

# Nevada Type 2 Diabetes Report | 2015

*Featuring Demographic, Utilization, Charges and Pharmacotherapy Data*



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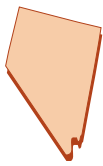


Nevada Business Group  
**ON HEALTH**

*HealthInsight*

a partnership for the future of health care





# NEVADA TYPE 2 DIABETES REPORT

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## Introduction

Sanofi U.S. (Sanofi), in partnership with the Nevada Business Group on Health (NVBGH), iDo, HealthInsight and Health Services Coalition, is pleased to present the ninth edition of the **Nevada Type 2 Diabetes and Cardiovascular Report** for 2015, an overview of key demographic, utilization, charge, pharmacotherapy and readmission measures for Type 2 diabetes patients in key local markets in Nevada. The report also provides Los Angeles, Salt Lake City, state of Nevada and national benchmarks that can help providers and employers identify opportunities to better serve the needs of their patients. All data are drawn from the Sanofi **Managed Care Digest Series®**.

Sanofi, as sponsor of this report, maintains an arm’s-length relationship with the organizations that prepare this report and carry out the research. The desire of Sanofi is that the information in this report be completely independent and objective.

This ninth edition features a number of examples of the kinds of disease-specific data on Type 2 diabetes that can be provided by the **Managed Care Digest Series®**. The sponsoring organizations chose Type 2 diabetes (high blood glucose levels caused by either a lack of insulin or the body’s inability to use insulin efficiently) as the focus of this report, as the prevalence of this disease has grown considerably in recent years.

This report also includes discharge data for cardiovascular diseases and other conditions that affect Nevada patients. These data are included to help identify potential gaps in care.

The data in this report (covering 2009 through 2014) were gathered by IMS Health, Parsippany, NJ, a leading provider of innovative health care data products and analytic services. The data provide health care providers with independent, third-party information they can use to benchmark their own data on patient demographics, professional and facility charges, utilization and pharmacotherapy.

## Methodology

IMS Health generated most of the data for this **Managed Care Digest Series®** report using health care professional and institutional insurance claims. Data for this report represent more than 8 million unique Type 2 diabetes patients in 2014 with a diagnoses in the 250.00-250.92 range.

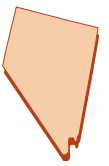
Inpatient case counts, average length of stay and inpatient charge data come from IMS Health’s Hospital Procedure/Diagnosis (HPD) Database. This database contains an extensive set of hospital inpatient and outpatient discharge records, including actual diagnoses and procedures for about 75% of discharges nationwide (including 100% of Medicare-reimbursed discharges).

IMS Health also gathers data on prescription activity from the National Council for Prescription Drug Programs (NCPDP). These data represent some 2 billion prescription claims annually, or more than 70% of the prescription universe. These data represent the sampling of prescription activity from a variety of sources, including retail chains, mass merchandisers and pharmacy benefit managers. Cash, mail-order, Medicaid and third-party transactions are tracked.

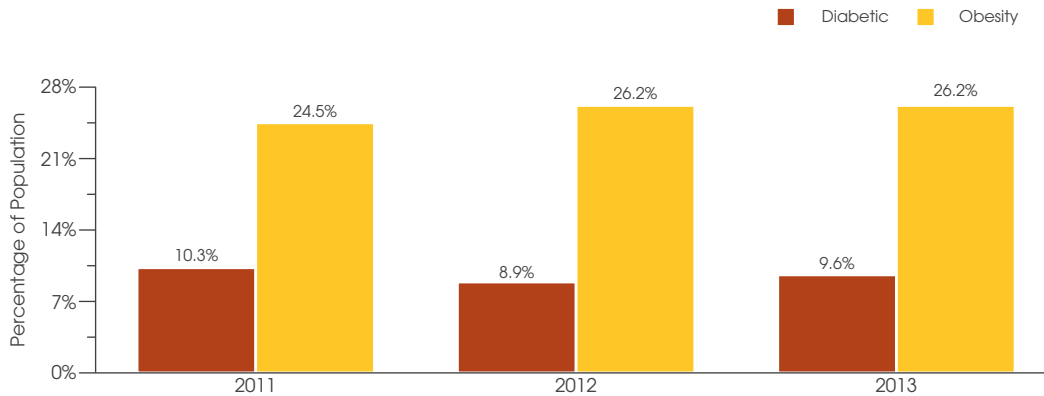
### DATA INTEGRITY

Patient-level, disease-specific data arriving into IMS Health are put through a rigorous process to ensure that data elements match to valid references, such as product codes, ICD-9 (diagnosis) and CPT-4 (procedure) codes, and provider and facility data. Claims undergo a careful de-duplication process to ensure that when multiple, voided or adjusted claims are assigned to a patient encounter, they are applied to the database, but only for a single, unique patient. Through its patient encryption methods, IMS Health creates a unique, random numerical identifier for every patient, and then strips away all patient-specific health information that is protected under HIPAA. The identifier allows IMS Health to track disease-specific diagnosis and procedure activity across many settings where care is provided.

# PATIENT DEMOGRAPHICS



## PERCENTAGE OF NEVADA POPULATION WITH DIABETES OR OBESITY, 2011-2013



Data source: Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2014

## NEARLY 10% OF NEVADA'S POPULATION IS DIABETIC

In 2013, 9.6% of the Nevada population self-reported a diabetes diagnosis, up from 8.9% in 2012. More than a quarter (26.2%) were told by a physician they were obese, up from 24.5% in 2011.

## SHARES OF TYPE 2 DIABETES PATIENTS AGE 65+ ARE HIGH IN NEVADA MARKETS

Type 2 diabetes patients in Las Vegas (54.8%), Reno (54.3%) and across Nevada (54.7%) were more apt than their counterparts nationally (51.6%) to be age 65 or over in 2014. Although they did rise from 2013 to 2014, the percentages of Type 2 diabetes covered by Medicare fell shy of that of the nation (39.7%) in all three Nevada markets in 2014, as did the Medicaid shares. Commercial carriers covered notably larger portions of Las Vegas (55.2%), Reno (53.5%) and Nevada (56.2%) Type 2 diabetes patients than they did across the U.S. (48.9%) in 2014.

## PERCENTAGE OF TYPE 2 DIABETES PATIENTS, BY AGE, GENDER AND PAYER<sup>1</sup>

|                                   | Las Vegas |       | Reno  |       | Los Angeles |       | Salt Lake City |       | Nevada |       | NATION       |              |
|-----------------------------------|-----------|-------|-------|-------|-------------|-------|----------------|-------|--------|-------|--------------|--------------|
|                                   | 2013      | 2014  | 2013  | 2014  | 2013        | 2014  | 2013           | 2014  | 2013   | 2014  | 2013         | 2014         |
| <b>AGE</b>                        |           |       |       |       |             |       |                |       |        |       |              |              |
| 0-17                              | 0.5%      | 0.5%  | 0.6%  | 0.8%  | 0.3%        | 0.4%  | 0.7%           | 0.9%  | 0.5%   | 0.6%  | <b>0.4%</b>  | <b>0.5%</b>  |
| 18-35                             | 2.7       | 2.7   | 2.9   | 2.8   | 2.4         | 2.5   | 3.9            | 3.8   | 2.7    | 2.7   | <b>2.9</b>   | <b>2.9</b>   |
| 36-64                             | 45.9      | 41.9  | 43.3  | 42.2  | 40.1        | 42.2  | 47.4           | 46.1  | 45.6   | 42.1  | <b>45.4</b>  | <b>45.1</b>  |
| 65-79                             | 40.4      | 43.3  | 41.4  | 42.4  | 39.6        | 38.4  | 37.1           | 38.2  | 40.5   | 43.0  | <b>38.1</b>  | <b>38.4</b>  |
| 80+                               | 10.6      | 11.5  | 11.8  | 11.9  | 17.6        | 16.5  | 11.0           | 11.0  | 10.7   | 11.7  | <b>13.2</b>  | <b>13.2</b>  |
| <b>GENDER</b>                     |           |       |       |       |             |       |                |       |        |       |              |              |
| Male                              | 50.3%     | 49.8% | 49.6% | 50.1% | 46.8%       | 46.9% | 47.0%          | 48.3% | 50.1%  | 49.7% | <b>46.7%</b> | <b>46.8%</b> |
| Female                            | 49.7      | 50.2  | 50.5  | 49.9  | 53.2        | 53.1  | 53.0           | 51.7  | 49.9   | 50.3  | <b>53.3</b>  | <b>53.2</b>  |
| <b>PAYER</b>                      |           |       |       |       |             |       |                |       |        |       |              |              |
| Commercial Insurance <sup>2</sup> | 59.3%     | 55.2% | 55.4% | 53.5% | 48.8%       | 49.8% | 60.1%          | 59.9% | 59.7%  | 56.2% | <b>49.2%</b> | <b>48.9%</b> |
| Medicare                          | 34.5      | 36.6  | 40.1  | 40.4  | 44.4        | 38.6  | 32.8           | 33.0  | 35.5   | 37.3  | <b>40.5</b>  | <b>39.7</b>  |
| Medicaid                          | 6.2       | 8.2   | 4.5   | 6.1   | 6.8         | 11.6  | 7.0            | 7.1   | 4.8    | 6.5   | <b>10.4</b>  | <b>11.5</b>  |

## PERCENTAGE OF TYPE 2 DIABETES PATIENTS, BY DIAGNOSING SPECIALIST

| MARKET         | Primary Care <sup>3</sup> |              | Internal Medicine |              | Cardiology   |             | Endocrinology |             |
|----------------|---------------------------|--------------|-------------------|--------------|--------------|-------------|---------------|-------------|
|                | 2013                      | 2014         | 2013              | 2014         | 2013         | 2014        | 2013          | 2014        |
| Las Vegas      | 13.7%                     | 13.3%        | 17.8%             | 16.9%        | 11.2%        | 11.5%       | 2.9%          | 2.5%        |
| Reno           | 17.4                      | 17.8         | 10.0              | 9.2          | 6.7          | 8.0         | 3.0           | 2.2         |
| Los Angeles    | 10.1                      | 12.6         | 12.7              | 13.9         | 11.8         | 9.9         | 3.4           | 3.7         |
| Salt Lake City | 17.5                      | 18.6         | 11.0              | 11.7         | 5.7          | 5.3         | 2.1           | 2.3         |
| Nevada         | 14.4                      | 13.7         | 15.9              | 15.1         | 9.9          | 10.5        | 3.0           | 2.5         |
| <b>NATION</b>  | <b>15.3%</b>              | <b>15.5%</b> | <b>14.9%</b>      | <b>14.7%</b> | <b>10.3%</b> | <b>9.9%</b> | <b>3.4%</b>   | <b>3.5%</b> |

<sup>1</sup> On pages 3-10, the percentages are representative of the universe of Type 2 diabetes patients for whom claims data have been collected in a given year.

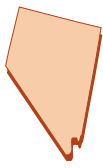
<sup>2</sup> Includes HMOs, PPOs, point-of-service plans and exclusive provider organizations.

<sup>3</sup> "Primary care" consists of both general and family practitioners.

NOTE: Inpatient/outpatient case counts data come from IMS Health's Hospital Procedure/Diagnosis (HPD) database and are current as of calendar year 2013.

Throughout this report, the Los Angeles market includes Long Beach, and Salt Lake City includes Ogden.

