Health systems performance assessment - what is it all about?

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Structure

- 1. Background and history of HSPA
- 2. Why do HSPA?
- 3. The contents of HSPA
- 4. How to present HSPA
- 5. The impact of HSPA
- 6. The process of HSPA
- 7. Concluding comments

1. Background and history of HSPA

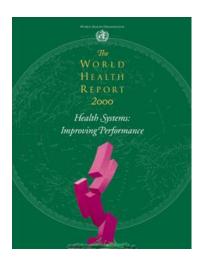
Florence Nightingale: the "Passionate Statistician"



- International Statistics Congress, London, 1860
- "... Miss Nightingale's scheme for Uniform
 Hospital Statistics should be conveyed to all governments represented."

Source: D. J. Spiegelhalter: *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, Vol. 162, No. 1, (1999), pp. 45-58

World Health Report 2000



- The health system:
 - "... all the activities whose primary purpose is to promote, restore or maintain health."

WHO 2000 Efficiency Rankings

			OVERALL PERFORMANCE		
R	ank	Uncertainty interval	Member State	Index	Uncertainty interval
	1	1 – 5	France	0.994	0.982 - 1.000
	2	1 – 5	Italy	0.991	0.978 - 1.000
	3	1 – 6	San Marino	0.988	0.973 - 1.000
	4	2 – 7	Andorra	0.982	0.966 - 0.997
	5	3 – 7	Malta	0.978	0.965 - 0.993
	6	2 – 11	Singapore	0.973	0.947 - 0.998
	7	4 - 8	Spain	0.972	0.959 - 0.985
	8	4 – 14	Oman	0.961	0.938 - 0.985
	9	7 – 12	Austria	0.959	0.946 - 0.972
	10	8 – 11	Japan	0.957	0.948 - 0.965
	11	8 – 12	Norway	0.955	0.947 - 0.964
	12	10 – 15	Portugal	0.945	0.931 - 0.958
	13	10 - 16	Monaco	0.943	0.929 - 0.957
	14	13 - 19	Greece	0.933	0.921 - 0.945
	15	12 – 20	Iceland	0.932	0.917 - 0.948
	16	14 – 21	Luxembourg	0.928	0.914 - 0.942
	17	14 - 21	Netherlands	0.928	0.914 - 0.942
	18	16 - 21	United Kingdom	0.925	0.913 - 0.937
	19	14 - 22	Ireland	0.924	0.909 - 0.939
	20	17 – 24	Switzerland	0.916	0.903 - 0.930

Tallinn Charter, 2008

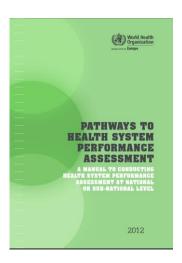


- ☐ "We, the member states, commit ourselves to:
- Promote shared values of solidarity, equity and participation ...
- Invest in health systems, and foster investment across sectors that influence health ...
- o Promote transparency and be accountable ...
- o Make health systems more responsive ...
- Engage stakeholders ...
- Foster cross-country learning and cooperation ...
- Ensure that health systems are prepared and able to respond to crises ..."

The WHO vision of Health System Performance Assessment

 "... a country-specific process of monitoring, evaluating, communicating and reviewing the achievement of high-level health system goals based on health system strategies."

World Health Organization, Pathways to health system performance assessment: a manual to conducting health system performance assessment at national or subnational level, 2012, Copenhagen: WHO Regional Office for Europe.



EU expert group on health systems performance assessment

Four objectives:

- To provide a forum to European countries for the exchange of experiences in HSPA
- To support policy makers in their HSPA activities
- To define criteria for identifying policy priorities where to focus performance assessment
- To intensify cooperation with international organisations in this field.

