# Table of Contents

- **Executive Summary** ........................................... 3
- **Study Scope** ................................................. 9
- **Safety Net Snap Shot** ........................................ 10
- **Current Demand** ........................................... 29
  - Community Clinics ........................................... 32
  - Hospital Utilization .......................................... 34
  - ED Utilization ................................................. 38
  - Trauma ......................................................... 40
  - County Comparisons ........................................ 42
- **Current Capacity** ........................................... 47
  - Map of Hospitals/Clinics .................................... 50
  - Community Clinics .......................................... 51
  - Hospital Beds ................................................. 52
  - ED Treatment Stations ....................................... 57
  - County Comparisons ........................................ 59
  - Diversion ..................................................... 61
  - Physician/Nurse Supply ...................................... 63
- **Demand Forecasts** .......................................... 71
  - Methodology/Summary ....................................... 72
  - Community Clinics .......................................... 74
  - Hospital Discharges ......................................... 75
  - ED Visits ...................................................... 77
  - Trauma Admissions .......................................... 79
- **Capacity Forecasts** ........................................ 80
  - Methodology/Summary ....................................... 81
  - Community Clinics .......................................... 83
  - Hospitals ...................................................... 84
  - ED Treatment Stations ....................................... 88
  - Trauma Centers .............................................. 91
  - Physician/Nurse Supply ...................................... 92
  - Demand Capacity Forecast ................................ 96
  - Forecasted Payer Sources .................................. 100
  - GAP Analysis ............................................... 109
  - What If? ..................................................... 110
  - Potential Hospital Closures ............................... 112
  - Bed Gaps .................................................... 115
  - UCSDMC Inpatient Bed Move .............................. 117
  - Bed Gaps .................................................... 118
  - ED Treatment Station Gaps ................................ 119
  - UCSDMC Additonal Findings ............................... 117
  - Medicare/Medi-Cal/Spending .............................. 128
  - Input From Stakeholders & Consumers .................. 134
  - Characteristics of a Strong Healthcare Safety Net ... 142
  - SWOT Analysis ............................................. 148
- **Conclusions** ............................................... 166
- **Recommendations** ......................................... 176
- **Appendix** .................................................. 186
  - Methodology ................................................. 187
  - Principles for the Safety Net .............................. 194
  - Coordination Structure ..................................... 191
  - Best Practice Communities ................................ 194
  - UCSDMC Additional Findings ............................. 197
  - San Diego IT Best Practice ................................. 207
  - Capacity Challenges for Major Disasters ............... 210
  - Safety Net Nationally & Statewide ....................... 218
  - Immigrant Healthcare Use ................................. 234
  - Future Trends for Healthcare ............................. 237
Executive Summary
Executive Summary

Study Overview

- The San Diego County Healthcare Safety Net Study was jointly funded by The California Endowment and the County of San Diego.
- The study’s focus was to examine the long-term needs of the region’s healthcare safety net.
- As a result of this process, an estimate of the service and funding needs and gaps of the healthcare safety net, as well as the strengths, opportunities, weaknesses, and threats of meeting those needs, was developed.

The Healthcare Safety Net in San Diego County

- San Diego County has an extensive network of community clinics, 19 acute care hospitals with emergency departments (EDs), and 6 trauma centers that serve the safety net.
- The number of uninsured and underinsured residents in San Diego County is likely to grow with some variation by region.
Executive Summary

Current Demand on the Safety Net
- Demand on the safety net providers has increased over the past 10 years. The number of community clinic visits, hospital discharges and ED visits have all increased steadily.
- While the total number of ED visits and hospital discharges has only grown modestly, the number of ED and hospital inpatient visits per hospital has increased more rapidly. Trauma center utilization (the number of trauma patient admissions per 1,000 population) has also increased at a steady rate.

Current Capacity
- The use of existing hospital beds has risen, which is also evidenced by the increasing number of discharges per bed and bed occupancy rate.
- The number of community clinics and ED stations have increased. San Diego County has the most community clinics per 100,000 residents in the state and a moderate number of ED visits per station.
- The actual number of physicians in the community is consistent with need but not all these physicians are available or will treat safety net patients. Nursing gaps do exist.
Executive Summary

Future Demand on the Safety Net

- San Diego’s population is expected to grow from 3 million to 3.7 million by 2025
- Hospital discharges, community clinic visits, trauma admissions, and demand for physicians will all grow faster than the population. ED visits are projected to grow at a slightly more modest rate given San Diego County’s relatively low ED utilization rate
- Regionally, the North Central region will see the greatest increase in discharges and ED visits growth, as this region has historically and will continue to have the most hospital inpatient capacity

Future Capacity

- Hospital expansion plans call for 801 beds by 2025, while the study projected the actual number of needed beds based on demand at 959
- Considering historical growth in visits, the number of clinics in the community is expected to grow
- Gaps in inpatient beds and ED treatment beds were forecasted for some regions
Executive Summary

Conclusions
Seven conclusions were developed as a result of the analysis. They are, in summary:

1) San Diego County has taken a major step with the potential to rethink the delivery of healthcare
2) The community benefits from a range of resources that responds to or addresses many of the healthcare needs of the poor
3) The current capacity challenges provides an opportunity to rethink the healthcare safety net
4) UCSD Medical Center’s announced inpatient move will impact some patients and their families. However, the impact is expected to be minimized by UCSDMC’s plans to leave outpatient capacity at Hillcrest and there will be sufficient inpatient capacity at their East campus
5) The healthcare safety net lacks a lead agency, seamless coordination and an integrated delivery system
6) This study has the potential to bolster and strengthen the safety net
7) The largest threat to the healthcare safety net in San Diego County is the potential failure to address the conclusions of this report
Executive Summary

Recommendations

The key recommendations of the report are outlined in summary below.

San Diego County stakeholders should:

- Develop a collaborative countywide coordination and oversight structure that uses a public/private partnership model.
- Explore a variety of methods to leverage and enhance funding sources for the safety net.
- Re-engineer and close the key access gaps identified in this report.
- Implement system reforms designed to improve coordination, strategic planning and best practices.
Study Scope

Conduct a long-range (20 year) assessment of San Diego County’s healthcare safety net needs including:

- Hospital inpatient & outpatient
- Emergency & trauma
- Primary & specialty care
- Physician requirements
- Funding requirements

The focus should be on estimating service and funding needs and identifying strengths, weaknesses, opportunities and threats to meeting these needs.
Safety Net Snapshot
County Regions Used

North Coastal
North Inland
North Central
East
South
Central
I-15
I-8
I-805
SAN DIEGO
LA JOLLA
POWAY
ENCINITAS
OCEANSIDE
SAN MARCOS
ESCONDIDO
POWAY
SAN DIEGO
CORONADO
SAN MARCOS
CHULA VISTA
IMPERIAL BEACH

Freeways
Service Regions
San Diego Hospitals by Region

<table>
<thead>
<tr>
<th>San Diego County - Hospitals by Region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>North Coastal</strong></td>
</tr>
<tr>
<td>Scripps Memorial Hospital - Encinitas</td>
</tr>
<tr>
<td>Tri-City Medical Center</td>
</tr>
<tr>
<td><strong>North Inland</strong></td>
</tr>
<tr>
<td>Fallbrook Hospital District</td>
</tr>
<tr>
<td>Palomar Medical Center</td>
</tr>
<tr>
<td>Pomerado Hospital</td>
</tr>
<tr>
<td><strong>North Central</strong></td>
</tr>
<tr>
<td>Alvarado Hospital Medical Center</td>
</tr>
<tr>
<td>Children's Hospital - San Diego</td>
</tr>
<tr>
<td>Kaiser Fdn Hosp - San Diego</td>
</tr>
<tr>
<td>Scripps Memorial Hospital - La Jolla</td>
</tr>
<tr>
<td>Sharp Memorial Hospital</td>
</tr>
<tr>
<td>UCSD Thornton Hospital</td>
</tr>
</tbody>
</table>

Note: These regions are defined for purposes of regional analysis and do not necessarily represent the true service areas of all providers. Not all clients receive care in the same region they live.
## Community Clinics by Region

### San Diego County - Community Clinics by Region

<table>
<thead>
<tr>
<th>North Inland</th>
<th>East</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrego Medical Center</td>
<td>Alpine Family Medicine</td>
</tr>
<tr>
<td>Fallbrook Family Health Center</td>
<td>Chase Avenue Family Health Center</td>
</tr>
<tr>
<td>Indian Health Council - Rincon</td>
<td>Grossmont Spring Valley Family Health Center</td>
</tr>
<tr>
<td>Indian Health Council - Santa Ysabel</td>
<td>High Desert Family Medicine</td>
</tr>
<tr>
<td>NCHS - Ramona</td>
<td>Mountain Empire Family Medicine</td>
</tr>
<tr>
<td>NCHS - San Marcos</td>
<td>Neighborhood Healthcare - Lakeside</td>
</tr>
<tr>
<td>Neighborhood Healthcare - Pauma Valley</td>
<td>Neighborhood Healthcare - Lakeside Dental</td>
</tr>
<tr>
<td>Neighborhood Healthcare - Pennsylvania Avenue</td>
<td>Neighborhood Healthcare El Cajon</td>
</tr>
<tr>
<td>Neighborhood Healthcare Escondido</td>
<td>Neighborhood Healthcare La Mesa</td>
</tr>
<tr>
<td>Neighborhood Healthcare Women's Center</td>
<td>Southern Indian Health Council - Alpine</td>
</tr>
<tr>
<td>Ramona Pregnancy Care Clinic</td>
<td>Southern Indian Health Council - Campo</td>
</tr>
<tr>
<td>Ray M. Dickinson Wellness Center</td>
<td>Sycuan Medical/Dental Center</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>North Central</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beach Area Family Health Center</td>
<td>Highland Women’s Clinic</td>
</tr>
<tr>
<td>La Maestra Dental Unit - El Cajon</td>
<td>Imperial Beach Health Center</td>
</tr>
<tr>
<td>La Maestra Medical Clinic - El Cajon</td>
<td>Operation Samahan Health Clinic</td>
</tr>
<tr>
<td>Linda Vista Healthcare Center</td>
<td>SYHC - Chula Vista Family Clinic</td>
</tr>
<tr>
<td>Operation Samahan Mira Mesa Outreach Clinic</td>
<td>SYHC - National City Family Clinic</td>
</tr>
<tr>
<td>Planned Parenthood - Kearny Mesa</td>
<td>SYHC - Otay Family Health Center</td>
</tr>
<tr>
<td>Planned Parenthood - Mira Mesa Clinic</td>
<td>SYHC Behavioral - Chula Vista</td>
</tr>
<tr>
<td>Planned Parenthood - Mission Bay Clinic</td>
<td>SYHC Behavioral - San Diego</td>
</tr>
<tr>
<td>Planned Parenthood - Mission Valley Express</td>
<td>SYHC Behavioral - San Ysidro</td>
</tr>
<tr>
<td>Planned Parenthood – Pacific Beach Clinic</td>
<td>SYHC Dental - San Ysidro</td>
</tr>
<tr>
<td>UCSD Free Clinic - Pacific Beach</td>
<td>SBFDC - National City</td>
</tr>
<tr>
<td></td>
<td>SYHC HIV/AIDS - San Ysidro</td>
</tr>
<tr>
<td></td>
<td>SYHC Mobile - Adults</td>
</tr>
<tr>
<td></td>
<td>SYHC Mobile - Children</td>
</tr>
</tbody>
</table>
## Community Clinics by Region (cont’d)

<table>
<thead>
<tr>
<th>North Coastal</th>
<th>Central</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. County Health Svcs (NCHS) - Carlsbad Family Medicine</td>
<td>Asian Pacific Health Center</td>
</tr>
<tr>
<td>NCHS - Oceanside-Carlsbad Community Clinic</td>
<td>City Heights Family Health Center</td>
</tr>
<tr>
<td>NCHS Encinitas Women and Children’s Health Center</td>
<td>Comprehensive Health Center - Downtown</td>
</tr>
<tr>
<td>NCHS Mission Mesa Community Health Center</td>
<td>Comprehensive Health Center - Lincoln Park</td>
</tr>
<tr>
<td>NCHS Mission Mesa Dental</td>
<td>Comprehensive Health Center - Oceanview</td>
</tr>
<tr>
<td>NCHS Women’s Health Services</td>
<td>Downtown Family Health Center</td>
</tr>
<tr>
<td>North County Health Services San Dieguito</td>
<td>Downtown Mental Health Center</td>
</tr>
<tr>
<td>Tri-City Community Health Center</td>
<td>Kidcare Express</td>
</tr>
<tr>
<td>Vista Community Clinic</td>
<td>Kidcare Express II (Mobile Medical Unit)</td>
</tr>
<tr>
<td>Vista Community Clinic - Horne Street</td>
<td>Kidcare Express III (Mobile Medical Unit)</td>
</tr>
<tr>
<td>Vista Community Clinic - North River Rd</td>
<td>La Maestra Dental Clinic</td>
</tr>
<tr>
<td>Vista Community Clinic- Pier View Way</td>
<td>La Maestra Family Clinic, Inc</td>
</tr>
<tr>
<td></td>
<td>Logan Heights Family Health Center</td>
</tr>
<tr>
<td></td>
<td>Mid-City Community Clinic</td>
</tr>
<tr>
<td></td>
<td>Mid-City Community Clinic (Pediatrics)</td>
</tr>
<tr>
<td></td>
<td>North Park Family Health Center</td>
</tr>
<tr>
<td></td>
<td>San Diego American Indian Health Behavioral Center</td>
</tr>
<tr>
<td></td>
<td>San Diego American Indian Health Center</td>
</tr>
<tr>
<td></td>
<td>Sherman Heights Family Health Center</td>
</tr>
<tr>
<td></td>
<td>St. Vincent De Paul Center Medical Clinic</td>
</tr>
<tr>
<td></td>
<td>UCSD Free Clinic - Baker Clinic</td>
</tr>
<tr>
<td></td>
<td>UCSD Free Clinic - Downtown</td>
</tr>
</tbody>
</table>
Snapshot of San Diego County

- Population is just over 3 million
- North Central region is the most populated (19.5 percent of total)
- 28.8 percent of the county population is Hispanic, 9.9 percent Asian and 5.3 percent Black
- 28.5 percent of the county population is 0 – 19 years of age and 11 percent is 65 plus

### Population by Region

<table>
<thead>
<tr>
<th>Health Region</th>
<th>Population</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>497,133</td>
<td>16.3%</td>
</tr>
<tr>
<td>East</td>
<td>456,161</td>
<td>14.9%</td>
</tr>
<tr>
<td>North Central</td>
<td>595,486</td>
<td>19.5%</td>
</tr>
<tr>
<td>North Coastal</td>
<td>497,461</td>
<td>16.3%</td>
</tr>
<tr>
<td>North Inland</td>
<td>549,980</td>
<td>18.0%</td>
</tr>
<tr>
<td>South</td>
<td>455,059</td>
<td>14.9%</td>
</tr>
<tr>
<td>Total</td>
<td>3,051,280</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: SANDAG
Future Snapshot of San Diego County, 2020

- County population in 2020 = 3.5 million (average increase of 1 percent per year)
- North Inland & South region = largest growth in 2020 (1.3 percent per year)
- In 2020 Hispanics = 34.3 percent, Asians = 9.6 percent, and Blacks = 5.2 percent of the population
- South & Central regions will have the largest proportion of Hispanics in 2020 61.1 and 47.6 percent, respectively. In 2030 these regions are expected to reach 65.5 and 50.9 percent, respectively.
- In 2020, 0-19 years of age = 27.7 percent and 65+ = 15 percent

### Projected Population by Region 2010-2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>522,032</td>
<td>1.0%</td>
<td>570,269</td>
<td>0.9%</td>
</tr>
<tr>
<td>East</td>
<td>470,791</td>
<td>0.6%</td>
<td>511,393</td>
<td>0.9%</td>
</tr>
<tr>
<td>North Central</td>
<td>621,809</td>
<td>0.9%</td>
<td>666,667</td>
<td>0.7%</td>
</tr>
<tr>
<td>North Coastal</td>
<td>538,951</td>
<td>1.7%</td>
<td>584,304</td>
<td>0.8%</td>
</tr>
<tr>
<td>North Inland</td>
<td>568,194</td>
<td>0.7%</td>
<td>641,903</td>
<td>1.3%</td>
</tr>
<tr>
<td>South</td>
<td>489,944</td>
<td>1.5%</td>
<td>554,069</td>
<td>1.3%</td>
</tr>
<tr>
<td>Total</td>
<td>3,211,721</td>
<td>1.1%</td>
<td>3,528,605</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

Source: SANDAG
The UCLA Center for Health Policy Research found that Californian Latinos are nearly twice as likely to be uninsured than any other ethnicity, due to low rates of employer sponsored health insurance.

Source: 2001 California Health Interview Survey. From the UCLA report: “Important Health Care issues for California Latinos: Health Insurance and Health Status” Jan-03
The San Diego Healthcare Safety Net Consumer

- The uninsured accounted for 15.2 percent of the county population (463,415 people) in 2005.
- Based on the California Health Interview Survey, there were 99,044 uninsured children in San Diego during 2003. The Central and South regions have the largest proportion of uninsured.
- North Central has the least number of uninsured.
- The County has 14.3 percent of its population on Medi-Cal (434,936).
- Central and South regions have the largest number of Medi-Cal beneficiaries (22.3 and 19.4 percent, respectively).
- As of June 2005, there were 22,979 residents on County Medical Services (CMS).

### San Diego County - Estimated Uninsured & Medi-Cal by Region, 2005

<table>
<thead>
<tr>
<th>Region</th>
<th>Uninsured</th>
<th>Medi-Cal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>22.3%</td>
<td>22.3%</td>
</tr>
<tr>
<td>East</td>
<td>12.3%</td>
<td>13.3%</td>
</tr>
<tr>
<td>North Central</td>
<td>10.7%</td>
<td>8.6%</td>
</tr>
<tr>
<td>North Coastal</td>
<td>13.2%</td>
<td>11.2%</td>
</tr>
<tr>
<td>North Inland</td>
<td>13.1%</td>
<td>12.4%</td>
</tr>
<tr>
<td>South</td>
<td>21.1%</td>
<td>19.4%</td>
</tr>
<tr>
<td>San Diego</td>
<td>15.2%</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

Note: Uninsured includes all ages. Medi-Cal includes Healthy Families.

Source: The Abaris Group

- Combined, the safety net consumer comprises 29.5 percent of the population (907,661).
Community Clinic Payer Mix, 1996 and 2004

As a percent of total patients, Medicare, Medi-Cal, and sliding scale/self-pay patients increased from 1996 to 2004 while County Indigent, Private, and Other payers declined.