Data source: IMS Health © 2015



# COMPLICATIONS/COMORBIDITIES

## COMMON COMPLICATION RATES ARE HIGH FOR NEVADA TYPE 2 DIABETES PATIENTS

The percentages of Nevada Type 2 diabetes patients with a complication of cardiovascular disease (57.1%), neuropathy (39.6%), nephropathy (38.7%) or hypoglycemia (13.9%) as a result of their diabetes were all higher than the percentages of such patients nationally in 2014. Furthermore, the share of Nevada Type 2 diabetes patients with more than two complications increased from the previous year (to 27.3% from 23.5%), and remained notably higher than the corresponding national average in 2014 (21.4%).

PERCENTAGE OF TYPE 2 DIABETES PATIENTS, BY NUMBER OF COMPLICATIONS<sup>1</sup>

| MARKET         | 0            |              | 1            |              | 2           |             | >2           |              |
|----------------|--------------|--------------|--------------|--------------|-------------|-------------|--------------|--------------|
|                | 2013         | 2014         | 2013         | 2014         | 2013        | 2014        | 2013         | 2014         |
| Las Vegas      | 49.6%        | 46.3%        | 15.0%        | 14.1%        | 8.9%        | 9.0%        | 26.5%        | 30.6%        |
| Reno           | 59.7         | 59.0         | 16.3         | 15.2         | 8.5         | 8.0         | 15.5         | 17.8         |
| Los Angeles    | 59.2         | 54.1         | 16.3         | 15.9         | 8.0         | 8.7         | 16.4         | 21.3         |
| Salt Lake City | 65.8         | 62.5         | 14.7         | 14.4         | 6.8         | 7.2         | 12.7         | 15.9         |
| Nevada         | 52.5         | 49.7         | 15.3         | 14.4         | 8.7         | 8.6         | 23.5         | 27.3         |
| <b>NATION</b>  | <b>55.0%</b> | <b>54.3%</b> | <b>15.6%</b> | <b>15.5%</b> | <b>8.8%</b> | <b>8.9%</b> | <b>20.6%</b> | <b>21.4%</b> |

PERCENTAGE OF TYPE 2 DIABETES PATIENTS, BY ACTUAL COMPLICATION, 2014<sup>1</sup>

| MARKET         | Cardiovascular Disease | Neuropathy   | Nephropathy  | Retinopathy  | Hypoglycemia |
|----------------|------------------------|--------------|--------------|--------------|--------------|
| Las Vegas      | 57.7%                  | 41.6%        | 40.4%        | 15.6%        | 14.2%        |
| Reno           | 51.9                   | 32.8         | 32.5         | 19.2         | 9.3          |
| Los Angeles    | 50.2                   | 32.8         | 38.4         | 19.5         | 14.5         |
| Salt Lake City | 41.7                   | 39.9         | 33.8         | 18.8         | 8.9          |
| Nevada         | 57.1                   | 39.6         | 38.7         | 16.8         | 13.9         |
| <b>NATION</b>  | <b>56.2%</b>           | <b>34.3%</b> | <b>32.9%</b> | <b>18.2%</b> | <b>8.8%</b>  |

## SHARE OF NV TYPE 2 DIABETES PTS. WITH >2 COMORBIDITIES INCREASES, TOPS U.S. MEAN

In 2014, the share of Type 2 diabetes patients in Nevada with more than two comorbidities increased to 41.8% from 38.5% in 2013. In both years, the shares of such Nevada patients were higher than the overall national means (39.1% and 38.2%, respectively).

PERCENTAGE OF TYPE 2 DIABETES PATIENTS, BY NUMBER OF COMORBIDITIES<sup>2</sup>

| MARKET         | 0            |              | 1            |              | 2            |              | >2           |              |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                | 2013         | 2014         | 2013         | 2014         | 2013         | 2014         | 2013         | 2014         |
| Las Vegas      | 32.7%        | 30.5%        | 13.1%        | 12.3%        | 12.1%        | 11.6%        | 42.1%        | 45.6%        |
| Reno           | 41.7         | 39.4         | 15.2         | 14.8         | 11.9         | 11.9         | 31.2         | 33.8         |
| Los Angeles    | 53.2         | 45.6         | 14.4         | 15.3         | 9.8          | 11.2         | 22.7         | 27.9         |
| Salt Lake City | 51.7         | 46.9         | 13.8         | 13.5         | 11.1         | 12.4         | 23.4         | 27.3         |
| Nevada         | 35.9         | 33.5         | 13.6         | 13.0         | 12.1         | 11.7         | 38.5         | 41.8         |
| <b>NATION</b>  | <b>37.3%</b> | <b>36.3%</b> | <b>12.7%</b> | <b>12.7%</b> | <b>11.8%</b> | <b>11.9%</b> | <b>38.2%</b> | <b>39.1%</b> |

PERCENTAGE OF TYPE 2 DIABETES PATIENTS, BY ACTUAL COMORBIDITY, 2014<sup>2</sup>

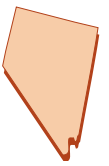
| MARKET         | Hypertension | Hyperlipidemia | Congestive Heart Failure |
|----------------|--------------|----------------|--------------------------|
| Las Vegas      | 81.2%        | 65.1%          | 12.9%                    |
| Reno           | 75.8         | 58.1           | 10.9                     |
| Los Angeles    | 74.9         | 52.9           | 12.6                     |
| Salt Lake City | 71.9         | 59.2           | 10.4                     |
| Nevada         | 79.7         | 63.8           | 12.7                     |
| <b>NATION</b>  | <b>79.6%</b> | <b>63.1%</b>   | <b>12.4%</b>             |

<sup>1</sup> A complication is defined as a patient condition caused by the Type 2 diabetes of the patient. These conditions are a direct result of having Type 2 diabetes. Complications of Type 2 diabetes include, but are not limited to, cardiovascular disease, neuropathy, nephropathy, retinopathy and amputations.

<sup>2</sup> A comorbidity is a condition a Type 2 diabetes patient may also have, which is not directly related to the diabetes. Comorbidities were narrowed down to a subset of conditions which are typically present in patients with Type 2 diabetes. Comorbidities of Type 2 diabetes may include, but are not limited to, hypertension, hyperlipidemia and congestive heart failure.

Data source: IMS Health © 2015

# USE OF SERVICES



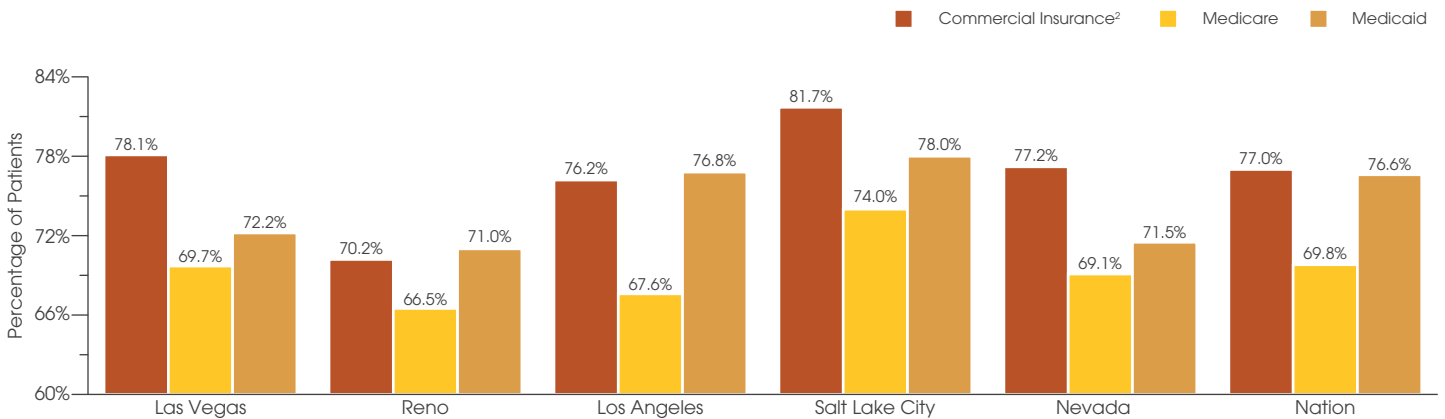
PERCENTAGE OF TYPE 2 DIABETES PATIENTS, BY SERVICE

| MARKET         | A1c Test <sup>1</sup> |              | Blood Glucose Test |              | Serum Cholesterol Test |              | Ophthalmologic Exam |              | Urine Microalbumin Test |              |
|----------------|-----------------------|--------------|--------------------|--------------|------------------------|--------------|---------------------|--------------|-------------------------|--------------|
|                | 2013                  | 2014         | 2013               | 2014         | 2013                   | 2014         | 2013                | 2014         | 2013                    | 2014         |
| Las Vegas      | 75.0%                 | 74.8%        | 86.3%              | 86.7%        | 83.8%                  | 84.3%        | 63.2%               | 63.7%        | 73.8%                   | 74.7%        |
| Reno           | 71.7                  | 68.7         | 83.3               | 81.2         | 80.5                   | 79.2         | 67.0                | 66.3         | 71.3                    | 70.0         |
| Los Angeles    | 71.2                  | 72.6         | 87.2               | 87.9         | 84.4                   | 85.3         | 65.2                | 66.0         | 66.3                    | 67.9         |
| Salt Lake City | 78.6                  | 78.9         | 85.4               | 85.7         | 82.6                   | 82.6         | 63.5                | 63.7         | 69.6                    | 69.7         |
| Nevada         | 74.7                  | 74.1         | 85.7               | 85.6         | 83.0                   | 83.2         | 63.3                | 63.9         | 73.0                    | 73.7         |
| <b>NATION</b>  | <b>74.2%</b>          | <b>73.9%</b> | <b>86.8%</b>       | <b>86.7%</b> | <b>84.3%</b>           | <b>84.4%</b> | <b>69.6%</b>        | <b>69.7%</b> | <b>71.5%</b>            | <b>71.4%</b> |

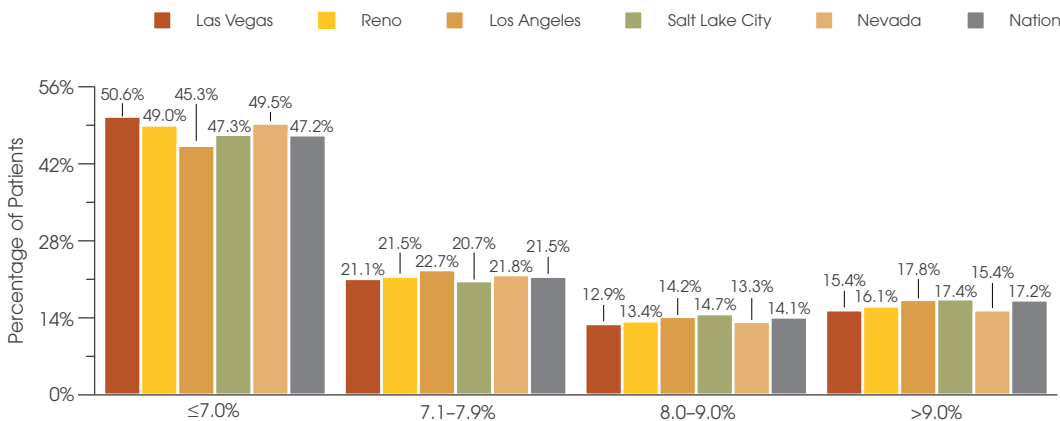
## A1c TESTING RATE DIPS FOR TYPE 2 DIABETES PATIENTS ACROSS NEVADA

The portion of Nevada Type 2 diabetes patients who received an A1c test declined from 2013 (74.7%) to 2014 (74.1%), but remained above that of the U.S. (73.9%) in 2014. That year, this share was lowest, by profiled market, in Reno (68.7%).

