Cluster Analysis: A Look at the Healthcare Industry in Spokane County

Presented by:
- Amanda Lazaro
- Curran Scott
- Galen Hyatt
- Grant Deniston
- Josh Hoyer
- Saleh Almansour
- Sun Wei

BADM585: Strategy, Competitiveness and Economic Development
Spokane Profile

Location / Size:
- Land size: 1,763.79 Miles (Ranking 19th in WA)
- Population Density: 269.65 (Ranking 8th in WA)

Population:
- 2000: 417,939
- 2012: 475,600 4th largest in Wa
- 2030 (projected: 558,614)
Spokane Economy

- Ranks 114 of all MSAs

**GDP GROWTH (CURRENT DOLLARS)**

**REAL GDP**
Spokane Economy

Natural Endowments:
- Gold
- Agriculture
- Timber

Political / Legal Factors:
- Tax Rates
- Federal Laws (Health Care)
- Infrastructure
Spokane Clusters:
Overall Composition of Employment and Wages, 2010

- **Traded Clusters**
  - Total Employment: 41,823
  - Share of Region's Employment: 23.30%
  - Average Wages: $38,380
  - Patents: 57

- **Local Clusters**
  - Total Employment: 137,015
  - Share of Region's Employment: 76.34%
  - Average Wages: $35,374
  - Patents: 6

- **Natural Endowment Dependent Clusters**
  - Total Employment: 647
  - Share of Region's Employment: 0.36%
  - Average Wages: $102,818
  - Patents: 0
## Spokane Clusters:
### Traded Clusters: Employment, 2010

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Rank in US</th>
<th>Employment, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Services</td>
<td>102</td>
<td>6,980</td>
</tr>
<tr>
<td>Education and Knowledge Creation</td>
<td>86</td>
<td>5,682</td>
</tr>
<tr>
<td>Entertainment</td>
<td>51</td>
<td>3,297</td>
</tr>
<tr>
<td>Hospitality and Tourism</td>
<td>96</td>
<td>3,151</td>
</tr>
<tr>
<td>Distribution Services</td>
<td>87</td>
<td>2,948</td>
</tr>
<tr>
<td>Financial Services</td>
<td>95</td>
<td>2,665</td>
</tr>
<tr>
<td>Heavy Construction Services</td>
<td>107</td>
<td>2,075</td>
</tr>
<tr>
<td>Metal Manufacturing</td>
<td>83</td>
<td>1,928</td>
</tr>
<tr>
<td>Transportation and Logistics</td>
<td>139</td>
<td>1,575</td>
</tr>
<tr>
<td>Processed Food</td>
<td>168</td>
<td>1,428</td>
</tr>
<tr>
<td>Prefabricated Enclosures</td>
<td>20</td>
<td>985</td>
</tr>
<tr>
<td>Medical Devices</td>
<td>77</td>
<td>900</td>
</tr>
<tr>
<td>Aerospace Vehicles and Defense</td>
<td>47</td>
<td>810</td>
</tr>
<tr>
<td>Building Fixtures, Equipment and Services</td>
<td>115</td>
<td>745</td>
</tr>
<tr>
<td>Publishing and Printing</td>
<td>136</td>
<td>731</td>
</tr>
<tr>
<td>Plastics</td>
<td>132</td>
<td>729</td>
</tr>
<tr>
<td>Production Technology</td>
<td>130</td>
<td>700</td>
</tr>
<tr>
<td>Information Technology</td>
<td>144</td>
<td>600</td>
</tr>
<tr>
<td>Forest Products</td>
<td>126</td>
<td>436</td>
</tr>
<tr>
<td>Analytical Instruments</td>
<td>125</td>
<td>405</td>
</tr>
<tr>
<td>Automotive</td>
<td>197</td>
<td>383</td>
</tr>
<tr>
<td>Heavy Machinery</td>
<td>143</td>
<td>300</td>
</tr>
<tr>
<td>Oil and Gas Products and Services</td>
<td>102</td>
<td>285</td>
</tr>
<tr>
<td>Chemical Products</td>
<td>171</td>
<td>285</td>
</tr>
</tbody>
</table>
Spokane Clusters:
Local Clusters: Employment, 2010

