Expert Panel on Effective Ways of Investing in Health (EXPH)

Opinion on
Task shifting and health system design

Expert Panel on Investing in Health

Provides independent non-binding advice on effective ways of investing in health. Established by Commission Decision 2012/C 198/06 following the Council conclusions of June 2011 'Towards modern, responsive and sustainable health systems'; renewed in 2017

The views in this presentation are those of the independent scientists who are members of the Expert Panel and do not necessarily reflect the opinion of the European Commission nor its services.

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Mandate: TERMS OF REFERENCE

- How to identify and characterize “tasks” suitable for a “task shifting” process?
- What are the main enabling conditions and difficulties/risks that have to be taken into account when defining “task-shifting” measures as part of a health system reforms?
- How to measure the impact of “task shifting” in contributing to the effectiveness of the health system using an evaluation framework to inform decision-making?

The traditional (WHO)definition of task shifting

- "the rational re-distribution of tasks among health workforce teams… specific tasks are moved, where appropriate, from highly qualified health workers to health workers who have fewer qualifications in order to make more efficient use of the available HRH [human resources for health]"

- Ignores evidence that some tasks should be shifted upwards to those who perform them better, or to patients and carers, or to machines

An updated approach

Includes:

- *task distribution*
  - overview of who does what, without any implied imperative to change it
- *task sharing* and *competency sharing*
  - responsibilities are often shared between different professional groups and with the patient and, in some cases their families

Factors driving change

- Changing patterns of disease
  - Multimorbidity, frailty, antimicrobial resistance
- Technology
  - Minimally invasive surgery, intravenous anaesthetics, diagnostic kits, artificial intelligence for image processing, telemedicine
- Professional norms
  - Rejection of traditional hierarchies, growing autonomy of non-physician staff (but still very variable in EU)
- Shortage of health workers
- (Cost containment)
- Decentralisation of organisational structures

Challenges to achieving change

- Limited evidence base
  - What exists is concentrated in a few countries
- Threat to power in established hierarchies
  - Especially where there are financial interests involved
- Obsolete regulation
  - On who can do what, often based on ideas decades old

Why is this important now?

- Sustainability of the health workforce
  - We don't have enough health workers so we need to use those we have as effectively as possible
- Financial sustainability of the health system
  - It is morally wrong to waste scarce resources unnecessarily
- Improved quality of care
  - Those who do the job best should do it
- Resilience of the health system
  - In emergencies, may need different groups to cover for each other

Changing roles

Enhancement	Increasing the depth of the job by extending the role or skills of a particular group of workers
Substitution/ delegation	Exchanging one type of work from one profession to another profession, breaking traditional professional divides
Innovation	Creating new jobs by introducing a new type of worker (or technology)

Task shifting from health professionals to patients

- The evidence base for self-management of many long term conditions is relatively weak, reflecting a combination of limitations of many of the studies that have been undertaken and a lack of studies on key issues.
- There is evidence of improved quality of life for patients with stroke and COPD, although self-management of exacerbations of COPD may be associated with higher respiratory mortality.
- Evidence in support of technology is also limited; it has been associated with better control of oral anti-coagulation but other forms of monitoring, such as pulse oximetry, are not supported.

Task shifting to community workers

- Review of 39 systematic reviews
- Most concluded that services provided by volunteers not inferior to those provided by other health workers, and sometimes better.
- However, they performed less well with more complex tasks such as diagnosis and counselling.
- Many reviews concluded that their performance could be strengthened by regular supportive supervision, in-service training and adequate logistical support, as well as a high level of community ownership.

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Task shifting from health workers to machines

- autonomous embodied agents (e.g. apps to support people with mental health problems)
- digital image processing (e.g. radiology, sperm counts, haematology/ cytology)
- replacing laboratory personnel by automated production lines (3D printing of implants, automated biochemical analysis, microbial genetic analysis replacing culture)
- autonomous monitoring and alert systems based on wearable technologies supported by artificial intelligence on servers and cloud technology (e.g. blood pressure, ECG, oximetry, blood glucose, ovarian cycle monitoring (e.g. www.ladytechnologies.com))
- robot assisted physiotherapy and rehabilitation
- replacement of administrative staff (e.g. automated hospital coding replacing human coders)
- automatic/robotic medication dispensing systems
- artificial intelligence supported decision making

Task shifting from health workers to machines

- Evidence base surprisingly weak
- Methodology often poor
- Considerable potential, at least in theory
- Some clear benefits in limited areas but…
- Lots of problems with conflicts of interest
- Major concerns about abuse of data

Task shifting between different types of health workers

- In many studies, nurses achieve similar outcomes to doctors when managing routine conditions
- Patient satisfaction often higher with nurses
- However nurses tend to recall more patients and request more investigations
- Results less clear for more complex conditions

Task shifting between different types of health workers

- Nurses as good as doctors in routine pre-operative assessment
- Pharmacists achieve better results than doctors in medicines reviews and add benefit to multidisciplinary teams
- Prescribing by nurses and pharmacists in routine care often achieves greater adherence
- Evidence on enhanced role of nurses is mixed