PERCENTAGE OF TYPE 2 DIABETES PATIENTS RECEIVING A1c TESTS, BY PAYER, 2014<sup>1</sup>



PERCENTAGE OF TYPE 2 DIABETES PATIENTS, BY A1c LEVEL RANGE, 2014<sup>1</sup>



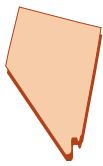
## PORTION OF NEVADA TYPE 2 DIABETES PATIENTS WITH A1c ≤7.0% DECLINES IN 2014

In 2014, just under half of Nevada Type 2 diabetes patients had an A1c level at or below 7.0% on their latest test, a lower rate than that reported in 2013 (51.1%). This percentage also fell in both Las Vegas and Reno during this time. Just over 15% of Nevada Type 2 diabetes patients had an A1c level above 9.0% in 2014, a slightly lower percentage than that of the nation (17.2%).

Data source: IMS Health © 2015

<sup>1</sup> The A1c test measures the amount of glucose present in the blood during the past 2-3 months. Figures reflect the percentage of Type 2 diabetes patients who have had at least one A1c test in a given year.

<sup>2</sup> Includes HMOs, PPOs, point-of-service plans and exclusive provider organizations.



# INPATIENT AND OUTPATIENT CASES/ALOS

## INPATIENT DIABETES MELLITUS CASE COUNTS ARE HIGH IN LAS VEGAS, RENO AND NV

Compared with the national average of 1,245.5, hospitals in Las Vegas (1,800.0), Reno (1,878.3) and Nevada (1,354.7) treated higher average numbers of diabetes mellitus inpatient cases in 2013.

NUMBER OF INPATIENT AND OUTPATIENT DIABETES MELLITUS CASES PER HOSPITAL PER YEAR

| MARKET         | Inpatient      |                | Outpatient     |                |
|----------------|----------------|----------------|----------------|----------------|
|                | 2012           | 2013           | 2012           | 2013           |
| Las Vegas      | 1,744.7        | 1,800.0        | 5,444.9        | 4,433.2        |
| Reno           | 1,883.8        | 1,878.3        | 12,476.3       | 6,633.3        |
| Los Angeles    | 2,068.2        | 2,011.1        | 5,390.9        | 5,331.0        |
| Salt Lake City | 1,220.5        | 1,062.5        | 6,322.2        | 5,656.6        |
| Nevada         | 1,360.8        | 1,354.7        | 6,294.3        | 3,888.4        |
| <b>NATION</b>  | <b>1,249.3</b> | <b>1,245.5</b> | <b>5,748.0</b> | <b>6,435.5</b> |

## ED SHARES OF NEVADA DIABETES, HYPOGLYCEMIA OUTPATIENT CASES ARE HIGH

Emergency departments (EDs) in Nevada hospitals treated 36.3% of diabetes mellitus outpatient cases and 60.2% of hypoglycemia outpatient cases in 2013, higher shares than those reported by hospitals nationally (24.7% and 45.1%, respectively).

DISTRIBUTION OF OUTPATIENT CASES, BY SETTING, 2013

| MARKET         | Emergency Department |              | Ambulatory Surgery |              | All Other Outpatient Cases <sup>1</sup> |              |
|----------------|----------------------|--------------|--------------------|--------------|---|--------------|
|                | Diabetes Mellitus    | Hypoglycemia | Diabetes Mellitus  | Hypoglycemia | Diabetes Mellitus                       | Hypoglycemia |
| Las Vegas      | 38.5%                | 59.7%        | 15.0%              | 1.6%         | 46.5%                                   | 38.6%        |
| Reno           | 33.9                 | 60.4         | 16.0               | 3.2          | 50.1                                    | 36.4         |
| Los Angeles    | 33.4                 | 54.7         | 12.8               | 2.2          | 53.8                                    | 43.0         |
| Salt Lake City | 24.5                 | 51.6         | 17.2               | 3.5          | 58.3                                    | 44.9         |
| Nevada         | 36.3                 | 60.2         | 13.6               | 1.9          | 50.1                                    | 37.9         |
| <b>NATION</b>  | <b>24.7%</b>         | <b>45.1%</b> | <b>12.6%</b>       | <b>7.6%</b>  | <b>62.8%</b>                            | <b>47.3%</b> |

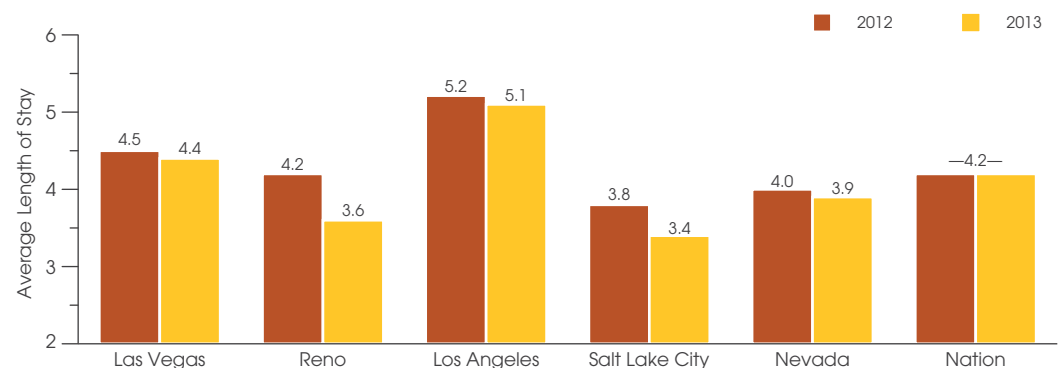
## ALOS DIPS, YET REMAINS HIGH VS. U.S. MEAN FOR DIABETES INPATIENT CASES IN LAS VEGAS

Despite a slight decline from 2012 (4.5 days) to 2013 (4.4 days), average length of stay (ALOS) per diabetes mellitus inpatient case treated in Las Vegas hospitals still exceeded the national average of 4.2 days in 2013. Reno recorded a 14.3% decline in this measure during this time (to 3.6 days from 4.2).

AVERAGE LENGTH OF STAY (DAYS) PER HOSPITAL INPATIENT DIABETES MELLITUS CASE

| MARKET         | 2012       | 2013       | Percentage Change |
|----------------|------------|------------|-------------------|
| Las Vegas      | 4.5        | 4.4        | -2.0%             |
| Reno           | 4.2        | 3.6        | -14.3             |
| Los Angeles    | 5.2        | 5.1        | -1.9              |
| Salt Lake City | 3.8        | 3.4        | -10.5             |
| Nevada         | 4.0        | 3.9        | -2.5              |
| <b>NATION</b>  | <b>4.2</b> | <b>4.2</b> | <b>0.0%</b>       |

AVERAGE LENGTH OF STAY (DAYS) PER HOSPITAL INPATIENT DIABETES MELLITUS CASE

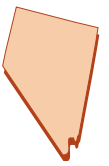


<sup>1</sup> "All Other Outpatient Cases" includes any outpatient visit that did not require surgery or arrive as an emergency. Services rendered include, but are not limited to, lab work and wellness visits, etc.

NOTE: Inpatient/outpatient case counts and average length of stay (ALOS) data come from IMS Health's Hospital Procedure/Diagnosis (HPD) database and are current as of calendar year 2013.

Data source: IMS Health © 2015

# FACILITY CHARGES



## FACILITY CHARGES PER YEAR FOR TYPE 2 DIABETES PATIENTS<sup>1</sup>

| MARKET         | Hospital Inpatient |                 | Hospital Outpatient |                 |
|----------------|--------------------|-----------------|---------------------|-----------------|
|                | 2013               | 2014            | 2013                | 2014            |
| Las Vegas      | \$38,991           | \$42,308        | \$9,821             | \$8,926         |
| Reno           | 39,001             | 47,118          | 8,451               | 13,325          |
| Los Angeles    | 48,005             | 50,033          | 14,637              | 14,540          |
| Salt Lake City | 34,369             | 31,193          | 12,132              | 13,600          |
| Nevada         | 38,358             | 42,550          | 9,725               | 9,357           |
| <b>NATION</b>  | <b>\$42,425</b>    | <b>\$42,911</b> | <b>\$11,741</b>     | <b>\$11,589</b> |

## INPATIENT FACILITY CHARGES FOR TYPE 2 DIABETES PATIENTS, BY ACTUAL COMPLICATION, 2014

| MARKET        | Cardiovascular Disease | Hypoglycemia    | Nephropathy     | Neuropathy      | Retinopathy     |
|---------------|------------------------|-----------------|-----------------|-----------------|-----------------|
| Las Vegas     | \$42,729               | \$42,792        | \$45,659        | \$43,515        | \$48,578        |
| Los Angeles   | 52,561                 | 54,855          | 56,541          | 54,158          | 49,140          |
| Nevada        | 44,225                 | 44,799          | 46,404          | 42,770          | 40,160          |
| <b>NATION</b> | <b>\$47,308</b>        | <b>\$51,590</b> | <b>\$50,577</b> | <b>\$48,380</b> | <b>\$43,722</b> |

## FACILITY INPATIENT CHARGES PER YEAR FOR TYPE 2 DIABETES PATIENTS, BY PAYER<sup>1</sup>

| MARKET         | Commercial Insurance <sup>2</sup> |                 | Medicare        |                 | Medicaid        |                 |
|----------------|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                | 2013                              | 2014            | 2013            | 2014            | 2013            | 2014            |
| Las Vegas      | \$39,644                          | \$36,944        | \$38,111        | \$44,980        | —               | —               |
| Los Angeles    | 45,598                            | 44,442          | 48,291          | 51,743          | \$40,952        | \$46,088        |
| Salt Lake City | 35,268                            | 31,831          | —               | —               | —               | —               |
| Nevada         | 37,978                            | 38,657          | 39,194          | 44,980          | —               | —               |
| <b>NATION</b>  | <b>\$38,482</b>                   | <b>\$40,320</b> | <b>\$40,525</b> | <b>\$41,492</b> | <b>\$39,330</b> | <b>\$40,771</b> |

## FACILITY OUTPATIENT CHARGES PER YEAR FOR TYPE 2 DIABETES PATIENTS, BY PAYER<sup>1</sup>

| MARKET         | Commercial Insurance <sup>2</sup> |                 | Medicare        |                 | Medicaid       |                 |
|----------------|-----------------------------------|-----------------|-----------------|-----------------|----------------|-----------------|
|                | 2013                              | 2014            | 2013            | 2014            | 2013           | 2014            |
| Las Vegas      | \$8,856                           | \$8,440         | \$8,801         | \$9,436         | \$4,378        | —               |
| Reno           | 5,996                             | 12,067          | 12,732          | 14,771          | —              | —               |
| Los Angeles    | 12,575                            | 11,692          | 15,179          | 15,409          | 13,352         | \$14,000        |
| Salt Lake City | 11,627                            | 13,772          | 5,557           | 9,449           | 4,906          | 12,099          |
| Nevada         | 8,614                             | 9,499           | 10,452          | 8,869           | 3,723          | —               |
| <b>NATION</b>  | <b>\$9,847</b>                    | <b>\$10,171</b> | <b>\$10,577</b> | <b>\$10,920</b> | <b>\$9,753</b> | <b>\$11,278</b> |

## IP FACILITY CHARGES RISE FOR TYPE 2 DIABETES PTS. IN MOST PROFILED MARKETS

With the exception of Salt Lake City (-9.2%), average annual facility charges for Type 2 diabetes inpatients (IPs) climbed in every profiled market between 2013 and 2014. Reno recorded the largest increase in such charges (20.8%), followed by Nevada (10.9%), Las Vegas (8.5%) and Los Angeles (4.2%). Nationally, these charges edged up 1.1%.