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Rank in US</th>
<th>Employment, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Health Services</td>
<td>90</td>
<td>31,688</td>
</tr>
<tr>
<td>Local Real Estate, Construction, and Development</td>
<td>83</td>
<td>16,405</td>
</tr>
<tr>
<td>Local Hospitality Establishments</td>
<td>111</td>
<td>16,236</td>
</tr>
<tr>
<td>Local Commercial Services</td>
<td>117</td>
<td>12,551</td>
</tr>
<tr>
<td>Local Retail Clothing and Accessories</td>
<td>93</td>
<td>8,880</td>
</tr>
<tr>
<td>Local Financial Services</td>
<td>88</td>
<td>8,018</td>
</tr>
<tr>
<td>Local Food and Beverage Processing and Distribution</td>
<td>92</td>
<td>7,689</td>
</tr>
<tr>
<td>Local Motor Vehicle Products and Services</td>
<td>96</td>
<td>7,173</td>
</tr>
<tr>
<td>Local Community and Civic Organizations</td>
<td>118</td>
<td>5,805</td>
</tr>
<tr>
<td>Local Personal Services (Non-Medical)</td>
<td>93</td>
<td>4,806</td>
</tr>
<tr>
<td>Local Logistical Services</td>
<td>116</td>
<td>3,890</td>
</tr>
<tr>
<td>Local Entertainment and Media</td>
<td>85</td>
<td>3,251</td>
</tr>
<tr>
<td>Local Household Goods and Services</td>
<td>97</td>
<td>2,983</td>
</tr>
<tr>
<td>Local Utilities</td>
<td>96</td>
<td>2,922</td>
</tr>
<tr>
<td>Local Education and Training</td>
<td>83</td>
<td>2,536</td>
</tr>
<tr>
<td>Local Industrial Products and Services</td>
<td>107</td>
<td>2,182</td>
</tr>
</tbody>
</table>

Overall Employment Rank = 100
Spokane Clusters:  
Natural Endowment Clusters: Employment, 2010

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Rank in US</th>
<th>Employment, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Mining</td>
<td>15</td>
<td>467</td>
</tr>
<tr>
<td>Combination Energy Services</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>91</td>
<td>60</td>
</tr>
<tr>
<td>Forestry and Primary Wood Processing</td>
<td>203</td>
<td>20</td>
</tr>
<tr>
<td>Coal Mining</td>
<td>156</td>
<td>10</td>
</tr>
<tr>
<td>Agricultural Products</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Nonmetal Mining</td>
<td>283</td>
<td>10</td>
</tr>
</tbody>
</table>

Overall Employment Rank = 100
### Spokane Clusters: Traded Clusters: Jobs Created 2009 and 2010

#### Net Traded Cluster jobs created 2009 to 2010

-432

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Jobs Created, 2009 to 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Machinery</td>
<td></td>
</tr>
<tr>
<td>Oil and Gas Products and Services</td>
<td></td>
</tr>
<tr>
<td>Transportation and Logistics</td>
<td></td>
</tr>
<tr>
<td>Business Services</td>
<td></td>
</tr>
<tr>
<td>Distribution Services</td>
<td></td>
</tr>
<tr>
<td>Publishing and Printing</td>
<td></td>
</tr>
<tr>
<td>Education and Knowledge Creation</td>
<td></td>
</tr>
<tr>
<td>Building Fixtures, Equipment and Services</td>
<td></td>
</tr>
<tr>
<td>Information Technology</td>
<td></td>
</tr>
<tr>
<td>Prefabricated Enclosures</td>
<td></td>
</tr>
<tr>
<td>Aerospace Vehicles and Defense</td>
<td></td>
</tr>
<tr>
<td>Jewelry and Precious Metals</td>
<td></td>
</tr>
<tr>
<td>Plastics</td>
<td></td>
</tr>
<tr>
<td>Sporting, Recreational and Children's Goods</td>
<td></td>
</tr>
<tr>
<td>Power Generation and Transmission</td>
<td></td>
</tr>
<tr>
<td>Leather and Related Products</td>
<td></td>
</tr>
<tr>
<td>Fishing and Fishing Products</td>
<td></td>
</tr>
</tbody>
</table>

*Percent change in national benchmark times starting regional employment summed at the metropolitan statistical area region.

