

Quaternary Prevention and cost

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Introduction

Quaternary prevention aims to:

- a) **Do not: reducing exposure** to the system (to avoid unnecessary tests, ineffective treatments...). Unlike the secondary and tertiary prevention, the quaternary is mainly characterized by abstaining from intervening in order to prevent avoidable damage caused by actions of the health system. Much of the overuse is in prevention (screening, diagnostic tests, medicalization of pre-diseases...)
- b) **move exposure** to the level where the healthcare system is less harmful (eg, primary versus specialized care. A clear example is the monitoring of heart failure (1))
- c) but broadly quaternary prevention would **actively intervene** to prevent collateral damage of health interventions, for example, preoperative tests, omeprazole to prevent damage by NSAIDs, or STREP test to avoid antibiotic prescriptions in respiratory viral infections)

Also in economics when talking about costs we refer to the costs of not doing, the **opportunity costs** (to give up the best alternative available because we spend the resources on the chosen course of action). Conceptually, cost goes beyond accounting costs incurred, when the money is actually disbursed and resources are mobilized. The costs are positive (resource consumption) and negative (savings, resources released).

Individual and Social Perspectives

To make decisions about what is worth or not worth to a society in terms of population, the equation is conceptually simple. The cost-effectiveness analysis (CEA) compares the health benefits, net of risks and adverse effects, with the costs of the intervention being evaluated, compared to the gold standard, or standard treatment. The risks and adverse effects are integrated as positive costs in the calculation and are included in the cost equation.

As in any other field, perspective matters, a lot. There are three perspectives, the individual, the management center, and social. Strategic decisions about medical interventions aimed at populations must be based on social costs. The medical protocols

are based on them. They should consider the external costs induced by a level of care on other-eg, specialist prescribing induced on primary care. The family that pays for nursing care of hospitalized patients at home is an example of externalized costs from the public healthcare network to patients -

Therefore, costs and savings can be generated by action and omission. What matters is the social cost-health balance, taking into account the uncertainty and risk, and that different people have different degrees of **risk aversion** and therefore **there is no global optimal**, but such local optima (eg. prostate hormone treatment; breast cancer screening, treatment of osteoporosis...). Collectively, there are rules of decision, at the individual level, there are specific clinical decisions. Both are taken at different levels- the first political, the second clinical-A program can be cost-effective for a population, but not suit a particular patient.

Accounting is not sufficient, but necessary

Accounting is not sufficient, but necessary. Cost accounting is much more developed in the private network in public, because it is most needed. In Spain we have a serious lack of understanding of process costs. It is alarming that a large part of the cost-effectiveness studies, including the quality plan of the Ministry of Health are based on the database cost by a private company (Soikos).

You have to have good data to use to develop databases of costs. Nor will we very advanced in this.

The art of cutting, pruning or felling the tree bonsai

There are costs in the short term and long-term costs. To flow over time, equivalence scales are created based on time discount rates. However, in the context of budget crisis, short-term costs are more important. In these times of crisis, the art of cutting has come to the forefront of interest. How countries can reduce health costs without adversely affecting the health (2). The divestment is seen as an active policy (3) to be borne by the makers, but no systematic approaches on divestment involving governments, professional and relevant groups of opinion. The divestment has become fashionable and is fueled by the crisis, but it is always necessary. Requires a method, data and evidence on how to identify inefficient practices, high risk, ineffective, or prohibitive cost-effectiveness in order to prune the tree efficiently.

But do not forget that the system's objective is not to save or minimize costs, but difficult to achieve a balance between benefits and risks, benefits and costs. Because, for example, if all smokers stop smoking right now, or all the obese lose weight overnight, the long-term care spending in the country would increase (4). Which, naturally, must not lead to want maintain smoking or obesity.

Information systems: a) also have an opportunity cost, b) should enhance economies of scope and network, which are missed in Spain because there is no collaboration between CCAA, c) have adverse effects. One very serious issue is the security leaks. In the U.S., from 2001 to 2011 have been reported over 300 cases, affecting a total of nearly two

hundred thousand patients.

The three questions

1. **Felling or pruning?** Is it better to address the major global reform or concentrate on looking for marginal improvements to reach local optima in specific processes for patients? Designing a strategy for chronic care or selecting specific processes in which priority is disinvest because of their high cost and unfavorable risk-benefit balance?
2. **Preventing prevention:** suggest some examples of the *business of prevention* that from the social point of view have more costs than benefits. Expose the biased and self-serving use of the popular saying "prevention is better"
3. **Information systems.** Would it be worth creating a public repository of costs to be used in observational studies of health services utilization?

References

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