Federico Paoli et al (2019) "An EU approach to health system performance assessment", 123, 403-407,

https://doi.org/10.1016/j.healthpol.2019.02.004





Contrasting approaches (and longevity): Netherlands and Sweden

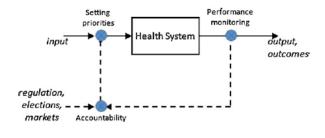




Some broadly accepted principles of HSPA

- HSPA should focus on the **health system as a whole**, including health promotion and public health as well as health services;
- Health systems goals should be expressed in terms of outcomes such as improved health and reduced exposure to financial risk, rather than processes such as workforce size or numbers of treatments;
- Wherever feasible, progress should be **quantified using reliable metrics** and associated analytic techniques;
- HSPA should be a regular process, embedded in all aspects of health policymaking;
- The exact form of HSPA should be a matter of choice for individual systems, although its effectiveness is likely to be maximized by the adoption of metrics and methods that enjoy widespread international use.

A cybernetic model of health system leadership and governance



Smith, P., Anell, A., Busse, R., Crivelli, L., Healy, J., Lindahl, A. K., Westert, G. and Kene, T. (2012), "Leadership and governance in seven developed health systems", *Health Policy* 106 (1) 37–49.

2. Why do HSPA?

Objectives of HSPA

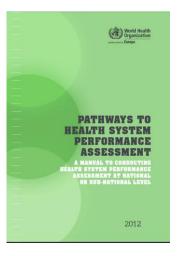
- Many related to planning, accountability, transparency, comparison, understanding the system, expressing values, setting priorities, etc.
- Ultimate goals
 - Improvement in health
 - Improved use of health system funds
 - Sustainability of health system
- Objectives are needed to design the content and dissemination of HSPA

Goals of HSPA

- *Armenia*: Enhance stewardship; Accountability; Transparency; Identify policy priorities.
- Belgium: Transparency and accountability; Comparisons with other countries; Performance monitoring over time.
- England: Performance management of public sector organizations.
- Estonia: Enhance accountability; Enhance stewardship; Provide a monitoring scheme for the National Health Plan.
- *Kyrgyzstan*: Monitor progress and impact of health sector programmes; Accountability to donors; Identify potential policy problem areas.
- Portugal: Accountability; Inform policy.
- Turkey: Provide a monitoring and evaluation scheme for the Health
 Transformation Program; Transparency and accountability; Support the
 development of evidence-based policy-making; Guide governmental policy
 development; Identify policy priority areas.

World Health Organization, Case studies on health system performance assessment. A long-standing development in Europe, 2012, Copenhagen: World Health Organization Regional Office for Europe.

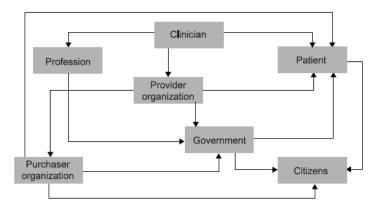
The WHO vision of Health System Performance Assessment



The prime objectives of HSPA are:

- To set out the goals and priorities for a health system;
- To act as a focus for policymaking and coordinating actions within the health system;
- To measure progress towards achievement of goals;
- To act as a basis for comparison with other health systems;
- To promote transparency and accountability to citizens and other legitimate stakeholders for the way that money has been spent.

Map of some important accountability relationships in the health system



Smith, P., Mossialos, E. and Papanicolas, I. (2011), "Performance measurement for health system improvement: experiences, challenges and prospects" in McKee, M. and Figueras, J. (eds) *Health systems, health, wealth and societal well-being:* assessing the case for investing in health systems, Maidenhead: McGraw-Hill, pp 247-280.

Five key questions

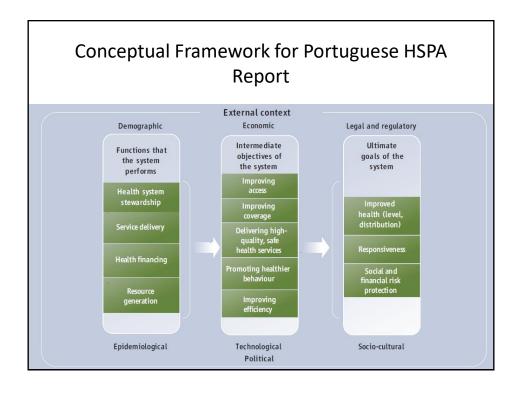
"The world sorely needs a 'third voice' that receives general attention and reports how things are going."

