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"Selling the store" to the HMO: A life insurance contract for optimal provision of care

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Abstract

Health care is a credence good: consumers must consult an expert who diagnoses and repairs a problem. Since effort is difficult to monitor, fraud or low effort are possible. This paper proposes "selling the store" to an HMO via a life insurance contract. The HMO becomes a residual claimant, avoiding payment as long as the patient is alive. This contract forces the HMO to provide a specified level of care, even when a patient does not know his initial level of health. This contract solves several problems associated with fraudulent diagnosis and low effort, but is not a panacea.

JEL classification: I11; L15

Keywords: Health care; HMO; Credence good; Insurance

1. Introduction

Consumers, the United States Congress, HMOs, and doctors are all searching for ways to reform health care, attempting to improve quality and accessibility while restraining cost. At present, there are two main alternatives for a consumer in the U.S. health care market. The first alternative is either to pay for health care costs out of pocket or enter into an insurance pool to pay these costs on a fee-for-service (FFS) basis. This alternative is not ideal because unnecessary procedures and medications may be recommended by a profit-maximizing health care expert. In

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such cases, the additional costs might outweigh the additional benefits of treatment (i.e., marginal cost is greater than the marginal benefit (MC > MB)). Almost by definition, most insurance options create price distortions that reduce the private marginal cost of the consumer below the true social marginal cost. The second common alternative is to join an HMO, where expenses are limited by its very design. In this case, a consumer is not likely to receive the desired level of care and fail to receive some services for which his MB > MC. Health care is just one example of a type of service where consumers must rely on an expert to diagnose a problem, determine the type of treatment needed, and perform a treatment or repair. These types of services can be classified as *credence goods*.

An increasing percentage of doctors and patients are becoming part of "managed care" organizations, where it is often alleged that choices regarding when and how to treat various conditions are being made by accountants rather than patients and doctors. From an economist's standpoint, the incentives are clear:

> The ethical problems of HMO medicine flow from its very design . . .. In the HMO system of prepayment, every dollar of revenue is also a potential dollar of profit if it is not spent on direct patient care—an incentive, or at best a temptation, not just to economize on care but to skimp on it. (Cadette, 1998, 1)

Indeed, in one study of 14 quality of care indicators, for-profit HMO plans performed significantly worse than not-for-profit plans on all 14 of them (Himmelstein et al., 1999).[1] Many politicians and policy analysts see legislation as the solution to these problems. Some legislation attempts to give patients "rights", such as the right to stay in the hospital for at least *n* days after delivering a baby. Other legislation suggests allowing patients the right to sue their HMO for damages if "proper" treatment is not given and also tries to define "proper treatment".

In this article we examine credence goods in the context of health care and propose a market-based solution for the under-treatment problem with HMOs while simultaneously avoiding the overtreatment problem associated with FFS providers. We explore the idea of an HMO bundling a life insurance contract with health services. This contract places the incentive for preserving the patient's life squarely in the hands of the HMO. A novel feature of the proposed solution is that it allows the consumer to choose among a continuum of treatment levels, rather than one "standard" level of service.[2] In Section 2 we outline the previous research on credence goods, pointing out several potential solutions to the problem. In Section 3, we discuss the special case of health care and why previously proposed solutions are problematic in this setting. In Section 4, we derive the consumer's desired level of treatment in a simple model and discuss how this desired level differs from the level of care provided by an HMO. In Section 5, we explore how a consumer could induce an HMO to provide various levels of care through a life insurance contract and consider the consumer's maximization problem in detail in Section 6. In Section 7 we discuss the results and implications, followed by the conclusion in Section 8.

[1] Examples of these important indicators were immunization rates for children, eye exams for diabetics, beta-blocker use after an MI, mammography rates, pap smears, prenatal care, postpartum checkups, and follow-up visits after inpatient mental health treatment.

[2] A continuous variable is an improvement because most previous research has assumed that we are looking for something that is broken, and the consumer definitely wants to fix it. This is not always the case with health care. While cholesterol medications may marginally benefit almost everyone, it is not optimal for everyone to take them. Additionally, we must economize on diagnostics. Clearly, there is much more than a fix/not fix dimension; there is a continuous "desired level of service" that will be different for everyone.