected to aggressive, yet ultimately futile, resuscitation measures which may include multiple broken ribs, needle punctures in the arms, wrists and groin, and electric shocks. It is not unusual to hope that these patients are not receiving enough oxygen to their brains to be aware during these last moments of their lives.

Anonymous, Anaesthetist.

Radiology request forms are meant to be completed and signed by the person requesting the procedure. In the operating theatre, the surgeon is usually scrubbed and sterile, therefore the anaesthetist often fills out and signs the form despite this being "against the rules". Managers in radiology refused to believe that the radiographers carrying out the procedures in theatre were "allowing" this deviation from the rules.

Anonymous.

Certain clinical situations are volatile, uncertain, complex, ambiguous (VUCA) and time critical and they can highlight different aspects of 'the messy reality'. For example, a patient with a ruptured abdominal aortic aneurysm, if they reach hospital alive, will require immediate transfer to theatre for the life-threatening bleeding to be stopped and a new vessel to be grafted into place. The complex and dynamic nature of the case deems that it cannot be prescribed and so the practitioner has to operate within the discretionary space. This allows the practitioner the necessary freedom to treat the changes as they arise and potentially to deviate from 'standard operating procedures' (SOPs). These SOPs are ordinarily designed for non-emergency work and have a number of 'safety steps' inherent within them. There are important steps such as identifying the patient, procedure and allergies and form part of the wider WHO 'five steps to safety' but also other points less critical but important, especially in the non-emergency setting. It is commonplace for the practitioner to deviate from the SOPs and to perform an ad-hoc, yet necessary, streamlining of this process in order to proceed at the appropriate pace and to treat physiological changes as they present themselves. This can give rise to a number of issues. Firstly, I have known this deviation to create friction amongst the team at this critical time that is

generally not helpful in both proceeding with the work and maintaining team harmony. Secondly, if the outcome for the patient is poor and the case is investigated, I have known for practitioners to be admonished for their deviation from the SOPs, although they nominally relate to the non-emergency setting. This is in stark contrast to if there is a good patient outcome as the deviation is often not even noted, or highlighted as potentially being intrinsic to the positive outcome. Lastly there is often a corporate response that seeks to prescribe the work that is by definition VUCA and cannot be prescribed. Ultimately, I believe that, on balance, practitioners benefit from 'the messy reality' as it is when the work is at its most complicated and cannot be prescribed that autonomy and professional judgment can be exercised most readily for the benefit of the patient.

**Dr Alistair Hellewell, Anaesthetist,
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The 'normalised' unsafe practice of hyperventilation during cardiac arrest management provides a comprehensive example of 'the messy reality'. It has become evident, from analysing retrospective observational data, that during the procedure of cardiopulmonary resuscitation (CPR), medical practitioners (usually anaesthetists) almost always deliver too much pressurised oxygen/air to the lungs of patients (both adults and children). Traditional Safety-I concepts may regard this as a 'violation', in that that this practice continues to occur despite a succession of recommendations in international guidelines to the contrary, supported by the established and widespread provision of systematic, organised education and training. However, when directly questioned, anaesthetists demonstrate a clear, functional knowledge that such practice is detrimental to patient outcome. When contemplating this behaviour we must consider the following. Firstly, there is no intention for airway management practitioners to deliberately hyperventilate a patient. Secondly, these clinicians do not know that they are hyperventilating patients during the period that it is actually happening. Thirdly, there is not ordinarily any recognition or acknowledgement that they may have hyperventilated the patient after the clinical intervention has been discontinued. Despite the fact that this issue is widely known to anaesthetists, others (particularly at the blunt end) would generally be ignorant of the issue.

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These vignettes, and more, can be found at www.humanisticsystems.com as part of a series entitled 'The Archetypes of Human Work' (see <http://bit.ly/TAOHW1>).

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