

In healthcare, more or less, less is more. Notes on healthcare disinvestment

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ABSTRACT

Objectives. Beyond the current economic crisis, the Spanish National Health System (SNHS) has a problem of long-term sustainability that has its roots in changes in the morbidity patterns with the onset of chronic diseases and the acceleration of technological change, and with the rapid incorporation of new and expensive technologies. The aim of this paper is to explore the role of low value technology disinvestment as a strategy for SNHS sustainability.

Material and methods. Narrative review and discussion of the relevant features of disinvestment, and disinvestment strategies in several countries.

Results. Disinvestment is an explicit process of (partially or completely) withdrawing drugs, devices, practices or procedures with low or questionable clinical value. Very dissimilar healthcare systems such as those in Australia, New Zealand, United Kingdom or United States have launched disinvestment strategies adapted to their different contexts, while in Spain there remains a degree of reluctance to incorporate explicit mechanisms for decision-making on incorporation/disinvestment of health technologies with regard to the SNHS.

Discussion. Low value technology disinvestment is complex. Many technologies are only candidates for partial withdrawal, or its value is controversial and, in addition, there are psychological and sociological barriers to disinvestment. Implementation of these strategies requires commitment from professionals and health authorities and cooperation from patients and citizens, which in turn should be carefully managed.

Keywords: Resource allocation; Health policy; Technology assessment, biomedical; Policy making; Health priorities; Financing, government; State medicine; Cost-benefit analysis.

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THE NATIONAL HEALTH SYSTEM: CURRENT AND BACKGROUND SUSTAINABILITY ISSUES

Although the policy (or lack thereof) has become significantly polarized in our country, there seems to be agreement that the National Health System (NHS) has an odd little problem of financial sustainability. There is no much overlap in the scope, causes and potential solutions to this issue, but it is obvious that the current economic crisis - with its correlate of falling tax revenues, increased social needs and financial failure of the State- has contri-

buted to accentuate this concern. We must recall that Spain should reduce by more than half its public deficit in terms of GDP by 2016. Half of that half, round numbers, corresponds to the Autonomous Communities (CCAA) and, since they are directly responsible for the provision of welfare services (with about 40% of their budgets dedicated to healthcare services), constraint of healthcare spending is critical for regional policies to reduce that budgetary deficit. The "cuts" in healthcare centers (especially regarding the staff and wages), reduced healthcare coverage to some groups and the transfer of some costs to users are the most visible faces of these policies, in their

reasonable aspects, if any, and in the absurd, that too, or those which are simply heartless and debasing, which also exist.

Yet beyond the economic crisis- deep, durable and, at least for some, painful —there are healthcare underlying trends that need new approaches more focused on the medium and long term than on today's budgetary emergencies. The main features of these tendencies are based on two different yet entwined components.

The first relates to changes in morbidity patterns with the emergence of chronicity as the primary source of health care consumption. If traditionally chronic diseases were limited to certain medical conditions (diabetes, heart failure, chronic lung disease, etc.) and their risk factors (hypertension, smoking, etc.), the current concept of chronicity has expanded to many types of cancer that entail more or less prolonged survival rates, rare diseases, mental disorders, neurodegenerative diseases, some infectious diseases like AIDS or hepatitis C, musculoskeletal conditions and many other diseases. This includes many diseases, highly prevalent and very durable, which share a pattern of multiple causality, association with lifestyles, multimorbidity, permanent nature, prevalence increased in advanced ages, course with exacerbations and relapses leading to progressive deterioration, functional disability, and a loss of autonomy for daily activities and in the long-term eventually to death.

