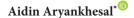


JHPM_____

Letter to Editor

Using Financial Incentives and Market Mechanisms to Improve Hospitals' Performance; A Double-edged Sword





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Dear Editor,

Even with the improvement of public knowledge about healthcare and health services, the healthcare sector remains an incomplete market due to the complexity of health conditions as well as the adoption of high-tech products and devices in the health sector. Aware of such incompleteness, health sector policy-makers play their stewardship role through the so-called control knobs to regulate efficiency, quality, and access as intermediate performance measures (see Figure). Fulfilling such intermediate goals can assure people are in good health, satisfied with the care and services they receive, and protected from risks such as catastrophic expenses.

Two recent publications showed that performance-based financing (PBF) in Sub-Saharan Africa³ and licensing mechanisms in France,⁴ as direct and indirect financial mechanisms respectively, are developed to shape healthcare

providers' and hospitals' behaviour and improve quality. As shown in Figure, financing and payments are two key items of the control knobs employed in the health sector for such reforms. Evidence also suggests that financial incentives are strong motives for triggering changes across healthcare providers,⁵⁻⁸ although such changes may not always result in quality improvement.⁹ Hence, due to such a strong impact, financial incentives can spread through health systems quickly.³ While the appropriate application of PBF and creating competition among providers for their share of the market through licensing mechanisms can be an attractive and influential means for policy-makers, such mechanisms should be used with caution.

One important root of why PBF or licensing procedures may fail to reach the final goals of health systems lies in a lack of a comprehensive view when setting the intermediate performance measures and how they are defined and are in mutual relation with the final goals. An example of when final goals can be missed is when quality is defined as adopting new technologies, including advanced biomedical equipment or advanced procedures. While the adoption of new technologies can be defined as inputs and processes, its association with the final goals should be monitored by health policy-makers. Developing countries are good examples of importing extravagant high-tech biomedical equipment or procedures¹⁰ with limited effectiveness.^{11,12} Such adoptions, which are generally made with no need assessment,¹³ impose a high financial burden on governments and can result in

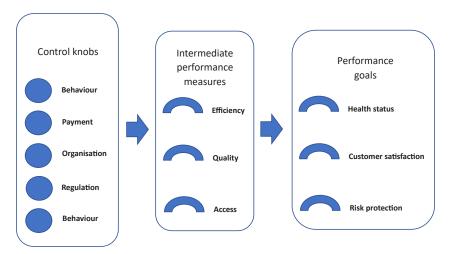


Figure. The Control Knobs for Health System Reforms.

induced demands and inappropriate indications because providers would like to see a return on their investments. Health technology assessment studies can address whether such technologies are needed. Moreover, high-tech procedures need advanced pieces of training before applying them which is sometimes missed in the settings that adopt such technologies.¹⁰

Another possible consequence of using PBF and licensing, if the control knobs aspects are not considered carefully, can be limiting the public access to services. In such cases, the final goals are considered by policy-makers but the intermediate performance measures are neglected; the financial mechanisms can push smaller healthcare properties to merge with bigger ones due to the economy of scale rule.4 As mergers usually work towards the concentration of healthcare properties from the originally decentralised centres, access is generally affected. In some extreme scenarios, PBF can push hospitals into a vicious circle where poor-performing properties cannot improve their performance or even deteriorate since they receive a lower range of finance¹⁴ and may push to charge patients more. 15 Such properties which are penalised for their performance, are in danger of bankruptcy and getting shut down which again limits public access to services.

In summary, financial motivation mechanisms, including direct features such as PBF or indirect ones including licensing, can work as double-edged swords and should be considered with caution. When defining performance in the PBF mechanism, a comprehensive view should be applied so that all aspects of performance including intermediate and final goals are considered. The included intermediate and final goals should also be in rational mutual associations. The PBF and other financial motivation mechanisms should be applied in combination with other financing methods so that low-performing entities can survive the possible economic pressures, otherwise, people's access to healthcare can be damaged.

