her 2009 using SD's VONA and VOPA databases. Statistical analyses were performed using one-way ANOVA; significant results had p < 0.05. RESULTS: Although indi-

guals ages 55–64 did not dominate the NPrs—ranging from 15% to 26%—this group was the second-largest contributor to all prescriptions (TRs) for all the drug mark
ters, ranging from 20% to 93%. The average size of prescriptions for the average range was statistically equivalent to the average size for the 65 population, indicating that prescriptions were refilled equally frequently in both populations. Medicare beneficiaries paid significantly less, on average, for drugs in the five classes compared to others by a margin of 20% to 93%.

The primary data sources were the prescription drug event data in the Chronic Condi-
tion Warehouse (CCW) matched to the Beneficiary Annual Summary for 2006 and 2007. This data was adjusted for 2007 costs. Results are based on analysis of 100% data for Medicare beneficiaries in the CCW. The six protected medication classes under study were anticonvulsants, antidepressants, antineoplastics, antipsy
chotics, antiretrovirals, and immunosuppressants. RESULTS: Immunosuppressants were used by the fewest number of beneficiaries for 2006 and 2007 (81,974 and 80,187, respectively); antidepressants were utilized the most (6,040,698 and 6,645,639, respectively). Immunosuppressants had the lowest average ingredient costs for both years ($294 million and $199 million, respectively). Antipychotics had the highest ($4,163 million and 4,807 million, respectively). Ingredient costs to total Medicare expenditures ranged from 4.2% for antidepressants to 25.2% for antiretro
virals in 2006. Results were similar for 2007 (4.5% for antidepressants to 29.4% for antiretrovirals). From 2006 to 2007, antidepressants had the lowest increase and antiretrovirals had the highest increase from 2006 to 2007 at 17.6%; while immunosuppres
sants decreased by 0.2%. CONCLUSIONS: Between 2006 and 2007, beneficiary utilization based on number of users per protected class increased for all classes except for immunosuppressants. Aggregate ingredient cost payments increased for all six protected classes. Based on ingredient cost payments per beneficiary, the immunosupressant class was the only protected class showing a slight decrease; all other classes showed an increase.

THE IMPACT OF MISUSE OF ANTIBIOTIC THERAPIES ON INPATIENT COSTS

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OBJECTIVES: In the 1980s, China launched market-oriented reforms. Public hospi
tals were encouraged to make their own incomes with the aim of mobilizing medical workers to maintain and improve hospital efficiency. Less government funding resulted in financial deficits for public health institutions, which forced hospitals to generate their own revenue by aggressively selling drugs, especially antibiotics. To stem the tide of rising public complaints about high medical costs, the NDRC has capped the cost of hun
dreds of drugs over the years. However, critics argue the price cuts have not been the
decisive factors for controlling antibiotic use. The objectives of this study were to evaluate the impact of inappropriate antibiotic use on inpa
tients’ cost during the hospital stay. METHODS: One thousand cases with antibiotic

The number and rate of ED visits for opioid abuse increased from 70,748 visits per year in 2006–2007, with an estimated 8% annual increase (p < 0.05). Of the total 1,289,529,680 ED visits monitored during the 12-year period, 1,633,224 (0.13%) were attribut
able to opioid abuse. ED visits for opioid abuse increased from 70,748 visits per year (0.08%) in 1996–1997 to 208,378 (0.18%) in 2006–2007. The annual rate of ED visits for opioid abuse per 1000 people increased from 0.26 in 1996–1997 to 0.70 in 2006–2007, with an estimated 8% annual increase (p < 0.001). Children and elderly were less likely to have an ED visit for opioid abuse compared to nonelderly adults aged 34–64 (AOR 0.075, 95% CI 0.042–0.134; AOR 0.067, 95% CI 0.026–0.173, respectively). Females were less likely to have an ED visit for opioid abuse than males (AOR 0.555, 95% CI 0.483–0.695). Compared to the West, people in the South and Midwest were less likely to have an ED visit for opioid abuse (AOR 0.447, 95% CI 0.313–0.638; AOR 0.517, 95% CI 0.334–0.799, respectively). Risks of ED visits for opioid abuse more than doubled in years 2002–2003 and 2006–2007 (AOR 2.286, 95% CI 1.420–1.679; AOR 2.329, 95% CI 1.473–1.682, respectively) compared to 1996–1997. CONCLUSIONS: The number and rate of ED visits for opioid abuse increased over time with the highest in 2006–2007.

