The Cost of Home Delivery Schemes for Lipid-based Nutrient Supplement Products: A Policy Experiment from Rural Malawi

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ABSTRACT

Objectives: Public policy makers may play a role in promoting products demonstrated to be efficacious. Home delivery reduces households’ out-of-pocket costs of accessing these products; however, home delivery may be expensive, especially in rural areas. This paper provides evidence based on a home-delivery scheme undertaken by the International Lipid-Based Nutrient Supplements (iLiNS-DOSE) Project in rural Malawi.

Methods: Estimates of home delivery costs for lipid-based nutrient supplements (LNS), including product procurement, transportation, staffing and storage costs, are based on those faced by the iLiNS-DOSE Project. A cost model was developed and used to run a hypothetical five-year policy experiment to provide LNS to 60% of the approximately 12,000 young children aged 6-24 months. LNS is delivered bi-weekly to all children in the targeted age bracket; older early-enrollees and young late-enrollees would not receive the full 18-month intervention.

Results: Total cost of the hypothetical five-year intervention would be approximately US$3.3m. Cost per treated-child is US$69; cost per fully-treated-child is US$89. 63% and 21% of the total cost is attributable to product purchases and personnel costs, respectively.

Conclusions: Home delivery of LNS products brings the private costs of procuring them to
zero. However, the cost of procurement, storage and weekly home delivery of these products, shouldered by the public sector in our example, can be large relative to other product delivery mechanisms. Changes to intervention protocol (target population, frequency of delivery, etc.) will affect costs. The expected health and other benefits associated with each proposed intervention strategy should be compared to these costs to set priorities.

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