Overall Traded jobs created, if it matched national benchmarks, would be -1,207.
Spokane Clusters: Traded Clusters: Jobs Created 2009 and 2010

- Forest Products
- Entertainment
- Biopharmaceuticals
- Textiles
- Agricultural Products
- Communications Equipment
- Analytical Instruments
- Construction Materials
- Processed Food
- Lighting and Electrical Equipment
- Automotive
- Production Technology
- Metal Manufacturing
- Financial Services
- Hospitality and Tourism
- Heavy Construction Services

* Percent change in national benchmark times starting regional employment summed at the metropolitan statistical area region. Overall Traded jobs created, if it matched national benchmarks, would be -1,207.

indicates expected job creation at national trend
Spokane Clusters: Jobs Created between 2009 and 2010

Net Local Cluster jobs created 2009 to 2010
-2,831

Local Commercial Services
Local Health Services
Local Motor Vehicle Products and Services
Local Retail Clothing and Accessories
Local Utilities
Local Education and Training
Local Hospitality Establishments
Local Personal Services (Non-Medical)
Local Household Goods and Services
Local Entertainment and Media
Local Industrial Products and Services
Local Logistical Services
Local Financial Services
Local Community and Civic Organizations
Local Food and Beverage Processing and Distribution
Local Real Estate, Construction, and Development

Jobs Created, 2009 to 2010

Indicates expected job creation* at national trend

* Percent change in national benchmark times starting regional employment summed at the metropolitan statistical area region. Overall Local jobs created, if it matched national benchmarks, would be -2,705.
Spokane Clusters:
Natural Endowment Clusters: Jobs Created between 2009 and 2010

Net Natural Endowment Dependent
Cluster jobs created
2009 to 2010

-98

Indicates expected job creation* at national trend

* Percent change in national benchmark times starting regional employment summed at the metropolitan statistical area region. Overall Natural Endowment Dependent jobs created, if it matched national benchmarks, would be -28.
Spokane Clusters:
Traded Clusters: Specialization

- Business Services: 6,980
- Education / Knowledge Creation: 5,682
- Entertainment: 3,297
- Hospitality / Tourism: 3,151
- Biopharmaceuticals: 60
- Furniture: 30
- Sporting, Recreational and Children’s Goods: 30
- Fishing and Fishing Products: 10
Spokane Clusters: Specialization

- Health Services: 31,688
- Real Estate, Construction, and Development: 16,405
- Hospitality Establishments: 16,236
- Commercial Services: 12,551
- Household Goods and Services: 2,983
- Utilities: 2,922
- Education and Training: 2,536
- Industrial Products and Services: 2,182
Spokane Clusters: Natural Endowment Clusters:

- Metal / Mining: 467
- Combination Energy Services: 70
- Fertilizers: 60
- Forestry and Primary Wood Processing: 20

Overall change in Share of US Natural Endowment Employment: -0.014%

- Agricultural Products: 10
- Coal Mining: 10
- Nonmetal Mining: 10

Overall Share of US Natural Endowment Employment: 0.22%
# Spokane Clusters: Traded Clusters: Wages, 2010

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Wages, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Services</td>
<td>$60,502</td>
</tr>
<tr>
<td>Forest Products</td>
<td>$72,000</td>
</tr>
<tr>
<td>Heavy Construction Services</td>
<td>$75,000</td>
</tr>
<tr>
<td>Leather and Related Products</td>
<td>$78,000</td>
</tr>
<tr>
<td>Business Services</td>
<td>$80,000</td>
</tr>
<tr>
<td>Distribution Services</td>
<td>$82,000</td>
</tr>
<tr>
<td>Information Technology</td>
<td>$84,000</td>
</tr>
<tr>
<td>Analytical Instruments</td>
<td>$86,000</td>
</tr>
<tr>
<td>Heavy Machinery</td>
<td>$88,000</td>
</tr>
<tr>
<td>Publishing and Printing</td>
<td>$90,000</td>
</tr>
<tr>
<td>Plastics</td>
<td>$92,000</td>
</tr>
<tr>
<td>Metal Manufacturing</td>
<td>$94,000</td>
</tr>
<tr>
<td>Automotive</td>
<td>$96,000</td>
</tr>
<tr>
<td>Transportation and Logistics</td>
<td>$98,000</td>
</tr>
<tr>
<td>Processed Food</td>
<td>$100,000</td>
</tr>
<tr>
<td>Education and Knowledge Creation</td>
<td>$102,000</td>
</tr>
<tr>
<td>Agricultural Products</td>
<td>$104,000</td>
</tr>
<tr>
<td>Hospitality and Tourism</td>
<td>$106,000</td>
</tr>
<tr>
<td>Entertainment</td>
<td>$108,000</td>
</tr>
</tbody>
</table>

US Average Traded Wage: $60,502
Spokane, WA Metropolitan Statistical Area
Average Traded Wage: $38,953
Spokane Clusters:
Local Clusters: Wages, 2010