The second component is represented by the acceleration of technological change, with the rapid incorporation of new technologies (including new drugs) to public services portfolio such as: preventive, diagnostic, therapeutic, surgical, rehabilitative, biological and imaging technologies, information and communication technologies, eHealth technologies, etc. Some of them would be *prêt-à-porter* but for others, those customized, we have to pay the costs added to the "*personalization*". In some cases (not all, and probably not even most of them) these technologies entail innovations that improve survival and quality of life for patients suffering from certain conditions. In other cases innovation is only innovative in price: the same but more expensive. Much more expensive. Anyway, the combination of drugs and technologies with extraordinarily high prices, which can be used in chronic diseases of high prevalence and repeatedly for long periods of time, is being devastating for the sustainability of all health systems. For the Spanish National Health System too. And this is a second sustainability problem that will not be solved by itself even if today's economic crisis is overcome.

THE SUSTAINABILITY ISSUE HIDES OTHER ISSUES

What the economic crisis does seem to have overcome, at least for now, is the social willingness to pay all our bills (those which we pulled out of our drawers from time to time) without further explanation or more numbers than the mantra of "universal, free, public, equitable and quality" that, even if true, does not prove the goodness of all spending decisions, which should be based upon their specific clinical effectiveness and cost, and not on the aggregate of the system. Therefore, although we prefer to look the other way, the discussion on how to build internally sustainable systems is crucial for public health systems. While the usual speech-formally shared by government and opposition, whoever they may be in each moment, refers to the problem (and solutions) of the NHS sustainability to provide more financial income (to keep doing the same), beyond the crisis, financing and overall spending, SNHS incorporates many dysfunctional elements that are also the source of its own crisis. Among these elements it is worth noting the following:

- a) The evidence of wide variations in medical practice. Studies concerning this issue have reported how similar populations residing in neighbor territories and exposed to similar risks are provided with surprisingly different healthcare services¹. Beyond possible problems of clinical outcomes and social inequalities, the most disturbing message that "variations in medical practice" entails is to suggest that physicians act very differently before similar clinical situations, breaking the traditional belief that health professionals apply uniformly an unequivocally appropriate treatment for each health problem, and demanding a continuous search for "evidence" (regarding effectiveness, safety and efficiency) that support clinical practice. In terms of spending, and in the absence of improved clinical outcomes, services provided in an area that would not have been provided to their neighbors involve welfare losses for the whole society².
- b) Empirical evidence regarding an important *inappropriate use of technologies, drugs, healthcare services and benefits*, both due to *underuse* (not treating when the patient's condition requires to do so) and, specially due to *overuse* (unnecessary treatments or tests for the specific condition of the patient)³. From a health spending perspective, underuse entails a waste of the assistance to

pathologies and decompensation that could have been avoided. In our country, overuse is an important issue specially concerning the consumption of many drugs (such as antibiotics, psychotropic medication, proton-pump inhibitors, statins, antiosteoporotic drugs in primary care, etc.) but also concerning diagnostic tests, opportunistic screening and even some surgeries. Probably this regards too the use of ER visits and both visits and re-visits in primary and specialized care. Overuse does not only imply a direct waste of such resources, but also that regarding adverse effects entailed by unnecessary treatments and tests, or false positive results⁴.

- c) The finding a *significant gap in the quality of care and safety of medical practices*⁵⁻⁶ with a significant impact of adverse effects on clinical outcomes and costs. This does not mean that the quality of care in the Spanish NHS is particularly worse than in other neighboring countries, but probably how we face these problems and our improvement strategies are weakest in our environment.
- d) The *lack of transparency, honesty and good governance of public services*⁷. Such lack, and beyond the absence of information to citizens and patients on healthcare outcomes, results in political patronage regarding the construction and location of health facilities, selection and promotion of management staff and also health and other personnel, shunning decisions that can generate bad press (such as not funding of some medications), etc. The lack of governance —although it may not seem more serious in healthcare than in other public services, institutions or private sectors— is a crucial issue for the delegitimation of the health system to citizens and patients, who support it financially and trust it, it weakens the management and professional leadership of those responsible for each and every different level of management and ultimately it undermines any measure of rationalization of health expenditure however sensible and necessary.

