Abstract 397

TITLE: Cost-Threshold Evaluation of the NADR HIV Prevention Interventions

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BACKGROUND/OBJECTIVE: The multisite National AIDS Demonstration Research (NADR) program provided sexual and drug injection risk reduction interventions to out-of-treatment injection drug users and their sex partners. Previous analyses have established that the NADR interventions were effective at changing participants' risky behaviors. The purpose of the present analysis is to determine whether the NADR program also is a cost-effective investment in HIV prevention.

METHODS: Data from 8 NADR study sites were included in the analysis. We used a mathematical model to estimate the number of infections prevented by the NADR interventions, based on reported sexual and injection-related behavior changes. We then calculated the corresponding savings in averted HIV/AIDS medical care costs and quality-adjusted years of life. Because cost data were not collected as part of the original NADR evaluation, we compared savings in was cost saving (i.e., provides net economic savings), cost-effective, or neither.

RESULTS: The 8 NADR interventions we analyzed prevented over 72 infections among 6658 participants and their partners. Changes in sexual behavior (as opposed to injection behavior) were responsible for more than two-thirds of the infections averted by the interventions. Overall, the NADR program would be cost saving if it cost less than $1180 per person to implement, and would be cost-effective if it cost less $5996 per person. Both of these estimates are considerably less than the $273, per person, that it cost to implement the similar Cooperative intervention. There was substantial variability across sites. The cost-effectiveness threshold varied from a low of $782 at one site to a high of $14,179 at another, whereas the cost-saving threshold varied from $165 to $3032 at these same two sites (all costs given on a per-person basis).

CONCLUSIONS: The results of this analysis strongly suggest that the NADR interventions were cost saving overall, and were, at the very least, cost-effective at all 8 study sites. Investments in HIV prevention interventions such as these have the potential to save substantial economic resources by averting future medical care expenses among injection drug users.

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