Graph 4: No Leisure-Time Physical Activity

- Southeast Michigan
- West Michigan

<table>
<thead>
<tr>
<th>Year</th>
<th>Southeast Michigan</th>
<th>West Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
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<tr>
<td>2012</td>
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</tbody>
</table>

Percentage of Population
Graph 7: No Health Care Coverage

- Southeast Michigan
- West Michigan

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>12.5%</td>
</tr>
<tr>
<td>2008</td>
<td>14.0%</td>
</tr>
<tr>
<td>2010</td>
<td>16.5%</td>
</tr>
<tr>
<td>2012</td>
<td>18.0%</td>
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</tbody>
</table>
Risk Factors
Heavy Drinking, Binge Drinking, Smoking, Inadequate Physical Activity, Obesity

Access
Health Care Coverage

Diseases
Diabetes, Asthma, Depression, Heart Disease
Graph 9: Prevalence of Lifetime Asthma

- **Southeast Michigan**
- **West Michigan**

<table>
<thead>
<tr>
<th>Year</th>
<th>Southeast Michigan</th>
<th>West Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 1: Health Care Overview

**Risk Factors**
- Heavy Drinking
- Binge Drinking
- Smoking
- Inadequate Physical Activity
- Obesity

**Access**
- Health Care Coverage

**Diseases**
- Diabetes
- Asthma
- Depression
- Heart Disease

**Outcomes**
- Poor Health
- Disability
- Low Birth Weight
Graph 11: Low Birth Weight

Percentage of Population

- Southeast Michigan
- West Michigan

<table>
<thead>
<tr>
<th>Year</th>
<th>Southeast Michigan</th>
<th>West Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>9.5</td>
<td>7.0</td>
</tr>
<tr>
<td>2008</td>
<td>9.8</td>
<td>7.2</td>
</tr>
<tr>
<td>2010</td>
<td>9.9</td>
<td>7.3</td>
</tr>
<tr>
<td>2011</td>
<td>9.7</td>
<td>7.1</td>
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</table>
Demographics Matter
Figure 1: Population Change Since 2000
Figure 3: Population Distribution as Percent of KOMA
Are we prepared to meet the demand?

Graph 7: No Health Care Coverage

Demographics

ACA

Risk Factors

[Bar chart showing trends over years for Southeast Michigan and West Michigan]
To Answer this Question

- We provide the 2020 BLS forecasts for different medical professions in the State of Michigan.

- We undertake an inventory of education programs in the health care sector for different specializations. The numbers in the current iteration are updated to
  - reflect recent changes
  - broaden the area from KOMA to the MHA West Central Region.

- We make specific predictions for some selected health professions in West Michigan
Over/Under Provision in Select Professions

- Physical Therapists: 12
- PA: 29
- Occupational Therapist: 50
- Occupational Therapist Assistants: 53
- Medical and Clinical Lab Tech: -1
- Medical Assistants: -8
- LPN: 228
- RN: -102
- Family and General Practitioners: 125
- EMT's and Paramedics: -62
- Dietitians and Nutritionists: 211
- Diagnostic Medical Sonographers: 25
- Dental Hygienists: -17
- Dental Assistants: -70
NOTES ON PROJECTIONS

• Retirements

• Job additions and leakages

• Historical Trend

• Some for profit and online schools not included

• Regulatory Changes
Investment in Healthcare Infrastructure
## Worker Compensation KOMA ($Millions)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2012</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$24,540</td>
<td>$29,877</td>
<td>22%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$7,647</td>
<td>$8,030</td>
<td>5%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>$2,292</td>
<td>$3,983</td>
<td>74%</td>
</tr>
<tr>
<td>Percent Manufacturing</td>
<td>31%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>Percent Healthcare</td>
<td>9%</td>
<td>13%</td>
<td></td>
</tr>
</tbody>
</table>

Percent Compensation in Manufacturing or Healthcare for the entire US is 11%.
Graph 3: Total Number of Hospital Beds per 1,000 People

- Ohio Cuyahoga County
- Michigan Kent County
- Wisconsin Milwaukee County
- Oregon Multnomah County
- Ohio Summit County

Year Comparison:
- 2000
- 2005
- 2010

Number of Beds
Graph 9: Facilities Expense per Bed

- **Ohio**: Cuyahoga County, Summit County
- **Michigan**: Kent County
- **Wisconsin**: Milwaukee County
- **Oregon**: Multnomah County

**Years Represented:**
- **2000** (dark blue)
- **2005** (light blue)
- **2010** (greenish yellow)

**Total Dollars** range from approximately 0 to 1,600.
How has change influenced costs...
Diabetes Case
Figure 1: Diabetes Risk

- West Michigan
- Southeast Michigan

- No Leisure-time physical activity
- No health care coverage
- Obese
- No routine checkup in the past year
- Current smoking
Graph 2: Cost of Diabetes with Comorbidities

- **KOMA**
- **Southeast Michigan**

### Cost per Member

- **Diabetes**
- **Diabetes + Hyperlipidemia**
- **Diabetes + Depression**
- **Diabetes + CAD**

- KOMA: $10,000
- Southeast Michigan: $15,000
- KOMA: $20,000
- Southeast Michigan: $25,000
- KOMA: $25,000
- Southeast Michigan: $30,000
Map 1: Distribution of Average Cost per Patient for Diabetes by Zip Code

- Less than $10,100
- $10,100 to $11,600
- $11,600 to $13,300
- $13,300 or more

Counties: Oceana, Mecosta, Newaygo, Montcalm, Muskegon, Ottawa, Kent, Allegan, Barry, Van Buren, Kalamazoo, Allegan, Oakland, Wayne, Genesee, Lapeer, St. Clair, Macomb, Monroe.
ACA in KOMA

Thanks Leslie Muller and Priority Health
Graph 3: Increase Employees’ Share of Medical Services

- Already taken: 48%
- Not taken, nor considering: 12%
- Not taken, but considering: 40%
Graph 1: Implement Changes to Prescription Drug Coverage

- Not taken, nor considering: 25%
- Already taken: 29%
- Not taken, but considering: 45%
Graph 2: Implement or Expand Use of High-deductible Health Plans

- Not taken, nor considering: 23%
- Not taken, but considering: 41%
- Already taken: 36%
Graphs 4a and 4b: Action Taken in Response to the Affordable Care Act

a. Implement or expand wellness programs
- Not implemented, not considering: 24%
- Already implemented: 31%
- Not implemented, but considering: 45%

b. Implement or expand wellness incentives (e.g. premium discounts)
- Not implemented, not considering: 29%
- Already implemented: 22%
- Not implemented, but considering: 49%
Graph 5: Future Plans to Offer Employer-sponsored Insurance

- Offering coverage in 2014
  - No: 10%
  - Yes: 80%
  - Undecided: 10%

- Offering coverage in 2015
  - No: 20%
  - Yes: 80%
  - Undecided: 10%
Conclusion

- **Risks**
  - Ageing Population
  - Obesity

- **Jobs**
  - Shortages in Key High Skill Healthcare jobs
  - No shortages in Low Skill Healthcare jobs

- **Investment**
  - More Healthcare infrastructure given Population
  - More Outpatient Visits

- **Costs**
  - Tests Matter
  - General Health Affects all costs

- **ACA**
  - Cost Shifting
  - Employment Changes
QUESTIONS