Ethical issues

Not applicable.

Competing interests

Author declares that he has no competing interests.

References

1. Schlesinger M, Gray BH. Incomplete markets and imperfect

- institutions: some challenges posed by trust for contemporary health care and health policy. *J Health Polit Policy Law.* 2016;41(4):717-742. doi:10.1215/03616878-3620905
- Roberts M, Hsiao W, Berman P, Reich M. Getting Health Reform Right: A Guide to Improving Performance and Equity. New York: Oxford University Press; 2008. doi:10.1093/acprof:oso/9780195371505.001.0001
- Gautier L, De Allegri M, Ridde V. Transnational networks' contribution to health policy diffusion: a mixed method study of the performancebased financing community of practice in Africa. *Int J Health Policy Manag*. 2021; 10(6):310-323. doi:10.34172/ijhpm.2020.57
- Or Z, Rococco E, Touré M, Bonastre J. Impact of competition versus centralisation of hospital care on process quality: a multilevel analysis of breast cancer surgery in France. *Int J Health Policy Manag.* 2022; 11(4):459-469. doi:10.34172/ijhpm.2020.179
- Aryankhesal A, Sheldon TA, Mannion R. Role of pay-for-performance in a hospital performance measurement system: a multiple case study in Iran. Health Policy Plan. 2013;28(2):206-214. doi:10.1093/heapol/czs055
- Aryankhesal A, Sheldon TA, Mannion R. Impact of the Iranian hospital grading system on hospitals' adherence to audited standards: an examination of possible mechanisms. *Health Policy*. 2014;115(2-3):206-214. doi:10.1016/j.healthpol.2013.11.004
- Gadsden T, Mabunda SA, Palagyi A, et al. Performance-based incentives and community health workers' outputs, a systematic review. *Bull World Health Organ*. 2021;99(11):805-818. doi:10.2471/blt.20.285218
- Hussein M, Pavlova M, Ghalwash M, Groot W. The impact of hospital accreditation on the quality of healthcare: a systematic literature review. BMC Health Serv Res. 2021;21(1):1057. doi:10.1186/s12913-021-07097-6
- Vlaev I, King D, Darzi A, Dolan P. Changing health behaviors using financial incentives: a review from behavioral economics. BMC Public Health. 2019;19(1):1059. doi:10.1186/s12889-019-7407-8
- Hakobyan S, Cherif R. Trade in Medical Goods: Challenges and a Way Forward for Sub-Saharan Africa. Special Series on COVID. International Monetary Fund (IMF): 2021:19.
- Perry L, Malkin R. Effectiveness of medical equipment donations to improve health systems: how much medical equipment is broken in the developing world? *Med Biol Eng Comput.* 2011;49(7):719-722. doi:10.1007/s11517-011-0786-3
- Webber CM, Martínez-Gálvez G, Higuita ML, et al. Developing strategies for sustainable medical equipment maintenance in under-resourced settings. Ann Glob Health. 2020;86(1):39. doi:10.5334/aogh.2584
- Bastani P, Tahernezhad A, Hakimzadeh SM. Forty years review of upstream documents of the Islamic Republic of Iran's health sector on strategic purchasing of advanced-expensive medical equipment. *Int J Health Gov.* 2020;25(2):93-105. doi:10.1108/ijhg-12-2019-0077
- Aryankhesal A, Sheldon TA, Mannion R, Mahdipour S. The dysfunctional consequences of a performance measurement system: the case of the Iranian national hospital grading programme. J Health Serv Res Policy. 2015;20(3):138-145. doi:10.1177/1355819615576252
- Waithaka D, Cashin C, Barasa E. Is performance-based financing a pathway to strategic purchasing in sub-Saharan Africa? A synthesis of the evidence. *Health Syst Reform*. 2022;8(2):e2068231. doi:10.1080/23 288604.2022.2068231