

QIDS

Quality Improvement Demonstration Study

A DOH-PhilHealth-UCSF-UPecon Partnership

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DON'T WAIT 'TIL IT'S TOO LATE: QIDS Access Intervention Improves the Timeliness of Health-seeking Behavior, Reduces Delays in Seeking Care and Lowers Costs

When poor households face barriers to health care, experience show that there is a tendency to resort to self-medication and wait until the illness worsens before visiting a health care facility for treatment. The Quality Improvement Demonstration Study (QIDS) data show that more than a quarter of pediatric patients, parents or guardians waited for more than 2 days after the onset of symptoms before seeking care from their district hospital.

What are the implications of delayed health-seeking? Using the QIDS data, two significant effects have been found on poor household's health and their medical costs.

The first and most significant effect is delayed health-seeking's impact on health. When parents delay care, a child is more likely to have worse health status at the time of hospital discharge compared to a child who is promptly admitted. Using the 2003 baseline patient exit interview data, the likelihood of still having positive levels of C-Reactive Protein (CRP), an indicator of infection, increased by 11.2 % ($p < .05$) when care is delayed. Moreover, children who were diagnosed with diarrhea were 8.1% less likely to be discharged with positive CRP ($p < .01$). Those who required specialist visits, and thus were possibly sicker, were 17% more likely to have positive CRP upon discharge ($p < .01$) when care was delayed. There is also an increased likelihood of 4.6 % that children given delayed health care would be wasted ($p < .10$). As expected, wasting was also associated with longer lengths of stay, and children sick with either diarrhea ($p < .01$) or pneumonia ($p < .05$) were more likely to be wasted at the point of discharge compared with children with other illness (see Figure 1).

The other effect of delay is on medical costs—higher costs. When children delay admission to the hospital until after their medical condition has already worsened, treatment interventions cost more and the hospital stay is longer. This effect of delayed treatment is particularly worrisome when viewed against the large burden of health care spending (out

of pocket) borne by Filipino households. We know from the Philippine National Health Accounts that close to 50% of all health expenditures are shouldered by households in the form of out-of-pocket payments. In the QIDS sample of children, the marginal effect of more than two days delay in admission increases costs by 2% of mean total charges computed at the average length of stay of over 3 days (again see Figure 1). Cost savings from reduced delay are higher for patients with less severe illnesses – about 7 % for those in the hospitals for two days and about 11 % for those confined for a single day. This further implies that the 50 % out-of-pocket burden can be reduced by about 5.5 percentage points with timely visits to the health care facility when ill. This potential drop in out-of-pocket payments is large considering that in the last 15 years, we had not been able to achieve this magnitude of reductions. In fact, preliminary estimates of the 2006 National Health Accounts suggest modest increases in households' out-of-pocket burden.

Did any of the QIDS interventions help mitigate delays in health seeking? The QIDS Access Intervention is designed to achieve two goals: (i) to increase PhilHealth coverage for indigent households and (ii) to expand PhilHealth insurance coverage available to children. We found the Access Intervention did indeed reduce the delays in health seeking: delays were 5.29% lower in the Intervention sites compared to the control sites ($p < .05$). In other words, with the Intervention, there were at least 5 fewer children in 100 with more than two days elapsing before hospital admission.

We then had used the QIDS data to understand why parents delayed getting health care. We found that mother's with 4 years of additional education were 3.6% less likely to delay. Household income, as expected, also predicted delays in seeking health formal care. Delay increased by 4.9 % if the child belonged to a household in the bottom income quintile. Interestingly, children with diarrhea were less likely to delay hospital care compared to those with pneumonia clearly indicating that parents sometimes delay when the clinical condition can be quite severe.

In conclusion, we found that delayed medical treatment is a significant problem that has important health and cost implications. More importantly, the QIDS experiment shows that health policy can be an effective intervention that improves the timeliness of health seeking. Expanded insurance will not only shift costs away from households, it can also improve health.

Figure 1. Predicted probabilities of being CRP positive and wasted, and predicted total charges, Delayed vs. Not Delayed