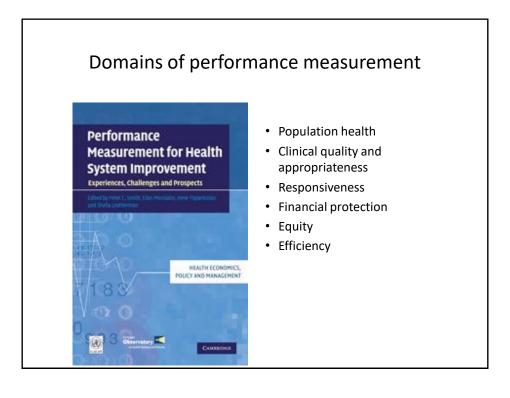
- 1. Who is reporting?
- 2. To whom are they reporting?
- 3. What are they reporting?
- 4. How are they reporting?
- 5. What is the effect of reporting?

Lasswell, H. D. (1972). Communications research and public policy. *Public Opinion Quarterly*, 36(3), 301-310. https://doi.org/10.1086/268012

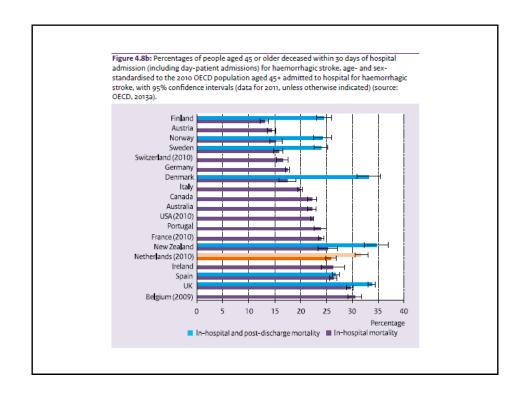
3. The content of HSPA

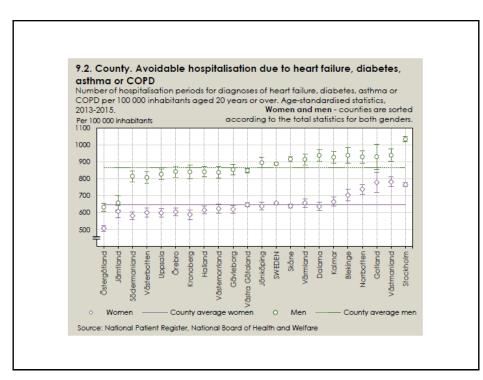
- Structuring information need for a framework
- · Choosing and aggregating the indicators
- Treatment of the external influences on attainment
- Basis of comparison:
 - International
 - Regional
 - Time trends
- Handling constraints in availability and comparability of data





(ID) Ind	licator		Belgium	Year	Flanders	Wallonia	Brussels	Source	EU-15 (mean)
Healtho	care-associated infections								
QS-1	Prevalence of healthcare-associated infections (% of hospitalised patients)	SI	7.3	2017	-	-	-	Sciensano	6.4%(1)
Q\$-2	Incidence of hospital-acquired MRSA (per 1000 hospital admissions, median)	0	0.7	2016	0.5	1.2	0.5	Sciensano	-
QS-7 NEW	Proportion of methicillin-resistant Staphylococcus aureus (MRSA) in acute care hospitals (%, median)	0	15.0	2016	10.9	21.2	10.3	Sciensano	(3)
QS-8 NEW	Proportion of Escherichia coli with reduced susceptibility to 3rd or 4th generation cephalosporins (3GC/4GC l/R E. coli) in acute care hospitals (%, median)	0	9.1	2016	8.1	9.3	10.9	Sciensano	(3)
Compli	ications after surgery ^a								
Q S -3	Incidence of post-operative pulmonary embolism or deep vein thrombosis, after hip or knee replacement (/100 000 hip or knee surgery discharges)	0	352	2014	247	498	576	MZG – RHM	401 ⁽²⁾ [BE: 354]
QS-4	Incidence of post-operative sepsis after abdominal surgery (/100 000 abdominal surgery discharges)	0	1717	2014	2230	1443	715	MZG – RHM	2122 ⁽²⁾ [BE: 1717]
Compli	ications during hospitalisation – quality of nursing care								
QS-5*	Prevalence of hospital-acquired cat II-IV pressure ulcers (% of patients hospitalised)		5.1	2012	4.0	7.7	5.9	FRKVA-CFQAI	-
Polyme	edication								
Q S -6	Polypharmacy among the elderly (5 or more drugs of >80 DDD per year) (% of insured population 65+)	0	39%	2016	37%	44%	35%	Pharmanet Sciensano	_
(1) Exc	average () or poor () results, globally stable (81), improving (+), deteriorall fuluding Denmark and Sweden (2) OECD Health at a Glance 2017 (a) Belg all sheet in appendix for details), * this Indicator will be updated on the updated.	ium ha	s an interme	diate po	a Pa sition acros	s EU-15 cou	ntries for a s		scharge data e the