From the perspective of financial sustainability, these problems result in a significant (and in some aspects quantified) wastage that reduces patients' welfare and contributes directly to the financial difficulties of the NHS, but also contributes to the discrediting of rationalization and improvement policies, to disappointment, to further wastage and more patronage and, overall, to an increased entropy of the health system. We should remember that the construction of the (unnecessarily) largest hospital in Europe (or

the smallest in the most remote place) in a community does not create a right for all regions to have other larger hospitals in Europe. Wastage can not be allocated with fairness. Wastage is unfair and inequitable itself⁸ and it intrinsically implies the suffering created by other health needs that have not been covered.

SOMETIMES IN HEALTH, LESS IS MORE: LOW VALUE TECHNOLOGIES AND SERVICES

As we have previously stated, the Spanish NHS is not the only one to face these extrinsic and intrinsic sustainability issues, although it may be one of the systems which strives more to ignore them. In many countries there have been initiatives to try to redress, even partially, wastage problems by trying to reduce unnecessary (and / or harmful) care patients receive. Disinvestment strategies are included among these initiatives and they can be defined as "the processes of (partially or completely) withdrawing health resources from any existing health care practices, procedures, technologies or pharmaceuticals that are deemed to deliver little or no health gain for their cost, and thus are not efficient health resource allocations"⁹.

For some authors disinvestment (from low value-added technologies) must associate the reinvestment of the saved resources in higher value-added technologies¹⁰⁻¹¹.

The definition of "low or dubious value" remains controversial. It may refer to clinical facts (an evidence of the lack of effectiveness, of a negative risk-benefit ratio, of a limited effectiveness to certain subgroups, lower effectiveness than other alternatives), to clinical-economical facts (less cost-effectiveness than other alternatives), to social preferences (provision for minor symptoms, drugs with a high potential for abuse), to the available knowledge (uncertain or weak evidence regarding effectiveness) or to epidemiological facts (procedures which greatly vary in medical practice). A recent study¹², outlined the six questions that we should ask any health technology or service to define its value: 1) Is it effective or ineffective? (Statins in primary prevention in patients without clearly specified risk factors; preoperative chest x-rays in patients without a risk factors); 2) Is it unsafe in general or for specific patient subgroups? (Hormone replacement therapy in menopause); 3) Is it unnecessary because the same outcome can be reached more easily, with less risks, more economically? (Antibiotics for most of upper respiratory tract infections or asymptomatic bacteriuria, cesarean de-

livery in low risk pregnancies); 4) Is it futile because it no longer provides relevant benefits to the patient? (hospitalization in intensive care units for terminal patients; oncologic treatments that “improve” survival in days); 5) Is it merciless because it can only offer unacceptable quality of life conditions (pregnancies at term in fetuses with severe malformations) and 6) Is it foolish because it offers insignificant outcome at enormous cost or because providing such care entails leaving more important things unattended? (gaining a ten day median survival, by the end of life, with new oncology treatments that cost over one million Euro per quality-adjusted life year)

COPYING IS SOMETIMES THE QUICKEST WAY TO INVENT

We said that this is not just a problem of the Spanish NHS. In practice different health systems have addressed divestment differently. In countries with public insurance systems with comprehensive coverage that already had mechanisms for the assessment of medical technologies, such as Australia, New Zealand and others, technology assessment agencies, which traditionally used to assess the incorporation of innovations, have changed the approach to include the evaluation of pre-existing technologies to which they apply the same criteria than in newer technologies (effectiveness, safety and cost-effectiveness barriers), trying to defund low value technologies to preserve (or incorporate) higher value technologies^{8, 13}. It is worth noting that controlling the introduction of new low value technologies is crucial to avoid the costs implied by their reinvestment, which can be difficult when involving personnel and equipment.