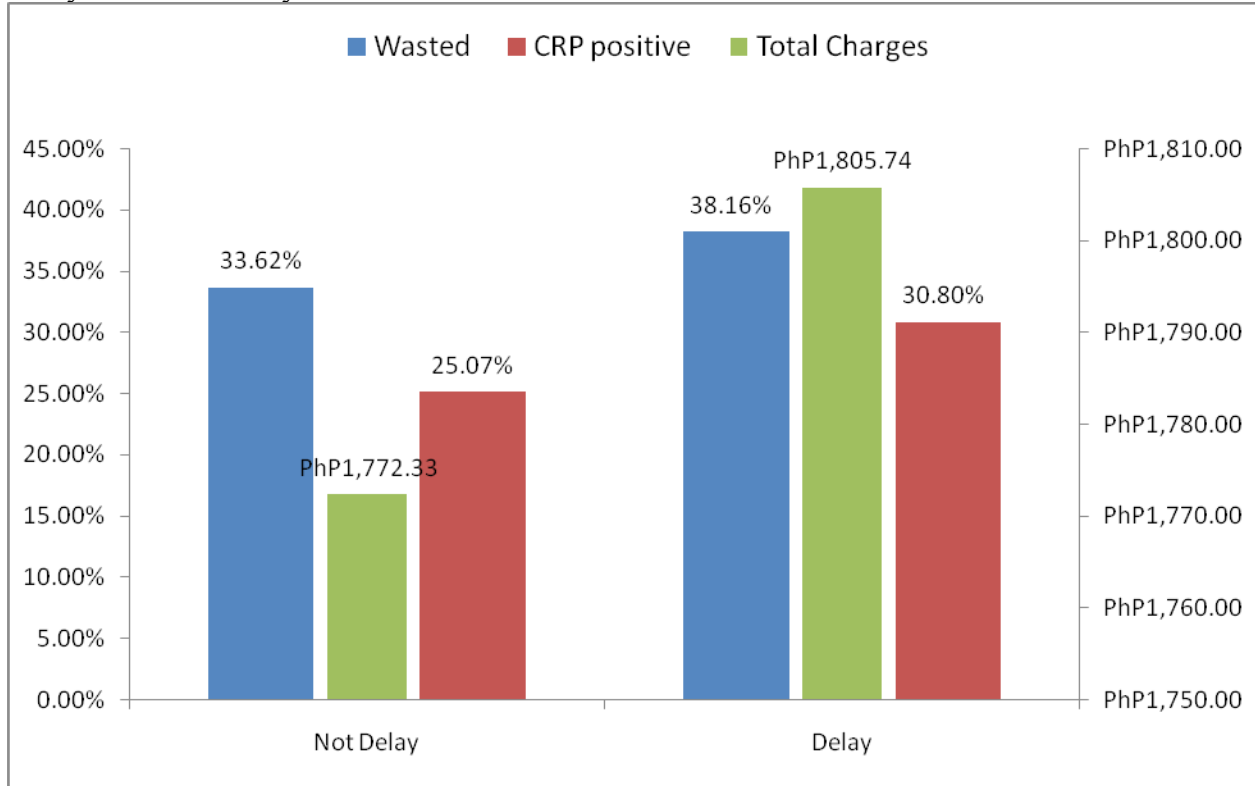
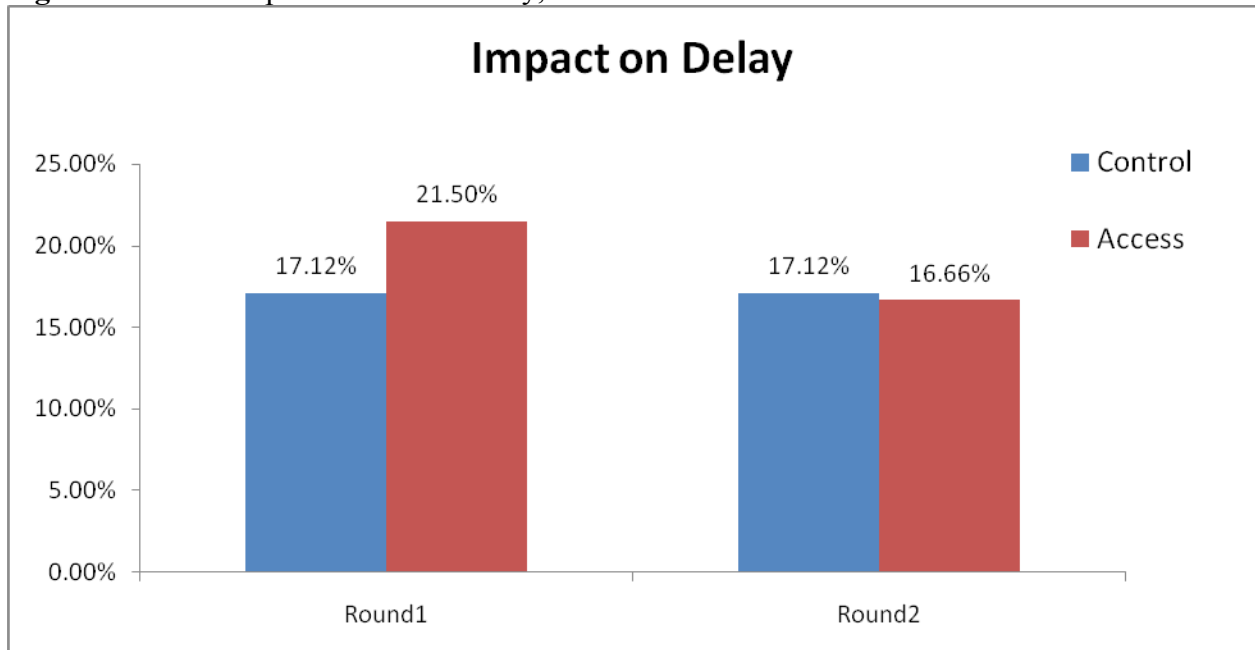


Figure 2. Predicted probabilities of delay, differences across intervention sites



The Quality Improvement Demonstration Study (QIDS), which is jointly being undertaken by the Department of Health (DOH), Philippine Health Insurance Corporation (PhilHealth), University of California San Francisco (UCSF), and the UPecon Foundation, attempts to evaluate policy interventions implemented under the DOH Health Sector Reform Agenda. QIDS is funded by the US National Institutes for Health and PhilHealth.

Specifically, QIDS evaluates the impacts of three policy interventions of interest to PhilHealth: expanding access to PhilHealth benefits for the most vulnerable populations (Intervention A); targeting bonuses for high quality care that leads to better health outcomes (Intervention B); and the current benefit program. In the QIDS project, these three interventions were randomly assigned to 30 district hospitals in the Visayas and Camiguin. To determine which intervention results in the greatest health benefits, QIDS is carrying out evaluations at baseline, every quarter and at the end-of-project. There are surveys of hospitals, physicians, exiting patients, patient follow home and random households.

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