## FACILITY CHARGES FOR TYPE 2 DIABETES INPATIENTS COVERED BY MEDICARE TOP U.S. MEAN

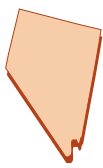
In 2014, average annual facility charges for Type 2 diabetes inpatients covered by Medicare in Las Vegas (\$44,980), Los Angeles (\$51,743) and Nevada (\$44,980) were higher than those of the nation (\$41,492). Furthermore, they increased in each market from 2013, when such charges in Las Vegas and Nevada trailed those of the nation. Of the profiled markets, Las Vegas recorded the highest growth rate (18.0%) in such charges.

<sup>1</sup> Figures reflect the charges generated by the facilities that delivered care. The data also reflect the amounts charged, not the amounts paid.

<sup>2</sup> Includes HMOs, PPOs, point-of-service plans and exclusive provider organizations.

NOTE: Due to low patient claims counts, hospital inpatient and outpatient charge data by payer were unavailable for some of the selected state and local markets.

Data source: IMS Health © 2015



# PROFESSIONAL CHARGES

## PROFESSIONAL CHARGES FOR LAS VEGAS AND NV TYPE 2 DIABETES PTS. TOP U.S. MEAN

In 2013 and 2014, average annual professional charges for Type 2 diabetes patients in Las Vegas and Nevada exceeded those of the nation in every profiled setting. Furthermore, charges increased from 2013 to 2014 in these two profiled markets across the selected settings. For instance, such charges for patients treated in emergency rooms increased 51.4% in Las Vegas and 40.7% in Nevada. Nationally, these charges climbed 17.6%.

## PROFESSIONAL CHARGES ARE HIGHEST FOR TYPE 2 DIABETES PTS. WITH HYPOGLYCEMIA

In all the profiled markets in 2014, professional inpatient charges were highest by selected complication for Type 2 diabetes patients with hypoglycemia. Among the markets shown, such charges were highest in Las Vegas (\$7,088), exceeding those of the nation (\$5,967) by 18.8%. The Nevada mean (\$6,851) was 14.8% higher than that of the nation. Salt Lake City recorded the lowest such charges (\$4,824).

<sup>1</sup> Professional charges are those generated by the providers delivering care to Type 2 diabetes patients in various settings.

<sup>2</sup> Includes HMOs, PPOs, point-of-service plans and exclusive provider organizations.

## PROFESSIONAL CHARGES PER YEAR FOR TYPE 2 DIABETES PATIENTS<sup>1</sup>

| MARKET         | Ambulatory Surgery Center |                | Emergency Room |                | Hospital Inpatient |                | Hospital Outpatient |                | Office/Clinic  |                |
|----------------|---------------------------|----------------|----------------|----------------|--------------------|----------------|---------------------|----------------|----------------|----------------|
|                | 2013                      | 2014           | 2013           | 2014           | 2013               | 2014           | 2013                | 2014           | 2013           | 2014           |
| Las Vegas      | \$2,871                   | \$3,356        | \$1,618        | \$2,450        | \$3,338            | \$4,351        | \$1,352             | \$1,400        | \$2,867        | \$3,135        |
| Reno           | 3,138                     | 3,129          | 1,771          | 2,018          | 2,256              | 3,125          | 1,261               | 1,428          | 1,964          | 2,168          |
| Los Angeles    | 2,148                     | 2,625          | 846            | 1,226          | 2,251              | 3,409          | 1,097               | 1,370          | 1,965          | 2,249          |
| Salt Lake City | 2,676                     | 3,981          | 991            | 1,427          | 2,633              | 3,316          | 1,155               | 1,578          | 1,548          | 2,114          |
| Nevada         | 3,022                     | 3,394          | 1,655          | 2,329          | 3,136              | 4,149          | 1,329               | 1,409          | 2,707          | 2,954          |
| <b>NATION</b>  | <b>\$2,724</b>            | <b>\$3,143</b> | <b>\$1,088</b> | <b>\$1,280</b> | <b>\$3,005</b>     | <b>\$3,433</b> | <b>\$1,175</b>      | <b>\$1,299</b> | <b>\$2,024</b> | <b>\$2,203</b> |

## PROFESSIONAL INPATIENT CHARGES FOR TYPE 2 DIABETES PATIENTS, BY ACTUAL COMPLICATION, 2014

| MARKET         | Cardiovascular Disease | Hypoglycemia   | Nephropathy    | Neuropathy     | Retinopathy    |
|----------------|------------------------|----------------|----------------|----------------|----------------|
| Las Vegas      | \$5,687                | \$7,088        | \$6,719        | \$6,298        | \$5,421        |
| Reno           | 3,959                  | 5,425          | 4,913          | 4,771          | 3,391          |
| Los Angeles    | 4,553                  | 5,890          | 5,385          | 5,357          | 4,762          |
| Salt Lake City | 4,248                  | 4,824          | 4,356          | 4,030          | 3,549          |
| Nevada         | 5,471                  | 6,851          | 6,593          | 6,195          | 5,126          |
| <b>NATION</b>  | <b>\$4,417</b>         | <b>\$5,967</b> | <b>\$5,288</b> | <b>\$4,957</b> | <b>\$4,085</b> |

## PROFESSIONAL INPATIENT CHARGES PER YEAR FOR TYPE 2 DIABETES PATIENTS, BY PAYER<sup>1</sup>

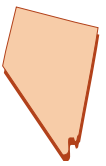
| MARKET         | Commercial Insurance <sup>2</sup> |                | Medicare       |                | Medicaid       |                |
|----------------|-----------------------------------|----------------|----------------|----------------|----------------|----------------|
|                | 2013                              | 2014           | 2013           | 2014           | 2013           | 2014           |
| Las Vegas      | \$2,924                           | \$4,086        | \$3,201        | \$3,577        | \$2,998        | \$3,780        |
| Reno           | 2,084                             | 2,857          | 2,042          | 2,480          | 1,956          | 3,644          |
| Los Angeles    | 2,211                             | 3,432          | 2,176          | 2,560          | 1,524          | 3,523          |
| Salt Lake City | 2,287                             | 3,218          | 2,231          | 2,500          | 1,975          | 2,232          |
| Nevada         | 2,794                             | 3,938          | 2,960          | 3,355          | 2,999          | 3,846          |
| <b>NATION</b>  | <b>\$2,779</b>                    | <b>\$3,196</b> | <b>\$2,605</b> | <b>\$2,838</b> | <b>\$2,823</b> | <b>\$3,246</b> |

## PROFESSIONAL OUTPATIENT CHARGES PER YEAR FOR TYPE 2 DIABETES PATIENTS, BY PAYER<sup>1</sup>

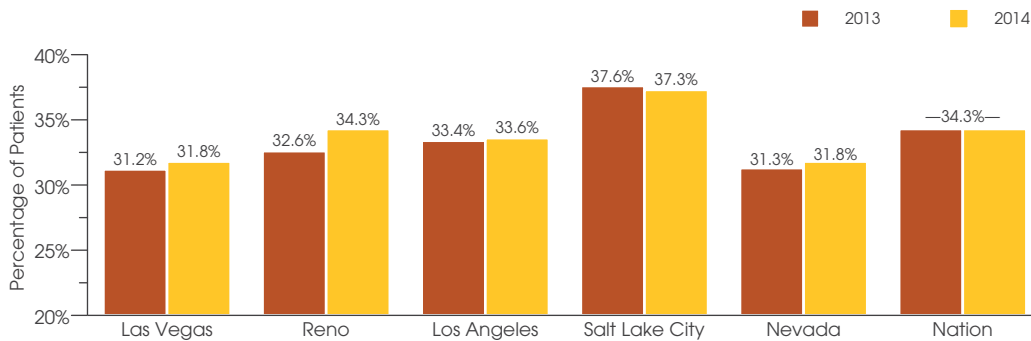
| MARKET         | Commercial Insurance <sup>2</sup> |                | Medicare       |                | Medicaid       |                |
|----------------|-----------------------------------|----------------|----------------|----------------|----------------|----------------|
|                | 2013                              | 2014           | 2013           | 2014           | 2013           | 2014           |
| Las Vegas      | \$1,404                           | \$1,483        | \$1,173        | \$1,138        | \$1,346        | \$1,443        |
| Reno           | 1,149                             | 1,262          | 1,261          | 1,384          | 1,113          | 1,620          |
| Los Angeles    | 1,148                             | 1,468          | 1,037          | 1,123          | 733            | 1,116          |
| Salt Lake City | 1,059                             | 1,461          | 1,069          | 1,459          | 926            | 1,215          |
| Nevada         | 1,338                             | 1,431          | 1,204          | 1,206          | 1,402          | 1,540          |
| <b>NATION</b>  | <b>\$1,120</b>                    | <b>\$1,248</b> | <b>\$1,086</b> | <b>\$1,155</b> | <b>\$1,148</b> | <b>\$1,280</b> |

Data source: IMS Health © 2015

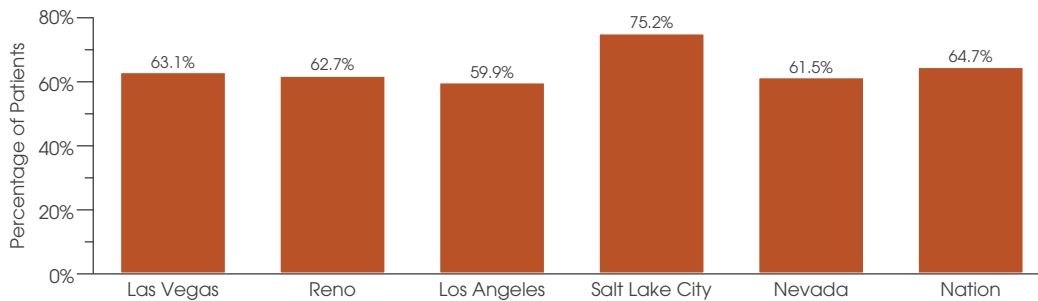




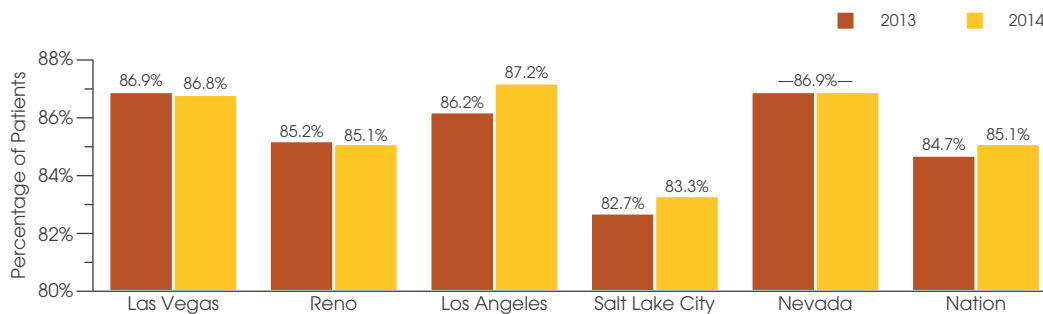
PERCENTAGE OF TYPE 2 DIABETES PATIENTS USING ANY INSULIN PRODUCTS<sup>1</sup>



