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NHSEED - - Economic Study or Review

## Economic impact of tobramycin in patients with cystic fibrosis in a managed care population (Provisional abstract)

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**Author:** Wertz DA

### Participants

Patients (0-64 years) with  $\geq 2$  CF medical claims between 01/01/04-03/31/09 were identified. A total of 388 TSI users (mean age 19 years, 48% female) and 444 non-users (mean age 30 years, 54% female) met study criteria.

### Interventions

tobramycin solution for inhalation (TSI)

### Outcome measures

This study evaluated the economic impact of TSI in managed care CF patients. For TSI users, the index date was the first TSI claim in the period; for non-users, a pseudo-index date was determined and randomly assigned by simulating the distribution of index dates of TSI users. Maximum sample size was obtained for patients with  $\geq 3$  months pre- and  $\geq 12$  months post-index eligibility. Users were categorized by number of TSI prescriptions filled during 12-month post-index period as low (1 fill), medium (2-3 fills) and high adherence ( $\geq 4$  fills). Differences in per member per month (PMPM) costs pre-index to post-index were analyzed using paired t-tests.

### Main results

In users, total and CF-related PMPM costs decreased \$959 (17%) and \$113 (3%), respectively, after starting TSI. Among TSI users, CF-related inpatient PMPM costs decreased by \$1171 (49%;  $p=0.01$ ), while CF-related prescription PMPM costs increased by \$992 ( $p$

### Authors' conclusions

All-cause and CF-related PMPM medical costs significantly decreased after TSI initiation. Among TSI users, total healthcare costs decreased, although not significantly, due to PMPM increases in prescription costs. A trend towards greater decrease in inpatient PMPM costs was observed with increasing TSI adherence.

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### See also

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### Keywords

Anti-Bacterial Agents; Bacterial Infections; Infection; Inhalation OR nebulised; pharmacological\_intervention; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; Tobramycin; Aminoglycosides;