Source: OSHPD, Annual Primary Clinic Utilization Data Files 1996 & 2004. Other includes other state and federal programs.
The South region has the highest Medi-Cal population (36 percent) with the lowest in the North Central region (20 percent).

The percentage of Self-Pay patients is highest in the North Inland Region (41 percent) and lowest in the Central Region (12 percent).
Hospital Discharge Payer Mix, 1996 and 2004

<table>
<thead>
<tr>
<th>Payer Source</th>
<th>1996</th>
<th>2004</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>27.2%</td>
<td>36.3%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>21.5%</td>
<td>19.9%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>County Indigent</td>
<td>2.8%</td>
<td>3.9%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Other Third Parties</td>
<td>43.5%</td>
<td>35.2%</td>
<td>-8.3%</td>
</tr>
<tr>
<td>Other Payers</td>
<td>5.0%</td>
<td>4.7%</td>
<td>-0.3%</td>
</tr>
</tbody>
</table>

As a percent of total patients, Medicare and County Indigent patients increased during the years 1996 to 2004 while Medi-Cal, Other Payers, and Other Third Parties (i.e. private insurance) declined.

Note: The “other” payer source category primarily represent state and federal programs outside the traditional Medicare/Medicaid programs.

Source: OSHPD, State Utilization Data File for Hospitals, 1996-2004
Hospital Gross Revenue by Payer Source, 1996 and 2004

The traditional safety net payer categories (County Indigent, Other Payers, and Medi-Cal) all declined as a percentage of total gross patient revenue.

As a percent of total patients, Medicare and County Indigent patients increased from 1996 to 2004 while Medi-Cal, Other Payers, and Other Third Parties (i.e. private insurance) declined.

Source: OSHPD, Annual Hospital Financial Data Files 1996 & 2004

<table>
<thead>
<tr>
<th>PAYER SOURCE</th>
<th>1996</th>
<th>2004</th>
<th>CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>32.2%</td>
<td>43.0%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>19.2%</td>
<td>18.2%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>County Indigent</td>
<td>3.2%</td>
<td>2.4%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Other Third Parties</td>
<td>40.4%</td>
<td>32.0%</td>
<td>-8.3%</td>
</tr>
<tr>
<td>Other Payers</td>
<td>4.9%</td>
<td>4.4%</td>
<td>-0.3%</td>
</tr>
</tbody>
</table>
The highest number of safety net discharges came from the North Central, Central and South regions but safety net payers made up the highest percentage of their total patients in the Central and South regions.

“Other” payers were defined as those with expected payments of either private insurance, workers comp, Medicare, unknown, or other.
Patients do not necessarily receive their inpatient care in the region they live. The North Central region had 53.8 percent fewer North Central residents needing inpatient care than the number of inpatients treated at North Central hospitals. Conversely, the East region had 92 percent more residents seeking inpatient care outside their region.

Note: Due to data reporting variances, the total number of discharges reported in the Patient Origin and Market Share File is different than that reported in the Patient Discharge File (previous slides).
In 2004, the most discharges occurred in the North Central Region. This region has the greatest number of hospitals, and is the most populated.

Not all patients get their inpatient care in the region they live. The East region discharged the fewest residents who live in that region (17.5). While the North Central region had the most discharges that came from outside their region.

Note: Due to data reporting variances, the total number of discharges reported in the Patient Origin and Market Share File is different than that reported in the Patient Discharge File (previous slides).
Patients do not always receive inpatient care in their own region. In 2004, 52 percent of all admitted patients countywide received care outside the region in which they lived (N = 264,992).

Source: 2004 OSHPD discharge data, acute and psychiatric care types at acute care hospitals.
Total Hospital Patient Days by Payer Type By Region, 2004

In 2004, the South Region had the most patient days by underinsured payers\(^1\) (131,867). This number accounted for 50.4 percent of the region’s total patient days.

Note: Underinsured payers defined as Medi-Cal, County Indigent, Other Indigent, and Other Payers. Insured payers defined as Third Parties and Medicare.

### Total Patient Days by Payer Type

<table>
<thead>
<tr>
<th>Region</th>
<th>Underinsured</th>
<th>Insured</th>
<th>Total Days</th>
<th>Percent Underinsured</th>
<th>Percent Insured</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Coastal</td>
<td>22,629</td>
<td>90,713</td>
<td>113,342</td>
<td>20.0%</td>
<td>80.0%</td>
</tr>
<tr>
<td>North Inland</td>
<td>95,005</td>
<td>122,428</td>
<td>217,433</td>
<td>43.7%</td>
<td>56.3%</td>
</tr>
<tr>
<td>North Central</td>
<td>102,878</td>
<td>372,688</td>
<td>475,566</td>
<td>21.6%</td>
<td>78.4%</td>
</tr>
<tr>
<td>Central</td>
<td>112,776</td>
<td>145,848</td>
<td>259,624</td>
<td>43.4%</td>
<td>56.6%</td>
</tr>
<tr>
<td>East</td>
<td>28,257</td>
<td>83,476</td>
<td>111,733</td>
<td>25.3%</td>
<td>74.7%</td>
</tr>
<tr>
<td>South</td>
<td>131,867</td>
<td>129,639</td>
<td>261,506</td>
<td>50.4%</td>
<td>49.6%</td>
</tr>
<tr>
<td>San Diego County</td>
<td>493,412</td>
<td>945,792</td>
<td>1,439,204</td>
<td>34.3%</td>
<td>65.7%</td>
</tr>
</tbody>
</table>

### Percent of Patient Days by Payer Type

Source: OSHPD, Annual Hospital Financial Data, 2004
Hospital Care to the Uninsured, 2001-2004

Hospital care to the uninsured, as a percentage of total hospital expenditures, remained relatively stable between 2001-2004. Charity Care and Bad Debt accounted for 4.1 percent of total hospital expenditures in 2004, while County Indigent programs accounted for 2 percent.

Note: OSHPD data in 2000 was not used due to changes in reporting methods.

Source: OSHPD, Hospital Annual Financial Data, 2001-2004
Current Demand
Current Demand Summary

In San Diego County:

- Demand for healthcare and for the safety net consumer has continued to rise over the last several years:
  
  - For the safety net:
    
    - Community clinics visits have increased steadily since 1996 averaging 3.3 percent growth per year
    - ED patient visits have continued to rise approximately 1.2 percent per year

  - For the safety net and hospitalized patients in general:
    
    - Total hospital discharges have grown modestly from 1995 to 2004 averaging 1.5 percent per year with some annual variations. However, total discharges by hospital have grown more dramatically, averaging 6.8 percent per year from 1995 to 2004
    - Trauma patient admissions have risen on average 3.3 percent each year from 1996 to 2004
Current Demand Summary

San Diego County has:

- The second highest community clinic utilization rate (160 patients per 1,000 population) in California

- A higher utilization rate for hospital discharges when compared to similar sized counties (94.7 discharges/1,000 population)

- A low ED utilization rate (225 visits/1,000 population) when compared to California (275 visits/1,000 population) and the US (370 visit/1,000)

- An increasing trauma utilization rate (2.9 to 3.3 from FY 1993 to 2005)

Note: Comparison counties were selected based on their relative comparative population size (Orange, population of 3,036,002; San Bernardino, population of 1,926,555; and Riverside, population of 1,849,844).
Community Clinic Patient Utilization, 1996-2004

Community clinic utilization has increased steadily since 1996 from 127 to 161 patients per 1,000 residents.

The total number of clinic patients has increased by more than 136,500 since 1996.

Source: OSHPD, State Utilization Data File for Primary Care Clinics, 1996-2004
Community Clinic Visits, 1996-2004

Total clinic visits have increased from 1 million in 1996 to 1.3 million in 2004, an average annual increase of 3.7 percent.

In 2004, community clinic patients visited clinics on average 2.8 times per year.

Source: OSHPD, State Utilization Data File for Primary Care Clinics, 1996-2004

Note: Community clinics are not the only source of care for primary and specialty services to the underinsured. Other sources include private physician offices, VA and EDs.
In 2004, there were 94.7 discharges per 1,000 residents. This is slightly higher than the number of discharges per 1,000 in 1995 (93.1).

Note: All hospitals and discharge types included except newborns.
San Diego County Discharges Per Hospital, 1995-2004

Due in large part to a net loss in total hospitals since 1995, discharges per hospital have steadily increased between 1996 and 2004 (an average of 6.8 percent per year).

Sources: OSHPD Hospital Discharge Summary Reports, 1999-2004, Annual Hospital Financial Data, 1995-1998
Bed occupancy (percentage of available and licensed beds to admissions) has steadily risen over the past 10 years based on available and licensed beds.

Available bed occupancy has grown from 56 percent in 1995 to 69 percent in 2004.

Source: OSHPD, Hospital Annual Financial Data, 2004
Hospital Bed Occupancy Rates, 2004

Overall, San Diego County available hospital beds were at 69 percent capacity in 2004. The lowest occupancy rate was in the North Coastal Region, which used 58 percent of its available bed days.

The highest occupancy rate was in the North Inland Region, which used 75 percent of its available bed days. The South region uses 71 percent of its occupancy and the Central region used 65 percent.

Note: Only acute-care and non Kaiser beds were included in this analysis.
Between 1996 and 2004, the number of ED visits per 1,000 population remained relatively stable. The average utilization rate over the 10-year period was 227 per 1,000 residents.

Note: Estimated data was used for hospitals that did not report to OSHPD for a given year. *2003 data was adjusted by The Abaris Group due to a large data variation.

Source: OSHPD, State Utilization Data File for Hospitals, 2004; The Abaris Group estimates, 2006
ED Visits per Hospital, 1995-2004

Even though total ED visits have only marginally increased since 1995, the number of ED visits per hospital has steadily increased due to a decline in the number of EDs countywide.

Note: Estimated data was used for hospitals that did not report to OSHPD for a given year. *2003 data was adjusted by The Abaris Group due to a large data variation.

Source: OSHPD, State Utilization Data File for Hospitals, 2004; The Abaris Group Estimates, 2006
After increasing each year from FY97 to FY03, trauma admissions have leveled off.

The number of admissions per 1,000 residents increased from 2.9 in FY96 to 3.3 in FY05.
## California Trauma Triage Rates

### California County Trauma System Comparison

<table>
<thead>
<tr>
<th>Local EMS Agency</th>
<th>Total Trauma Triage</th>
<th>Population</th>
<th>Utilization Rate/1,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marin</td>
<td>945</td>
<td>251,330</td>
<td>3.76</td>
</tr>
<tr>
<td>San Diego</td>
<td>10,357</td>
<td>3,036,373</td>
<td>3.41</td>
</tr>
<tr>
<td>San Francisco</td>
<td>3,296</td>
<td>1,074,727</td>
<td>3.07</td>
</tr>
<tr>
<td>Alameda</td>
<td>4,537</td>
<td>1,501,952</td>
<td>3.02</td>
</tr>
<tr>
<td>Sacramento</td>
<td>3,736</td>
<td>1,360,346</td>
<td>2.75</td>
</tr>
<tr>
<td>Riverside</td>
<td>4,895</td>
<td>1,877,000</td>
<td>2.61</td>
</tr>
<tr>
<td>Northern California</td>
<td>1,562</td>
<td>604,100</td>
<td>2.59</td>
</tr>
<tr>
<td>Coastal Valleys</td>
<td>1,727</td>
<td>696,199</td>
<td>2.48</td>
</tr>
<tr>
<td>Inland Counties</td>
<td>4,148</td>
<td>1,762,427</td>
<td>2.23</td>
</tr>
<tr>
<td>Central California</td>
<td>2,444</td>
<td>957,070</td>
<td>1.99</td>
</tr>
<tr>
<td>Kern</td>
<td>1,608</td>
<td>672,500</td>
<td>1.65</td>
</tr>
<tr>
<td>Sierra-Sacramento</td>
<td>1,331</td>
<td>567,000</td>
<td>1.29</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>18,150</td>
<td>7,811,506</td>
<td>1.24</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>5,019</td>
<td>4,915,500</td>
<td>1.72</td>
</tr>
<tr>
<td>Santa Barbara</td>
<td>1,818</td>
<td>1,117,527</td>
<td>1.63</td>
</tr>
<tr>
<td>Orange</td>
<td>4,100</td>
<td>2,987,591</td>
<td>1.37</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>1,296</td>
<td>1,015,302</td>
<td>1.28</td>
</tr>
<tr>
<td>Merced</td>
<td>245</td>
<td>237,005</td>
<td>1.03</td>
</tr>
</tbody>
</table>

### Average Utilization Rate

2.26

### Standard Deviation

0.75

---

San Diego County has one of the highest triage rates of any EMS region in the state.

Local geographical factors and epidemiological factors could contribute to this high triage rate.
Hospital Demand Comparison Benchmarks

San Diego County has a hospital inpatient utilization rate close to the statewide average but higher than similar-sized counties.

In terms of the number of discharges per hospital, San Diego County has one of the highest rates in the state and is higher than similar-sized counties.

San Diego County is above the state average for the number of ED visits per hospital. San Diego County’s EDs averaged 35,400 visits in 2004 while Riverside County averaged 39,600 ED visits/hospital.
ED Demand Comparisons, 1998-2004

San Diego County’s ED utilization and growth rates remains below the US and California.

Source: CDC, Census, CA State Finance, OSPD and The Abaris Group calculations.
ED Use of Underinsured Versus Insured, 2005

The uninsured and underinsured patients use the ED more frequently for non-emergent, emergent but primary care treatable and emergent but preventable conditions.

Insured patients use the ED more frequently for non-preventable, emergent conditions and other visits (e.g. injury, mental health, substance abuse).

Note: Visits with a primary diagnosis of injury, mental health, substance abuse, and other smaller incidence categories are not assigned to classifications of interest, and are included under “Other Visits”.

October – December, 2005. Totals do not include inpatient admissions and approximately 3 percent of civilian ED with missing data.

Source: HASD&IC, CHIP, SD County EMSA, ED Database, October - December 2005.
Community Clinic Demand Comparison

San Diego County’s robust network of community clinics results in a utilization rate well above similar sized counties.

Note: Because visit data was only available from the public hospital clinics, the number of patients at public hospital clinics was estimated using visits per patient ratios at community clinics in their respective communities.

Source: OSHPD, State Utilization Data File for Primary Care Clinics, 1996-2004
Current Capacity
Current Capacity Summary

San Diego:

- Has more community clinics per 100,000 population than any other county in the state
- Has more available hospital beds per 1,000 population than Riverside, San Bernardino and Orange Counties
- Treats more patients per ED treatment station than San Bernardino and Orange Counties and has more ED bed capacity than the average for California and another comparable county, Riverside County
- Has adequate physician coverage countywide with some regional and specialty gaps

- Is second to last in its nurse to population ratio compared to other California metropolitan counties

---

1 Not all physicians residing in San Diego County practice full time, are willing to see any or more safety net patients or make themselves available for hospital on-call services.
Since 2001, San Diego County’s population has increased an average of 1.3 percent per year. Some areas of safety net capacity have also increased:

- The number of community clinics has increased most years since 1996
- The number of staffed hospital beds has risen since 1998
- ED treatment stations have risen consistently since 2000

However, some areas of support have decreased:

- Over the past 25 years, nine hospitals and one ED closed, resulting in the net total loss of 221 hospital beds and a gain of 128 ED treatment stations.
- “Licensed” and “available” hospital beds have declined since 2000
Where Are The Safety Net Consumers and the Healthcare Resources?

The resources for the safety net (clinics and hospitals) are mostly located where the safety net consumer lives.

Source: SANDAG
The number of community clinics in San Diego County has increased since 1996. The number of clinics per 100,000 residents has increased modestly from 2.1 in 1996 to 2.5 in 2004. There are currently about 90 clinics in the San Diego region.

Note: Data does not include all community clinics in the county because some clinics report as one under their parent entity and others, such as Native American community clinics, do not report to OSHPD. The actual number of clinics differs from the data presented in the graph for the same reason.

Source: OSHPD, State Utilization Data File for Primary Care Clinics, 1996-2004
Licensed Hospital Beds & Closures, 1986-2004

1988 Closure: Clairemont Hospital (MH Facility)
1991 Closure: Physicians and Surgeons Hospital
1997 Closure: Harborview Hospital
1999 Closure: Sharp Cabrillo became a skilled nursing facility
2000 Closures: Scripps Memorial Hospital – East County Mission Bay Hospital

Over the past 25 years, at least 43 ED treatment stations and 1,120 hospital beds were lost due to hospital closures.

San Diego County Hospital Beds, 1995-2004

The total number of available and staffed hospital beds (acute, sub acute, etc.) countywide has also declined since 1995. After falling sharply from 1996-1998, the number of staffed beds is increasing.

Source: OSHPD, Hospital Annual Financial Data, 1995-2004
Licensed Acute Care Beds, 1995-2004

The loss of hospital capacity can also be seen in the acute care area where 481 beds were lost between 1995 and 2004. This represents a 10 percent decline in the number of acute care beds in the county.

Source: OSHPD, State Utilization Data File for Hospitals, 1994-2004
San Diego County Licensed Bed Types 1995-2004

There has been a decline in hospital beds in all bed types:

- Psychiatric beds have declined by 268 beds since 1995 (29 percent).
- Pediatric beds have declined by 62 beds (35 percent).
- Chemical Dependency beds have declined by 157 beds (57 percent).
- Long-Term-Care and Rehab beds have declined by 154 beds (12 percent).

Source: OSHPD, State Utilization Data File for Hospitals, 1994-2004
The number of discharges per available, staffed, and licensed beds has steadily risen over the last 10 years.

Discharges per available bed increased by 30.6 percent between 1995 and 2004. Discharges per staffed bed increased by 24.9 percent while discharges per licensed bed increased by 33.3 percent.

Source: OSHPD, Hospital Annual Financial Data, 2004
Despite four hospital closings since 1995, the total number of ED stations in the county has increased.

To compensate for the hospital closures, the number of ED stations per open hospital has risen steadily over the past 10 years.

ED Visits per Treatment Station, 1995-2004

In 2001, an average of 1,934 patients were treated at each ED treatment station. In 2004 that number dropped to 1,588 per ED treatment station.

Since peaking in 2001, there has been a general decline in bed utilization due to the addition of more ED treatment stations in San Diego County.

Note: Estimated data was used for hospitals that did not report to OSHPD for a given year. 2003 data was adjusted by The Abaris Group due to a large data variation in one hospital.

Source: OSHPD, State Utilization Data File of Hospitals, 1995 - 2004
San Diego County has a supply of 2.0 available hospital beds per 1,000 population, almost in line with the state average of 2.1.

San Diego County has fewer hospital discharges per available bed than similar sized counties (46.9) and is almost in line with the statewide average of 46.4.

