

## A Study on the Items, Pricing, and Web-Based Presentation of Out-of-Pocket Health Examinations: An Analysis and Design Based on the Taiwanese Market

**Yii-Ching Lee**

Department of Health Business Administration, Hungkuang University, Taichung, Taiwan

**Nian-Ying Wu**

Department of Health Business Administration, Hungkuang University, Taichung, Taiwan

**Shu-Yu Yang**

Department of Health Business Administration, Hungkuang University, Taichung, Taiwan

**Xia-Owen Gao**

Department of Health Business Administration, Hungkuang University, Taichung, Taiwan

**Ya-Ju Tu**

Department of Health Business Administration, Hungkuang University, Taichung, Taiwan

**Yu-Fang Chen**

Department of Health Business Administration, Hungkuang University, Taichung, Taiwan

**Abstract—Research Motivation and Objectives:** The primary objective of this study was to investigate and analyze the current status of out-of-pocket health examination items, pricing, and the application of web-based presentation elements in hospitals across Taiwan. Additionally, based on the perspectives of information exposure and option framing, four experimental versions of out-of-pocket health examination webpages were designed.

**Methods:** To achieve the aforementioned objectives, this study employed a content analysis approach. A total of 212 hospitals were selected using stratified proportional sampling based on the distribution and proportion of hospital levels (medical centers, regional hospitals, and district hospitals) across the four geographic regions of Taiwan—Northern, Central, Southern, and Eastern. Publicly accessible information on out-of-pocket health examination services was systematically collected from each hospital's official website. Data collection continued until information saturation was reached.

**Results:** This study found that the most frequently observed price for out-of-pocket health examinations was USD 533.33 (43 hospitals), followed by USD 150 (42 hospitals). Among the USD 533.33 webpages, 100% disclosed examination items and prices, 95.3% included examination content, 83.7% provided contact information, and 25.6% offered descriptive content. Webpages showing all advertising elements were defined as high information exposure; those displaying only basic package information were classified as low exposure. Two option framing approaches were applied: additive framing presented a basic USD 533.33 package with 88 items, allowing users to add items; subtractive framing showed a full USD 1025.33 package with 93 items, allowing users to remove items. These exposure levels and framing types were combined to create four experimental webpages.

**Keywords—**Out-of-Pocket Health Examinations, Option Framing, Information Exposure Level, Web-Based Presentation Elements