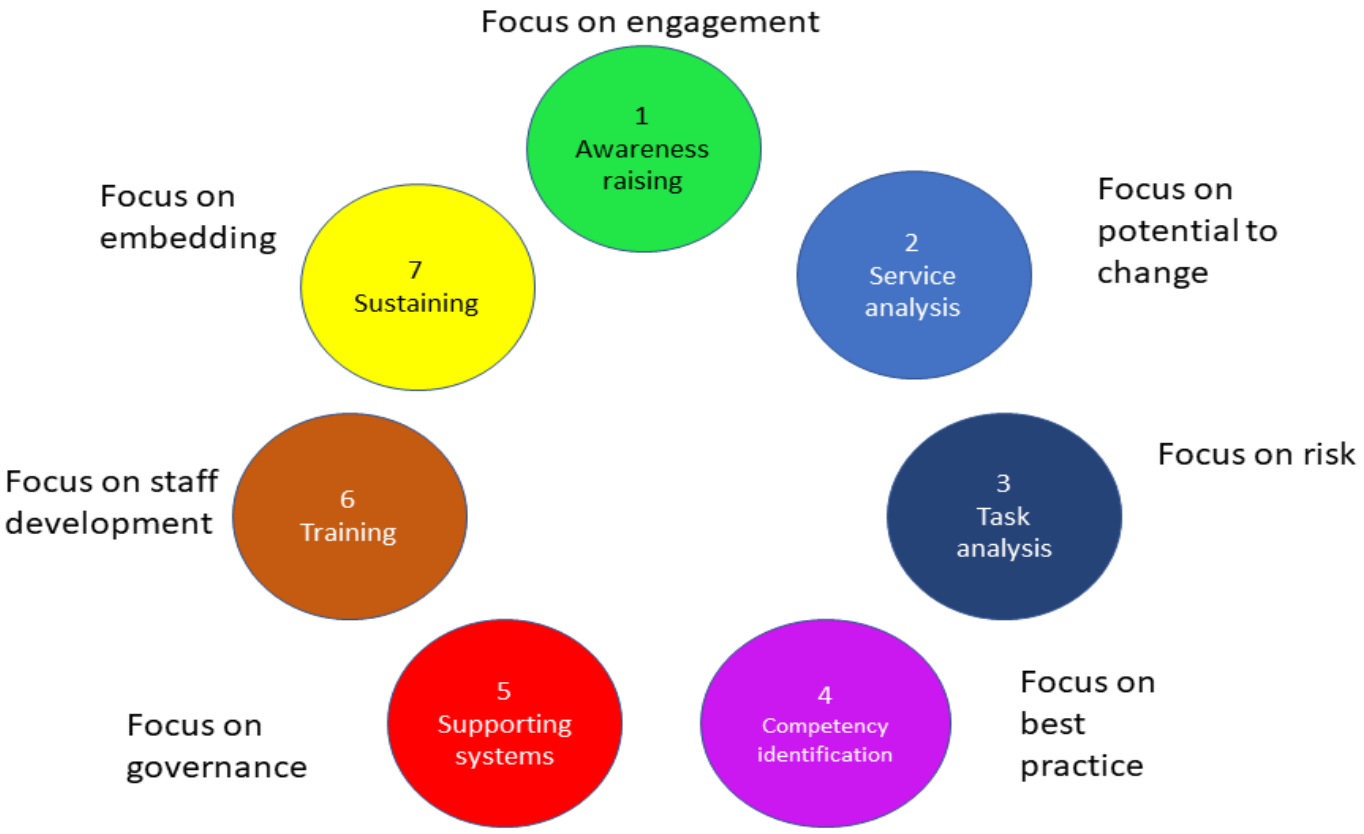
Summary of the evidence

- There is little evidence for the rigid demarcation that is between different health professionals, such as doctors and nurses, that exists in many countries
- Groups other than physicians, and especially nurses and pharmacists, can undertake substantially expanded roles compared to what has traditionally been the case.
- However, they must be adequately trained and supported and function in integrated teams with information-sharing.
- There is a need to better understand the optimal combination or “package” of changes and additions that can act synergistically to improve the quality and safety of healthcare as well as patient experience.
- While it is not necessary to evaluate every change, there is a strong argument for doing so where major changes are taking place, as there is scope for unintended consequences.
- This should not, however, be an argument for doing nothing.

Enablers and barriers

- Staff shortages
- Increasing complexity of care
- Legal factors
- Professional associations
- Financial incentives
- Changing professional attitudes
- Pilot projects and experiments
- Capacity to implement change
- Regularisation of informal practices
- Legal indemnity

Making it happen: The Calderdale Framework



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Recommendation 1

We recommend that, in all cases of task shifting, the objective being pursued is clearly specified, the rationale for selecting task shifting as a means to achieve that objective is explained, and the evidence on which the decision is based is presented.

Recommendation 2

We recommend that there should be increased investment in research on task shifting, with the goals of increasing the number of studies from settings that are inadequately represented and understanding the contextual factors that determine what works in what circumstances.

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Recommendation 3

We recommend that those responsible for training health workers ensure that they:

- **convey positive attitudes to interprofessional and team working and that those being trained have opportunities for interprofessional learning experiences**
- **provide the specific skills necessary for task shifting, in those cases where the evidence indicates that task shifting is likely to be effective.**

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Recommendation 4

We recommend that those responsible for implementing task shifting engage in dialogue to understand the expectations and fears of those who will be affected by it, including patients and their carers where appropriate.

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Recommendation 5

We recommend that those responsible for health services evaluate, and where necessary, intervene to improve the organisational culture of the facilities that are within their remit to ensure that they promote flexible approaches to working.

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Recommendation 6

We recommend that legislative and regulatory authorities review the rules that exist in their jurisdiction to assess the extent to which they place unjustifiable barriers in the way of more flexible ways of working, taking account of the growing body of evidence on the potential benefits of task shifting in particular contexts.

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Recommendation 7

We recommend that task shifting to patients and their carers should recognise the goals, expectations, and capacities of those adopting new roles, ensuring that they are empowered to engage fully with health workers to design their care packages and with the ongoing monitoring and evaluation of these packages.

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Recommendation 8

We recommend that decisions to engage in task shifting should be planned carefully, taking full account of the implications both for the individuals concerned and for the wider health sector.

Hearing

Questions?

Comments?

Additions?

Health