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Wages, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Financial Services</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Health Services</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Industrial Products and Services</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Utilities</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Commercial Services</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Real Estate, Construction, and Development</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Logistical Services</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Motor Vehicle Products and Services</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Entertainment and Media</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Household Goods and Services</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Food and Beverage Processing and Distribution</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Retail Clothing and Accessories</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Personal Services (Non-Medical)</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Community and Civic Organizations</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Education and Training</td>
<td>$30,000</td>
</tr>
<tr>
<td>Local Hospitality Establishments</td>
<td>$30,000</td>
</tr>
</tbody>
</table>

indicates national benchmark Average Wage

US Average Local Wage: $38,416
Spokane, WA Metropolitan Statistical Area Average Local Wage: $32,835
Spokane Clusters: Natural Endowment Clusters: Wages, 2010

- Metal Mining: Average Wage
  - US Average Natural Endowment Wage: $41,638
  - Spokane, WA Metropolitan Statistical Area Average Natural Endowment Wage: $102,818
Infrastructure

Transportation
- Quality domestic road system
- Highway infrastructure (I-90)
- International Airport
  - 4,800 acre commercial service airport
  - 2nd largest airport in Washington State
  - 10 airlines and 3 cargo carriers
- North/South and East/West rail
  - Union Pacific and Burlington Northern Santa Fe railroad.
  - Seattle to Chicago

Electricity
- Avista Utilities
  - Hydroelectric power from Clark Fork River and Spokane River.

Telecommunications
- Network of digital switches and dial tones for telephone system.
- Fiber optic technology for high speed internet
- Cell phone towers
Local Public Education System
- 14 public school districts (top 33% of 2,800 in nation)
- 13 private schools
- 12-19 teacher-to-pupil ratio

Regional Universities
- 18 Universities in region

<table>
<thead>
<tr>
<th>School Name</th>
<th>Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Colleges of Spokane</td>
<td>16,789</td>
</tr>
<tr>
<td>Eastern Washington University</td>
<td>11,534</td>
</tr>
<tr>
<td>Embry Riddle Aeronautical University</td>
<td>45</td>
</tr>
<tr>
<td>Gonzaga University</td>
<td>7,738</td>
</tr>
<tr>
<td>ITT Technical Institute</td>
<td>494</td>
</tr>
<tr>
<td>Lewis-Clark State College-Coeur d' Alene</td>
<td>464</td>
</tr>
<tr>
<td>Moody Bible Institute</td>
<td>550</td>
</tr>
<tr>
<td>North Idaho College</td>
<td>6,347</td>
</tr>
<tr>
<td>University of Idaho - Coeur d' Alene</td>
<td>262</td>
</tr>
<tr>
<td>Washington State University</td>
<td>26,308</td>
</tr>
<tr>
<td>Webster University</td>
<td>100</td>
</tr>
<tr>
<td>Whitworth University</td>
<td>2,989</td>
</tr>
</tbody>
</table>
Endowments

- Rich mineral deposits
- Large river system (cheap electricity)
- Fertile lands to support agriculture
- Forests for lumber production
- Central location to surrounding cities
Demand Conditions

- Higher Environmental Standards
  - Spokane Regional Clean Air Agency
  - Air Quality Permits - Notice of Construction permit to install new equipment and any modification of existing equipment.

- Taxes
  - Business and Occupation Tax (B&O)
    - Tax on gross receipts
    - Difficult for startup and small firms
      - Taxed whether or not money is made or lost

- Focus on Technology
  - Stem Schools
    - Further science, technology, engineering and math learning and innovation.
    - Entrepreneur spirit → High-tech. companies

- Weather
  - Construction
  - Seasonal Industries
Context for Firm Strategy and Rivalry

- Community Empowerment Zone.
- Customized Training program.
- Local Business Group.
- Spokane Area Workforce Development Council
## Supporting Industries

<table>
<thead>
<tr>
<th>Total Primary Jobs</th>
<th>Count</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care and Social Assistance</td>
<td>35,891</td>
<td>17.9 %</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>31,353</td>
<td>15.7 %</td>
</tr>
<tr>
<td>Education Services</td>
<td>18,389</td>
<td>9.2  %</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>16,528</td>
<td>8.3  %</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14,668</td>
<td>7.3  %</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>10,332</td>
<td>5.2  %</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>9,826</td>
<td>4.9  %</td>
</tr>
<tr>
<td>Waste Management and Remediation</td>
<td>9,385</td>
<td>4.7  %</td>
</tr>
<tr>
<td>Technical Services</td>
<td>8,283</td>
<td>4.1  %</td>
</tr>
<tr>
<td>Construction</td>
<td>7,862</td>
<td>3.9  %</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>5,909</td>
<td>3    %</td>
</tr>
</tbody>
</table>
Inflow/Outflow Job Counts in Spokane 2010

