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Healthcare organizations' attitudes toward pay-for-performance in Korea

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ABSTRACT

This study was conducted to assess views of healthcare organizations on pay-for-performance (P4P) in terms of its design, possible effects, and unintended consequences. This is a cross-sectional, self-administered, internet-based survey. Eligible healthcare organizations were 3605 organizations in Korea. Healthcare organizations of 522, including 31 tertiary teaching hospitals, 182 general hospitals, 158 hospitals, and 152 clinics, were participated in this survey. Rates of awareness and support of P4P, preferred P4P program design, and possible effects and unintended consequences resulting from the P4P program were identified. There were variations in the awareness and support from the type of healthcare organization. The preferred design was quite different from the current design of the P4P program. They believed that the P4P program would not have a significant economic impact on their organizations, but that the P4P program could stimulate positive changes in their practice behaviors. They also showed considerable concerns about unintended consequences. P4P implementing agency such as HIRA in Korea should make an effort to improve healthcare organizations' understanding of the program. Also, HIRA could take into consideration of reflecting their reasonable opinions regarding its design components and unintended consequences.

1. Introduction

Pay-for-performance (P4P) is a program that has been rapidly spreading across the world [1–5] and its main purpose is to promote a higher quality of care through the provision of financial incentives or rewards to healthcare providers [2]. In 2007, the Korean government's Ministry of Health & Welfare and Health Insurance Review & Assessment Service (HIRA) launched a new P4P program called the HIRA-Value Incentive Program (HIRA-VIP) [1,5]. The program was designed to reward high performers and performance improvers with financial incentives amounting to 1% of reimbursements from the National Health Insurance Corporation and to penalize providers performing below the 2007 baseline with reimbursement reductions amounting to 1% of reimbursement [1,5]. Until 2010, the HIRA-VIP was a demonstration program that measured organizational performance in the areas of acute myocardial infarction (AMI) treatment and caesarian section (CS) for each of the 44 tertiary teaching hospitals in Korea [1,5,6]. Recent reports may suggest that the quality of care for AMI improved and the rate of CS dropped as a result of the HIRA-VIP [1,5,7,8]. Based on the success

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of HIRA-VIP, HIRA announced that starting from 2011, it would officially expand the program to include general hospital based on their volume of cases along with tertiary teaching hospitals and to measure organizational performance of acute stroke care. Additionally, HIRA also planned that from 2012, it would expand the program to measure organizational performance of prophylactic use of antibiotics in tertiary teaching hospitals, general hospitals, and hospitals [9]. Ultimately, HIRA would like to expand the program to all healthcare organizations in Korea, broaden the clinical areas covered, and increase the incentive rate to 2% [1].

However, it is doubtful that the opinions of healthcare providers regarding the VIP were being reflected in the design. Before the launch of the HIRA-VIP, the Korean Medical Association and the Korean Hospital Association fiercely opposed a P4P program because they believed it would be another method of government control over healthcare organizations and would reduce physicians' clinical autonomy without improving the quality of care [10,11]. As of September 2010, the HIRA-VIP had been operating as a demonstration program for three years and had only three months remaining before expansion, yet there was no information available about the opinion of healthcare providers on the program. Provider support can be a critical factor in the success of P4P programs [12].

This study was performed to document the views of healthcare organizations on the HIRA-VIP as a descriptive study. We conducted a national survey of healthcare organizations in Korea to assess their general attitudes, design components, possible effects, and unintended consequences of the program.

2. Materials and methods

2.1. Sampling

As of June 30, 2010, there were 40,703 healthcare organizations in Korea, including 1605 hospital level healthcare organizations (44 tertiary teaching hospitals, 271 general hospitals, and 1290 hospitals) and 39,098 clinics. Using the HIRA healthcare organization list, we selected 3605 healthcare organizations to participate in the study. To reduce potential selection bias, we included all 1605 hospitals and 2000 of the 39,098 clinics (about 5%). We deemed to be sufficient to represent the opinions of clinics, and selected the 2000 clinics randomly. The "RAND" function in Microsoft Excel software was used to generate a randomly ordered list of all 39,098 clinics, and the top 2000 were selected for inclusion.

2.2. Questionnaire development

After reviewing the relevant literature [12–23], four main categories were chosen as a basis for the questionnaire. The first category was general attitudes toward the HIRA-VIP. The questions asked were whether the respondent was aware of this program, if they supported or opposed it, and the reasoning behind their answers. The second category was preferred design of HIRA-VIP, and the questions asked how the respondent would redesign the P4P program. The third category was the possible effects of the HIRA-VIP on the respondent's organization. The questions in this category asked how the expansion of the HIRA-VIP would affect the healthcare organization in terms of economic effect, practice behavioral change, and quality of care. The last category was possible unexpected consequences of HIRA-VIP. A pre-test questionnaire was conducted with four healthcare organizations, and the final questionnaire consisted of a cover letter and 34 self-administered questions covering the four categories (Appendix A). And Table 1 shows the core 22 questions among all questions except general items such as identification number, organizations' name and address.

2.3. Survey

The web-based SurveyMonkey™ program (SurveyMonkey.Com LLC, Portland, OR) was used to administer the questionnaire. In September, 2010, the questionnaire was emailed to the official e-mail address of each selected healthcare organization. We asked for the collective opinions of the healthcare organization, rather than personal opinions. To increase the total response rate, non-respondents were sent follow-up emails every 2 weeks over a 6-week period, for a total of up to three follow-up emails. After the 6-week period, a final phone call was made to encourage non-respondents to participate in the survey and then the survey was closed to new participants.

2.4. Data analysis

Response rates on types of organization were calculated and all frequencies on each question also were displayed by organizational types. Not all healthcare organizations responded to every question; therefore, the total number of responses fluctuated from question to question. We conducted a Pearson's chi-square test to identify any differences between levels of healthcare organizations. Chi-square tests for trends were also performed to verify whether there were the linear tendencies in proportion of responses by size of organizations. The PASW statistical software package (version 18.0 K for Windows; SPSS Inc., Chicago) was used to perform the all statistical analyses. All statistical tests were two-sided and a p-value <0.05 was considered statistically significant.

3. Results

3.1. Response rate

Response rates differed across the level of healthcare organizations ($p < 0.01$). The response rate was 70.5% (31 out of 44) for tertiary teaching hospitals; 67.2% (182 out of 271) for general hospitals; 12.2% (158 out of 1290) for hospitals; and 7.6% (152 out of 2000) for clinics.

3.2. Awareness of and support for the HIRA-VIP

Table 2 presents the levels of healthcare organizations' awareness and support of HIRA-VIP. There were variations in the awareness and support from different types of