San Diego County is below the state average for the number of ED visits per ED treatment station.

Source: OSHPD, State Utilization Data File of Hospitals, 2004
San Diego County EMS & Trauma Diversion Hours, 2001-2005

While there has been some individual hospital variation, EMS diversion hours have declined 63 percent since 2001 while trauma diversion hours have declined 28 percent.

In 2001, EDs were on diversion 31 percent of the time. In 2005, that number dropped to 11 percent with a benchmark of less than 5 percent. Trauma Centers were on diversion less than 2 percent of the time between 2001 and 2005.

Source: San Diego County EMS Agency, 2006
In terms of overall clinic capacity, San Diego County has more available clinics per 100,000 residents than any similar-sized counties and is above the statewide average.

Note: In addition to Indian Health Services and clinics that report under parent facilities, County clinics do not report to OSHPD. Because of this, the number of clinics in San Bernardino, Riverside, and California may be understated more heavily than in San Diego and Orange counties.

Source: OSHPD, State Utilization Data File of Primary Care Clinics, 2004
According to the Center for Workforce Studies, San Diego County’s ratio of physicians per population is 4 percent above California’s and 14 percent below Orange County’s. Its ratio is higher than that of two other high population counties in Southern California.

Based on a study conducted by the County Medical Society, San Diego’s ratio of physicians is well above what is deemed adequate.

Note: Populations may vary from previous charts because authors of study used different dates and sources.
Per the same Center for Health Workforce Studies, San Diego County’s ratio of specialists per 100,000 population is 5 percent higher than California’s and 14 percent lower than Orange County’s. The study by the County Medical Society determined that San Diego’s supply of specialists is adequate although not all physicians treat the safety net patient.
San Diego Physicians by Region, 2006

The South and East Regions have a physician shortage while the North Central Region has a surplus.

Source: San Diego County Medical Society Physician-to-Patient Ratio Study, 2006. Study may overstate estimates due to physician retirement, relocation, or part-time employment. Not all physicians treat the safety net patient. Also many specialists may not provide on-call coverage to EDs.
According to the California Institute for Nursing and Health Care, San Diego’s ratio of nurses per population is just above California’s but 10 percent below Orange County’s. Compared to other high population counties in California, San Diego ranks second to last.

Sources: California Registered Nurse Regional Report Card, 2004; California Institute for Nursing and Health Care; National Sample Survey of Registered Nurses, 2005; Center for California Health Workforce Studies, University of California, San Francisco, 2005
The North Central Region has the highest *number* of unstaffed but available beds (263). However, the North Coastal Region has the lowest *percentage* of available beds that are staffed (59.2 percent).

The East Region has the fewest unstaffed available beds (12) and the highest percentage of available beds that are staffed (97.6 percent).

The Healthcare Advisory Board defines full at 85 percent of available hospital capacity.

Source: OSHPD, Hospital Annual Financial Data, 2004
When considering available but unstaffed beds, San Diego County hospitals beds were at 71.5 percent capacity in 2005. The lowest occupancy rate was in the North Coastal region, which used 62.9 percent of its available bed days. The highest occupancy rate was in the South region, which used 73.7 percent of its available bed days.

Bed days were calculated by multiplying the total available beds by 365. The difference between patient days (total discharges multiplied by LOS) and bed days provides an indication of potential available bed days in each region.

Source: Hospital Campus Surveys, 2006. 2004 OSHPD data was used for hospitals that did not participate in the survey (3 hospitals.)
Tri-City Medical Center, Scripps Mercy Hospital, and Palomar Medical Center all have over 100 beds that are available, but not staffed. Countywide, 835 available beds are not staffed among the acute care hospitals.

Note: An “available” bed does not solely indicate that the bed would be immediately available due to issues of bed retrofitting, staffing, patient cohorting, infectious diseases or privacy.

Changes in Available Hospital Beds, 2000-2004

The North Central Region added the most available hospital beds between 2000 and 2004 (+204). The Central Region lost the most beds (-71) during that same time period.

Note: Hospital beds include acute care, psychiatric, long-term care, chemical, and rehabilitation.
Demand Forecasts
Demand Projection Methodology

Community Clinic Visits
Factor of Change = 9-year trend in clinic visits per 1,000 population, adjusted for 10 years (2.4 percent growth)

Emergency Department Visits
Factor of Change = 10-year average of ED visits per 1,000 population (a utilization rate of 227.1)

Hospital Discharges
Factors of Change = Age adjusted increase in discharges based on population growth plus growth in median age (annual growth of 1.6 percent)

Trauma Center Admissions
Factors of Change = 10-year trend in trauma admissions per 1,000 population (1.9 percent growth)
Demand Forecast Summary

The Abaris Group expects that by 2015 and 2025, San Diego County’s healthcare demand to respectively increase by:

- 212,651 and 434,876 community clinic visits
- 47,393 and 102,939 hospital discharges
- 43,436 and 116,484 ED visits
- 1,224 and 2,500 trauma center admissions

This equates to overall increases by 2025 of:

- 31.6 percent increase in the demand for community clinics
- 37.4 percent percent increase in the demand for hospital beds
- 16.1 percent increase in the demand for ED stations
- 25.6 percent increase in trauma admissions
- Up to a 26.7 percent increase in demand for physicians (2002 to 2015)
Community Clinic Patient and Visit Projections, 2005-2025

Community clinics in San Diego County see close to a half million unique patients each year and provide over 1.3 million clinic visits from those patients. In 2025, community clinics will serve approximately 650,000 patients and 1.8 million visits.

Source: OSHPD, State Utilization Data File of Primary Care Clinics, 2004
### Hospital Discharge Projections, 2005-2025

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Median Age</th>
<th>Discharges</th>
<th>per 1,000</th>
<th>Pop.</th>
<th>Age Adj. Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>3,051,280</td>
<td>35.1</td>
<td>275,500</td>
<td>- .05</td>
<td>- .05</td>
<td>90.3</td>
</tr>
<tr>
<td>2010</td>
<td>3,211,721</td>
<td>36.1</td>
<td>298,257</td>
<td>313,169</td>
<td>92.9</td>
<td>97.5</td>
</tr>
<tr>
<td>2015</td>
<td>3,370,163</td>
<td>37.1</td>
<td>322,893</td>
<td>339,038</td>
<td>95.8</td>
<td>100.6</td>
</tr>
<tr>
<td>2020</td>
<td>3,528,605</td>
<td>38.0</td>
<td>349,564</td>
<td>367,043</td>
<td>99.1</td>
<td>104.0</td>
</tr>
<tr>
<td>2025</td>
<td>3,691,845</td>
<td>38.9</td>
<td>378,439</td>
<td>397,361</td>
<td>102.5</td>
<td>107.6</td>
</tr>
</tbody>
</table>

**Annual Percent Change:**
- 1.05% 0.54% 1.9% 2.2% 1.5% 0.7% 1.0% 0.4%

**Hospital Discharge Projections +/- 5 Percent**

![Hospital Discharge Projections Diagram](chart.png)

Source: Hospital Campus Surveys, 2006; SANDAG Population Forecasts, 2003

Hospital discharges were projected using an age adjusted annual percent increase of 1.6 percent. This adjusted rate accounts for the aging population as well as the overall population increase that will impact the total number of discharges. By 2025, hospital discharges are projected to increase by 102,939 countywide.
Based on the countywide discharge projection and regional changes in distribution of discharges, hospital discharges by region were projected to the year 2025.

The North Central region is expected to see the greatest absolute change (39,608 net new discharges), but the East region will have the highest percent of hospital discharge growth (65 percent).
**ED Visit Projections, 2005-2025**

**Emergency Department Visit Projections 2005-2025**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Visits</th>
<th>+.05</th>
<th>-.05</th>
<th>1,000 Pop.</th>
<th>+.05</th>
<th>-.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>3,051,280</td>
<td>721,859</td>
<td>-</td>
<td>-</td>
<td>236.6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2010</td>
<td>3,211,721</td>
<td>729,316</td>
<td>765,782</td>
<td>692,850</td>
<td>227.1</td>
<td>238.4</td>
<td>215.7</td>
</tr>
<tr>
<td>2015</td>
<td>3,370,163</td>
<td>765,295</td>
<td>803,560</td>
<td>727,030</td>
<td>227.1</td>
<td>238.4</td>
<td>215.7</td>
</tr>
<tr>
<td>2020</td>
<td>3,528,605</td>
<td>801,274</td>
<td>841,338</td>
<td>761,210</td>
<td>227.1</td>
<td>238.4</td>
<td>215.7</td>
</tr>
<tr>
<td>2025</td>
<td>3,691,845</td>
<td>838,343</td>
<td>880,260</td>
<td>796,426</td>
<td>227.1</td>
<td>238.4</td>
<td>215.7</td>
</tr>
</tbody>
</table>

**Annual Percent Change**

- 1.0%
- 0.8%
- 1.1%
- 0.5%
- 0.2%
- 0.0%
- -0.4%

Historical ED utilization rates and Census data were used to project ED visits against future population forecasts.

The projections show a 0.8% percent annual growth in ED visits with an absolute change of 116,484 visits (volume projections were bracketed at +/- 5 percent).

Source: 2005 Hospital Campus Surveys; SANDAG Population Forecasts, 2003
Using the countywide ED visit growth rate as an indicator of regional ED visit growth (.8 percent annually), ED visits were projected by region to the year 2025.

The North Central region, with the highest concentration of EDs, is projected to see the greatest absolute growth in ED visits by 2025.

Trauma Admission Projections, 2005-2025

Trauma admission projections were calculated by using the historical utilization rate, which has increased by 1.9 percent annually. By 2025, admissions are projected to increase to 12,276 (or 1.3 percent per year). This will result in a utilization rate of 3.33 admissions per 1,000 population.

Capacity Forecasts
Capacity Projection Methodology

Community Clinics
Factor of Change = 5 year average of Visits per Clinic (17,599)¹

ED Treatment Stations
Factor of Change = 10 year average of ED Visits per Treatment Station (1,730) (adjusted based on individual hospital expansion plans)

Hospital Beds
Factor of Change = 5 year percent change in Discharges per Bed (4.25 percent) (adjusted based on individual hospital expansion plans)

Trauma Centers
Factor of Change = Current average of 1,630 Admissions per Trauma Center

¹ Used for countywide forecasting purposes only. Number does not assume all clinics are full at this level of capacity.
Capacity Forecast Summary- new

The Abaris Group’ forecast San Diego County’s capacity will need to increase by 2025:

- 21 community clinics¹
- 959 hospital beds/122 ED treatment stations
- Up to 1,504 new physicians (2015) and 7,531 nurses (2025)
- Using current trauma system utilization rates and protocols practices, there is no likely need for an additional trauma center in any part of the county until 2020

This equates to a:

- 24.1 percent increase in community clinics
- 15.7 percent increase in hospital beds
- 28.7 percent increase ED treatment stations
- Up to a 19.3 percent increase in physician supply (2015) and 39.4 percent nurse supply (2025)

¹ Note: The actual number of community clinics for the future will vary based on current individual clinic capacity, expansion of current clinics and funding.
Community Clinic Projections, 2005-2025

Projections for Community Clinics 2005-2025

<table>
<thead>
<tr>
<th>Year</th>
<th>Visits</th>
<th>+.05</th>
<th>-.05</th>
<th>Clinics</th>
<th>+.05</th>
<th>-.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,376,171</td>
<td>-</td>
<td>-</td>
<td>88</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2010</td>
<td>1,481,773</td>
<td>1,555,862</td>
<td>1,407,684</td>
<td>93</td>
<td>98</td>
<td>89</td>
</tr>
<tr>
<td>2015</td>
<td>1,588,822</td>
<td>1,668,263</td>
<td>1,509,381</td>
<td>99</td>
<td>104</td>
<td>94</td>
</tr>
<tr>
<td>2020</td>
<td>1,697,913</td>
<td>1,782,808</td>
<td>1,613,017</td>
<td>104</td>
<td>109</td>
<td>99</td>
</tr>
<tr>
<td>2025</td>
<td>1,811,047</td>
<td>1,901,599</td>
<td>1,720,495</td>
<td>109</td>
<td>115</td>
<td>104</td>
</tr>
</tbody>
</table>

Considering historical growth in visits, the number of clinics, and assuming continued community support for these clinics, future growth in the community clinic system is expected.

Based on the mid-level forecast, the number of clinics will grow by approximately 21 to 109 by 2025 with some of the clinic growth occurring through expansions.

Source: OSHPD, State Utilization Data File for Primary Care Clinics, 2004
Hospital Expansion Plans

Based on data supplied by the hospitals, hospital expansion plans include an additional 122 ED treatment stations and 801 hospital beds by the year 2025.

<table>
<thead>
<tr>
<th>Year Expected</th>
<th>ED Beds</th>
<th>ICU</th>
<th>Med/Surg</th>
<th>Other</th>
<th>Total Inpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-2010</td>
<td>71</td>
<td>24</td>
<td>170</td>
<td>101</td>
<td>295</td>
</tr>
<tr>
<td>2011-2015</td>
<td>51</td>
<td>20</td>
<td>56</td>
<td>380</td>
<td>456</td>
</tr>
<tr>
<td>2016-2020</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2021-2025</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

1Contingent upon approval of Proposition F
All bed plans are subject to demand and funding sources.
UCSD Medical Center’s (UCSDMC) planned move of inpatient beds was not included in this countywide chart.

Source: Hospital Interviews and Campus Survey, 2006
San Diego County Hospital Expansion Plans 2006-2025

Between 2006 and 2025, 122 new ED treatment stations and 801 hospital beds are planned. Most of these beds will be in the North Inland and North Central regions.

Note: UCSD Medical Center’s announced bed move was not considered as an expansion as the move is expected to only net a modest number of new available beds and not change overall licensed beds.

Source: Hospital Campus Survey and Interviews, 2006
Hospital Bed Projections, 2005-2025

Available hospital beds are expected to increase countywide based on projected need and individual hospital expansion plans. 959 available beds are needed, which would bring the countywide total beds to 6,722 by 2025.

Note: This is the projected need for hospital beds and differs from actual expansion plans (previous slide). Only acute care hospitals were included in the hospital bed projections.

Source: Hospital Campus Surveys, 2006; SANDAG Population Forecasts, 2003
Regional Hospital Bed Projections, 2025

Countywide, 959 hospital beds are projected to be needed by 2025 based on historical capacity data and individual hospital expansion plans.

The most construction is expected for the North Inland and North Central regions. Collectively, these two regions will have 65.6 percent of all net new hospital beds countywide.

Note: UCSD Medical Center’s announced bed move would not add significant new beds to their capacity and thus was not included in this new bed analysis but would have an impact on the study’s gap analysis and thus was considered in the regional gap analysis further in this report.

Source: Hospital Interviews and Campus Surveys, 2006; The Abaris Group ED Demand Estimates, 2006
ED Treatment Station Projections, 2005-2025

Significant ED capacity is expected to be added by existing hospitals to the year 2015. After this construction, ED visits/stations are expected to be 100-200 visits below the historical 10-year average (1,730 visits per station) and thus no projected need for additional ED stations between 2015 and 2025.

Source: Hospital Campus Surveys, 2006; SANDAG Population Forecasts, 2003
Regional ED Treatment Station Projections, 2025

122 ED treatment stations are planned to be built countywide by 2015. Based on projected demand, no additional stations beyond this planned expansion will be needed by 2025.

Source: Hospital Interviews, 2006; The Abaris Group Hospital Demand Estimates, 2006
Hospital Bed and ED Treatment Station Projections, 2005-2025

Based on individual hospital expansion plans and historical trends, hospital beds will increase by 17% (959 net new beds) by 2025.

Note: This is the projected need for hospital beds and differs from actual expansion plans (previous slide).

Hospitals are planning even more construction in ED treatment stations. The number of new treatment stations (122) will meet or exceed projected demand by 2025.

Source: Hospital Campus Surveys, 2006; The Abaris Group
Hospital Bed and ED Station Projections, 2006
In this projection model, San Diego County would not need an additional trauma center until 2020 to keep the number of admissions per trauma center around the current average of 1,629.

Note: The exact number of trauma centers can only be determined by a local analysis taking into consideration a variety of factors in addition to this benchmark. The effectiveness, size, scope, future plans, and commitment of existing trauma centers are not factored into this projection.
San Diego Physician Supply Projections, 2002-2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Assumptions</td>
<td>Per 100,000 Population</td>
<td>San Diego Population Physicians</td>
<td>Per 100,000 Population</td>
</tr>
<tr>
<td>1. Historical Experience</td>
<td>202</td>
<td>3,234,263</td>
<td>6,533</td>
</tr>
<tr>
<td>2. Lifestyle Changes</td>
<td>202</td>
<td>3,234,263</td>
<td>6,533</td>
</tr>
<tr>
<td>3. Productivity Increases</td>
<td>202</td>
<td>3,234,263</td>
<td>6,533</td>
</tr>
<tr>
<td>4. Lifestyle Productivity Hybrid</td>
<td>202</td>
<td>3,234,263</td>
<td>6,533</td>
</tr>
</tbody>
</table>

Assumptions:
- Historical Experience: Historical percentage increase mirrors that of California and remains constant
- Lifestyle Changes: 10 percent reduction in work hours
- Productivity Increases: 5 percent increase in physician productivity
- Lifestyle Productivity Hybrid: Assumes 10 percent reduction in work hours and 5 percent increase in physician productivity

A mid-range forecast estimates that by 2015, there will be an need for a total of 7,792 physicians in the county, a 19.3 percent increase from the year 2002.

This forecast predicts a 1.1 percent decrease in the number of physicians per population over the same period.
San Diego County Medi-Cal Paid Claims to PCPs

The number of paid claims by Medi-Cal to all types of physicians and to the subset of PCPs (defined as pediatrics, internal medicine, family and general practice physicians) has declined from first quarter 2001 to first quarter 2005 by 5.7 percent.

Paid Claims by Medi-Cal to Physicians & Physician Groups in San Diego County, First Quarter 2001 - 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Physicians/Physician Groups All Specialties</th>
<th>Pediatrics, Internal Med., Family &amp; General Practice Physicians</th>
<th>Medi-Cal Beneficiaries as of January</th>
<th>PCPs per 100,000 Beneficiaries</th>
<th>PCPs Annual Percent Change from 2001 to 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1/2001</td>
<td>1,668</td>
<td>615</td>
<td>287,538</td>
<td>214</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Q1/2002</td>
<td>1,619</td>
<td>587</td>
<td>315,565</td>
<td>186</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Q1/2003</td>
<td>1,572</td>
<td>575</td>
<td>336,076</td>
<td>171</td>
<td>-3.5%</td>
</tr>
<tr>
<td>Q1/2004</td>
<td>1,528</td>
<td>555</td>
<td>344,121</td>
<td>161</td>
<td>-4.5%</td>
</tr>
<tr>
<td>Q1/2005</td>
<td>1,581</td>
<td>580</td>
<td>344,488</td>
<td>168</td>
<td>-5.7%</td>
</tr>
</tbody>
</table>

Note: These physicians reflect those that accept fee-for-service and do not reflect payments by Medi-Cal through managed care networks. However, in discussions with various health plans it was determined that most likely these PCPs also participate in managed care plans as well.