United States, where the health system (if it can be so called) is less regulated administratively, has been characterized by the development of bottom-up sustainability strategies: the Choosing Wisely campaign¹⁴, the Top-5 lists of each medical society with five recommendations for preventing overuse of a treatment in their field¹⁵, the Less is More initiative of the American Medical Association (widely spread in the society's Journals such as JAMA and JAMA Internal Medicine)¹⁶ and some others are clear examples of these initiatives. In general, and although some insurers use Top-5 criteria to eliminate benefits or drugs from their coverage, these initiatives are based on voluntarism that appeals to the professionalism of healthcare professionals, even incorporating explanatory documents for patients and other formulas to act on the population¹⁷.

In the United Kingdom, where formal disinvestment strategies have been more developed, lists of procedures candidate for full or partial disinvestment have been drawn¹⁸, the National Institute for Health and Clinical Excellence (NICE) reconfigured its practice guidelines to extract hundreds of Do Not Do recommendations, a strategy which is complemented with support and implementation mechanisms (audit, educational materials, practice guidelines), dissemination of local experiences on good practices and assessment mechanisms including an indicator system¹⁹. Moreover an alliance between NICE and the Cochrane Collaboration is allowing the development of the Cochrane Quality & Productivity Topics, a series of systematic revisions approaching disinvestment, with an estimation of its economical impact, viability, etc. There is also the PenCLAHRC-NICE Project which includes the piloting and evaluation of disinvestment strategies and which has explicitly looked for the collaboration of clinicians, aimed at identifying barriers and facilitators in the implementation of the Do Not Do recommendations as well as at prioritizing the more relevant strategies. On the other hand, United Kingdom already counted upon a long experience in the evaluation of medical technologies for the National Health Service.

In Spain the reluctance of the Ministry of Health to incorporate explicit and formal mechanisms for the assessment of technologies has entailed years, if not decades, of delaying the incorporation of investment and divestment processes (understood as the incorporation or withdrawal of technologies or services to the service portfolio of the NHS, and the establishment of the price that should be paid for them, depending on the value-added-in terms of health). It is not unusual that the NHS adds to its portfolio health technologies which have not been included in richer countries. Nor is it that poorly transparent and less reproducible procedures are used to make some decisions (with the paradigmatic example of the recent exclusion of funding for over 400 drugs aimed at “minor symptoms”). On the positive side, on the initiative of the *Sociedad Española de Medicina Interna SEMI* (Spanish Society of Internal Medicine), the Ministry of Health is supporting a campaign similar to Choosing Wisely, with a widespread participation of scientific societies which will chose their top-5 recommendations to “stop doing”. One of the most interesting examples is the 15 item list developed by *Sociedad Española de Medicina Familiar y Comunitaria SEMFyC* (Spanish Society of Family and Community Medicine)²⁰. However, yet unsurprisingly, the initiative is oriented towards the voluntarism of professionals in

making clinical decisions, therefore ignoring the space for public decisions, of paramount importance in the Spanish NHS. This basically entails that while the Ministry and the Societies may recommend that, for example, clinicians do not prescribe statins for primary cardiovascular prevention, the NHS will keep financing this unnecessary (with some exceptions) service for those cases in which clinicians do not follow the recommendation. Somehow, professionals are called for assuming their responsibility in disinvestment (which they are responsible for) yet health authorities avoid taking part- an essential part for the success of the first one. Also on the positive side, it is worth noting the development of strategies in some Autonomous Communities such as the project *Esen-cial* in Catalunya; including elements of NICE's Do Not Do recommendations, of the Choosing Wisely strategy and some of their own.

DISINVESTMENT REQUIRES A CERTAIN DEGREE OF INVESTMENT AND COMMITMENT

Disinvestment from low value technologies may not be as easy as it looks like. Rarely are there technologies candidate to complete disinvestment and frequently there are patient subgroups for whom a specific low value technology remains a reasonable alternative, either due to failure or intolerance to the initially most appropriate treatment. Managing such exceptions may require using complex information in the limited time of some consultations (eg. the interesting experience with prescription algorithms in Valencia).

