

Protection Against Financial Catastrophe: Evaluation of Z Benefit Packages in Providing Financial Risk Protection and Improving Clinical Outcomes

Implementing Agency: Foundation for the Advancement of Clinical Epidemiology (FACE)

Cooperating Agency: Philippine Council for Health Research and Development &
Philippine Health Insurance Corporation

TECHNICAL ABSTRACT

Introduction: The leading causes of mortality in the Philippines are diseases of the heart, diseases of the vascular system, malignant neoplasms, pneumonia and accidents. In a longitudinal study in ASEAN countries of newly diagnosed cancer patients, Ngelangel et al (2015) found that in a sub-analysis of the Philippine dataset insurance did not confer any benefit against financial catastrophe.

Significance: In 2012, PhilHealth introduced Z Benefits in order to cover for “catastrophic illnesses.” The current direction of PhilHealth is to expand the Z Benefit Package by covering other catastrophic conditions, enhancing existing Z Benefit Packages, and increasing access by contracting capable private health care institutions. It is timely to evaluate the current design of the Z Benefit Package.

Objectives: The objective of this study is to evaluate the impact of the Z Benefit Package in providing financial risk protection and improving health outcomes among patients enrolled in the program. Specifically, to (1) measure out-of-pocket expenditures of Z Benefit patients, (2) evaluate impact of the benefit package in improving financial risk protection, and (3) evaluate impact of the Z Benefits in improving quality of life and patient survival/clinical health outcomes.

Methods: A mixed-methods approach was used, including patient surveys and records review to measure the occurrence of financial catastrophe and possible changes in health-related quality of life, and qualitative interviews to document impacts of illness and the Z Benefit Package that was not captured by the survey. The same number of control for each interviewed Z Benefit respondents were recruited. The controls were matched to age group, sex, disease, health facility, and procedure received.

Results and Discussion: Recruitment and interviews were from December 5, 2016 to October 2, 2017. The group sampled a total of 559 cases and 463 controls. The costs for these respondents were split into three periods: period 1 is the time from diagnosis up to just before admission, period 2 is the first year of coverage by the Z-package (and its equivalent for controls), and period 3 is after that first year.

Expenses were classified based on inclusion of non-admission expenses related to the condition and the inclusion of transportation and food expenses in the computation. The terminologies used were: (1) Health only - related to condition, (2) Health only – all conditions, (3) All expenses – related to the condition, and (4) All expenses – all conditions. In general expenses, data were highly skewed to the right hence medians and non-parametric tests were used for comparisons.

With this sample, of the Z Benefit respondents, all expenses – all conditions covering the period 1 to 3, was on average PhP 669,883 (n = 385, SD: 1,252,114) and a median of PhP 234,750. For controls, the corresponding figures were an average of PhP 3,971,440 (n = 251, SD: 50,200,000.00) and a median of PhP 315,285.

Financial catastrophe occurred in 45% of Z Benefit recipients and in 53% of controls if all expenses for all periods were considered. The group noted that in the sample, the Z Benefit Package conferred a protective effect if all costs for the entire period from diagnosis to present were considered as well as in some cases during the first year of coverage by the package.

The Z Benefit patients has lower OOP (PhP 0.00) compared to controls (PhP 14,624.25) (p-value <0.001), and received significantly higher PhilHealth deductions (PhP 250,000.00). Consequently, Z Benefit patients has a higher support value (80.79%) compared to controls (PhP 21,400.00, 12.04%) (p-values: <0.001 for two values). Z Benefit packages follow the same process, of evidence gathering, stakeholder validation, and costing exercises for all its diseases. Based on these evidence-based set of services, Z Benefit patients received statistically more of some diagnostics, imaging, and medical services. Z Benefit kidney transplant patients had a higher documentation of other post-surgical events and pediatric heart surgery Z Benefit patients had more events of surgical site infection and cardiac events. Though breast cancer patients and CABG patients had mostly non-significant differences in complication rates.

Patients who were alive at the time of the interview were asked to accomplish Health-related quality of life measures including EuroQol's EQ-5D-5L, SF-36, Quality of Life – C30, and the Quality of my Life Questionnaire for the pediatric population. With these, the proponents failed to detect a significant difference between the Z-package recipients and the controls.

Qualitative data show that Z Package causes lessening of stress brought upon by thinking about finances. Furthermore, it was mentioned that the package aids by increasing the access to more treatment, and receiving treatment that otherwise would have been delayed or deferred due to financial reasons. Qualitative data also suggest that access to adequate social resources might be protective against catastrophic expenditure and allows for treatment completion.

Limitations: Limitations of the study include inability to achieve original sample size targets, cross-sectional design which is high risk for recall and response bias, and incomplete matching in some sites due to incomplete disease severity data.

Conclusion: Based on the data collected and the results obtained, this study concludes that, Z Benefit Package was associated with significantly lower costs, and higher support value. In terms of Financial Catastrophe protection, occurrence was significantly lower during period 1 and 2 among Z Benefit recipients compared to controls. In terms of quality of life, there was no significant difference found using various quality of life measures between Z Benefit recipients and controls.

Recommendations:

- 1) Period at diagnosis and during 1st year treatment (or the critical periods of financial toxicity) is where the Z Benefit package should focus on priority-wise.
- 2) Z-packages should be revisited by disease and adjust according to a chosen tolerable FC threshold. PhilHealth may consider the need for extended coverage for conditions that require prolonged treatment.
- 3) Develop Z-packages for other catastrophic diseases.
- 4) Implement a monitoring system for Z Benefit patients to track impact on quality of life, survival, and clinical outcomes.
- 5) A longer follow-up over 5 years should therefore be done to ascertain survival benefits.