Source: CA Dept. of Health Services, Medical Care Statistics Section
San Diego will face a significant shortage of registered nurses over the next 20 years.

Today, there is a shortage of 2,003 nurses in San Diego County. Using the Best Supply Forecast, the shortage will grow to at least 8,269 nurses, by 2025 which represents 45 percent of the projected nurse workforce.

Source: The Abaris Group, 2006; Forecast of Registered Nurse Workforce in California, University of California, San Francisco, 2005. Assumes the changes in inflow and outflow of nurses within San Diego mirror those of California over the same time period.
Potential Employee Shortages in Healthcare 2010

<table>
<thead>
<tr>
<th>Potential Employee Shortages in San Diego for Healthcare Occupations, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare Primary Occupations</td>
</tr>
<tr>
<td>Licensed Practical &amp; Vocational Nurses</td>
</tr>
<tr>
<td>Radiologic Technologists &amp; Technicians</td>
</tr>
<tr>
<td>Registered Nurses</td>
</tr>
<tr>
<td>Cardiovascular Technologists &amp; Technicians</td>
</tr>
<tr>
<td>Clinical, Counseling, &amp; School Psychologists</td>
</tr>
<tr>
<td>Dietetic Technicians</td>
</tr>
<tr>
<td>Emergency Medical Technicians &amp; Paramedics</td>
</tr>
<tr>
<td>Medical &amp; Clinical Laboratory Technicians</td>
</tr>
<tr>
<td>Medical &amp; Clinical Laboratory Technologists</td>
</tr>
<tr>
<td>Medical Assistants</td>
</tr>
<tr>
<td>Medical Records &amp; Health Information Technicians</td>
</tr>
<tr>
<td>Nursing Aides, Orderlies, &amp; Attendants</td>
</tr>
<tr>
<td>Occupational Therapist Assistants</td>
</tr>
<tr>
<td>Pharmacy Technicians</td>
</tr>
<tr>
<td>Physical Therapists</td>
</tr>
<tr>
<td>Respiratory Therapists</td>
</tr>
<tr>
<td>Respiratory Therapy Technicians</td>
</tr>
<tr>
<td>Speech-Language Pathologists</td>
</tr>
<tr>
<td>Surgical Technologists</td>
</tr>
<tr>
<td>Home Health Aides</td>
</tr>
<tr>
<td>Pharmacy Aides</td>
</tr>
<tr>
<td>Physical Therapist Aides</td>
</tr>
<tr>
<td>Physical Therapist Assistants</td>
</tr>
</tbody>
</table>

**High:** Occupations with the strongest indication that the number of openings will exceed the number of qualified candidates

**Medium:** Occupations with some indication that the number of openings will exceed the number of qualified candidates

**Low:** Occupations with little to no indication that the number of openings will exceed the number of qualified candidates

Licensed practical and vocational nurses, radiology technologists and technicians, and registered nurses are expected to have the greatest potential shortage by 2010.

Source: San Diego Workforce Partnership Occupational Outlook Reports, 2000-2005
Demand & Capacity Forecast Qualifiers
Demand/Capacity Notes

The previous current and forecasted demand and capacity calculations were based on historical utilization and projected need. This methodology may have limitations:

- Calculations used averages and yet patient utilization of services generally follow peaks and valleys throughout the day (e.g. ED volumes peak at 5:00 pm and on Mondays) and season (e.g. flu and respiratory seasons)

- No adjustments were made for pandemics, major emergencies (e.g. fires, earthquakes) or for terrorism events

- Inventorying current capacity has the risk of over simplification of the assumptions such as the use of beds (e.g. acute care, pediatric versus adults) and availability of staff (e.g. physician capacity) for the safety net and healthcare in general
Demand/Capacity Forecast Qualifiers

There are many areas of risk for the future county healthcare system:

- Decline in reimbursement at all levels (Medicare, Medi-Cal, CMS and private payers)
- Adjustments to health care delivery payments (e.g. physician and hospital quality DRG adjustments)
- Potential public policy changes regarding the undocumented immigrant (e.g. citizenship documentation, immigration policy)
- Changes in the number and location of providers (e.g. hospitals)
- Workforce capacity challenges at all levels and for all providers
- Unfunded mandates (e.g. seismic safety, nurse ratios, EMTALA)
- Uncertainty on how future health care resources will be funded
- Increased cost of construction
Demand/Capacity Forecast Qualifiers

Some possible ways future risk may be mitigated:

- Increased use of technology
- Best practice industry production methodology implementation
- Improved healthcare regional strategic planning and collaboration
- Creative use of healthcare workforce resources
- Reduction in utilization rates due to healthy living, disease management, prevention and gate keeping
- Continued trend towards outpatient services
- Market demands that may be attractive to healthcare providers
Forecasted Payer Sources
Projected Payer Mix by Region - Background

- Projections derived from data, surveys, and trends at the national, state, county, and regional levels
- Based on the SANDAG’s steady growth population projections
- Considerations made for the aging populations and the locations of the poor and ethnic distributions
- Medi-Cal projections include Healthy Families
- Medicare projections reflect those people who only have Medicare as their sole insurance, and those on Medicare who have additional insurance distributed throughout
- Uninsured projections are for all ages
- Changes in public policy (e.g., universal payer, immigration, etc.) could impact these projections
Projected Payer Mix As a Percent of Population by Region

- While Employer-Based insurance is the largest component of the payer mix, it is expected to decline proportionately over time.
- Because of the decline in Employer insurance, the Direct Purchase (consumer) category is expected to increase over time.
- Medi-Cal is expected to increase over the next 20 years, but at a slower rate (1 percent).
- Medicare is also expected to grow slowly as a proportion of the total population (0.1 percent).
- Military is expected to increase slowly (1.1 percent).
- The Uninsured category is expected to grow at a slightly higher pace (2.1 percent).

<table>
<thead>
<tr>
<th>Projected Payer Mix - Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Diego County</td>
</tr>
<tr>
<td>Insurance Type</td>
</tr>
<tr>
<td>Employer-Based</td>
</tr>
<tr>
<td>Direct Purchase</td>
</tr>
<tr>
<td>Medi-Cal</td>
</tr>
<tr>
<td>Medicare</td>
</tr>
<tr>
<td>Military</td>
</tr>
<tr>
<td>Uninsured</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: CA Health Interview Survey (CHIS), United Way of San Diego Outcomes and Community Impact Program Survey, SANDAG, US Census Bureau, CA Employment Development Department, County of San Diego Community Health Statistics Unit, The Abaris Group.
### Projected Payer Percentage by Region

- The South and Central regions are expected to continue to have the highest number of uninsured.
- These regions are also expected to have the largest number of Medi-Cal recipients.
- The East region has the second largest proportion of people obtaining their insurance via employer-based sources.

#### Projected Payer Mix - Percent of Total

<table>
<thead>
<tr>
<th>South Region</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>44.9</td>
<td>43.5</td>
<td>42.0</td>
<td>40.5</td>
<td>39.0</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>3.6</td>
<td>3.8</td>
<td>4.1</td>
<td>4.3</td>
<td>4.6</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>19.4</td>
<td>19.7</td>
<td>20.0</td>
<td>20.3</td>
<td>20.6</td>
</tr>
<tr>
<td>Medicare</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Military</td>
<td>5.7</td>
<td>6.0</td>
<td>6.2</td>
<td>6.5</td>
<td>6.8</td>
</tr>
<tr>
<td>Uninsured</td>
<td>21.1</td>
<td>21.7</td>
<td>22.4</td>
<td>23.0</td>
<td>23.6</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>East Region</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>55.9</td>
<td>54.3</td>
<td>52.8</td>
<td>51.2</td>
<td>49.6</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>6.3</td>
<td>6.8</td>
<td>7.2</td>
<td>7.7</td>
<td>8.3</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>13.3</td>
<td>13.6</td>
<td>13.9</td>
<td>14.2</td>
<td>14.4</td>
</tr>
<tr>
<td>Medicare</td>
<td>7.5</td>
<td>7.6</td>
<td>7.6</td>
<td>7.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Military</td>
<td>4.7</td>
<td>5.0</td>
<td>5.2</td>
<td>5.5</td>
<td>5.8</td>
</tr>
<tr>
<td>Uninsured</td>
<td>12.3</td>
<td>12.8</td>
<td>13.2</td>
<td>13.7</td>
<td>14.1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Central Region</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>42.8</td>
<td>41.4</td>
<td>39.9</td>
<td>38.5</td>
<td>37.2</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>2.0</td>
<td>2.1</td>
<td>2.3</td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>22.3</td>
<td>22.7</td>
<td>23.0</td>
<td>23.3</td>
<td>23.6</td>
</tr>
<tr>
<td>Medicare</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Military</td>
<td>5.3</td>
<td>5.6</td>
<td>5.8</td>
<td>6.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Uninsured</td>
<td>22.3</td>
<td>23.0</td>
<td>23.6</td>
<td>24.3</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: CA Health Interview Survey (CHIS), United Way of San Diego Outcomes and Community Impact Program Survey, SANDAG, US Census Bureau, CA Employment Development Department, County of San Diego Community Health Statistics Unit, The Abaris Group.
The North Central region has the largest number of people obtaining their insurance from employers and a relatively higher proportion of people purchasing their insurance.

North Coastal has the largest number of persons obtaining their insurance from the military.

North Inland is expected to have the second largest proportion of persons on Medicare.

### Projected Payer Mix - Percent of Total

#### North Central Region

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>56.9</td>
<td>55.3</td>
<td>53.7</td>
<td>52.0</td>
<td>50.4</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>9.0</td>
<td>9.6</td>
<td>10.3</td>
<td>11.0</td>
<td>11.8</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>8.6</td>
<td>8.8</td>
<td>9.0</td>
<td>9.1</td>
<td>9.3</td>
</tr>
<tr>
<td>Medicare</td>
<td>9.2</td>
<td>9.3</td>
<td>9.4</td>
<td>9.4</td>
<td>9.5</td>
</tr>
<tr>
<td>Military</td>
<td>5.6</td>
<td>5.9</td>
<td>6.2</td>
<td>6.5</td>
<td>6.9</td>
</tr>
<tr>
<td>Uninsured</td>
<td>10.7</td>
<td>11.1</td>
<td>11.5</td>
<td>11.9</td>
<td>12.3</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### North Coastal Region

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>52.3</td>
<td>50.7</td>
<td>49.1</td>
<td>47.5</td>
<td>45.8</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>9.0</td>
<td>9.6</td>
<td>10.2</td>
<td>10.9</td>
<td>11.6</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>11.2</td>
<td>11.4</td>
<td>11.6</td>
<td>11.8</td>
<td>12.0</td>
</tr>
<tr>
<td>Medicare</td>
<td>8.2</td>
<td>8.3</td>
<td>8.3</td>
<td>8.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Military</td>
<td>6.1</td>
<td>6.4</td>
<td>6.7</td>
<td>7.0</td>
<td>7.4</td>
</tr>
<tr>
<td>Uninsured</td>
<td>13.2</td>
<td>13.0</td>
<td>14.1</td>
<td>14.5</td>
<td>14.9</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### North Inland Region

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>52.2</td>
<td>50.6</td>
<td>49.0</td>
<td>47.4</td>
<td>45.9</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>8.9</td>
<td>9.5</td>
<td>10.1</td>
<td>10.8</td>
<td>11.5</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>12.4</td>
<td>12.6</td>
<td>12.9</td>
<td>13.1</td>
<td>13.3</td>
</tr>
<tr>
<td>Medicare</td>
<td>8.7</td>
<td>8.8</td>
<td>8.8</td>
<td>8.8</td>
<td>8.9</td>
</tr>
<tr>
<td>Military</td>
<td>4.7</td>
<td>4.9</td>
<td>5.2</td>
<td>5.4</td>
<td>5.7</td>
</tr>
<tr>
<td>Uninsured</td>
<td>13.1</td>
<td>13.5</td>
<td>14.0</td>
<td>14.4</td>
<td>14.8</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: CA Health Interview Survey (CHIS), United Way of San Diego Outcomes and Community Impact Program Survey, SANDAG, US Census Bureau, CA Employment Development Department, County of San Diego Community Health Statistics Unit, The Abaris Group.
Projected Payer Totals by Region

- Medi-Cal is expected to increase by approximately 130,512 new patients.
- The Uninsured is expected to grow the most of any payer class with a new net patients of 173,792.
- Medicare is also expected to grow but more slowly with a net of 53,080 patients.

### Projected Payer Mix - Absolute Change

<table>
<thead>
<tr>
<th>San Diego County</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>1,558,182</td>
<td>1,589,523</td>
<td>1,614,810</td>
<td>1,634,905</td>
<td>1,652,474</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>202,376</td>
<td>227,321</td>
<td>254,308</td>
<td>283,585</td>
<td>315,615</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>434,936</td>
<td>466,812</td>
<td>499,079</td>
<td>531,746</td>
<td>565,448</td>
</tr>
<tr>
<td>Medicare</td>
<td>228,103</td>
<td>241,489</td>
<td>254,712</td>
<td>267,765</td>
<td>281,183</td>
</tr>
<tr>
<td>Military</td>
<td>163,267</td>
<td>180,782</td>
<td>198,994</td>
<td>218,327</td>
<td>238,918</td>
</tr>
<tr>
<td>Uninsured</td>
<td>464,415</td>
<td>505,794</td>
<td>548,261</td>
<td>592,277</td>
<td>638,207</td>
</tr>
<tr>
<td>Total</td>
<td>3,051,280</td>
<td>3,211,721</td>
<td>3,370,163</td>
<td>3,528,605</td>
<td>3,691,845</td>
</tr>
</tbody>
</table>

Source: CA Health Interview Survey (CHIS), United Way of San Diego Outcomes and Community Impact Program Survey, SANDAG, US Census Bureau, CA Employment Development Department, County of San Diego Community Health Statistics Unit, The Abaris Group.
Projected Payer Totals by Region

- The South and Central regions are expected to continue to have the highest total number of uninsured (133,988 and 152,180 respectively).
- These regions are also expected to have the largest total number of Medi-Cal recipients (116,55 and 77,155 respectively).
- The East region has the second largest proportion of people obtaining their insurance via employer based sources (265,180).

### South Region

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>204,321</td>
<td>212,884</td>
<td>219,202</td>
<td>224,602</td>
<td>221,281</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>16,382</td>
<td>18,752</td>
<td>21,232</td>
<td>23,932</td>
<td>26,029</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>88,281</td>
<td>96,560</td>
<td>104,428</td>
<td>112,406</td>
<td>116,555</td>
</tr>
<tr>
<td>Medicare</td>
<td>24,118</td>
<td>26,067</td>
<td>27,854</td>
<td>29,621</td>
<td>30,331</td>
</tr>
<tr>
<td>Military</td>
<td>25,938</td>
<td>29,224</td>
<td>32,567</td>
<td>36,124</td>
<td>38,643</td>
</tr>
<tr>
<td>Uninsured</td>
<td>96,017</td>
<td>106,457</td>
<td>116,724</td>
<td>127,383</td>
<td>133,985</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>455,059</td>
<td>489,944</td>
<td>522,007</td>
<td>554,069</td>
<td>566,824</td>
</tr>
</tbody>
</table>

### East Region

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>254,994</td>
<td>255,864</td>
<td>259,268</td>
<td>261,955</td>
<td>265,180</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>28,738</td>
<td>31,806</td>
<td>35,512</td>
<td>39,542</td>
<td>44,101</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>60,669</td>
<td>64,042</td>
<td>68,231</td>
<td>72,490</td>
<td>77,151</td>
</tr>
<tr>
<td>Medicare</td>
<td>34,212</td>
<td>35,667</td>
<td>37,536</td>
<td>39,390</td>
<td>41,411</td>
</tr>
<tr>
<td>Military</td>
<td>21,440</td>
<td>23,341</td>
<td>25,640</td>
<td>28,087</td>
<td>30,820</td>
</tr>
<tr>
<td>Uninsured</td>
<td>56,108</td>
<td>60,071</td>
<td>64,904</td>
<td>69,929</td>
<td>75,475</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>456,161</td>
<td>470,791</td>
<td>491,092</td>
<td>511,393</td>
<td>534,138</td>
</tr>
</tbody>
</table>

### Central Region

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Based</td>
<td>212,773</td>
<td>215,969</td>
<td>218,169</td>
<td>219,738</td>
<td>226,908</td>
</tr>
<tr>
<td>Direct Purchase</td>
<td>9,943</td>
<td>11,113</td>
<td>12,366</td>
<td>13,723</td>
<td>15,576</td>
</tr>
<tr>
<td>Medi-Cal</td>
<td>110,861</td>
<td>118,273</td>
<td>125,604</td>
<td>133,006</td>
<td>144,224</td>
</tr>
<tr>
<td>Medicare</td>
<td>26,348</td>
<td>27,768</td>
<td>29,130</td>
<td>30,470</td>
<td>32,646</td>
</tr>
<tr>
<td>Military</td>
<td>26,348</td>
<td>28,977</td>
<td>31,725</td>
<td>34,637</td>
<td>38,694</td>
</tr>
<tr>
<td>Uninsured</td>
<td>110,861</td>
<td>119,931</td>
<td>129,156</td>
<td>138,696</td>
<td>152,462</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>497,133</td>
<td>522,032</td>
<td>546,151</td>
<td>570,269</td>
<td>610,510</td>
</tr>
</tbody>
</table>

Source: CA Health Interview Survey (CHIS), United Way of San Diego Outcomes and Community Impact Program Survey, SANDAG, US Census Bureau, CA Employment Development Department, County of San Diego Community Health Statistics Unit, The Abaris Group.
The North Central region has the largest number of people obtaining their insurance from employers and a relatively higher proportion of people purchasing their insurance (350,823 and 81,823 respectively).

North Coastal has the largest number of persons obtaining their insurance from the military (44,195).

North Inland is expected to have the second largest proportion of persons on Medicare (60,743).
San Diego County MMA Section 1011 Payment Information

The Medicare Prescription Drug, Improvement and Modernization Act of 2003, Section 1011 enables physicians, hospitals and ambulance providers to be paid for their otherwise unreimbursed costs of providing EMTALA (ED and inpatient) services to undocumented aliens. It provides $250 million nationally per fiscal year from 2005 to 2008.

