Alison Leary and Elaine Maxwell: In praise of professional judgment

Magic thinking seems common in healthcare and nowhere is this more apparent than when it comes to the workforce. Employers and policy makers continue to search for a solution to the intractable challenge of how we can deal with more complex demand with a deficit of both hands and skills. We'd argue that they don't always understand the problem they are trying to solve.

The fundamental premise of workforce planning in healthcare is that the division of labour should be based primarily on technical competence; that is, a worker's capability to complete a series of independent tasks of varying complexity in a standardised manner. A small number of decision makers determine the tasks that need to be completed through the development of guidelines, checklists, and protocols. The workforce is then assessed against a set of task competencies, but never against the need to balance competing tasks, or to consider the unintended consequences of one task on another aspect of the workload.

This approach is based on Taylorism, a management theory that looked at how to maximise productivity and make work more measurable, efficient, and even controllable. It's worth noting that Taylorism was developed in factories in a bid to increase the efficiency of workers and machines. In such a system, the workload is stable, predictable, and linear with little variability, but does it work for modern healthcare?

Healthcare consists of a series of overlapping systems—of physiological and physical structures in parallel with psychological and social frameworks. The competency based approach, which reduces work to a series of independent tasks considered in the abstract, misses the complexity and the critical thinking that is essential to professional working.

It also fails to consider that unlike manufacturing, each case in healthcare has a particular context. Patients are all unique and the resources that professionals have available fluctuate. Professionals have to manage finite resources to best manage the needs of a group of patients or a population rather than the needs of a single individual. For the best outcomes, we'd argue that the competency approach needs to be complemented by professional judgment.

The limitations of relying entirely on competency based workforce approaches can be seen in the adoption of early warning scores (EWS). The first early warning score was created in 1997 as an aid to assessing and detecting critical illness. Since then, it has developed into a mandatory task in the NHS, with an updated national early warning score (NEWS2) <u>published and endorsed by NHS England</u> and NHS Improvement in 2017 for use in acute and ambulance settings.

The use of early warning scores is justified <u>by studies</u> that show associations between their introduction and apparent reductions in cardiac arrest. Yet, as always in science, associations are not sufficient explanation. Back in 1974 Richard Feynman warned against the pitfalls of assuming that visible artefacts associated with a desirable outcome are causal, <u>calling this cargo cult science</u>. Instead, we need to have a deeper understanding of the mechanisms that lead to observable outcomes—and the difficult truth that they may not always be amenable to direct measurement. Professional judgment is one of these confounding factors that may not be readily quantified. When we fail to

recognise its role and reduce vital sign assessment to a technical task with a score, we may be doing more harm than good.

In an increasingly competence based system, there is less and less value attached to professional expertise. <u>McGaughey et al</u> found that when observations were delegated to healthcare assistants, meaning the EWS was not complemented by professional nursing judgment, the number of false positive calls went up, thereby increasing junior doctors' workload. They also found instances of false negatives, where junior doctors refused early referrals based on nursing judgment because the EWS thresholds had not been triggered. In <u>a recent systematic review</u>, Gerry and colleagues point out the weakness of various EWS models. However, their adoption as a national approach means they are often given primacy over professional judgment, and debate around their use is unlikely to be welcome.

As <u>Dreyfus and Dreyfus have set out</u>, professional judgment is the combination of theory and experience. Using well evidenced theory, an expert draws on their experience of both typical and atypical cases to subliminally match appropriate evidence to each given situation and whether that unique situation requires adaptations.

Dreyfus and Dreyfus's model applies to the whole healthcare workforce, but has particular resonance for nursing, which has, we'd argue, struggled to quantify its impact more than other healthcare professions. Nurses' professional judgment and expertise has been repeatedly shown (Twigg et al; Needleman et al) to be associated with reduced mortality, length of stay, readmissions, admissions to residential care, and a raft of other outcomes. Yet nursing judgement is less amenable to being appraised by technical competencies and its expertise is often lost in discussions about the shape of the workforce.

The profession's value is often subsumed into concepts of "caring" (as though the other professions don't care) and delivering technical tasks prescribed by others. The critical thinking skills it requires often go unseen. When nurses' expertise isn't recognised, the risk is that the skills their role requires are underestimated and the work is redistributed to roles that are cheaper, but with a different balance of theory and experience.

We would suggest that the challenges of reducing professional practice to task delivery, which nursing is currently facing, will begin to impact other professions, including doctors, as the number of patients with multiple long term conditions rises. The complexity of these patients physiologically and socially means that the confounding variables become too numerous for a simple scoring system or pathway. While technology has the potential to crunch the evidence for individual cases, people living with long term conditions will increasingly need to make choices about the compromises they are willing to make. In reaching these decisions, professional judgment will likely be a better support to them than an algorithm.

We are still dividing healthcare work according to a Taylorist model and struggling to understand why safety failures continue to happen. It's time to reconsider our underlying assumptions about what makes an efficient and effective healthcare workforce, and to draw out how they can produce better outcomes for patients, rather than simply delivering activities and ticking boxes.