Some other times the selection of low value technologies (or in subpopulations where no value-added is provided) remains controversial. The analysis of variations in medical practice helps identifying technologies or practices about which there are significant differences of opinion among clinicians regarding its value, but this does not necessarily entail the identification of the correct opinion ²¹. Uncertainty regarding clinical outcome depending on the course of action is usually the basis for this controversy, yet while no new knowledge is provided, variability concerning the recommendations on appropriate care (or not care) can be huge and with a formidable impact, in terms of the affected population and the implied health expenditure ²².

Moreover, there are psychological and sociological aspects which impair disinvestment strategies. Clinicians seem to need more evidence for doing nothing

than for providing a treatment with potential adverse effects. Patients distrust, now more than ever, expectant attitudes. It is difficult for them to know whether certain treatment is not being prescribed either because they do not need it or because it is expensive or because the insurer does not provide it any more. It is an important aspect and all who are committed to the sustainability of the NHS should take care not to create confusion between disinvestment and "cuts" (or between public welfare and the welfare of those who work for the public welfare sector). It is different to reduce wastage (which always implies improved welfare) than reducing services of demonstrated effectiveness.

This situation implies that divestment strategies have reputational, communication, information and computing costs. It also implies that they need the commitment of professionals and health administrations and the complicity of patients and citizens. This commitment, as so many other things in our sector, must be managed. We can not expect it to grow from nothing. To do so, again we need to generate trust, including the explicit and transparent management of exceptional cases, which in healthcare will always exist. We can make rules to treat 90% of patients with the most common diseases, but unless we make an exemplary effort not to skip those rules (as the relatives of certain hospital managers and local authorities recently did) and we treat the remaining 10% with clinical knowledge, justice and transparency, such efforts will be thwarted.

TO SUM UP

There is significant room to underpin the sustainability of the NHS through divestment of low value technologies, facilities and services. There are ethical and professional imperatives for healthcare professionals to embrace divestment strategies. Good clinical practice includes "not doing" what is ineffective, unsafe, unnecessary, useless or merciless. Avoiding the damage and wastage of resources that would be needed by other patients is in the genome of the healthcare professions. Obviously, some of these concepts may have different views (importance of shared decision making) and, in any case, we should do it with patients (rather than "against" patients).

Decisions concerning public (dis)investment of technologies based on cost-effectiveness, however, are taken from the point of view of society as a whole (not of a specific professional or patient) and must be implemented by means of public policies (not through

individual decisions of particular physicians and particular patients). This implies that society must be provided with mechanisms to inform these decisions explicitly, transparently and with methodological correction, on the basis of the evidence on effectiveness, costs and budgetary impact, and hence generating enough trust (honesty, good governance) to keep the decisions made for the benefit of all.

That it has to be done does not mean that it is easy to do, or that you can do it without effort, and that some do not lose what society wins as a whole. In any case, trying is part of the professional duties and should be part of our leaders' duties. Somehow it's the sustainability (and solvency) of the NHS ¹¹ what is at stake, the same NHS that we will have when we are slightly older, the same our children, relatives and fellow citizens will have.