The healthcare system with the largest amount of Section 1011 payments for 3rd and 4th quarter 2005 combined was Sharp Healthcare ($713,118), followed by Palomar Pomerado Health ($608,038), and then Scripps ($567,905).
Gap Analysis
What if no new beds/ED stations or clinics were added?

In 2004, 84.9 percent of all available beds were staffed countywide and many community clinics today are reported at or near capacity. If there are no new beds/clinics added and/or staffed, or insufficient beds/clinics are added, approximately 103,000 hospital discharges and 435,000 clinic visits would be affected by the year 2025.

Possible effects on hospitals could be:

- Longer waiting times to get a hospital bed or a clinic appointment
- Discharging patients faster from beds, possibly prematurely and leading to potential poorer clinical outcomes with potential higher costs of care for these patients in the future
- Overuse of outpatient services including EDs

These problems are especially acute in the East, South, and Central Regions, which have the highest percent of existing filled beds.
Planned Expansion Versus Projected Need, 2025

The number of planned beds falls short of the projected need by 108 beds. This bed gap is most pronounced in the South and East regions, which are projected to have a 31 and 27 bed gap by 2025. This assumes no other changes including hospital closures or moves.

<table>
<thead>
<tr>
<th>Region</th>
<th>Planned Expansion</th>
<th>Projected Need</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Coastal</td>
<td>46</td>
<td>59</td>
<td>(13)</td>
</tr>
<tr>
<td>North Inland</td>
<td>382</td>
<td>382</td>
<td>-</td>
</tr>
<tr>
<td>North Central</td>
<td>322</td>
<td>340</td>
<td>(18)</td>
</tr>
<tr>
<td>Central</td>
<td>-</td>
<td>18</td>
<td>(18)</td>
</tr>
<tr>
<td>East</td>
<td>90</td>
<td>117</td>
<td>(27)</td>
</tr>
<tr>
<td>South</td>
<td>11</td>
<td>42</td>
<td>(31)</td>
</tr>
<tr>
<td>Total</td>
<td>851</td>
<td>959</td>
<td>(108)</td>
</tr>
</tbody>
</table>

Note: This and the other gap analysis in this report assume patients will get their care in the region of their home which is not necessarily the case today. The analysis does not include into the calculations the fact that virtually all hospitals have primary and secondary markets that exceed the regions they are located in and some hospital providers have a county-wide market (e.g., Children’s, Kaiser and UCSD Medical Center)
Potential Impact of Hospital Closures

The following scenarios demonstrate the countywide impact of 1, 2, or 3 hospitals closing which could reduce the number of available beds by 743 and ED treatment stations by 52.

<table>
<thead>
<tr>
<th>Hospital Closures</th>
<th>Total Beds Lost</th>
<th>Total Treatment Stations Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>291</td>
<td>12</td>
</tr>
<tr>
<td>Two</td>
<td>442</td>
<td>32</td>
</tr>
<tr>
<td>Three</td>
<td>743</td>
<td>52</td>
</tr>
</tbody>
</table>

Source: Hospital Campus Surveys, 2006
Remaining Beds after Potential Hospital Closures, 2025

### Total Remaining Hospital Beds with Potential Closures, 2025

<table>
<thead>
<tr>
<th>Region</th>
<th>No Closures</th>
<th>1 Hospital</th>
<th>Net Loss</th>
<th>2 Hospitals</th>
<th>Net Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Central*</td>
<td>2,921</td>
<td>2,630</td>
<td>291</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Central</td>
<td>804</td>
<td>419</td>
<td>385</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>South</td>
<td>999</td>
<td>848</td>
<td>151</td>
<td>623</td>
<td>376</td>
</tr>
</tbody>
</table>

Note: The move of UCSD Medical Center’s inpatient beds (385) to the North Central region phased from 2014 to 2025 could result in a net gain of 94 beds to the North Central region.

### Total Remaining Hospital Beds after Potential Closures, 2025

- **North Central**
  - No Closures: 2,921 beds
  - 1 Hospital: 2,630 beds
  - Net Loss: 291 beds
  - 2 Hospitals: -
  - Net Loss: -

- **Central**
  - 1 Hospital: 419 beds
  - Net Loss: 385 beds
  - 2 Hospitals: -
  - Net Loss: -

- **South**
  - 1 Hospital: 848 beds
  - Net Loss: 151 beds
  - 2 Hospitals: 623 beds
  - Net Loss: 376 beds

The South region is the only region in this analysis at risk of losing two hospitals, which would decrease that region’s hospital bed total by 452.

Source: The Abaris Group, Hospital Bed Estimates, 2006
If one hospital closes, North Central would lose 12 ED treatment stations. In the South one hospital closure means the loss of up to 25 ED treatment stations and if two hospitals close up to 45 stations.

Note: This gap analysis does not include changes to UCSD Medical Center’s ED treatment stations in the Central region as they have announced they will attempt to keep the Hillcrest campus ED treatment stations open.

Source: The Abaris Group, Hospital Bed Estimates, 2006
Potential Hospital Bed Gaps Using Projected Needs, 2025

<table>
<thead>
<tr>
<th>Region</th>
<th>Current Hospital Beds</th>
<th>Projected Hospital Beds</th>
<th>Potential Change to Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005</td>
<td>2025</td>
<td>Gap</td>
</tr>
<tr>
<td>North Coastal</td>
<td>558</td>
<td>612</td>
<td>-31</td>
</tr>
<tr>
<td>North Inland</td>
<td>796</td>
<td>1,195</td>
<td>-60</td>
</tr>
<tr>
<td>North Central</td>
<td>2,312</td>
<td>2,671</td>
<td>-134</td>
</tr>
<tr>
<td>Central</td>
<td>907</td>
<td>920</td>
<td>-138</td>
</tr>
<tr>
<td>East</td>
<td>481</td>
<td>589</td>
<td>-29</td>
</tr>
<tr>
<td>South</td>
<td>1,049</td>
<td>1,075</td>
<td>-161</td>
</tr>
</tbody>
</table>

Risk margins of 5 and 15 percent (15 gap was used for the South and Central regions) were used to identify the possible gap in hospital beds by region.

For example, if the North Central region falls 5 percent short of the projection, the gap will be 134 beds and for the South region the gap is 161 beds or greater.

Note: This gap analysis does not describe total risk should one or more hospitals close or move.

Potential ED Treatment Station Gaps Using Project Needs

Risk margins of 10 percent (20 percent for the South and Central regions) were used to identify the possible gap in ED treatment stations by region.

For example, if the North Coastal region falls 10 percent short of the projection, the gap will be 6 stations. If the South region falls 20 percent short of the projection, the gap would be 15 ED stations.

Note: This gap analysis does not describe total risk should one or more hospitals close or move.

Source: The Abaris Group estimates based on hospital expansion plans. Larger risk percentages were used for ED beds due to the relatively smaller number of beds.
Gap Analysis - UCSD Medical Center’s Inpatient Bed Move
UCSD Medical Center Specific Plans

UCSD Medical Center has announced the following plans:

- They will move all Hillcrest campus inpatient beds (385) to a 500-bed hospital on their East (La Jolla) campus by 2030
  - By 2010 at their East campus, they will upgrade/add additional inpatient capacity (28 “universal” beds), a cardiac catheter lab and expand their ED (adding 10 ED treatment stations and an 8-bed clinical decision unit – CDU)
  - By 2014, move approximately 175 inpatient beds to their East campus leaving approximately 210 inpatient beds, the trauma center and the ED at the Hillcrest campus
  - By 2016, at their Hillcrest campus, the hospital plans to upgrade the ED and add a CDU
  - By 2030, the remaining 210 inpatient Hillcrest beds would move to their East campus
UCSD Medical Center Specific Plans (cont’d)

- All outpatient services currently at Hillcrest (including outpatient follow-up clinics for hospitalized patients) will remain at the Hillcrest campus with some of these services undergoing current expansion (e.g., outpatient surgery, 64-slide CT, interventional radiology, etc.)
- A free-standing ED/Urgent Care Center will remain in Hillcrest, if licensing permits, after full consolidation of beds
- Prior to the movement of any beds, UCSD Medical Center is undergoing or planning significant infrastructure and outpatient and inpatient improvements at their Hillcrest campus at an estimated current cost of $60 million
- All of these changes are subject to internal and state approval processes, availability of capital and regulatory changes
Where Do UCSD Medical Center Hillcrest Patients Reside?

### UCSD Medical Center Patients Place of Residence, 2004

<table>
<thead>
<tr>
<th>Patient's Residence</th>
<th>Total</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Coastal</td>
<td>1,072</td>
<td>5.6%</td>
</tr>
<tr>
<td>North Inland</td>
<td>1,109</td>
<td>5.8%</td>
</tr>
<tr>
<td>North Central</td>
<td>3,006</td>
<td>15.7%</td>
</tr>
<tr>
<td>Central</td>
<td>6,649</td>
<td>34.8%</td>
</tr>
<tr>
<td>East</td>
<td>1,814</td>
<td>9.5%</td>
</tr>
<tr>
<td>South</td>
<td>2,681</td>
<td>14.0%</td>
</tr>
<tr>
<td>Homeless</td>
<td>741</td>
<td>3.9%</td>
</tr>
<tr>
<td>Out of County</td>
<td>2,039</td>
<td>10.7%</td>
</tr>
<tr>
<td>Total</td>
<td>19,111</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

In 2004, 6,649 inpatients at UCSD Medical Center lived in the Central region (34.8 percent) and 2,681 inpatients lived in the South region (14.0 percent). UCSD Medical Center also provided inpatient care to 2,039 out-of-county residents.

Note: All numbers are estimates as the 2004 OSHPD data consolidates East and Hillcrest campuses. The estimated number of East Campus discharges were removed from this data based on 2003 OSHPD data that did not consolidate the campuses.

34.8 percent of the patients discharged at UCSD Medical Center Hillcrest live in the Central region. The Central and South regions combined for 9,330 (48.8 percent of their UCSDMC total) discharges in 2004, 44.7 percent of which were Medi-Cal users, 2.5 percent self-pay, 10 percent were CMS and 42.8 percent Other Payers (Private, Medicare, and an estimated portion of the All Other).

Note: Payer types differ from previous slide because different OSHPD files were used for this analysis. “All Other” category includes CMS/Other Indigent patients which has been estimated by The Abaris Group to be approximately 10 percent of the total discharges from Central and South region residents (665 and 268 discharges respectively).
### Payer Mix at South and Central Regions Acute Care Hospitals, 2004

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Region</th>
<th>Central Discharges</th>
<th>South Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Medi-Cal</td>
<td>Medicare</td>
</tr>
<tr>
<td>Scripps Mercy Hospital</td>
<td>Central</td>
<td>3,456</td>
<td>3,254</td>
</tr>
<tr>
<td>UCSD Medical Center - Hillcrest</td>
<td>Central</td>
<td>3,236</td>
<td>1,184</td>
</tr>
<tr>
<td>Paradise Valley Hospital</td>
<td>South</td>
<td>2,656</td>
<td>1,773</td>
</tr>
<tr>
<td>Scripps Memorial Hospital - Chula Vista</td>
<td>South</td>
<td>610</td>
<td>433</td>
</tr>
<tr>
<td>Sharp Chula Vista Medical Center</td>
<td>South</td>
<td>905</td>
<td>717</td>
</tr>
<tr>
<td>Sharp Coronado Hospital &amp; Healthcare Center</td>
<td>South</td>
<td>54</td>
<td>117</td>
</tr>
</tbody>
</table>

In 2004, UCSD Medical Center was the second largest Medi-Cal provider for the Central region (3,236 discharges) and the fourth largest for the South region (935 discharges). For self-payers, UCSD Medical Center was the fourth largest in the Central region and the fifth largest in the South region.

Note: Central and South region discharges from UCSD Medical Center East Campus were removed based on 2003 OSHPD data.

Source: OSHPD, Patient Origin Discharge File, 2004
There are three primary hospitals that serve underinsured inpatients in the Central region: Scripps Mercy Hospital, UCSD Medical Center, and Paradise Valley Hospital. These three hospitals see 66.5 percent of the Central region’s underinsured (13,171 discharges).

Note: 2004 OSHPD data consolidates UCSD East and Hillcrest campuses. The data presented from East and Hillcrest discharges are calculated from 2003 OSHPD data that did not consolidate the campuses.
Hospitals Serving South Region Safety Net Patients, 2004

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Percent of Total Discharges</th>
<th>Percent of Underinsured Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scripps Memorial Hospital - Chula Vista</td>
<td>19.0%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Sharp Chula Vista Medical Center</td>
<td>26.6%</td>
<td>23.9%</td>
</tr>
<tr>
<td>Paradise Valley Hospital</td>
<td>12.7%</td>
<td>18.6%</td>
</tr>
<tr>
<td>UCSD Medical Center - Hillcrest</td>
<td>6.1%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Children’s Hospital - San Diego</td>
<td>4.3%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Scripps Mercy Hospital</td>
<td>5.6%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Alvarado Hospital Medical Center</td>
<td>1.4%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Kaiser Foundation Hospital - San Diego</td>
<td>12.7%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Sharp Grossmont Hospital</td>
<td>1.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Sharp Memorial Hospital</td>
<td>3.7%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Scripps Memorial Hospital - La Jolla</td>
<td>2.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Sharp Coronado Hospital &amp; Healthcare Center</td>
<td>2.9%</td>
<td>0.8%</td>
</tr>
<tr>
<td>UCSD Medical Center - East Campus</td>
<td>0.7%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Palomar Medical Center</td>
<td>0.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Pomerado Hospital</td>
<td>0.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Tri-City Medical Center</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Scripps Memorial Hospital - Encinitas</td>
<td>0.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Fallbrook Hospital District</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Note: 2004 OSHPD data consolidates UCSD East and Hillcrest campuses. The data presented from East and Hillcrest discharges are calculated from 2003 OSHPD data that did not consolidate the campuses.
By 2015, there will be an estimated 54,368 patient days from UCSD Medical Center’s Hillcrest campus that will need to find treatment elsewhere. The number of available (unoccupied) beds by region reflect the available capacity if all of the remaining UCSD patient days still received care in the Central region, which is a conservative assumption as UCSD plans and will have the capacity to admit all current Hillcrest patients at their East campus by 2030. The number of available bed days are based on current hospital bed expansion plans, which call for 751 beds to be built by 2015.
Patient Days at UCSD Medical Center, 2025

In 2025, an estimated 128,963 patient days that would have been seen at UCSD Medical Center’s Hillcrest campus will need to be absorbed at their East Campus or by other hospitals. This chart also uses the conservative assumption that all UCSD patients would still get their care in the Central region. Because demand is projected to outpace capacity in half the regions, some Central, East and South regions patients would have to be absorbed out of their region. The number of available bed days is based on current hospital expansion plans.

<table>
<thead>
<tr>
<th>Region</th>
<th>A</th>
<th>B</th>
<th>Difference (A - B)</th>
<th>Regional Bed Occupancy Rates</th>
<th>Unused Available Bed Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Coastal</td>
<td>7,086</td>
<td>-</td>
<td>7,086</td>
<td>74.9%</td>
<td>20,331</td>
</tr>
<tr>
<td>North Inland</td>
<td>7,359</td>
<td>-</td>
<td>7,359</td>
<td>67.9%</td>
<td>73,529</td>
</tr>
<tr>
<td>North Central</td>
<td>19,848</td>
<td>-</td>
<td>19,848</td>
<td>73.8%</td>
<td>119,701</td>
</tr>
<tr>
<td>Central</td>
<td>46,433</td>
<td>-</td>
<td>46,433</td>
<td>152.8%</td>
<td>(103,677)</td>
</tr>
<tr>
<td>East</td>
<td>12,329</td>
<td>-</td>
<td>12,329</td>
<td>100.0%</td>
<td>(29,801)</td>
</tr>
<tr>
<td>South</td>
<td>17,898</td>
<td>-</td>
<td>17,898</td>
<td>113.4%</td>
<td>(103,688)</td>
</tr>
<tr>
<td>Other</td>
<td>18,010</td>
<td>-</td>
<td>18,010</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>128,963</td>
<td>-</td>
<td>128,963</td>
<td>86.0%</td>
<td>(23,604)</td>
</tr>
</tbody>
</table>

Source: The Abaris Group, 2006. Estimates based on OSHPD and individual hospital data and interviews.
The North Inland and North Central regions are expected to have the most excess bed capacity in 2015 and 2025. The Central and South regions are expected to be over capacity by 2015, and the East by 2025.

A gap would occur in these regions with or without the UCSD Medical Center’s move of inpatient beds due to a lack of new bed plans for those regions.

Note: This graph shows capacity in the Central region if all UCSD Medical Center patients still received care in the Central region. This is a very conservative assumption as UCSD Medical Center plans and has the capacity to admit all of their current Hillcrest patients at their East campus site by 2030. Bed capacity is based on the 85 percent occupancy rate assumption.

Medicare, Medi-Cal & Spending Gaps
Funding Gaps and Public Payer Spending

San Diego County health providers are disproportionately affected by low government payer reimbursement:

- Medicare’s geographical modifier, used to adjust physician payments for local cost of living, lumps San Diego County with 32 other rural counties in the state.

- San Diego County hospitals are among the lowest for State Medi-Cal expenditures (per member per month) of many other urban counties in the state.

- San Diego County ranks as fifth from last in the state for county spending per uninsured resident.

Sources: Federal Register, State DHS and the Insure the Uninsured Project Report on County Uninsured Expenditures
Medicare’s Geographical Modifier by California Metropolitan Area

<table>
<thead>
<tr>
<th>County</th>
<th>Work GPCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Clara</td>
<td>1.073</td>
</tr>
<tr>
<td>San Francisco</td>
<td>1.064</td>
</tr>
<tr>
<td>San Mateo</td>
<td>1.061</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>1.049</td>
</tr>
<tr>
<td>Alameda, Contra Costa</td>
<td>1.048</td>
</tr>
<tr>
<td>Orange</td>
<td>1.036</td>
</tr>
<tr>
<td>Sonoma</td>
<td>1.028</td>
</tr>
<tr>
<td>Marin, Napa, Solano</td>
<td>1.025</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>1.007</td>
</tr>
<tr>
<td>Ventura</td>
<td>1.007</td>
</tr>
<tr>
<td>Riverside</td>
<td>1.007</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>1.007</td>
</tr>
<tr>
<td>San Diego</td>
<td>1.007</td>
</tr>
</tbody>
</table>


San Diego’s GPCI* is one of the lowest in the state and the county is coupled with 32 other rural counties throughout the state unlike most other metropolitan communities.