- Employed in the Selection Area: 200,296 (100.0%)
- Employed in the Selection Area but Living Outside: 48,279 (24.1%)
- Employed and Living in the Selection Area: 152,017 (75.9%)
- Living in the Selection Area: 178,548 (100.0%)
- Living in the Selection Area but Employed Outside: 26,531 (14.9%)
- Living and Employed in the Selection Area: 152,017 (85.1%)
Spokane Health Care Background and Profile

- Spokane is the hub for medical services in the Inland Northwest.
- Four major full service facilities create overall Spokane Health Care background:
  
  - Providence Health & Services (non-profit Seattle-based)
    - More than 155 years Providence Health & Services continues a tradition of caring that the Sisters of Providence.
  
  - Sacred Heart Medical Center
    - Established in 1886 by Mother Joseph
    - Year 1898, Opens Nurses Training School, is the first in Spokane and second in the state.
    - Year 1919, Department of Laboratory Medicine opens.
  
  - Deaconess Medical Center
    - Established in 1896 by a compassionate and generous Spokane couple. Deaconess Medical Center grew along with the Spokane and the surrounding areas grew year by year. Nowadays, they are designated a top 100 hospital in the nation for heart care.
  
  - Community Health Systems (Profit Tennessee-based)
    - Established in 1985.
Spokane economic area Health care cluster: Wages by Subcluster, 2010

- Medical Equipment Distribution and Rental
- Healthcare Provider Offices
- Hospitals
- Drug Stores
- Medical Laboratories
- Home and Residential Care
- Optical Goods Retailing

US Average Cluster Wage: $46,073
Spokane, WA Economic Area
Average Cluster Wage: $42,706
Reno economic area Health care cluster: Wages by Subcluster, 2010

Reno-Sparks, NV Economic Area
Local Health Services Cluster: Wages by Subcluster, 2010

Chart Control: Mouse over for more information.

Reno-Sparks, NV Economic Area
Local Health Services Cluster: Wages by Subcluster, 2010

Wages, 2010

- **Healthcare Provider Offices**
- **Medical Equipment Distribution and Rental**
- **Hospitals**
- **Medical Laboratories**
- **Funeral Service and Crematories**
- **Drug Stores**
- **Home and Residential Care**

Indicates national benchmark **Average Wage**

US Average Cluster Wage: $45,073
Reno-Sparks, NV Economic Area Average Cluster Wage: $47,909
Health care cluster in Spokane, WA

Spokane, WA Economic Area
Local Health Services Cluster: Specialization by Subcluster, 2009-2010

- Funeral Service and Crematories
- Home and Residential Care
- Hospital
- Healthcare Provider Offices

Overall change in Share of US Local Employment: 0.0014%
Overall Share of US Local Employment: 0.20%

Employment 2009 - 2010
- Added Jobs
- Lost Jobs
- Employees 7,948

Click and drag to select an area to enlarge
Health care in Reno-Sparks, NV

Reno-Sparks, NV Economic Area
Local Health Services Cluster: Specialization by Subcluster, 2009-2010

Overall change in Share of US Local Employment: -0.025%

Overall Share of US Local Employment: 0.21%

- Funeral Service and Crematories
- Home and Residential Care
- Hospital
- Healthcare Provider Offices

Change in Share of National Employment, 2009 - 2010

- Added Jobs
- Lost Jobs

= Employees 5,329
Factor Inputs: Skilled Labor
Factor Inputs: Regional Hub

Source: http://education.nationalgeographic.com/education/mapping/interactive-map/?ar_a=1
Factor Inputs: Health Care use of Infrastructure

- I-90
- Airports
- Multiple Hospitals Facilities
  - Providence
    - Sacred Heart
    - Holy Family
  - Rockwood
    - Deaconess
    - Valley Hospital
Demand Conditions: Government

- Community Empowerment Zones
- Medicare/Medicaid
- Department of Labor and Industries
Demand Conditions: Population

- Spokane County Population - 471,221
  - Aging Population

- Est. Eastern Washington Population - 1.5 mil

- Spokane Hospital Coverage Area
  - Est. Population of 2.6 Mil

Source: http://quickfacts.census.gov/qfd/states/30/30001.html
Context for Firm Strategy & Rivalry