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BIBLIOGRAPHICAL REFERENCES

1. Bernal-Delgado E, García-Armesto S, Peiró S. Atlas of Variations in Medical Practice in Spain: the Spanish National Health Service under scrutiny. *Health Policy*. 2014; 114(1): 15-30.
2. Meneu R. Variabilidad de las decisiones médicas y su repercusión sobre las poblaciones. Barcelona: Masson; 2002.
3. Peiró S. Variaciones en la práctica médica y utilización inadecuada de tecnologías. En: González López Valcárcel B, editores. *Difusión de nuevas tecnologías sanitarias y políticas públicas*. Barcelona: Masson; 2005: 101-34.
4. Meneu R, Peiró S, editores. *Elementos para la gestión de la prescripción y la prestación farmacéutica*. Barcelona: Masson; 2004.
5. Aranaz Andrés JM, Dir. Estudio nacional sobre los efectos adversos ligados a la hospitalización, ENEAS 2005. Madrid: Ministerio de Sanidad y Consumo; 2006.
6. Aranaz J, Aibar Remón C, Vitaller Burillo J, Mira Solves JJ, Orozco Beltrán D, Terol García E, et al. Estudio APEAS. Estudio sobre la seguridad de los pacientes en atención primaria de salud. Madrid: Ministerio de Sanidad y Consumo; 2008.
7. Meneu R, Ortún V. Transparencia y buen gobierno en sanidad. También para salir de la crisis. *Gac Sanit*. 2011; 25(4): 333-8.
8. Urbanos R, Meneu R, editores. *La investigación sobre desigualdades en utilización de servicios sanitarios y sus distintos abordajes*. En: Rodríguez M, Urbanos R, eds. *Desigualdades en salud. Factores determinantes y elementos para la acción*. Barcelona: Elsevier-Masson; 2007: 145-65.
9. Elshaug AG, Hiller JE, Tunis SR, Moss JR. Challenges in Australian policy processes for disinvestment from existing, ineffective health care practices. *Aust New Zealand Health Policy*. 2007;4:23.
10. Campillo-Artero C, Bernal-Delgado E. Reinversión en sanidad: fundamentos, aclaraciones, experiencias y perspectivas. *Gac Sanit*. 2013; 27(2): 175-9.
11. Bernal-Delgado E, Campillo-Artero C, García-Armesto S. Oferta sanitaria y crisis: financiamos los bienes y servicios según su valor o caemos en la insolvencia. Informe SESPAS 2014. *Gac Sanit*. 2014; 28 Suppl 1: 69-74.
12. Repullo JR. Taxonomía práctica de la "desinversión sanitaria" en lo que no añade valor, para hacer sostenible el Sistema Nacional de Salud. *Rev Calid Asist*. 2012; 27(3): 130-8.
13. Mortimer D. Reorienting programme budgeting and marginal analysis (PBMA) towards disinvestment. *BMC Health Serv Res*. 2010; 10: 288.
14. Cassel CK, Guest JA. Choosing wisely: helping physicians and patients make smart decisions about their care. *JAMA*. 2012; 307(17): 1801-2.
15. Good Stewardship Working Group. The "top 5" lists in primary care: meeting the responsibility of professionalism. *Arch Intern Med*. 2011; 171(15): 1385-90.
16. Lipitz-Snyderman A, Bach PB. Overuse of health care services: when less is more ... more or less. *JAMA Intern Med*. 2013; 173(14): 1277-8.
17. Wolfson D, Santa J, Slass L. Engaging physicians and consumers in conversations about treatment overuse and waste: a short history of the choosing wisely campaign. *Acad Med*. 2014; 89(7): 990-5.
18. Audit Commission. *Reducing spending on low clinical value treatments*. London: Audit Commission; 2011.
19. Garner S, Littlejohns P. Disinvestment from low value clinical interventions: NICEly done? *BMJ*. 2011; 343: d4519.
20. Tranche Iparraguirre S, Coord. Recomendaciones NO HACER [Internet]. Barcelona: Sociedad

Española de Medicina de Familia y Comunitaria; 2014 [citado 29 may 2014]. Disponible en: <http://www.semfyc.es/es/componentes/ficheros/descarga.php?MTIyMzQ%3D>

21. Bernal-Delgado E, García-Armesto S, Campillo-Artero C. ¿Sirven los estudios de variabilidad geográfica de la práctica para informar la desin-

versión? Varias cautelas y algunas reflexiones. Gac Sanit. 2013; 27(1): 7-11.

22. Sanfélix-Genovés J, Catalá-López F, Sanfélix-Gimeno G, Hurtado I, Baixauli C, Peiró S. Variabilidad en las recomendaciones para el abordaje clínico de la osteoporosis. Med Clin (Barc). 2014; 142(1): 15-22.