Depending on the area/county of practice, a multiplier is used to adjust the Medicare payment to physicians practice cost to take into consideration the local cost of living.

*GPCI- Geographic Cost of Practice Index
San Diego County has one of the lowest rates of Medi-Cal hospital expenditures per person of all California counties.

<table>
<thead>
<tr>
<th>County</th>
<th>Total Population</th>
<th>Monthly Average Cost per User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contra Costa</td>
<td>1,019,101</td>
<td>$1,272</td>
</tr>
<tr>
<td>Sacramento</td>
<td>1,366,937</td>
<td>$1,210</td>
</tr>
<tr>
<td>Orange</td>
<td>3,047,054</td>
<td>$1,007</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>10,166,147</td>
<td>$968</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>1,950,806</td>
<td>$804</td>
</tr>
<tr>
<td>Alameda</td>
<td>1,500,228</td>
<td>$801</td>
</tr>
<tr>
<td>Riverside</td>
<td>1,888,311</td>
<td>$658</td>
</tr>
<tr>
<td>San Diego</td>
<td>3,039,277</td>
<td>$651</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>1,752,653</td>
<td>$577</td>
</tr>
<tr>
<td>California</td>
<td>36,728,196</td>
<td>$749</td>
</tr>
</tbody>
</table>

Source: CA Department of Health Services Calendar Year 2005 Medi-Cal Expenditures Report
San Diego County ranks fifth to last in the state in county spending per uninsured residents. Similar sized counties also rank below the statewide average. The four counties that rank below San Diego are, in order, Tulare, Orange, Merced, and Ventura.

1 The comparison groups Tehama, Colusa, Glen, and Lake counties together as a single county group. Counties missing from the analysis are Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Sierra, and Tuolumne.

Note: San Diego County operates public health facilities not considered in this analysis. They include a county operated psychiatric hospital, a skilled nursing facility (Edgemoor), and many other public health initiatives.

### County Spending Per Persons Uninsured, 2003

<table>
<thead>
<tr>
<th>County</th>
<th>Dollars Per Uninsured</th>
<th>47 County Comparison Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange</td>
<td>$108</td>
<td>45</td>
</tr>
<tr>
<td>San Diego</td>
<td>$131</td>
<td>43</td>
</tr>
<tr>
<td>Riverside</td>
<td>$243</td>
<td>34</td>
</tr>
<tr>
<td>San Bernardino</td>
<td>$324</td>
<td>28</td>
</tr>
<tr>
<td>California</td>
<td>$355</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: CHIS, 2003; U.S. Census Bureau; Insure the Uninsured Project
County Spending per Uninsured, Methodology

The number of uninsured in each county was calculated using 2003 California Health Interview Survey (CHIS) results and 2003 U.S. Census Bureau population estimates. The Insure the Uninsured Project staff acquired 2003 data on total county dollars spent on the uninsured. With this total and the total number of uninsured, the county spending per uninsured resident could be calculated.

\[
\frac{\text{Total County Spending on Uninsured}}{\text{Total Number of Uninsured Residents}} = \text{County Spending Per Uninsured}
\]
Input From Stakeholders and Consumers
Stakeholder Interview Results

What is the greatest demand on the safety net services?
1. Lack of primary care
2. Lack of mental health/substance abuse services
3. Use of ED services
4. Need for education/prevention
5. Chronic diseases/diabetes

What are the local barriers to access the safety net?
1. Cultural issues/language barriers
2. Lack of transportation options
3. Not enough capacity/lack of providers/beds/seismic retrofit
4. Limited access to care and hours of availability
5. Under funding
Stakeholder Interview Results

Are there any changes planned that could affect access or delivery of services?

**Strengths:**
1. Some increase in funding via different sources
2. Hospital expansions
3. Increasing mobile health clinics
4. Expanding clinics

**Weaknesses:**
1. Limited access/equity to healthcare
2. Inappropriate use of ED
3. Lack of cultural sensitivity
Stakeholder Interview Results

Opportunities:
1. UCSD move may be positive
2. Need prevention/education programs
3. Need to expand clinics/hours of operation
4. Create more organizational agreements/partnerships

Threats:
1. UCSD move may/will hurt healthcare safety net
2. Decreases in funding/resources/DSH money
3. Lack of transportation options
4. Immigration reform/undocumented immigrants
5. Hospital closures/lack of resources
Stakeholder Interview Results

Are there any best practices effective in accessing or delivering services?

1. Community clinics/mobile clinics
2. Local organizations like 2-1-1, SDKHAN, Project Dulce, etc.
3. Need funding/better reimbursement/cost sharing/obtaining DSH
4. Collaborations/partnerships among stakeholders
5. Education/prevention programs
Stakeholder Interview Results

*What areas of the safety net are the weakest?*

1. Mental health services/substance abuse services
2. Political environment/lack of countywide coordination
3. Under funding/eroding DSH
4. Lacking resources/capabilities/availability
5. Barriers to obtain insurance/re-enrollment/applying

*Aside from funding, what are the biggest challenges?*

1. Prevention/education of safety net consumer
2. Lack of funding
3. Political environment/healthcare is not a priority
4. Collaboration among providers/competition can hurt consumer
5. Access to care/equity
Consumer Focus Groups (113 participants)

1. San Diego’s health care safety net is extremely fragmented.

2. Many uninsured and underinsured patients face significant challenges accessing all levels of health care services (e.g., primary, specialty, tertiary).

3. FQHCs upfront, sliding fee scale requirements pose a significant challenge for many in accessing health care.

4. It is especially difficulty to access specialty care services.

5. Many participants reported that it was fairly easy to access some mental health care services from county mental health centers.

Note: Focus group results are not always generalizable and results are not indicative of all clinic sites.
Consumer Focus Groups

6. Many participants reported traveling to Tijuana for medications, primary, secondary, and dental care.

7. Many uninsured participants reported using the ED because they cannot afford services, and do not qualify for any programs.

8. Medi-Cal recipients were generally satisfied with their access to care.

9. Participants reported that it is generally easier to obtain health care services when covered by Medi-Cal than when uninsured.

10. Transportation is very challenging for many underserved patients.

11. Many users reported customer service issues.
Characteristics of a Strong Healthcare Safety Net
Characteristics of Strong Safety Nets

- **Access:** Sufficient culturally-sensitive entry points distributed throughout the community to facilitate effective use of services across the continuum of care.

- **Financing:** Stable source(s) of support to enable direct service provision and investment in capital and infrastructure for vulnerable and medically underserved.

- **Care Coordination:** Mechanisms to monitor and manage adequate and effective use of health services (broadly defined) across multiple sites of care.

- **Cost and Efficiency:** Community and institutional commitment/mandate to provide services to patients under fee structures that do not create disincentives to seek or receive adequate and appropriate health services. Implementation of business principles and financial/service management to maximize efficient use of resources.

- **Information Management:** Ongoing enhancements to IT and other patient information systems with mechanisms for regular review and analysis of data that loops back to care delivery.
Examples of Strong Safety Net Systems

<table>
<thead>
<tr>
<th>Access</th>
<th>New York City Health and Hospitals Corporation</th>
<th>Vast network of hospitals, primary care clinics, diagnostic and treatment centers, long-term care facilities, etc. in city with excellent public transportation system.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financing</td>
<td>South Broward Hospital District (South Florida)</td>
<td>County support (through property tax) for network of hospitals and health facilities to care for uninsured. Dedicated primary care clinics with links to specialty services coupled with strong disease management and deep outreach into community.</td>
</tr>
<tr>
<td>Care Coordination</td>
<td>Boston Medical Center</td>
<td>Large non-profit safety net hospital with formal relationships with multiple community health centers to coordinate care across primary, specialty, inpatient and social service needs. Community health center docs round at BMC and manage CHC patients when hospitalized.</td>
</tr>
<tr>
<td>Cost and Efficiency</td>
<td>Denver Health</td>
<td>Complete redesign of inpatient and outpatient services and administrative functions. Imported business principles of leading companies in US and Europe, then customized to public hospital setting. Heavy reliance on data and analysis of performance.</td>
</tr>
<tr>
<td>Information Management</td>
<td>Montefiore Medical Center (Bronx, NY)</td>
<td>Integrated health care system with specialty care hubs at hospital and primary care access points. IT system tracks all Montefiore-provided encounters and information is used to manage patient care.</td>
</tr>
</tbody>
</table>
Examples of Community-Wide Activity

- **Washington, DC: DC Healthcare Alliance**

  Public/private partnership formed after closure of public hospital. Membership program for uninsured, low-income residents who are ineligible for other public programs. Provides access to full range of health services, including inpatient care, primary and specialty services, dental care and pharmaceuticals.

  - **Benefits:** Improved access to primary and specialty care, coordination across sites of care. Medical home for those most likely to be without either public or private insurance.

  - **Challenges:** Low payment rates (at Medicaid levels), limit willingness of providers to participate.
Examples of Community-Wide Activity

- **Austin, Texas: I-Care: Indigent Care Collaboration**

  Patient clinical data repository (over 300,000 patients) through which safety net providers build shared longitudinal electronic health records for uninsured and other low-income patients to improve care continuity and delivery. Begun with foundation funding and HRSA grants; continuing through local grants and in-kind support from providers.

  - **Benefits:** Provides information on continuum of care, identifies gaps, streamlines data collection and information management on community’s most vulnerable patients. Also screens for eligibility for public programs, thus generating revenue for safety net providers.
  
  - **Challenges:** Ongoing data collection and management is onerous and use of data for quality improvement is in its infancy.
A High-Performing Safety Net – Where We Need to Be

A high-performing safety net:

- Delivers demonstrably high-quality care to publicly insured and uninsured patients across institutional settings and longitudinally through each patient’s life
- Maximizes collaboration between individual providers, ensures timely care and follow up is provided especially across transitions (e.g. inpatient to outpatient)
- Uses information technology to ensure the flow of clinical information between caregivers
- Is accountable and measures its performance and acts accordingly

Source: Siegel, B., Regenstein, M., submitted for publication
Strengths, Weaknesses, Opportunities and Threats (SWOT) Summary
Strengths

- Network of community clinics
- Collaborative network activity between the clinics and some hospitals with “best practices”:
  - Quality models
  - Disease management
  - Group purchasing
- Commitment, dedication and interest of local providers, stakeholders, and the community
- Hospital EDs as significant providers of safety net services
- County of San Diego initiatives
Strengths

- Network of trauma centers
- County-wide collaborative groups
- Numerous groups that plan and deliver improved access to the safety net through best practices. Examples include:
  - Serial Inebriation Program (SIP)
  - Cancer Navigator
  - Homeless Outreach Team (HOT)
  - Psychiatric Emergency Response Team (PERT)
  - Volunteers in Medicine (VIM)
  - Community Health Improvement Partners (CHIP)
- County Medical Services (CMS) income threshold raised resulting in increased eligibility and enhanced funding
- Large quantity of relevant historical reports
San Diego’s safety net is served by a mosaic of advocacy and service providers.
Weaknesses

Safety Net Access:

- There is an erosion of providers willing to serve the safety net
- Extremely limited access to specialty physician providers
- Clinics lack significant after-hour operations
- Up front payment clinic practices limit access
- Perceived and uneven access to affordable pharmaceuticals
- Transportation to/from safety net services and the lack of public transportation in certain geographic areas
- Lack of awareness/publication/education regarding services and programs; no clearly coordinated effort on the “how to” for access
Weaknesses

Capacity:

- Delays in achieving clinic appointments and long waits with some clinics and EDs
- Long patient off-load challenges for EMS providers
- Fragile hospital financial stability in the South county region
- ED on-call physician challenges with trauma centers and their EDs believing they have become the dumping ground for some other hospital responsibilities
- Lack of complete adoption of best-practice outpatient and inpatient access and throughput strategies by many providers
Weaknesses

Utilization/Outreach:

- Competitive hospital environment leading to aggressive competition and technology acquisition without regard to regional needs
- Active growth of community clinics:
  - Without benefit of a master plan
  - Leading to some overlap and duplication
  - Lack of complete collaboration or benefit of initiatives and programs
- Non-emergent use of hospital ED:
  - Leads to capacity challenges
  - Higher cost of care
  - Episodic care at best
- Limited coordinated outreach to specific groups (e.g. elderly, cancer, mental health, chronic diseases)
Weaknesses

Barriers:

- Barriers with the CMS and Medi-Cal application, enrollment and re-enrollment process
- Limited productivity and the lack of streamlining for these same enrollment/re-enrollment processes
- CMS “volunteer” adoption of the new Medi-Cal legal resident standard
- Cultural issues including translation services, staff and immigration sensitivities and stigmas surrounding the use of certain services (e.g. mental health)
- Customer service and access barriers at some community clinics
Weaknesses

County-wide Issues:

- No county-wide safety net coordination structure
- The County has not pursued expanded opportunities for bringing in new healthcare funds that are at no cost to the County (e.g. Children’s Health Initiative, waiver match)
- CMS payments have not been structured for special programs or populations or to improve quality
Opportunities

- Key collaboratives and delivery systems that coordinate and enhance access that could be better leveraged:
  - 2-1-1 San Diego/Reach Out
  - Healthy San Diego
  - Healthy Families
  - Assertive Community Treatment
  - Community health workers (e.g. *promotores*)

- Global willingness to explore other effective access and healthcare delivery models/programs:
  - Identifying best practice communities
  - Leveraging current dollars
  - Exploring funding enhancements
Opportunities

- Ability to create a countywide coordination structure:
  - Establishes a true county-wide collaborative
  - Creates a safety net “vision”
  - Creates measurable access goals for all health care regions
  - Eliminates gaps
  - Recommends funding for initiatives
  - Studies
    - Access
    - Customer service
    - Disease management
    - Disparities
    - Outcomes
    - Prevention
    - Quality
  - Further best practices
Opportunities

- Enhance and build on the coordination/collaboration among the County, community clinics, hospitals and other stakeholders:
  - Access hours/days
  - IT/EMR master planning
  - Quality and disease management initiatives
- ‘Big picture’ potential for fixing rising costs of healthcare for the un/underinsured
- Improve:
  - collaboration between public & private sector
  - hospital coordination with its competitors
  - education and training on cultural sensitivity for all provider types at all levels
Opportunities

- Train/hire healthcare staff of different cultural backgrounds
- Leverage of current County dollars and other public funds:
  - Targeted initiatives
  - Potential waiver (Section 1115) leverage of match
  - Increase funding
  - Enhance efforts of insurance coverage for all children
- Prop 63 mental health funding:
  - Creation of new programs
  - Study effectiveness
- Prevention initiatives:
  - Study and test programs that have a true health impact
  - Determine the true cost
    - Cost avoidance
    - Healthy community
    - Consumer contribution to society
- Many initiatives to assure insurance for all San Diegans (e.g. San Diegans for Health Care Coverage effort for coverage for small employers, The ACT Initiative for children)
Threats

- Changing demographics; growing aging population (elder care) and the demand on safety net services
- Growing immigrant/refugee populations poses increased access and cultural challenges
- Continued access difficulties leading to higher-cost consequences (e.g. sicker patients, over utilized EDs)
- Growing number of working un/underinsured
- Lack of necessary funding to globally ”fix” the system
- High Healthy Family disenrollment rates (84.5 percent)
- Potential reduction in Medi-Cal beneficiaries due to citizenship documentation requirement
Threats

- Changing payer climate:
  - Medicare/Medi-Cal cuts
  - Threaten local Med-Cal MCO plan
  - Highly managed market
  - Eroding hospital payer mix
- Fragile funding sources for the community clinics
- Unfunded mandates:
  - EMTALA
  - Mandatory seismic retrofits
  - Staffing ratios
- SANDAG’s Transportation Plan:
  - While ambitious, there is a potential for under funding
  - Does not specifically address health care safety net needs
Threats

- Potential reduction of or limit with hospital capacity:
  - Alvarado Hospital ongoing use/status
  - South county hospitals vulnerability
  - UCSDMC move of inpatient beds
  - Tri-City Hospital’s bond failure
  - Ability for any small hospital to sustain capabilities
Anywhere from 21,000 to 34,000 San Diego County Medi-Cal beneficiaries could lose coverage because of a new Federal requirement for proof of citizenship (birth certificate, passport or other approved forms).

### Potential Loss of Medi-Cal Beneficiaries Due Citizenship Proof

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US</strong></td>
<td>51,285,000</td>
<td>3.5 million</td>
<td>8,192,000</td>
<td>419,520 - 819,200</td>
<td>344,488</td>
<td>20,700 - 34,450</td>
</tr>
<tr>
<td><strong>California</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>San Diego</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Center on Budget & Policy Survey, 1/6/06; CA DHS, Medical Care Statistics Section; The Abaris Group extrapolation
The Institute of Medicine’s (IOM) recent report on describes alarming facts about emergency care systems in the country:

- ED’s and Trauma centers are overcrowded
- Ambulance diversion and ED backup are hospital-wide problems that must be addressed.
- Critical Specialists are often unavailable to provide emergency and trauma care.
- The emergency care system is ill-prepared to handle a major disaster.
- EMS and ED’s are not well equipped to handle pediatric care.
- Coordination of the regional flow of patients is an essential tool in ensuring quality pre-hospital care.

Source: The Future of Emergency Care Report Series, The Institute of Medicine, 6/14/06
Conclusions
Conclusions

Conclusion One:
San Diego County has taken a major step by studying the healthcare safety net with the potential to rethink the delivery of healthcare safety net services within the community:

- Global in scope
- Collaborative process
- Bold study allows for bold solutions
- Huge opportunity to recast the safety net to stabilize, expand coverage and assure quality outcomes
Conclusions

Conclusion Two:
The San Diego County community benefits from a countywide range of resources that either responds to or addresses many of the healthcare needs of the poor.

Benefits include:

- Providers
- Access facilitators (Community Health Workers, public health workers, Consumer Center for Health Education & Advocacy, 2-1-1, Reach Out, etc.)
- Community collaborations
Conclusions

Conclusion Three:
There are tremendous capacity challenges which also provide an opportunity for the community to rethink what the safety net will look like:

Challenges include:
- Hospital current and future capacity needs are at serious risk in certain regions of the county
- Perceived and actual access issues are prevalent
- Current community collaborations do not extend to a true shared vision
Conclusions

Conclusion Four:
The announcement of UCSD Medical Center’s move of inpatient beds (over 25 years) from their Hillcrest to their East campus move will impact some patients and their families. However, the impact is expected to be minimized because:

- Most of their current patient work is outpatient (86 percent) and UCSD has plans to leave all outpatient services and an Urgent Care/ED product at Hillcrest
- UCSD Medical Center plans to and will have the capacity to manage all current inpatients at their East campus
Conclusions

Conclusion Four (cont’d):

- As a teaching and tertiary hospital, many of UCSD Medical Center’s admissions are through its network of academic physicians and direct relationships with community physicians and clinics.
- The hospital appears to have adequate and expanding plans to meet patient and family transportation needs.

