## **Global Health Economics Summit**

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## COST-EFFECTIVENESS OF ADDING CLOSTRIDIAL COLLAGENASE OINTMENT TO STANDARD OF CARE IN INDIVIDUALS WITH STAGE-IV PRESSURE ULCERS

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A nalysis of an outpatient population with stage IV pressure ulcer indicated that addition of CCO (clostridial collagenase ointment; Santyl) to the standard of care (SOC) significantly increased the rate of healing over a 2-year period. The goal was to model the cost-effectiveness of adding CCO to SOC using data derived from the prior analysis. A Markov model using a cycle time of 4 weeks was chosen to model the intervention over a horizon time of 2 years. Healing rates were modeled using linear regression equations and on extrapolated percentage of subjects healed in each cycle accounting for subjects lost to follow-up to obtain the best fit. Mortality rates were modeled using the age structure in increment of 5 years of each group and adjusted for mortality rates using national census data. Markov health states included unhealed, healed, and dead. Unit costs included outpatient visits at hospitalbased wound care clinics, dressing change the, debridement, and offloading. Costs were calculated for the first half of 2015 and were based on Medicare reimbursement charges with the exception of commercial costs for supplementary offloading devices. Costs and effectiveness were discounted at 3% for the second year. The model was calibrated in stages using a dependent validity method to ensure that final results were within prescribed limits when compared against dataset parameters. The cost-effectiveness of the base model resulted in an incremental cost-effectiveness (ICER) of -\$375 per ulcer-free week with 17.2 additional ulcer-free weeks obtained attendant to a cost savings of \$6,445 per patient over a 2-year period.

## **Biography**

Marissa J Carter holds BA and MA in Biochemistry from Oxford University and a Ph.D. in Chemistry from Brandeis University. She is the author/coauthor of over 100 peer-reviewed papers and book chapters in Medicine and Chemistry. She is the President of Strategic Solutions, Inc., and trained in epidemiology, biostatistics, and evidence-based medicine. Her research interests include wound care, evidence-based medicine, health economics, ophthalmic epidemiology, clinical practice guidelines, oncology, orthopedics, and pain. She designs and analyzes clinical trials, develops new modeling techniques in health economics, conducts -systematic reviews, and assists clients in approval of new products.

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