Diabetes in California

Gary Puckrein, Ph.D.
National Minority Health Month Foundation
Washington, D.C.
Insurance Based Health Care System

Direct Purchasers

private insurance plan

Payers

In Direct Consumers

In Direct Payers

Providers
Summary of Key Facts:

1. Hispanics and African Americans are underserved by our financing and deliver system.

2. Under representation of minorities in clinical trials.

3. Hispanics and African Americans are overrepresented in Med-Cal.
Percent Expenditures and Populations by Race
(MEPS 2004)

National

Race

WNH  BNH  ANH  ONH  H

Percent (%)

0.0%  20.0%  40.0%  60.0%  80.0%  100.0%

Popn%

Exp%
Medical Expenditures 2005
Western United States

Total Medical Expenditures $204 Billion
<table>
<thead>
<tr>
<th></th>
<th>Total Pop</th>
<th>Insured</th>
<th>Medicaid</th>
<th>Percent Insured Covered by Medicaid</th>
<th>Total Pop Covered by Medicaid</th>
<th>Uninsured</th>
<th>Percent Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whites</td>
<td>15,799,917</td>
<td>14,535,924</td>
<td>1,320,232</td>
<td>9</td>
<td>8</td>
<td>1,263,993</td>
<td>8</td>
</tr>
<tr>
<td>Hispanics</td>
<td>12,788,413</td>
<td>8,440,353</td>
<td>3,515,780</td>
<td>42</td>
<td>27</td>
<td>4,348,060</td>
<td>34</td>
</tr>
<tr>
<td>Blacks</td>
<td>2,248,436</td>
<td>1,965,133</td>
<td>664,535</td>
<td>34</td>
<td>30</td>
<td>283,303</td>
<td>12.6</td>
</tr>
<tr>
<td>Other</td>
<td>5,136,371</td>
<td>4,683,371</td>
<td>1,067,652</td>
<td>23</td>
<td>21</td>
<td>453000</td>
<td>8.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2004</th>
<th>Payments</th>
<th>Percent of All Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>10,729,262,952</td>
<td>39</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7,819,548,046</td>
<td>28</td>
</tr>
<tr>
<td>Black</td>
<td>3,290,795,928</td>
<td>12</td>
</tr>
<tr>
<td>Asian</td>
<td>848,280,638</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>4,755,744,420</td>
<td>17</td>
</tr>
<tr>
<td>All</td>
<td>27,443,631,984</td>
<td>100</td>
</tr>
<tr>
<td>Group</td>
<td>Lives Covered by Private Insurance</td>
<td>Percent Live Covered by Private Insurance</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Whites</td>
<td>13,215,692</td>
<td>57</td>
</tr>
<tr>
<td>Hispanics</td>
<td>4,924,573</td>
<td>21</td>
</tr>
<tr>
<td>Blacks</td>
<td>1,300,598</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>3,615,719</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>23,056,581</td>
<td>100</td>
</tr>
</tbody>
</table>

California Medicaid Beneficiaries
By Ethnicity and Race
2008

Medi-Cal Beneficiaries by Zip code, http://www.dhcs.ca.gov/dataandstats/statistics/Pages/BeneficiaryDataFiles.aspx
GOAL

To initiate a dialogue about the disproportionate burden of diabetes in high-risk communities.
THE PROBLEM

Communities that are faced with a disproportionate burden of diabetes do not know each other, have not had a chance to network, have not shared best practices, and do not have the advantage of working collaboratively.
The ZIP Code Analysis Project (ZCAP)

In 1998, we began building ZCAP: a comprehensive database that links demographic, environmental, claims data, clinical laboratory values, and other data elements into one centralized data warehouse, linked by zip code.
ZCAP

Now Stores Over 500 Million Patient Records, Dating Back to 1988
ZCAP®

Enables the us to identify health disparities in small geographic areas.

The long-term goal is to be able to evaluate the impact of specific interventions and to monitor changes in health service and status.
Profiling Diabetes Prevalence Across the Nation
The Diabetes Atlas

Level one access: Users can map diabetes prevalence and calculate direct costs by race/ethnicity, age, sex and ...

Nationally

For each state

For each congressional or legislative district

Ga. 5th Congressional district
Level two access: Users can map diabetes prevalence and calculate costs for one state or congressional district.
Users can map diabetes prevalence and calculate costs for one state or congressional district. Users can measure actual estimated number of diagnosed diabetics one state or congressional district. Users can evaluate 7 yr. trend line data for diabetes prevalence for one state or congressional district.
D-ATLAS Conceptual Model

- National Map
  - State Maps
    - Congressional District Maps
      - State Legislative House and Senate District Maps
        - City Maps
  - Race/Ethnicity
  - Age
  - Gender

Minority Health Month Foundation
### Percentage of the 2005 Population Diagnosed with diabetes

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.80% or Less</strong></td>
<td><strong>The 1996 Zones</strong>, are the dark green zip codes that have average diabetes prevalence or lower for the Overall U.S. Population as observed in 1996.</td>
</tr>
<tr>
<td><strong>4.81% – 5.52%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>5.53% – 6.20%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>6.21% – 7.70%</strong></td>
<td><strong>The National Average</strong>, is the average of the estimated prevalence of diabetes across all zip codes in the United States for the Overall U.S. Population. For 2005, the national average for this population is estimated to be 7.59%.</td>
</tr>
<tr>
<td><strong>7.71% – 8.46%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>8.47% – 9.20%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>9.21% or Greater</strong></td>
<td><strong>The Critical Zones</strong>, or the zip codes shaded deep red, have estimated diabetes prevalence for the Overall U.S. Population substantially above the national average.</td>
</tr>
</tbody>
</table>
Welcome to the Diabetes Atlas (D-ATLAS)!