- There are likely to be a small number of patients and their physicians, with patients who live in the Central and South regions, who will choose to or be unable to be admitted to the UCSD East Campus. For these patients and their family members, the move of inpatient beds will be an inconvenience and will create some access issues.
Conclusions

Conclusion Four (cont’d):

- While there will likely be sufficient total beds in the county to meet total patient needs, the location of these inpatient beds will not necessarily be in the regions where the patients reside.
- The access gap will mean for some patients that cannot get their care at a local hospital, their transport and commute times will be longer.
- A gap is likely to exist with or without the move of UCSD Medical Center.
- In both the Central and particularly the South regions, long waits in EDs and ambulance bypass/diversion have been historical problems and will likely be further impacted by the lack of bed planning within those region and only modestly by the inpatient move by UCSD Medical Center Hillcrest.

Note: Details on UCSD Medical Center's plans and additional findings are available in the Appendix section of this report.
Conclusions

Conclusion Five:
The San Diego healthcare safety net lacks a lead agency, seamless coordination and an integrated delivery system. Thus, a fragile patchwork of healthcare access and providers exists. This drives the current characteristics of the provider system:

- Lack of a strategic vision
- Lack of a governance or accountability structure
- Assures healthcare access and fragmentation challenges
- Healthcare delivery gaps
- Limited public expenditures and leveraging of available funds
- Ongoing competition for limited resources
Conclusions

Conclusion Six:
San Diego County’s Board of Supervisors study has the potential to bolster and strengthen the safety net.

Key opportunities include:

- Developing a shared vision of the goals of the safety net
- Improved provider planning and coordination
- Leveraging and expanding current funding sources
- Developing and implementing initiatives that drive to vision execution
- Developing stronger interfaces, thus creating stronger networks of delivery
Conclusions

Conclusion Seven:
The largest threat to the healthcare safety net in San Diego County is the potential failure to address the conclusions of this report.

Key threat drivers include:

- Reducing revenue streams
- Rapidly increasing cost of care
- Healthcare capacity challenges
- Vulnerable hospitals in key safety net regions
- Unfunded mandates
- Healthcare worker challenges
Recommendations
Recommendations – System Planning & Oversight

System Planning and Oversight
San Diego County stakeholders should develop a collaborative countywide coordination and oversight structure that uses a public/private partnership model. Early duties would include:

- Create a vision statement for the safety net
- Develop a countywide performance dashboard for the safety net which is periodically published to all stakeholders
- Develop a series of summits around the key safety net features recommended in this report
- Develop resources for needed studies
- Conduct site visits to best practice safety net communities
- Monitor the UCSD Medical Center and other healthcare provider’s transitions affecting the safety net
System Planning and Oversight

Suggested membership might include executive leaders from:

- Community clinics
- Hospitals
- Access/consumer advocates
- County of San Diego representatives
- Targeted population stakeholder groups
- Medical Society
- Health plans
- Business community
- Elected officials
- Consumer groups representing all ages
- Other key stakeholders that have an interest in a strong healthcare safety net
System Planning and Oversight
The countywide coordination and oversight structure should have task forces to address the key recommendations of this report. The initial recommended task forces are:

- **Safety Net Planning & Oversight Governing Board**
  - Access Task Force
  - Financing Task Force
  - System Reform and Best Practices Task Force
Recommendations – Financing

Financing:

San Diego County stakeholders should explore a variety of methods to leverage and enhance funding sources for the safety net:

(1) Investigate mechanisms to augment and generate additional funds:
   a) Waiver opportunities (Section 1115)
   b) Children’s Health Initiatives
(2) Grant funds to support special studies, pilot tests and targeted initiatives
(3) Advocate to resolve the inequities with Medicare and Medi-Cal payments
(4) Increase spending for indigent care using federal, state and local funds
(5) Evaluate models for using current funds more creatively and efficiently:
   a) Targeting new funds for prevention and disease management
   b) Develop programs to case manage high-cost cases
   c) Create carefully targeted education programs designed to improve early access
Recommendations – Access

Access:
San Diego County stakeholders should re-engineer and close the key access gaps identified in this report:

1. Expand current low cost insurance options for businesses
2. Address the disenrollment problems with Healthy Families
3. Study and modify where possible policies and practices related to Medi-Cal and CMS eligibility/enrollment
4. Develop a coordinated countywide enrollment plan with goals, timetables and resources needed in cooperation with the community’s access/consumer advocates (e.g. 2-1-1, Community Health Workers, Reach Out, Consumer Center for Health Education and Advocacy, etc.)
Access:

(5) Create stronger interfaces and portals for accessing primary and specialty care for the safety net:
   a) Adopt and expand national and local model safety net interfaces for hospital/ED to clinic referrals
   b) Expand existing physician specialist referral programs (e.g. Reach Out, UCSD clinic programs, Medical Society, Volunteers in Medicine, etc) with specific targeted goals

(6) Create stronger interfaces and coordination of benefits between physical and mental health programs

(7) Adopt enhanced practices and policies to substantially improve cultural sensitivity for safety net customers at the inpatient, outpatient and clinic environments

(8) Quantify, trend and correct ED and trauma center transfers that involve the requesting hospital’s inability to access an on-call physician specialist
Recommendations – System Reforms and Best Practices

System Reforms/Best Practices

San Diego County stakeholders should adopt and implement system reforms designed to improve coordination, strategic planning and best practices:

1. Explore and adopt incentives for implementation of best-practice clinical processes on quality, patient flow and customer service
2. Develop targeted programs with populations that experience disparities for accessing health care services in the safety net
3. Immediately initiate regional collaborative planning to stabilize and enhance access and financing of health care resources with priority attention given to regions with the highest risk (e.g. South Region)
4. Develop and implement a comprehensive plan to enhance strategic planning and coordination with and between healthcare providers across the healthcare continuum
Recommendations – System Reforms and Best Practices

System Reforms/Best Practices

(5) Foster cooperation and the shared safety net vision with all traditional, grant and foundation funding sources for these and other safety net initiatives

(6) Develop and enhance countywide coordinated prevention efforts with high yield targets supported by a wide range of constituent groups (e.g. public health, provider, business, schools and community-based organizations)

(7) Establish a consistent and compatible information management system for access and care rendered throughout the safety net
Thanks To Our Partners

Community:

- Consumers
- Many community coalitions and advocacy groups
- Hospital, clinic and physician providers
- Individual stakeholders with an interest in the safety net
- San Diego County Health and Human Services Agency
- Many members of the public that provided input for this study
Appendix
Methodology

Interviews:

- 13 scheduled consumer focus groups (113 participants)
- 151 interviews (231 interviewees)
- 3 provider focus groups (EDs, trauma center directors & managers)
- 12 Town Tall meetings (363 total participants)
- 17 hospital site visits/interviews
- 6 community clinic site visits representing 9 clinics
Methodology

Study and data analysis:

- 51 historical national, state and local safety net reports
- State hospital and community clinic (OSHPD) data mining
- Focused survey of acute-care hospitals
- Specialized data requests
Key Project Staff

Technical:

The Abaris Group:

– Mike Williams, President
– Juliana Boyle, VP/Economist
– Mark Zocchi, Senior Analyst
– Bill Bullard, Senior Researcher
– Jonathan Chin, Senior Researcher
– Chuck Baucom, Mapping/GIS
– Dan Wong, Analyst
Key Project Staff

Technical

George Washington University Department of Health Policy:
  – Bruce Siegel, MD, MPH
  – Marsha Regenstein, PhD
  – Lea Nolan, MA

Demographic/Epidemiologist:
  – Christine Payne, PhD, Healthcare Demographer
  – Pam Gosler, CPA, PhD, Epidemiologist

Clinical Experts:
  – Kimball Maull, MD, FACS
  – Connie Stalcup, RN, MSN
Principles for the Safety Net Coordination Structure
Countywide Coordination Structure - Principles

Principles of System Planning and Oversight

The general principles proposed for the countywide coordination and oversight structure are:

- A collaborative approach to safety net planning and “global vision” increases the probability of the safety net improving and stabilizing.
- The coordination structure would have the potential of wielding significant informal leverage through the representative stakeholder’s volunteer endorsement of the principals and vision adopted by the structure.
- A public/private partnership provides the ideal relationship and assures the highest potential to achieve success with the goals recommended for this study.
- Valuing of identified local and published national best practices on safety net patient access, flow, customer service and cost efficiencies will assist in accelerating success with these goals.
Countywide Coordination Structure - Principles

Principles of System Planning and Oversight

- The vision, goals and forecasts of this report represent a snapshot in time and should be verified or updated every three years
Best Practice Communities and Resources
Best Practice Safety Net Collaboratives

A sample of best practice communities:
The following are communities that participated in the Community Care Network Demonstration Project:

Healthy Families Partnerships (Phoenix, AZ); Jurupa Community Partnership (Riverside, CA); Solano Coalition for Better Health (Vallejo, CA); Northwest Georgia Healthcare Partnership (Dalton, GA); South Central Health Network (Twin Falls, ID); Metropolitan Chicago Community Care Alliance (Chicago, IL); Decatur Community Partnership (Decatur, IL); Cambridge Health Alliance (Cambridge, MA); Vision for Health Consortium (Baltimore MD); Franklin Community Partnership (Farmington, ME); Creating a Healthier Macomb (Clinton Township, MI); Itasca Partnership for Quality Health Care (Grand Rapids, MN); HealthCare 1999 (Pembroke, NC); Sullivan County Community Health Network (Claremont, NH); Camden’s Learning Collaborative (Camden, NJ); Broome Community Partners...Uniting for Healthy Families (Binghamton, NY); Oregon Health Systems in Collaboration (Lake Oswego, OR); Capital Region Health Futures (Camp Hill, PA); Lancaster Community Health Plan (Lancaster PA); Tioga County Partnership for Community Health (Wellsboro, PA); Bamberg County Multi-Disciplinary Committee (Denmark, SC); West Texas Southeaster New Mexico Community Care Consortium (El Paso, TX); Rural Health Outreach Program (Arrington, VA); Lincoln County Public Health Coalition (Odessa, WA); The Central Area Health Center (Seattle, WA)

Other best practices communities

Washington, DC, DC Healthcare Alliance
Austin, TX: I-Care: Indigent Care Collaborative

1 Sponsored by the Health Research and Education Trust (HRET) of the American Hospital Association and partially funded by The Robert Wood Johnson Foundation.
Best Practice Resources:

A sample of web sites that publish best practice outpatient and inpatient examples:

- Institute of Health Improvement – ihi.org
- Volunteer Hospital Association – vha.org
- University Health System Consortium – uhc.edu
- Urgent Matters – urgentmatters.org
- Medical Group Management Association – mgma.com
- National Association of Public Hospitals and Health Systems – naph.org
- Healthcare Advisory Board – advisory.com
- The Abaris Group – abarisgroup.com

¹ Sponsored by the Health Research and Education Trust (HRET) of the American Hospital Association and partially funded by The Robert Wood Johnson Foundation.
UCSD Medical Center – Additional Findings
Findings - UCSD Medical Center Plans

Short Term:

- There are no planned inpatient bed moves for the next nine years.
- Two south county hospital providers have had serious financial challenges for in excess of five years.
- These challenges threaten all hospital providers in the South and Central regions.
- Those challenges are likely to drive a need to change their cost, revenue and/or service delivery models in the near future.
- This short-term need exists irrespective of the planned move of UCSD’s inpatient beds.

Note: There is a third hospital in the South region with a history of financial losses that has recently become more financially stable but could be at risk in the future.
Findings - UCSD Medical Center Plans

Medium Term (2015):

- The move of 175 beds by 2014 will reduce inpatient capacity at UCSD Hillcrest by 46 percent (increasing capacity at their East Campus by 122 percent)

- A modest number of patients are currently admitted to UCSD Medical Center from the South region (2,681) and approximately 50.5 percent of these patients are insured (e.g. Medicare, private and other insurance)

- A larger number of patients are admitted from the Central region (6,649) of which 39.6 percent are insured
Findings - UCSD Medical Center Plans

Medium Term (2015):

- The uninsured from the Central and South regions make up a small part of the inpatient admissions at UCSD Medical Center (1.7 percent and 4.6 percent, 113 and 124 patients respectively) and the number of County Indigent is a modest number as well (10 percent for both regions, 665 and 268 patients respectively).

- The ED and trauma center will remain open during this time period and there will be no impact on these services with the exception of the likelihood of a small number of patients who would bypass that ED by ambulance to a closer full service hospital or that might need to be transferred from the Hillcrest campus or admitted to specialized units at their East campus.

- UCSD Medical Center has significant faculty and resident relationships with physicians and community clinics that largely drive the source and location of hospital admissions.
Findings - UCSD Medical Center Plans

Medium Term (2015):

- For this time period, the move of 175 inpatient beds is potentially mitigated by the fact:
  - UCSD Medical Center has plans and will have the capacity to retain and serve all UCSD patients after consolidation of inpatient beds.
  - With this move, UCSD Medical Center will be able to operate at their full licensed capacity which they have not been able to do for some years.
  - A large percentage (86%) of UCSD Medical Center’s work is outpatient and outpatient services are expected to remain and expand at the Hillcrest campus.
  - A large percent of the inpatients will be insured.
  - Existing hospital capacity is likely to be available within the South and Central regions to partially meet the potential incremental patient needs and capacity is available in other regions to totally meet this need.
Findings - UCSD Medical Center Plans

Medium Term (2015) (con’t):

- The move of the initial 175 inpatient beds is further potentially mitigated by the fact:
  - The announced opening of a clinical decision unit (CDU) at both campuses will likely reduce ED inpatient admissions by up to 30 percent¹
  - Outpatient services at Hillcrest will remain the same or grow
  - Those needing transportation (e.g. family members of Hillcrest displaced East campus inpatients) will be met by the hospital’s planned transportation service (twice hourly and subject to expansion)

¹ This assumes the hospital operates a state of the art observation medicine program consistent with those that have demonstrated admission rate reductions and improve cost effectiveness of the care.
Findings - UCSD Medical Center Plans

Longer Term (2025):

- The complete move of all 385 beds coupled with the lack of hospital expansion plans in the Central and South regions will impact the access for those patients that have historically used UCSD Medical Center Hillcrest for inpatient admissions that choose to or are unable to be admitted at their East campus.

- While there will likely be sufficient total beds in the county to meet total patient needs, the location of these inpatient beds will not necessarily be in the regions where the patients reside.

- The access gap will mean for some patients who cannot get their care at a local hospital, that they will be disproportionately affected and their transport and commute times will be longer.

- A gap is likely to exist with or without the move of UCSD Medical Center.
Findings - UCSD Medical Center Plans

Longer Term (2025):
This is potentially mitigated by:

- The actual capacity will exist at their East campus to handle inpatient demand
- There is current and expected expansion of inpatient beds throughout the county that also could meet this demand
- The existence of a freestanding ED or similar product and the CDU will likely mitigate most of the ED needs and a portion of the inpatient needs (only lower acuity patients will likely to be transported by ambulance to the freestanding ED/urgent care center)
- UCSD Medical Center and numerous other San Diego hospital providers have successfully operated in the past as countywide providers and safety net providers

1 This assumes the hospital operates a freestanding ED and a state of the art observation medicine unit consistent with other national models.
Findings - UCSD Medical Center Plans

Other general findings:

- While the data suggests that actual future capacity needs will be met, the emotional impact cannot be ignored.
- When a hospital leaves a region in a community where it has been a leader in healthcare for the poor, it is likely to be perceived as having a significant impact on those who reside in that community whether they can receive care elsewhere or not.
- For some poor and the other underinsured who need inpatient care and cannot get it in the community they reside:
  - Inpatient care will necessarily have to be provided in other regions.
  - Patients will require longer transport times.
  - Some family members will experience some delays and challenges when visiting their family members who are admitted to other hospitals outside the regions they live.
- In both the Central and particularly the South regions, long waits in the ED and ambulance bypass/diversion have been historical problems and will likely be further impacted by the lack of bed planning within those region providers and only modestly by the inpatient move UCSD Medical Center Hillcrest.
Findings - UCSD Medical Center Plans

Longer Term (2025):
UCSD Medical Center plans to move their trauma center to their East campus. An automatic move is not possible under current State regulations:

- Current State regulation requires that a redesignation process occur for any new trauma center
- A revised State-approved trauma plan would also be likely needed
- The previous trauma system study submitted to the Board of Supervisors¹:
  - Recommends that a complete needs assessment be conducted if any trauma center were to close
  - The needs assessment should include reassessing many of the volume-driven assumptions of the trauma system including trauma triage procedures, on-call coverage costs, the practice of co-locating trauma centers, etc.

¹ San Diego Trauma System Assessment, The Abaris Group, 2003
San Diego County Information Technology Best Practice
Regional Health Information Organization (RHIO)

- RHIOs are multi-stakeholder organizations (hospitals, clinics, etc.) created to integrate and facilitate the exchange of patient information within healthcare systems.
- Their purpose is to reduce the costs of healthcare services, improve the quality of services, and offer better services as a result of more informed patients and physicians.
- It is estimated that 44,000 – 98,000 people die each year because of medical errors. Having medical history available to any physician, anywhere in the system will help reduce these errors.
- More than 150 RHIOs have been established nationwide, however most are still in the planning/organizational phase.
San Diego Medical Information Network Exchange (SD Mine)

- San Diego County Medical Society and California Institute of Information Technology & Telecommunications are working together to develop a countywide strategy to deliver “real time” healthcare information via a RHIO.
- The initiative is called SD Mine and is funded by a grant from the Blue Shield of California Foundation.
- It is being designed to yield measurable improvements in quality and patient safety for healthcare providers.
- The initial project is focused on linking the 19 emergency departments throughout San Diego to find underinsured and uninsured patients, who use the ED as their main source of medical care, a medical home (a physician or clinic).
- Many of these underinsured and uninsured patients are eligible for some type of coverage, but have difficulty completing the paperwork to enroll.
- CalRHIO, a not-for-profit statewide organization providing services to RHIOs in California, is working closely with SD MINE to help the initiative meet statewide guidelines.
Capacity Challenges for Major Emergencies
Disaster Preparedness

The underlying philosophy of disaster management is that every event is handled at the lowest possible geographic, organizational and jurisdictional level.