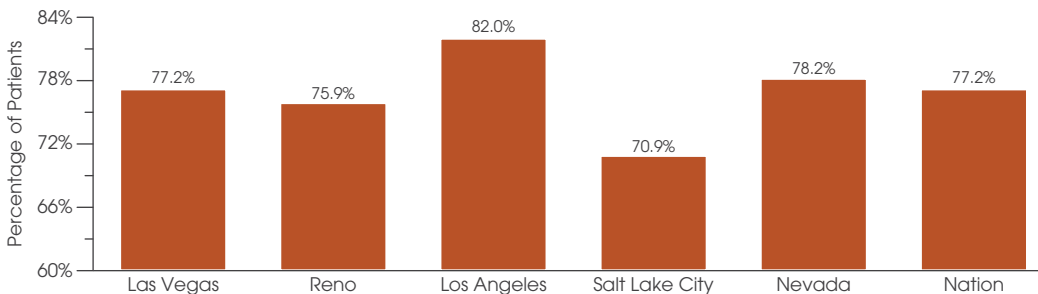
PERCENTAGE OF TYPE 2 DIABETES PATIENTS WITH AN A1c LEVEL >9.0% USING ANY INSULIN PRODUCTS, 2014<sup>1,2</sup>



PERCENTAGE OF TYPE 2 DIABETES PATIENTS USING ANY NON-INSULIN ANTIDIABETIC PRODUCT<sup>1</sup>



PERCENTAGE OF TYPE 2 DIABETES PATIENTS WITH AN A1c LEVEL >9.0% USING ANY NON-INSULIN ANTIDIABETIC PRODUCT, 2014<sup>1,2</sup>



## INSULIN FILL RATES IN LAS VEGAS, LOS ANGELES AND NV LAG THOSE OF THE U.S.

In 2014, the percentages of Type 2 diabetes patients dispensed any insulin products in Las Vegas (31.8%), Los Angeles (33.6%) and Nevada (31.8%) were lower than that of the nation (34.3%). Of the profiled markets, only the portion of such Type 2 diabetes patients in Salt Lake City (37.3%) exceeded the national average.

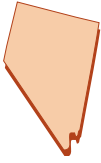
## TYPE 2 DIABETES PTS. WITH A1c LEVELS >9.0% ARE MORE APT TO RECEIVE NON-INSULIN RXs

Type 2 diabetes patients in Las Vegas, Reno and Nevada who had an A1c level greater than 9.0% on their last test were more likely to use a non-insulin antidiabetic product than any insulin products in 2014. Further, the percentages of such patients in these Nevada markets who received any insulin products were lower than that of the nation (64.7%). Only in Nevada (78.2%) did the percentage of such Type 2 diabetes patients who received any non-insulin antidiabetic product exceed the national mean (77.2%).

<sup>1</sup> Patients who filled prescriptions for any insulin products may have also filled prescriptions for products in the non-insulin category, and vice versa.

<sup>2</sup> The A1c test measures the amount of glucose present in the blood during the past 2-3 months. Figures reflect the percentage of Type 2 diabetes patients who have had at least one A1c test in a given year.

Data source: IMS Health © 2015

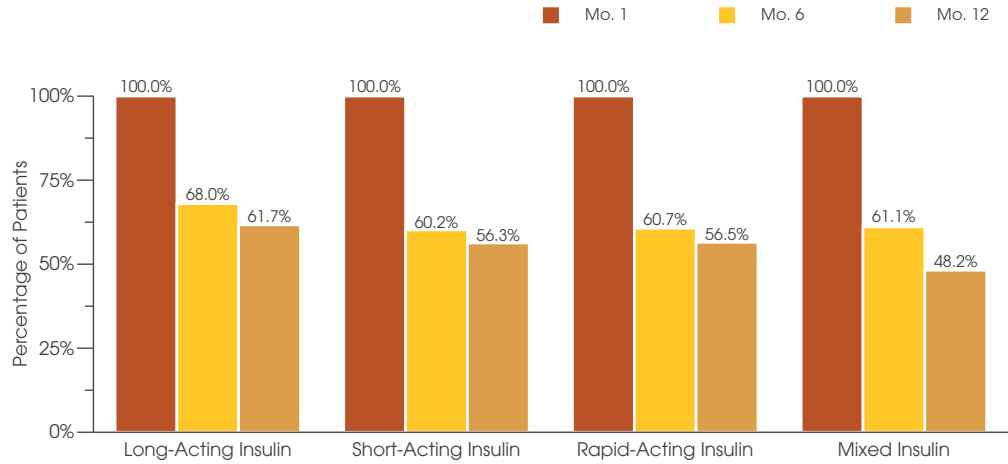


# PERSISTENCY/READMISSIONS

## PERSISTENCY IS HIGHEST FOR NV TYPE 2 DIABETES PTS. FILLING LONG-ACTING INSULIN

In 2014, among Nevada Type 2 diabetes patients who filled prescriptions for any of four classes of insulin, the persistency rate was highest in month 12 for those dispensed long-acting insulin (61.7%) than for those who received short-acting insulin (56.3%), rapid-acting insulin (56.5%) or mixed insulin (48.2%).

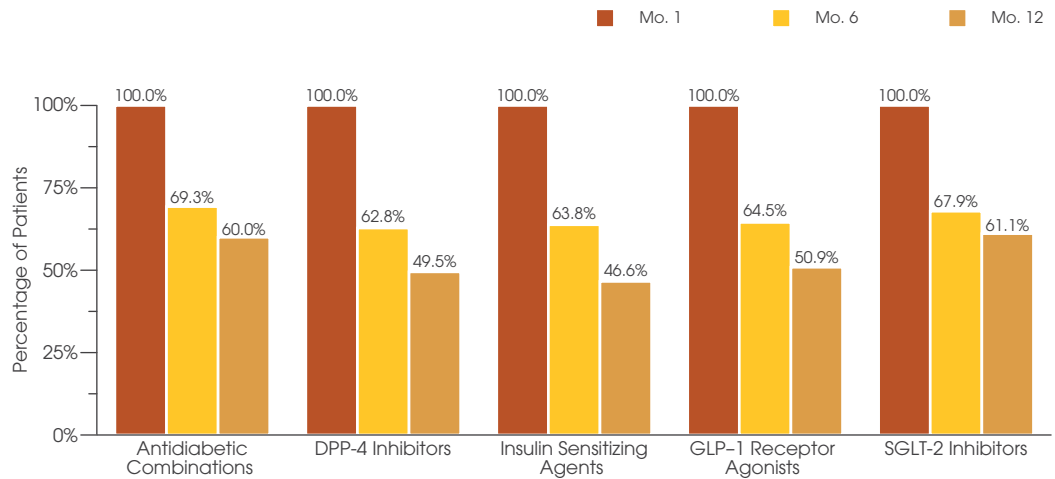
PERSISTENCY: TYPE 2 DIABETES PATIENTS USING VARIOUS INSULIN PRODUCTS, NEVADA, 2014



## SGLT-2 INHIBITOR THERAPY HAS HIGHEST PERSISTENCY RATE AMONG NON-INSULIN RXs

Month 12 persistency for Nevada Type 2 diabetes patients who filled prescriptions for SGLT-2 inhibitors (61.1%) surpassed that of patients who filled prescriptions for antidiabetic combinations (60.0%), DPP-4 inhibitors (49.5%), insulin sensitizing agents (46.6%) or GLP-1 receptor agonists (50.9%) in 2014.

PERSISTENCY: TYPE 2 DIABETES PATIENTS USING VARIOUS NON-INSULIN ANTIDIABETIC PRODUCTS, NEVADA, 2014



## READMIT RATE IS HIGH FOR PACIFIC TYPE 2 DIABETES PTS. ON THREE NON-INSULINS

Nearly one in every four (23.4%) Pacific region Type 2 diabetes patients admitted to an inpatient facility from 2012 through 2014 who filled prescriptions for three non-insulin antidiabetic products were readmitted within 30 days of their initial discharge. Among similar patients who received any insulin products, the rate was around one in six (16.4%).

READMISSION RATES FOR PATIENTS DIAGNOSED WITH TYPE 2 DIABETES, BY TYPE OF THERAPY, 2012-2014<sup>1,2</sup>

| MARKET         | Three-Day Readmissions |   | 30-Day Readmissions  |   |
|----------------|------------------------|---|----------------------|---|
|                | Any Insulin Products   | Three Non-Insulin Antidiabetic Products | Any Insulin Products | Three Non-Insulin Antidiabetic Products |
| Pacific Region | 8.1%                   | 13.2%                                   | 16.4%                | 23.4%                                   |
| NATION         | 10.3%                  | 14.0%                                   | 19.4%                | 24.5%                                   |

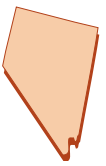
Data source: IMS Health © 2015

<sup>1</sup> Figures reflect the percentages of Type 2 diabetes patients who were readmitted to an inpatient facility in the three-year period between 2011 and 2013. These percentages include patients who filled multiple prescriptions. Readmissions are not necessarily due to Type 2 diabetes. Readmissions data were available down to the regional level only.

<sup>2</sup> Patients who filled prescriptions for any insulin products may have also filled prescriptions for products in the non-insulin category, and vice versa.

NOTE: "Persistency" measures whether patients maintain their prescribed therapy. It is calculated by identifying patients who filled a prescription for the reported drug class in the four months prior to the reported year, and then tracking prescription fills for those same patients in each of the months in the current reported year. If patients fill a prescription in a month, they are reported among the patients who have continued or restarted on therapy. Continued means that the patient has filled the drug group in each of the preceding months. Restarted means that the patient did not fill in one or more of the preceding months. Continuing and restarting patients are reported together. All patients tracked are "New-to-Brand," meaning they have not filled a prescription for their cohort product during the six months prior to initiation of therapy on that product.

