Episode-Based Payment For Service Bundles: Proposer Selection and Information Sharing

Abstract

With the objective of creating a virtuous cycle that fosters quality improvements and efficient service chain design, the Centers for Medicare and Medicaid Services (CMS) has introduced a “bundled payments for care improvement” initiative (BPCI). The BPCI consists of a non-competitive mechanism in which proposers choose what constitutes an episode of care, design service chains by contracting with or acquiring partners, and pick target values of quality metrics and an offered price per episode. CMS has announced evaluation criteria (points out of 100) that are used by expert panels to evaluate each proposal against historical quality standards and payments in the proposer’s geographical area. Several regulations concerning gain sharing among hospitals and health care professionals have been relaxed to allow formation of efficient service chains. CMS requires that prices must not exceed a maximum (e.g., a minimum of 3% discount relative to historical payments is mandatory) and proposers must submit plans for dealing with outliers as well as for sharing gains among service-chain partners.

With the above guidelines, proposers need to choose episodes of care, service chain design, and quality and payment targets. Although, proposers do not compete for being selected, they do compete for Medicare beneficiaries. We develop a normative model for the proposal parameter selection problem faced by potential proposers. In our model, proposers have private information about their cost of achieving different quality targets. The model allows proposers to determine their equilibrium strategy as a function of their private costs. We also evaluate whether CMS should announce a fixed score to eliminate proposers’ uncertainty about the selection process.

After establishing mild conditions under which the proposal parameter selection problem possesses an equilibrium solution in pure strategy, we show that whereas higher profit margin proposers offer higher overall scores, they do not necessarily offer greater discount to CMS. Although CMS has announced the evaluation criteria, it does not at present provide clear guidance to proposers on which proposals will be selected based on their scores. Our analysis shows that when the profit margins and competition for Medicare beneficiaries is low to moderate in a particular market, CMS will be better off to announce a fixed score needed to succeed. Furthermore, if CMS announces a firm threshold, the high profit margin proposers’ response is not monotone increasing in the value of the threshold. In particular, a lower threshold may result in higher profit margin proposers choosing a higher score.