~ Department of Homeland Security (DHS), 2004
Regional Preparedness

- Regions must be self-sufficient for at least 72 hours
- Identify surge capabilities in both hospitals and alternate care sites
- Activate additional staffing, such as Medical Reserve Corps (MRC)
- Educate citizens on self-help and supporting others (e.g. CERT)
- DHS, HRSA and CDC funding available to counties to prepare

National Preparedness

- Equipment – Strategic National Stockpile (SNS) includes ventilators, antivirals, antibiotics, other medical supplies
- Staffing – Disaster Medical Assistance Teams (DMAT)
- Funding – Reimbursement for operations, additional staffing, etc.
- Coordination – National Incident Management System (NIMS)
State of Our Nation

Despite the lifesaving feats performed every day by ED and ambulance services, the nation's emergency medical system as a whole is overburdened, under-funded, and highly fragmented.

The emergency care system is ill prepared to handle a major disaster:

- With many EDs at or over capacity, there is little surge capacity for a major event
- EMS received only 4 percent of the Department of Homeland Security first responder funding in 2002 to 2003
- Non fire EMTs have received less than one hour of disaster response training
- Both hospital and EMS personnel lack personal protective equipment needed for chemical, biological or nuclear threats

~ Institute of Medicine of the National Academies, June 2006 (drawn from all three reports)
State of San Diego

While San Diego is no exception to the Institute of Medicine’s national findings, the county has made significant strides to be prepared

Steps taken:
1) Regional, consolidated approach to trauma care that is nationally recognized for its excellence
2) 70 disaster exercises completed within the last two years, significantly more than most other California counties
3) Above average HRSA funding directly to hospitals for bioterrorism, natural disaster, and pandemic influenza surge capacity equipment
4) 18 hospitals currently have the ability to triage and treat 10 or more patients in negative pressure isolation – HRSA benchmarks only require one
San Diego Disaster Exercises and Drills

*During the last two years, 70 different table top, multi-level, and full-scale exercises have been completed*

- 24 table top exercises, including biological, explosive, WMD, pandemic influenza, and border health
- 10 MMST drills/trainings (6 chemical, 3 WMD, 1 high explosive)
- 4 earthquake functional drills
- 3 state-wide hospital drills (2 WMD, 1 biological)
- 3 point of distribution (POD) exercises (2 biological, 1 mass prophylaxis)
- 9 exercises planned between September and November 2006
National Bioterrorism Hospital Preparedness Program (HRSA Grant)

- Through a federal grant from HRSA, counties must prepare for potential bioterrorism incidents

<table>
<thead>
<tr>
<th>Incident</th>
<th>HRSA Benchmark within 3 hours</th>
<th>San Diego Capacity within 3 hours</th>
<th>San Diego Capacity within 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Infectious Disease</td>
<td>1,526</td>
<td>1,417</td>
<td>3,089</td>
</tr>
<tr>
<td>Acute Chemical Poisoning</td>
<td>152</td>
<td>909</td>
<td>1,284</td>
</tr>
<tr>
<td>Burn/Trauma</td>
<td>152</td>
<td>794</td>
<td>988</td>
</tr>
<tr>
<td>Radiation-Induced Injury</td>
<td>152</td>
<td>896</td>
<td>1,249</td>
</tr>
</tbody>
</table>

Source: HRSA, San Diego County EMS

- All participating hospitals (those with Basic or Comprehensive EDs) currently exceed the HRSA standard for at least one negative pressure isolation room and each has the capacity to treat 10 or more patients using negative pressure isolation
Pandemic Flu Scenario

- Hospital bed demand during a pandemic flu outbreak will be significant. Alternate care facilities will need to be identified as hospitals alone will not be able to manage the surge for the extended length of an outbreak.

<table>
<thead>
<tr>
<th>Resources Required for a Pandemic Flu Outbreak</th>
<th>Outbreak Scenario</th>
<th>San Diego Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource</td>
<td>Moderate</td>
<td>Severe</td>
</tr>
<tr>
<td>Hospital Beds</td>
<td>1,740</td>
<td>19,770</td>
</tr>
<tr>
<td>ICU Beds</td>
<td>420</td>
<td>5,100</td>
</tr>
<tr>
<td>Ventilators</td>
<td>210</td>
<td>2,520</td>
</tr>
</tbody>
</table>

* Denotes capacity above normal daily census and available staffed beds during 2004.
** Denotes capacity above normal daily census and licensed beds during 2004.

Source: NDMS Conference 2006, San Diego County EMS, 2004 OSHPD Financial Data

Note: Staffing during a pandemic will be a greater challenge than physical beds as 25 - 40 percent of healthcare staff are not expected to report to work due to concern of self-infection. Altered standards of care will be necessary.
The Safety Net Nationally and Statewide
The Safety Net – Institute of Medicine (IOM)

Nationally

- “America relies on a patchwork of hospitals, clinics and financing and programs that vary dramatically across the country.
- The funding and organization of the safety net is tenuous
- And subject to the changing tides of politics, available resources and public policies.”

“The Committee came away . . . convinced that today’s changing health care marketplace is placing core safety net providers in many communities at risk of not being able to continue their mission...”

Source: America’s Health Care Safety Net: Intact but Endangered, Institute of Medicine, 2000
Safety Net Defined

“Those providers that organize and deliver a significant level of health care and other health-related services to uninsured, Medicaid and other vulnerable populations”

Core providers: health centers (e.g. Community Health Centers, Migrant Health Centers, homeless healthcare programs, school-based health programs, public health programs), public hospitals, many teaching hospitals, small healthcare providers, emergency departments (EDs) and private physician offices.

Source: America’s Health Care Safety Net: Intact but Endangered, Institute of Medicine, 2000
Following a period of decline, the US uninsured population has increased since 2000 by 6 million or 14.9 percent.
The Safety Net – Uninsured

Factors Affecting Change:

- Mid to late 1990s, employer-sponsored coverage gradually increased – fueled by a robust economy, low unemployment rates, increases in real wages and slow growth in health premiums
- By 1999 the percentage of people covered by Medicaid stabilized and modest increases in private coverage helped to decrease the number of uninsured
- Economic growth stalled in 2001 causing 7 million more of the population to move to poverty by 2004
The Safety Net – Medicaid

**Number of Medicaid Enrolees in the US**
1997-2004

Revised method estimate for 1999 are comparable to later years (millions)
Source: Combined by KCMU from State Medicaid enrollment reports

US Medicaid enrollees increased by 6.1 million or 18.6 percent.
The Safety Net – SCHIP

US school enrollment of children increased by 1.2 million or 47 percent.
The Safety Net – Medicaid/SCHIP

Factors Affecting Change:

- Enrollment in Medicaid and SCHIP has increased to the greater numbers that qualify
- Enrollment has also increased in response to significant outreach efforts
- Children’s rates of uninsured have actually decreased slightly between 2000-2004 and the number of uninsured children has not grown
Increases in Health Insurance Premiums Compared to Other Indicators, 1988-2004

One of the largest determinants of uninsured is whether the employer offers health insurance coverage.
While overall wages and inflation remained somewhat flat, health insurance premiums rose dramatically.
Between 2000 and 2005 the number of small businesses (< 200 workers) offering health insurance dropped by 59 percent as health insurance premiums grew.

Note: Data reflect cost of health insurance premiums for family of four.
National Characteristics of the Uninsured, 2004

Total = 45.5 million uninsured

Source: Kaiser Commission on Medicaid and the Uninsured and Urban Institute analysis using CPS data

69 percent of all uninsured had one or more full-time workers in their family.

FPL = Federal Poverty Level
The Safety Net – Uninsured – Nationally

Characteristics:

- In 2004, over 8 of 10 uninsured came from working families – nearly 70 percent with one or more full-time workers
- Because of the high cost of health insurance, the poor and near poor have the greatest risk of not being insured
- Were it not for the Medicaid program more of the poor would be uninsured

Source: Kaiser Commission on Medicaid and the Uninsured
The Safety Net – Uninsured – Nationally

Characteristics:

- Adults are more likely to be uninsured than children
- Minorities are more likely to be uninsured than white Americans
- The majority of the uninsured (79%) are American citizens

Source: Kaiser Commission on Medicaid and the Uninsured
The Myths:

Myth 1: The uninsured go without coverage because they believe they do not need it or do not want it.

*The majority of uninsured say they forgo coverage because they cannot afford it.*

Myth 2: Most the uninsured do not have insurance because they are not working or do not have insurance through an employer.

*Most of the uninsured are either working full-time or have someone in their family working that work. Most do not have coverage because they are not offered benefits through their employer.*

Source: Kaiser Commission on Medicaid and the Uninsured
The Myths:

Myth 3: Most of the uninsured are new immigrants who are not US citizens.

*The majority of the uninsured (79%) are American citizens.*

Myth 4: The uninsured can get their care they need when they really need it and are able to avoid serious health problems.

*The uninsured are more likely to postpone and forgo care with serious consequences that increase their chances of preventable health problems, disability and premature death.*

Source: Kaiser Commission on Medicaid and the Uninsured
The Safety Net – Uninsured – Nationally

The Myths:

Myth 5: Buying health insurance coverage on your own is always an option.

> Individual health insurance policies are more expensive and coverage is often limited or even denied to those with less than good health.

Myth 6: Expanding health insurance coverage to all will cost more than the country currently spends on health care.

> Because the uninsured and government subsidies pay for a good share of their health costs already, the amount of additional health spending to cover all will be relatively small (14% of current expenditures or $41 billion).

Source: Kaiser Commission on Medicaid and the Uninsured
According to the Center for Studying Health System Change, there has been a continued decline in the number of physicians providing charity care and care to Medicaid patients in the US.

The percent of physicians who do not accept new Medicaid patients has increased from 19.4 percent to 21 percent over nine years.

<table>
<thead>
<tr>
<th>Year</th>
<th>% of Physicians Providing Any Charity Care in Previous Month</th>
<th>Avg. # of Hours Providing Charity Care</th>
<th>Physicians Not Accepting New Medicaid Patients</th>
<th>% of Practice Time Spent on Charity Care, If Any</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-97</td>
<td>76.3%</td>
<td>11.1</td>
<td>19.4%</td>
<td>6.7</td>
</tr>
<tr>
<td>2000-01</td>
<td>71.5%</td>
<td>11</td>
<td>20.9%</td>
<td>6.5</td>
</tr>
<tr>
<td>2004-05</td>
<td>68.2%</td>
<td>10.6</td>
<td>21.0%</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Immigrant Healthcare Use
Immigrant Health Care Use

• Fewer than 10 percent of recent Mexican immigrants reported using an emergency department in 2000, compared with 20 percent of U.S.-born whites.

• About 37 percent of recent Mexican immigrants visited a health clinic instead of a physician for health care, compared with about 15 percent of U.S.-born whites.

• Latino immigrants on average spent $962 on health care in 1998, compared with $1,870 for native-born Latino residents.

Comments from the studies’ authors:

“It’s a complete myth that immigrants are a disproportionate burden. The majority have health insurance, and, even when they have insurance, they use a whole lot less.”

“The truth is, immigrants get far less care than other Americans.”

Sources:
1 “Study Evaluates Differences Between Mexican Immigrants, U.S.-Born Residents' Access to, Use of Health Care Services,” California Healthline (Published Online October 15, 2005).
ED Utilization Across 60 U.S. Communities by Percentage of Hispanic Population, 2003

Communities with high ED utilization tend to have a smaller Hispanic population than those communities with low ED use.

Quartiles 1 and 2, representing communities with higher ED utilization, had populations of 8.0 and 8.8 percent Hispanic respectively. Conversely, quartiles 3 and 4, representing communities with lower ED utilization, had populations of 16.5 and 24.9 percent Hispanic respectively.

Source: P.J. Cunningham, “What Accounts for Differences In The Use Of Hospital Emergency Departments Across U.S. Communities,” Health Affairs, (Published Online, July 18, 2006).
Future Trends for Healthcare
Healthcare Trends

Generally:

- The population is aging and this will have an impact on utilization
- Hospitalized patients will have higher acuity
- Automation will play a more extensive role in healthcare
- Wireless capability will be “everywhere”
- Workforce shortages will drive:
  - Creative uses of human resources,
  - More extensive use healthcare worker surrogates (e.g. licensed vs unlicensed, physician extenders)
  - More leverage of technology
- More extensive use of production methodology: productivity tools, efforts to automate and eliminate waste (Toyota LEAN)
Hospital Trends

Hospitals:

- Suburban growth through the development of medical villages with high-end housing and retail
- Healthcare has been shifting from inpatient to outpatient care for two decades and many think this will accelerate
- The large for-profit firms have announced a significant shifting of their capital expenditures to outpatient services
- Those hospital beds that are being built are more likely to be universal that is acuity adjustable with each bed able to handle all acuity needs

¹ “Tenet spotlights outpatient care”, Modern Healthcare, May 8, 2006
Hospital Trends

Hospitals:

- The conventional wisdom that aging baby boomers will justify sharp increases in hospital beds may not be true.
- A recent study shows that population aging will play a relatively small role in rising demand for inpatient care over the next decade.\(^1\)
- The study estimates that between 2005-2015, population aging will increase use of inpatient services by only .74 percent per year or 7.6 percent for the decade compared to an overall increase of 64.9 percent for that same period.

\(^1\) The effect of population aging on future hospital demand. *Health Affairs*, March 2006
Hospital Trends

Hospitals:

- Partially this slow inpatient growth is true as the average age will only grow to 37.9 years from 36.5 but also due to:
  - Changes in inpatient care clinical conditions with more cardiovascular and orthopedic inpatient care
  - Less inpatient maternal and mental health utilization

- Although the aging-population affect will accelerate as the population ages further, it will plateau at .86 percent per year until 2022

- Local population trends and technology will play more important roles than aging
General Insurance Trends

Health Savings Accounts (HSAs):

- The passage of the Medicare Prescription Drug, Improvement and Modernization Act 2003 encouraged implementation of consumer-directed health care and HSA.
- However, one study suggests that HSAs will create more uninsured: 3.8 million will gain coverage but another 4.4 million would become uninsured through employers dropping coverage\(^1\).
- Healthcare providers are beginning to prepare for a health consumer with much higher co-pays and deductibles than their traditional health plans thus producing a larger number of “self-pay” clients and higher write offs.
- As the rise to shift costs to the consumer increases, it raises the question: “Are these people really insured?”

\(^1\) Gruber, J, Center on Budget and Policy Priorities April 2006
State Insurance Trends

The Case for Coverage:

- The Massachusetts new near-universal health plan followed months of debate
- Other states have taken action:
  - Maryland was the first to have an employer mandated health coverage law (which was recently successfully challenged in court)
  - West Virginia has a commission with a charge to develop a universal health plan by 2010
  - New York has a new law that helps limit medical debt as more costs shift to the consumer
- 25 states are considering expanding coverage through employee mandates
- 7 states (including CA) are considering bills with different forms of universal coverage. California’s version was recently vetoed by the governor
- A recent study indicated that CA will have higher hurdles to climb to achieve a Massachusetts-style health plan due to the higher proportion of the population being uninsured an low income1.

---

1 Massachusetts style coverage expansion: What would it cost California? The California HealthCare Foundation, April 2006
State Medicaid/SCHIP Trends

Healthcare Funding:

- In November, 2006 California voters are being asked to consider an additional tobacco tax
- Some of this new funding would be used to expand the Healthy Families Program
- Additional funding would be pushed to county health insurance programs for low-income children
Medicare/Medicaid Insurance Trends

President Bush FY07 Budget Proposal:

- $50 billion in Medicare and Medicaid cuts in the next five years
- Reductions in Medicare spending of $37.5 billion by 2011
- Reductions in Medicaid spending of 15.5 billion through 2011
- The Deficit Reduction Act (February 2006) also calls for $26.1 billion in Medicaid reductions by 2016
- Nearly 40 percent of those reductions will come from increased cost charging and co-pays including for non-emergency services provided in EDs
- Medicare and Social Security trustees now predict the trust fund to be exhausted by 2014

12006 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds
California’s Safety Net

Efforts to Cover the Uninsured:

- CA lawmakers have proposed legislation that are somewhat similar to the new universal coverage law in Massachusetts
- Efforts to insure children continue to have the most momentum with 800 thousand to 1 million children still uninsured in the state
- A proposed $2.60 tax per cigarette pack is on the November ballot to improve funding for children’s insurance, fund EDs and other programs
- Most efforts do not provide a solution for health coverage to the undocumented immigrant (estimated with 45 percent of the documented and undocumented immigrants in CA are without insurance)
Trends for the Poor

Growing Healthcare Disparities for the Poor:

“The inability or unwillingness to ensure equal access to high-quality health care is fueling a widening rift between the rich and poor.”

Study key findings:

1. Many recent healthcare investments and initiatives are focused in affluent communities

2. Access to basic care for the under or uninsured is worsening in the wake of stalled coverage expansions and service cuts.

1 “A widening rift in access and quality: growing evidence of economic disparities”, Health Affairs, December 2005
Study key findings:

3. The lines of lower-income patients have historically been skewed to certain providers with the lines of segregation hardening due to dictates of geography and growing disparities in access to physician care.

4. Hospitals and physicians are growing their investments in specialized and outpatient services with a burst towards freestanding facilities, and moving diagnostic and surgical procedures to outpatient settings.

5. Hospital expansions in affluent areas have the potential to worsen the disparities on the investment of resources between the rich and poor.

1 A widening rift in access and quality: growing evidence of economic disparities, *Health Affairs*, December 2005
Trends for the Poor

Study key findings:

6. State and local budget shortfalls resulting in Medicaid freezes and reductions have worsened the problems and access to key services like mental and dental care.

7. The move towards more reliance on copays, eliminating benefits and setting arbitrary limits on services are seen by some observers as “cost shirking”.

8. This leads healthcare providers in the position of either dropping these patients or absorbing the cost of their uncompensated care.
Employee Trends

More CA Workers are Declining Health Coverage:

- In 2003, 82 percent accepted coverage compared to 87 percent in 1998
- Largely because they are being required to contribute more towards their employer sponsored plan
- The average premium increased by 42 percent from $2,316 in 1998 to $3,293 in 2003
- 66 percent of insured Californians were employed at companies that offered health coverage in 2003
Hospitals Have Their Own Plight:

With the increase in uninsured and underinsured, the amount of hospital uncompensated care is also on the rise.

Charity care losses are up 30 percent from 1999.
Employer Financial Impact

Employers are Planning Health Coverage Cuts:

While employers are adapting to rising energy costs and interest rates, most are likely to reduce their healthcare coverage.

Source: PNC Economic Outlook survey conducted by Harris Interactive of small and midsize businesses, April 2006

Rising Health Coverage Costs to US Businesses

Source: Harris Interactive poll of 1,041 small to medium size businesses, February 2006
Although firms with 3-9 employees have the worst rate of Health Coverage (55 percent), firms of that size only employ 21.5 percent of the California workforce.