# OTHER CONDITIONS: DISCHARGE DATA



NUMBER OF INPATIENT CASES PER HOSPITAL PER YEAR

| MARKET         | Hypertension   |                | Hyperlipidemia |                | Hypercholesterolemia |              |
|----------------|----------------|----------------|----------------|----------------|----------------------|--------------|
|                | 2012           | 2013           | 2012           | 2013           | 2012                 | 2013         |
| Las Vegas      | 2,994.6        | 3,039.8        | 1,436.0        | 1,528.7        | 304.7                | 290.0        |
| Reno           | 3,281.5        | 3,114.3        | 1,683.5        | 1,744.0        | 206.0                | 233.5        |
| Los Angeles    | 2,739.1        | 2,457.4        | 1,454.3        | 1,358.3        | 326.9                | 286.0        |
| Salt Lake City | 1,892.3        | 1,755.6        | 899.4          | 770.6          | 284.9                | 255.7        |
| Nevada         | 2,342.7        | 2,277.3        | 1,218.5        | 1,251.3        | 223.8                | 212.5        |
| <b>NATION</b>  | <b>1,938.6</b> | <b>1,851.9</b> | <b>1,012.8</b> | <b>1,019.2</b> | <b>245.8</b>         | <b>228.0</b> |

## INPATIENT CASE COUNTS ARE HIGH IN LAS VEGAS HOSPITALS FOR PROFILED CV DIAGNOSES

The average Las Vegas hospital treated higher numbers of hypertension (3,039.8), hyperlipidemia (1,528.7) and hypercholesterolemia (290.0) inpatient cases than did hospitals across Nevada or the nation in 2013. Of the profiled markets, Reno reported the highest numbers of hypertension and hyperlipidemia inpatient cases per hospital that year, at 3,114.3 and 1,744.0, respectively.

NUMBER OF OUTPATIENT CASES PER HOSPITAL PER YEAR

| MARKET         | Hypertension   |                | Hyperlipidemia |                | Hypercholesterolemia |                |
|----------------|----------------|----------------|----------------|----------------|----------------------|----------------|
|                | 2012           | 2013           | 2012           | 2013           | 2012                 | 2013           |
| Las Vegas      | 9,822.6        | 6,848.2        | 3,265.6        | 2,362.6        | 1,038.7              | 915.0          |
| Reno           | —              | 12,153.0       | —              | 6,099.8        | 2,729.0              | 2,386.3        |
| Los Angeles    | 7,343.1        | 7,315.8        | 2,857.0        | 2,943.8        | 1,679.6              | 1,459.5        |
| Salt Lake City | 8,865.7        | 7,985.7        | 3,754.7        | 3,734.1        | 1,151.3              | 1,578.3        |
| Nevada         | 10,653.6       | 6,374.4        | 5,178.5        | 2,624.7        | 1,267.5              | 897.0          |
| <b>NATION</b>  | <b>8,262.1</b> | <b>8,805.3</b> | <b>3,837.2</b> | <b>4,286.8</b> | <b>1,664.3</b>       | <b>1,671.3</b> |

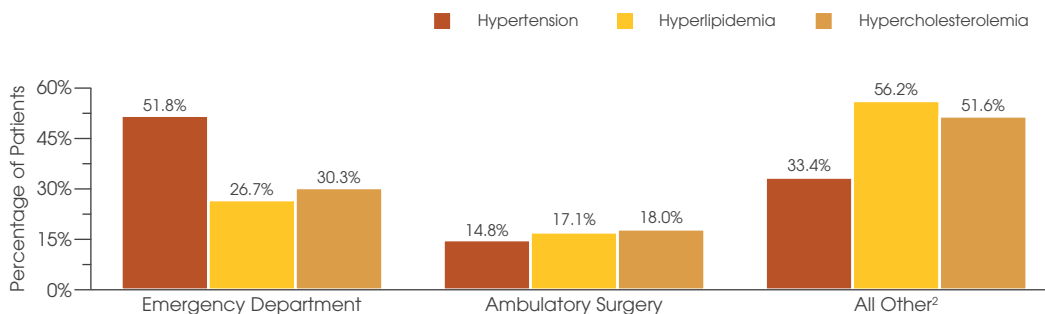
## HYPERTENSION INPATIENT CHARGES TOP THE U.S. MEAN IN LAS VEGAS AND NEVADA

In Las Vegas (\$39,530) and across Nevada (\$36,991), average charges per inpatient hypertension case were 76.7% and 65.2% higher, respectively, than the corresponding national average of \$22,385 in 2013. Reno (\$23,460) charges also topped the U.S. mark. Such charges in Las Vegas were highest, among the profiled markets, that year.

TOTAL CHARGES PER HOSPITAL INPATIENT CASE<sup>1</sup>

| MARKET         | Hypertension    |                 | Hyperlipidemia  |                 | Hypercholesterolemia |                 |
|----------------|-----------------|-----------------|-----------------|-----------------|----------------------|-----------------|
|                | 2012            | 2013            | 2012            | 2013            | 2012                 | 2013            |
| Las Vegas      | \$36,386        | \$39,530        | \$52,685        | —               | —                    | —               |
| Reno           | 22,621          | 23,460          | 37,297          | —               | —                    | —               |
| Los Angeles    | 32,738          | 31,353          | 22,084          | \$27,304        | \$59,454             | —               |
| Salt Lake City | 19,888          | 20,593          | —               | 26,207          | —                    | \$22,795        |
| Nevada         | 32,873          | 36,991          | 53,775          | —               | —                    | —               |
| <b>NATION</b>  | <b>\$21,396</b> | <b>\$22,385</b> | <b>\$33,947</b> | <b>\$31,639</b> | <b>\$40,609</b>      | <b>\$40,870</b> |

DISTRIBUTION OF OUTPATIENT CASES FOR HYPERTENSION, HYPERLIPIDEMIA AND HYPERCHOLESTEROLEMIA, BY SETTING, NEVADA, 2013

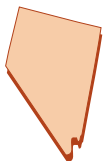


<sup>1</sup> Charge data are per case averages for inpatients with a particular diagnosis of interest. Charges may be for treatment related to other diagnoses. Data reflect the total charges billed by the hospital for the entire episode of care, and may include accommodation, pharmacy, laboratory, radiology and other charges not billed by the physician. Data do not necessarily indicate final amounts paid.

<sup>2</sup> "All Other" includes any outpatient visit that did not require surgery or arrive as an emergency. Services rendered include, but are not limited to, blood work, wellness visits, etc.

NOTE: Charges and discharge data were unavailable for some of the selected state and local markets.

Data source: IMS Health © 2015



# OTHER CONDITIONS: DISCHARGE DATA

## STROKE, AMI CASE COUNTS IN NV MARKETS SURPASS NATIONAL AVERAGES

In 2013, Las Vegas, Reno and Nevada hospitals recorded higher average annual inpatient case counts for stroke and acute myocardial infarction (AMI) than those of the nation. Case loads in Reno were highest, by market, for these two conditions (331.8 and 136.3, respectively).

## IP CHARGES FOR SOME CV CONDITIONS IN LAS VEGAS TOP THOSE OF OTHER MKT.

Total charges per hospital inpatient (IP) case for stroke (\$84,612), AMI (\$159,399) and heart failure (\$72,453) were highest, by profiled market, in Las Vegas in 2013. Nationally, such charges averaged \$44,734, \$92,018 and \$41,806, respectively.

NUMBER OF INPATIENT CASES PER HOSPITAL PER YEAR

| MARKET         | Stroke       |              | AMI (STEMI) |             | Heart Failure |              |
|----------------|--------------|--------------|-------------|-------------|---------------|--------------|
|                | 2012         | 2013         | 2012        | 2013        | 2012          | 2013         |
| Las Vegas      | 261.0        | 245.8        | 80.9        | 75.8        | 896.2         | 921.2        |
| Reno           | 353.0        | 331.8        | 157.0       | 136.3       | 1,163.5       | 1,240.3      |
| Los Angeles    | 226.4        | 217.8        | 51.9        | 51.4        | 1,065.2       | 1,019.4      |
| Salt Lake City | 165.7        | 154.4        | 81.5        | 53.1        | 604.7         | 555.9        |
| Nevada         | 241.3        | 232.5        | 98.1        | 92.6        | 730.0         | 721.4        |
| <b>NATION</b>  | <b>176.4</b> | <b>180.3</b> | <b>52.9</b> | <b>53.9</b> | <b>775.1</b>  | <b>795.0</b> |

NUMBER OF OUTPATIENT CASES PER HOSPITAL PER YEAR

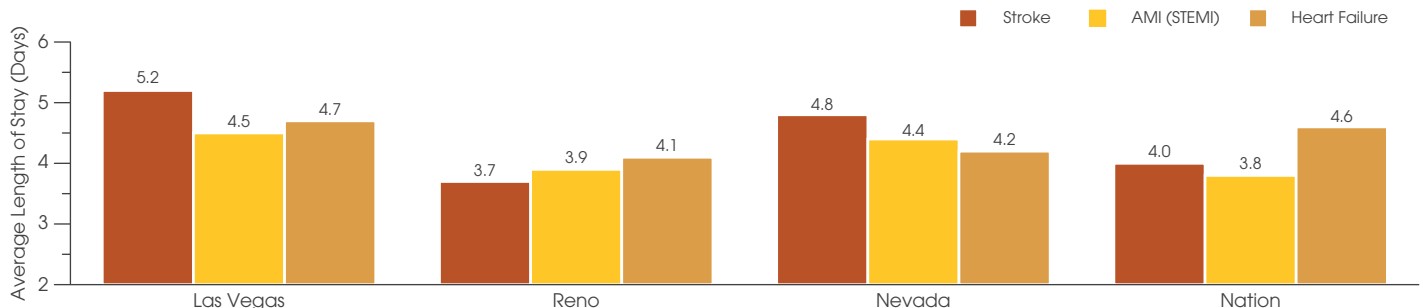
| MARKET         | Stroke       |              | AMI (STEMI) |             | Heart Failure  |                |
|----------------|--------------|--------------|-------------|-------------|----------------|----------------|
|                | 2012         | 2013         | 2012        | 2013        | 2012           | 2013           |
| Las Vegas      | 309.0        | 187.5        | 9.6         | 6.2         | 810.7          | 530.4          |
| Reno           | 1096.3       | 531.0        | 45.0        | 30.0        | 1,694.0        | 1,109.5        |
| Los Angeles    | 182.8        | 177.2        | 11.4        | 9.8         | 796.8          | 700.3          |
| Salt Lake City | 344.7        | 271.1        | 14.1        | 14.8        | 1,065.2        | 1,100.9        |
| Nevada         | 401.7        | 198.6        | 17.9        | 10.5        | 963.2          | 548.7          |
| <b>NATION</b>  | <b>358.0</b> | <b>424.9</b> | <b>18.5</b> | <b>19.0</b> | <b>1,033.0</b> | <b>1,156.3</b> |

TOTAL CHARGES PER HOSPITAL INPATIENT CASE<sup>1</sup>

| MARKET         | Stroke          |                 | AMI (STEMI)     |                 | Heart Failure   |                 |
|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                | 2012            | 2013            | 2012            | 2013            | 2012            | 2013            |
| Las Vegas      | \$78,486        | \$84,612        | \$162,426       | \$159,399       | \$71,524        | \$72,453        |
| Reno           | 42,671          | 43,783          | 96,839          | 94,926          | 41,290          | 39,151          |
| Los Angeles    | 70,560          | 74,011          | 130,647         | 141,014         | 67,109          | 70,254          |
| Salt Lake City | 30,398          | 33,193          | 68,374          | 73,617          | 36,308          | 39,433          |
| Nevada         | 69,934          | 75,614          | 142,404         | 137,960         | 62,503          | 62,789          |
| <b>NATION</b>  | <b>\$42,057</b> | <b>\$44,734</b> | <b>\$87,270</b> | <b>\$92,018</b> | <b>\$39,946</b> | <b>\$41,806</b> |

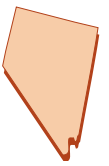
<sup>1</sup> Charge data are per-case averages for inpatients with a particular diagnosis of interest. Charges may be for treatment related to other diagnoses. Data reflect the total charges billed by the hospital for the entire episode of care, and may include accommodation, pharmacy, laboratory, radiology and other charges not billed by the physician. Data do not necessarily indicate final amounts paid.