Brought to you by the collaboration between NMHMF, Amylin Pharmaceuticals, Inc. and Eli Lilly and Company
Brought to you by the collaboration between NMHM, Amylin Pharmaceuticals, Inc., and Eli Lilly and Company.
State Maps

Diabetes Prevalence Map for the State of WV

[Map of West Virginia with legend indicating overall rates and critical zones.]

Click Here to Create a New Query

Brought to you by the collaboration between NMHM, Amylin Pharmaceuticals, Inc. and Eli Lilly and Company.
Diabetes 2000 Prevalence Map for the State of CA

Overall (RATE)

- 1.47-3.35%  HEALTHY PEOPLE 2010
- 3.35-5.04%  BELOW NATIONAL AVERAGE
- 5.04-6.74%  NATIONAL AVERAGE
- 6.74-8.44%  ABOVE NATIONAL AVERAGE
- 8.44-10.14%  CRITICAL ZONE
- 10.14-11.84%
- 11.84-18.86%  CRITICAL ZONE

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State Maps

Diabetes 2007 Prevalence Map for the State of CA

Overall (RATE)

- 1.47-3.35% HEALTHY PEOPLE 2010
- 3.35-5.04% BELOW NATIONAL AVERAGE
- 5.04-6.74% NATIONAL AVERAGE
- 6.74-8.44% ABOVE NATIONAL AVERAGE
- 8.44-10.14% CRITICAL ZONE
- 10.14-11.84%
- 11.84-18.86%

Patent Pending
Diabetes 2000 Prevalence Map for the State of CA

Prevalence in Black Non-Hispanics (RATE)

- 1.47-3.35% HEALTHY PEOPLE 2010
- 3.35-5.04% BELOW NATIONAL AVERAGE
- 5.04-6.74% NATIONAL AVERAGE
- 6.74-8.44% ABOVE NATIONAL AVERAGE
- 8.44-10.14% CRITICAL ZONE
- 10.14-11.84%
- 11.84-18.86%

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Diabetes 2007 Prevalence Map for the State of CA

Patent Pending

Prevalence in Black Non-Hispanics (RATE)

- 1.47-3.35%: HEALTHY PEOPLE 2010
- 3.36-6.01%: BELOW NATIONAL AVERAGE
- 6.04-6.74%: NATIONAL AVERAGE
- 6.74-8.44%: ABOVE NATIONAL AVERAGE
- 8.44-10.14%: CRITICAL ZONE
- 10.14-11.84%
- 11.84-18.86%: CRITICAL ZONE

Brought to you by the collaboration between NMQF, Amylin Pharmaceuticals, Inc. and Eli Lilly and Company
Diabetes 2000 Prevalence Map for the State of CA
State House District 047 - Overall (RATE)

Legislative Representative
Karen Bass, California, District 47
Room 319 State Capitol, 10th and L Sts Sacramento, CA 94249-0047
(916) 319-2847
Assemblymember.Bass@assembly.ca.gov

Brought to you by the collaboration between NMQF, Amylin Pharmaceuticals, Inc. and Eli Lilly and Company
Diabetes 2007 Prevalence Map for the State of CA
State House District 047 - Overall (RATE)

[Map showing prevalence rates across California]

Patent Pending

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Diabetes 2007 Prevalence Map for the State of CA
State House District 047 - Prevalence in Black Non-Hispanics (RATE)

Legislative Representative

Karen Bass, California, District 47
Room 319 State Capitol, 10th and L St.s Sacramento, CA 94249-0047
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Patient Pending

Healthy People 2010
Below National Average
National Average
Above National Average
Critical Zone

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Diabetes 2000 Prevalence Map for the State of CA

Overall (RATE)
- 1.47-3.35%: HEALTHY PEOPLE 2010
- 3.35-5.04%: BELOW NATIONAL AVERAGE
- 5.04-6.74%: NATIONAL AVERAGE
- 6.74-8.44%: ABOVE NATIONAL AVERAGE
- 8.44-10.14%: CRITICAL ZONE
- 10.14-11.84%
- 11.84-18.86%: CRITICAL ZONE

Patent Pending

Congressional Representative
Maxine Waters, California, District 35
1344 RHOB Washington, D.C. 20515-0535
10124 S. Broadway, 9th, 1 Los Angeles, CA 90033
www.house.gov/watcra
Diabetes Cost 2005 Atlas for the State of CA
Congressional District 35 - Overall

Overall (RATE)
- Less than $1,017,887.00
- $1,017,887.00 - $1,975,256.24
- $1,975,256.25 - $2,932,625.45
- Greater than $2,932,625.45
- N/A

Congressional Representative
Maxine Waters, California, District 35
2344 RHOB Washington, D.C. 20515-0535
1024 S. Broadway, Suite 1 Los Angeles, CA 90013
www.house.gov/waters/