HSPA: the technical problem areas

- Data: availability; consistency; timeliness
- · Population health
 - Adjusting for 'uncontrollable' social determinants
 - How much is attributable to the local health system?
 - Mental health
- Equity
 - What dimension of disadvantage to use (?income)
 - National groupings or regional groupings?
 - Complexity of presentation
- Efficiency
 - An overarching concept, or just another (bad) output?
 - Treat as an unexplained residual, or try to measure?
- · Clinical services
 - Capturing 'unmet' need

4. How to present HSPA

- Numerous examples, little research
- To some extent will depend on the intended audiences
- Should health system 'functions' be included as well as outcomes?
- To what extent should explanations and analysis supplement the information?
- Balance between data provision and structuring information
- Many alternatives to the 'heavy' reports mentioned earlier
- Very few examples exploiting social media or other 'new' media

Example 1: Observatory/OECD Health Profiles: 20 pages of data, comparison and narrative





https://ec.europa.eu/health/state/country_profiles_en

Example 2: Commonwealth Fund's Scorecards on State Health System Performance (Part 1)





https://www.commonwealthfund.org/publications/fund-reports/2018/may/2018-scorecard-state-health-system-performance

Commonwealth Fund's Scorecards on State Health System Performance (Part 2)





 $\underline{https://www.commonwealthfund.org/publications/fund-reports/2018/may/2018-scorecard-state-health-system-performance}$

National gains if all states achieved top rates* of performance

18 million more adults and children insured, beyond those who already gained coverage through the ACA

14 million fewer adults skipping care because of its cost

26 million more adults with a usual source of care

11 million more adults receiving recommended cancer screenings

837,000 more young children receiving all recommended vaccines

1 million fewer Medicare beneficiaries receiving a high-risk prescription drug

440,000° fewer hospital readmissions

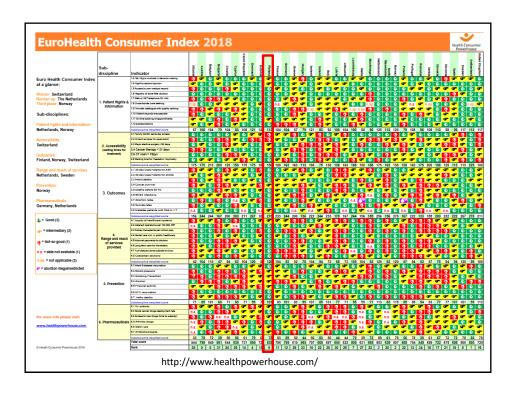
5.7 million fewer emergency room visits for nonemergency care or conditions treatable with primary care

89,000 fewer deaths before age 75 from treatable diseases

1 Performance benchmarks set at the level achieved by the top-performing state with available data for this indicator.

2 Estimate based on working-age population, ages 18–64, with employer-sponsored insurance, and Medicare beneficiaries age 65 and older.

Source: David C. Radley, Douglas McCarthy, and Susan L. Hayes, 2018 Scorecard on State Health System Performance (The Commonwealth Fund, May 2018).