AVERAGE LENGTH OF STAY (DAYS) PER INPATIENT CASE, 2013



Data source: IMS Health © 2015

# OTHER CONDITIONS: DISCHARGE DATA



NUMBER OF INPATIENT CASES PER HOSPITAL PER YEAR

| MARKET         | Diabetes with Depression |            | Depression   |              | Diabetes with Peripheral Vascular Disease |             |
|----------------|--------------------------|------------|--------------|--------------|---|-------------|
|                | 2012                     | 2013       | 2012         | 2013         | 2012                                      | 2013        |
| Las Vegas      | 8.0                      | 11.5       | 241.6        | 253.4        | 25.8                                      | 32.1        |
| Reno           | 18.0                     | 22.0       | 340.8        | 309.0        | 30.7                                      | 25.5        |
| Los Angeles    | 10.2                     | 9.8        | 527.2        | 516.5        | 82.6                                      | 89.5        |
| Salt Lake City | 5.5                      | 7.2        | 317.3        | 492.4        | 12.4                                      | 8.8         |
| Nevada         | 11.1                     | 13.0       | 271.0        | 285.8        | 28.4                                      | 30.4        |
| <b>NATION</b>  | <b>7.4</b>               | <b>7.6</b> | <b>342.3</b> | <b>350.4</b> | <b>28.5</b>                               | <b>30.1</b> |

## INPATIENT DEPRESSION CASE COUNTS CLIMB IN LAS VEGAS AND NEVADA HOSPITALS

In Las Vegas and across Nevada, the average numbers of inpatient depression cases increased from 2012 to 2013. In Reno, where this case count was the highest, by Nevada market, the average hospital treated 309.0 such cases in 2013, a decrease from 340.8 in 2012.

NUMBER OF OUTPATIENT CASES PER HOSPITAL PER YEAR

| MARKET         | Diabetes with Depression |          | Depression   |              | Diabetes with Peripheral Vascular Disease |             |
|----------------|--------------------------|----------|--------------|--------------|---|-------------|
|                | 2012                     | 2013     | 2012         | 2013         | 2012                                      | 2013        |
| Las Vegas      | —                        | —        | 656.0        | 403.7        | 53.5                                      | 73.5        |
| Reno           | —                        | —        | —            | 1,203.5      | 63.0                                      | 80.5        |
| Los Angeles    | —                        | —        | 714.0        | 643.0        | 95.2                                      | 63.5        |
| Salt Lake City | —                        | —        | 703.7        | 593.1        | 82.7                                      | 84.8        |
| Nevada         | —                        | —        | 1,237.7      | 508.6        | 47.0                                      | 31.0        |
| <b>NATION</b>  | <b>—</b>                 | <b>—</b> | <b>761.0</b> | <b>750.3</b> | <b>79.0</b>                               | <b>99.2</b> |

## ALOS IS HIGH VERSUS U.S. FOR INPATIENT DEPRESSION CASES IN LAS VEGAS, NEVADA

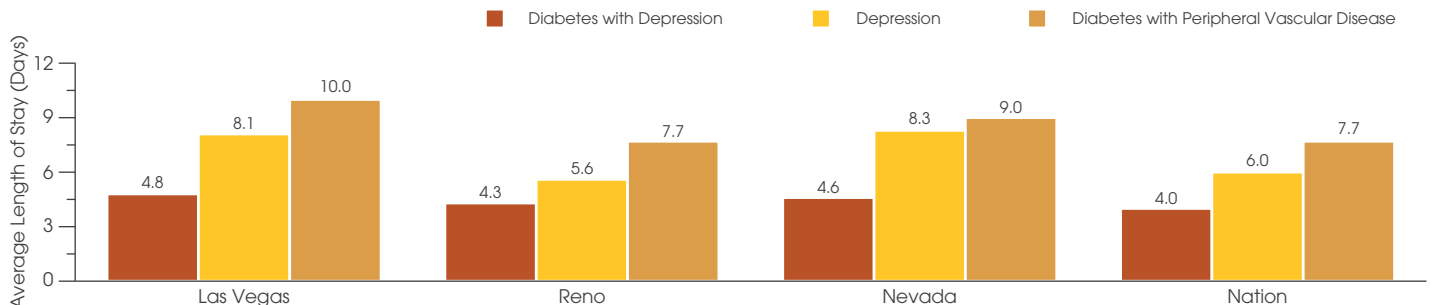
The average length of stay (ALOS) per inpatient depression case in Las Vegas and Nevada was considerably higher than the corresponding national average in 2013. This was also true for inpatient cases of diabetes with depression and diabetes with peripheral vascular disease.

TOTAL CHARGES PER HOSPITAL INPATIENT CASE<sup>1</sup>

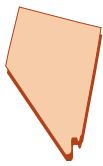
| MARKET         | Diabetes with Depression |                 | Depression      |                 | Diabetes with Peripheral Vascular Disease |                 |
|----------------|--------------------------|-----------------|-----------------|-----------------|---|-----------------|
|                | 2012                     | 2013            | 2012            | 2013            | 2012                                      | 2013            |
| Las Vegas      | \$63,724                 | \$51,606        | \$46,064        | \$46,153        | \$121,527                                 | \$144,435       |
| Reno           | 26,185                   | 29,854          | 38,554          | 27,791          | 89,608                                    | 78,166          |
| Los Angeles    | 50,025                   | 46,110          | 34,059          | 33,081          | 95,206                                    | 95,126          |
| Salt Lake City | 35,238                   | 39,270          | 21,243          | 22,824          | 73,212                                    | 60,263          |
| Nevada         | 59,446                   | 47,297          | 43,872          | 41,904          | 112,717                                   | 128,049         |
| <b>NATION</b>  | <b>\$33,929</b>          | <b>\$31,126</b> | <b>\$24,475</b> | <b>\$24,987</b> | <b>\$75,998</b>                           | <b>\$77,562</b> |

<sup>1</sup> Charge data are per-case averages for inpatients with a particular diagnosis of interest. Charges may be for treatment related to other diagnoses. Data reflect the total charges billed by the hospital for the entire episode of care, and may include accommodation, pharmacy, laboratory, radiology and other charges not billed by the physician. Data do not necessarily indicate final amounts paid. Some data were unavailable for the selected markets.

AVERAGE LENGTH OF STAY (DAYS) PER INPATIENT DEPRESSION, DIABETES WITH DEPRESSION, AND DIABETES WITH PERIPHERAL VASCULAR DISEASE CASE, 2013



Data source: IMS Health © 2015



# OTHER CONDITIONS: DISCHARGE DATA

## IP CASE COUNTS FOR STAGE 4 KIDNEY DISEASE EXCEED U.S. AVG. IN PROFILED NV MARKETS

In 2013, the average numbers of stage 4 (severe) chronic kidney disease inpatient (IP) cases per hospital in Las Vegas (98.6), Reno (112.0) and Nevada (100.1) exceeded that of the nation (95.5). The share of such cases treated in the outpatient setting in Reno (220.0) also surpassed the national norm (192.0) that year.

## PERCENTAGE OF ROUTINE DISCHARGES FOR STAGE 4 KIDNEY DISEASE IPs WANES

Between 2009 and 2013, the share of Nevada inpatient stage 4 chronic kidney disease cases that were discharged from a hospital routinely fell to 48.0% from 52.2%. Meanwhile, the percentages of such cases discharged to skilled nursing facilities (13.1%) or home health (18.7%) rose fractionally in 2013, from 12.9% and 17.6%, respectively, in 2009.

### NUMBER OF INPATIENT CASES PER HOSPITAL PER YEAR

| MARKET         | Chronic Kidney Disease Stage 2 |             | Chronic Kidney Disease Stage 3 |              | Chronic Kidney Disease Stage 4 |             |
|----------------|--------------------------------|-------------|--------------------------------|--------------|--------------------------------|-------------|
|                | 2012                           | 2013        | 2012                           | 2013         | 2012                           | 2013        |
| Las Vegas      | 30.1                           | 30.6        | 173.9                          | 162.8        | 105.3                          | 98.6        |
| Reno           | 72.0                           | 49.7        | 230.8                          | 300.0        | 103.0                          | 112.0       |
| Los Angeles    | 53.8                           | 44.9        | 275.6                          | 281.6        | 113.6                          | 112.2       |
| Salt Lake City | 8.3                            | 11.4        | 72.3                           | 61.9         | 63.6                           | 66.4        |
| Nevada         | 36.3                           | 34.0        | 173.7                          | 174.5        | 103.5                          | 100.1       |
| <b>NATION</b>  | <b>24.5</b>                    | <b>24.2</b> | <b>173.0</b>                   | <b>182.8</b> | <b>91.0</b>                    | <b>95.5</b> |

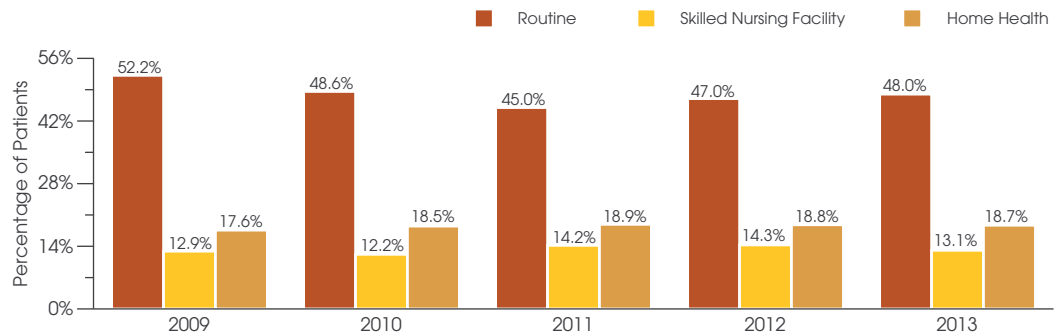
### NUMBER OF OUTPATIENT CASES PER HOSPITAL PER YEAR

| MARKET         | Chronic Kidney Disease Stage 2 |             | Chronic Kidney Disease Stage 3 |              | Chronic Kidney Disease Stage 4 |              |
|----------------|--------------------------------|-------------|--------------------------------|--------------|--------------------------------|--------------|
|                | 2012                           | 2013        | 2012                           | 2013         | 2012                           | 2013         |
| Las Vegas      | 34.9                           | 36.8        | 281.4                          | 241.7        | 64.8                           | 51.9         |
| Reno           | 163.3                          | 102.5       | —                              | 811.5        | 632.0                          | 220.0        |
| Los Angeles    | 103.3                          | 65.2        | 444.0                          | 336.5        | 126.7                          | 97.3         |
| Salt Lake City | 35.0                           | 43.7        | 365.0                          | 286.4        | 119.7                          | 134.9        |
| Nevada         | 58.4                           | 37.9        | 785.8                          | 271.5        | 209.9                          | 86.0         |
| <b>NATION</b>  | <b>55.2</b>                    | <b>63.4</b> | <b>425.1</b>                   | <b>518.4</b> | <b>165.3</b>                   | <b>192.0</b> |

### TOTAL CHARGES PER HOSPITAL INPATIENT CASE<sup>1</sup>

| MARKET         | Chronic Kidney Disease Stage 3 |                 | Chronic Kidney Disease Stage 4 |                 |
|----------------|--------------------------------|-----------------|--------------------------------|-----------------|
|                | 2012                           | 2013            | 2012                           | 2013            |
| Las Vegas      | —                              | —               | \$37,931                       | \$21,436        |
| Reno           | \$22,737                       | —               | 28,507                         | —               |
| Los Angeles    | 47,763                         | \$29,156        | 41,322                         | 43,119          |
| Salt Lake City | —                              | —               | 8,162                          | 10,237          |
| Nevada         | 22,737                         | —               | 29,838                         | —               |
| <b>NATION</b>  | <b>\$30,235</b>                | <b>\$31,129</b> | <b>\$35,817</b>                | <b>\$35,743</b> |

### PERCENTAGE OF INPATIENT CHRONIC KIDNEY DISEASE STAGE 4 CASES, BY DISCHARGE DESTINATION, NEVADA, 2009-2013

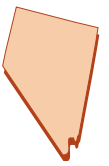


<sup>1</sup> Charge data are per-case averages for inpatients with a particular diagnosis of interest. Charges may be for treatment related to other diagnoses. Data reflect the total charges billed by the hospital for the entire episode of care, and may include accommodation, pharmacy, laboratory, radiology and other charges not billed by the physician. Data do not necessarily indicate final amounts paid.