EPISODES OF CARE AND INPATIENT MORTALITY FOLLOWING POISONINGS FROM OVER-THE-COUNTER MEDICATIONS IN THE UNITED STATES

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OBJECTIVES: To assess trends in the utilization and cost of the six medica-
tion classes in the Part D Program between calendar years 2006 and 2007. METHODS:
The primary data sources were the prescription drug event data in the Chronic Condi-
tion Warehouse (CCW) matched to the Beneficiary Annual Summary for 2006 and 2007. This data was adjusted for 2007 costs. Results are based on analysis of 100% data for Medicare beneficiaries in the CCW. The six protected medication classes under study were anticonvulsants, antidepressants, antineoplastics, antipsy
chotics, antiretrovirals, and immunosuppressants. RESULTS: Immunosuppressants were used by the fewest number of beneficiaries for 2006 and 2007 (81,974 and 80,187, respectively); antidepressants were utilized the most (6,040,698 and 6,645,639, respectively). Immunosuppressants had the lowest average ingredient costs for both years ($294 million and $199 million, respectively). Antipychotics had the highest ($4,163 million and 4,807 million, respectively). Ingredient costs to total Medicare expenditures ranged from 4.2% for antidepressants to 25.2% for antiretroviral costs of drugs over the years. However, critics argue the price cuts have not been the
decisive factors for controlling antibiotic use. The objectives of this study were to evaluate the impact of inappropriate antibiotic use on inpa
tients’ cost during the hospital stay. METHODS: One thousand cases with antibiotic

Significant positive global spatial autocorrelation in total number of prescription drugs and increased case-mix severities. Conversely, decreased odds of inpatient mortality were associated (p < 0.05) with shorter lengths of stay, bed-sizes of hospitals, hospitals in urban settings, and teaching hospitals. CONCLUSIONS: Inpatient hospitalizations associated with poisonings from OTC medications accounts for a substantial burden of illness often exceeding 50,000 cases per year and summing to $5.25 billion over five years. Despite a small percentage of inpatient mortality, further research is needed to examine the costs and outcomes following discharge, as well as those treated and released solely in emergency departments, and OTC poisonings among children.

SPATIAL DEPENDENCE (OR CLUSTER) IN TOTAL NUMBER OF PRESCRIPTION DRUGS FILLED AT RETAIL PHARMACIES IN THE UNITED STATES

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OBJECTIVES: To examine the presence of spatial clusters across states in total number of prescription drugs filled at retail pharmacies in US METHODS: Using data on total number of prescription drugs filled at retail pharmacies by each state in US from Vector One and National by Verispan, LLC in 2008, Moran’s I statistic for global spatial dependence (i.e. cluster) was used to identify if clusters existed. In Moran’s I, the weight matrix is derived from the number of prescriptions written in a state. For example, if pharmacy i wrote 10 prescriptions and pharmacy j wrote 100 prescriptions in a given region, then pharmacy i’s weight is equal to 10/100, or 0.1. The resulting Moran’s I is calculated using the formula: Moran’s I = Σwij (xi−x̄)(xj−x̄)/σ2, where wij is the weight between states i and j, xi is the number of prescriptions filled in state i, x̄ is the mean number of prescriptions filled in all states, and σ2 is the variance of the number of prescriptions filled. Moran’s I ranges from −1 to 1, with values close to 1 indicating strong spatial autocorrelation.

RESULTS: Significant positive global spatial autocorrelation in total number of prescription drugs filled at retail pharmacies was found regardless of any weight matrix. Moran’s I using Rock weight was 0.259 and p-value was 0.003. Moran’s I using Queen weight and 4-nearest neighbors were 0.263 (p-value = 0.002) and 0.412 (p-value = 0.001), respectively. CONCLUSIONS: Findings showed that clusters or non-randomness in total number of prescription drugs filled at retail pharmacies existed and implies closer considerations when they make a decision for health care distributions.