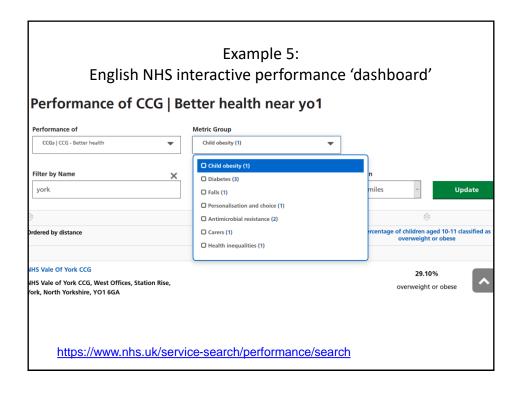
Example 4: Mass media

 "... not surprisingly, 13 of the top 20 communities in this year's ranking are university cities with medical schools - precisely where you'd expect to find superior services."









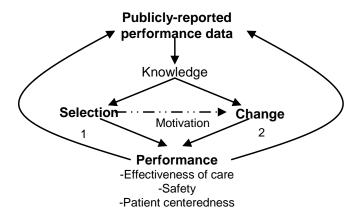
5. The impact of HSPA

- Accountability the key (but of whom to whom?)
- Is 'variation' the main focus of attention?
- Does the HSPA seek to 'explain' the variation?
- Are targets a valid aspect of HSPA?
- · Role of composite scores and 'rankings'
- Does the dissemination meet the needs of intended users?

Who is the intended audience?

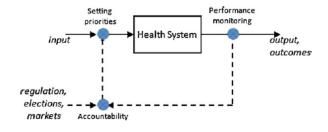
- Each has different perspectives, motivations and information needs
 - The general public
 - Patients and their families
 - Policy makers
 - National politicians
 - Managers and local politicians
 - Health professionals
 - Researchers
 - Media
- Beware unintended as well as intended consequences

The 'selection' and 'change' pathways



Berwick et al (2003) quoted in: Shekelle, P. (2010), "Public performance reporting on quality information", in Smith, P. Mossialos, M., Leatherman, S. and Papanicolas, I. (eds), *Performance measurement for health system improvement: experiences, challenges and prospects*, Cambridge: Cambridge University Press.

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Three domains of performance reporting

- · Priority setting
 - Although there seems to be reasonable consensus on broad goals of the health system there is variation in approaches to setting priorities.
- · Performance monitoring
 - The domain where there is most convergence of thinking, although countries are at different stages of development.
- Accountability
 - Domain where there is greatest uncertainty about the optimal approach
 ... a judicious mix of accountability mechanisms is likely to be
 appropriate in most settings, including market mechanisms, electoral
 processes, direct financial incentives, and professional oversight and
 control.

Smith, P., Anell, A., Busse, R., Crivelli, L., Healy, J., Lindahl, A. K., Westert, G. and Kene, T. (2012), "Leadership and governance in seven developed health systems", *Health Policy* 106 (1) 37–49.

6. The process of HSPA

- Who instigates and drives forward the demand for HSPA?
- How are stakeholders' differing priorities resolved?
- Who funds HSPA?
- Who undertakes HSPA?
- Format of HSPA: description or recommendations?
- How is the HSPA momentum sustained?
- The political economy of HSPA

HSPA: some stewardship responsibilities

- 1. Development of a clear conceptual framework and a clear vision of the purpose of performance measurement;
- 2. Mandating data collection mechanisms;
- 3. Information assurance and governance;
- 4. Development of analytic devices and capacity to help understand the data;
- 5. Development of appropriate data presentational methods;
- 6. Dissemination and securing attention of all relevant parties;
- 7. Stimulating action in response to performance measures;
- 8. Ensuring it is a regular, sustainable process, with suitable arrangements for reviewing and updating.

European Observatory on Health Systems and Policies: performance comparison initiative

- The objectives are
 - "to help governments, regulators, citizens and other commentators gain a better understanding of the comparative performance of their health systems, to improve approaches to measurement and analysis, and to demonstrate how comparative metrics can help in the design and evaluation of initiatives intended to strengthen health systems."
- The initiative is undertaken with the close cooperation of the WHO European Region, the Observatory's partners, the OECD, and other collaborators.

Health Systems Performance Comparison: European Observatory Publications

http://www.euro.who.int/en/about-us/partners/observatory