NOTE: Stage 2 chronic kidney disease (Dx 858.2) is mild. Stage 3 (Dx 858.3) is moderate. Stage 4 (Dx 858.4) is severe. Some charge data were unavailable for the selected markets.

Data source: IMS Health © 2015

# OTHER CONDITIONS: DISCHARGE DATA



NUMBER OF INPATIENT OBESITY CASES PER HOSPITAL PER YEAR, 2009–2013

| MARKET         | 2009         | 2010         | 2011         | 2012         | 2013         |
|----------------|--------------|--------------|--------------|--------------|--------------|
| Las Vegas      | 404.6        | 420.9        | 358.5        | 359.3        | 378.6        |
| Reno           | 415.0        | 411.0        | 407.8        | 453.8        | 424.0        |
| Los Angeles    | 466.4        | 505.2        | 490.1        | 476.3        | 471.1        |
| Salt Lake City | 340.3        | 371.7        | 350.1        | 404.8        | 361.6        |
| Nevada         | 349.8        | 344.6        | 282.4        | 307.1        | 318.7        |
| <b>NATION</b>  | <b>261.2</b> | <b>269.6</b> | <b>272.7</b> | <b>280.1</b> | <b>284.7</b> |

NUMBER OF OUTPATIENT OBESITY CASES PER HOSPITAL PER YEAR, 2009–2013

| MARKET         | 2009         | 2010         | 2011         | 2012         | 2013         |
|----------------|--------------|--------------|--------------|--------------|--------------|
| Las Vegas      | 393.9        | 408.5        | 684.6        | 659.4        | 473.9        |
| Reno           | 605.8        | 478.6        | 1,003.6      | 1,637.0      | 1,162.0      |
| Los Angeles    | 432.1        | 504.0        | 631.8        | 759.1        | 690.1        |
| Salt Lake City | 444.8        | 572.9        | 654.4        | 982.8        | 987.4        |
| Nevada         | 335.1        | 327.3        | 594.8        | 691.6        | 439.5        |
| <b>NATION</b>  | <b>399.5</b> | <b>434.9</b> | <b>501.0</b> | <b>652.9</b> | <b>707.6</b> |

TOTAL CHARGES PER HOSPITAL INPATIENT OBESITY CASE, 2009–2013<sup>1</sup>

| MARKET         | 2009            | 2010            | 2011            | 2012            | 2013            |
|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Las Vegas      | \$45,299        | \$44,247        | \$47,455        | \$110,973       | —               |
| Reno           | 46,945          | —               | 35,819          | —               | —               |
| Los Angeles    | 65,736          | 45,123          | 54,281          | 54,475          | \$46,140        |
| Salt Lake City | 53,868          | —               | —               | 47,521          | 56,201          |
| Nevada         | 45,690          | 44,247          | 43,749          | 110,973         | —               |
| <b>NATION</b>  | <b>\$35,567</b> | <b>\$41,605</b> | <b>\$42,015</b> | <b>\$43,699</b> | <b>\$46,642</b> |

## OBESITY IP CASES DECLINE IN LAS VEGAS AND NEVADA, BUT STILL EXCEED U.S. MEAN

In the five-year period from 2009 through 2013, the average number of obesity inpatient (IP) cases treated by hospitals in Las Vegas or across the state decreased, by 6.4% and 8.9%, respectively, but still remained well above the corresponding national averages each year. In Reno, the number of inpatient obesity cases rose intermittently during this period; by 2013, Reno hospitals treated, on average, 48.9% more inpatient obesity cases than their counterparts across the nation.

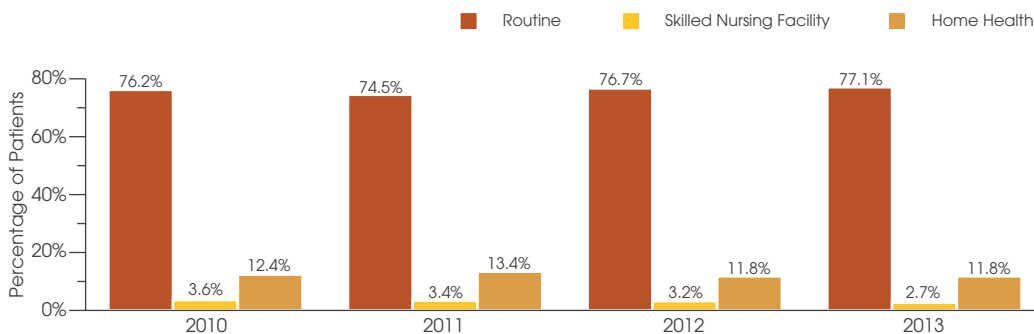
## PORTION OF NEVADA OBESITY INPATIENT CASES DISCHARGED ROUTINELY RISES SLIGHTLY

From 2010 (76.2%) through 2013 (77.1%), the percentage of inpatient obesity cases discharged routinely grew by 0.9 percentage points in Nevada. Meanwhile, declining shares of such cases were discharged to skilled nursing facilities (to 2.7% from 3.6%) or with home health (to 11.8% from 12.4%).

<sup>1</sup> Charge data are per-case averages for inpatients with a particular diagnosis of interest. Charges may be for treatment related to other diagnoses. Data reflect the total charges billed by the hospital for the entire episode of care, and may include accommodation, pharmacy, laboratory, radiology and other charges not billed by the physician. Data do not necessarily indicate final amounts paid.

NOTE: Some charge and discharge data were unavailable for the selected markets. Average length-of-stay data were unavailable for obesity, acute infection and acute infection with diabetes in the selected state and local markets.

PERCENTAGE OF INPATIENT OBESITY CASES, BY DISCHARGE DESTINATION, NEVADA, 2010–2013



Data source: IMS Health © 2015

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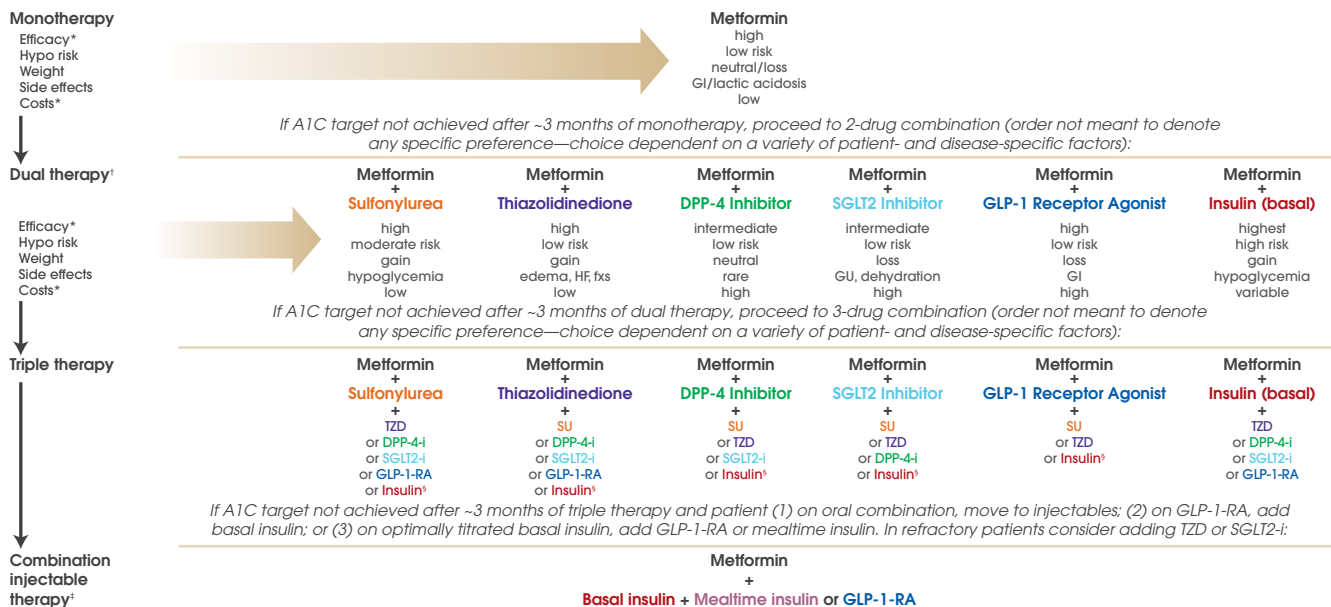
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**Adapted From the 2015 ADA/EASD Position Statement**

Healthy eating, weight control, increased physical activity, and diabetes education



Antihyperglycemic therapy in Type 2 diabetes: general recommendations (see Reference). The order in the chart was determined by historical availability and the route of administration, with injectables to the right; it is not meant to denote any specific preference. Potential sequences of antihyperglycemic therapy for patients with Type 2 diabetes are displayed, with the usual transition moving vertically from top to bottom (although horizontal movement within therapy stages is also possible, depending on the circumstances). DPP-4-i, DPP-4 inhibitor; fxs, fractures; GI, gastrointestinal; GLP-1-RA, GLP-1 receptor agonist; GU, genitourinary; HF, heart failure; Hypo, hypoglycemia; SGLT2-i, SGLT2 inhibitor; SU, sulfonylurea; TZD, thiazolidinedione. \*See Reference for description of efficacy categorization. † Consider starting at this stage when A1C is ≥9%. ‡ Consider starting at this stage when blood glucose is ≥300–350 mg/dL (16.7–19.4 mmol/L) and/or A1C is ≥10–12%, especially if symptomatic or catabolic features are present, in which case basal insulin + mealtime insulin is the preferred initial regimen. § Usually a basal insulin (NPH, glargine, detemir, degludec). Adapted with permission from Inzucchi et al. (see Reference).

**Reference:** Inzucchi, S. E., et al. (2015). Management of Hyperglycemia in Type 2 Diabetes, 2015: A Patient-Centered Approach: Update to a Position Statement of the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD). Diabetes Care. Retrieved from <http://care.diabetesjournals.org/content/38/1/140.full.pdf+html>

**NEVADA TYPE 2 DIABETES AND CARDIOVASCULAR DISEASE REPORT 2015**

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