- Fair & Open Local Competition
- IP Protection
- Transparency
- Local Policies & Incentives
- Open & Vigorous Local Competition
- Rule of Law
- Meritocratic incentive systems

Porter, 2008.
Context for Firm Strategy & Rivalry

- Fair & Open Local Competition?
  - Regulations on many aspects of health care facilities
    - Titles 43 & 70 of the Revised Code of Washington
  - However, performance professional services from physicians are not regulated by the state (RCW 70.41.180)
## Context for Firm Strategy & Rivalry

- **Antitrust immunity (RCW 43.72.310)**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancement of the quality of health services to consumers</td>
<td>Reduced competition among health carriers, health care providers, or health care facilities</td>
</tr>
<tr>
<td>Gains in cost efficiency of health services</td>
<td>Adverse impact on quality, availability, or price of health care services to consumers</td>
</tr>
<tr>
<td>Improvements in utilization of health services and equipment</td>
<td>The availability of arrangements less restrictive to competition that achieve the same benefits</td>
</tr>
<tr>
<td>Avoidance of duplication of health services resources</td>
<td></td>
</tr>
<tr>
<td>Facilitates the exchange of information relating to performance expectations</td>
<td></td>
</tr>
<tr>
<td>Simplifies the negotiation of delivery arrangements and relationships</td>
<td></td>
</tr>
<tr>
<td>Reduces the transactions costs on the part of health carriers and providers in negotiating more cost-effective delivery arrangements</td>
<td></td>
</tr>
</tbody>
</table>
Context for Firm Strategy & Rivalry

- IP Protection
- Transparency (financial reporting, corruption)
  - Increasingly more stringent financial reporting regulations, such as Sarbanes-Oxley.
    - Non-profit hospitals have even more regulation
Context for Firm Strategy & Rivalry

- Local Policies & Incentives
  - Medicaid Electronic Health Records incentive program (Health Care Authority, 2012)
  - Innovation Partnership Zone

- Open & Vigorous Local Competition
  - 172 Healthcare related companies in the Spokane area (Manta, 2013)
  - Major competing hospitals/clinics
  - Not really “local”
Context for Firm Strategy & Rivalry

Healthcare Companies in Spokane (3,079 Companies reported)

<table>
<thead>
<tr>
<th>Employee Count</th>
<th>Percent</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>79%</td>
<td>2,422</td>
</tr>
<tr>
<td>5-9</td>
<td>9%</td>
<td>287</td>
</tr>
<tr>
<td>10-19</td>
<td>5%</td>
<td>165</td>
</tr>
<tr>
<td>20-49</td>
<td>4%</td>
<td>114</td>
</tr>
<tr>
<td>50-99</td>
<td>1%</td>
<td>33</td>
</tr>
<tr>
<td>100-249</td>
<td>1%</td>
<td>34</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>24</td>
</tr>
</tbody>
</table>
Context for Firm Strategy & Rivalry

- Rule of Law
- Meritocratic incentive systems (antidiscrimination)
Related & Supporting Industry

- Presence of capable, local suppliers
  - 62 Medical Equipment & device suppliers in Spokane - Matrical, Pacific Northwest Medical, Lincare, etc.
    - Most have 20 employees or less (Manta 2013)
Related & Supporting Industry

Companies in related fields

- **Sports medicine** – Champion Sports Medicine, Physical Therapy Associates, Inland Orthopaedics of Spokane
- **Medical Research/ Pharmaceuticals** - PAML, Jubilant HollisterStier, Hyprotek, Lincare, AstraZeneca
- **Funerals / Crematories** - Hennessey-Smith, Heritage, Spokane Cremation, Riplingers
- **Transport Vehicles** - ACC Medlink, American Medical Response
- **Pharmacies** – CVS/Caremark, RiteAid, Walgreens, Various grocers
- **Health Insurance** - Assurant, Asuris, Group Health, LifeWise, ODS, Premera Blue Cross
- **Medical Universities** – Riverpoint Campus – WSU/EWU/UW cooperative campus
Clusters vs. isolated industries

- Health Sciences and Services Authority (HSSA) & Empire Health Foundation (EHF)
  - Planned $12.5 million investment between 2011 and 2020, plus aims to draw additional $5 million from outside sources.
  - Goal to grow total research funding in Spokane to $70 million per year by 2030
  - Board members are all executives from various universities and health care providers in Spokane
Related & Supporting Industry

- Clusters vs. isolated industries
  - Downtown Spokane Innovation Partnership Zone
    - $13,728,655 in private sector investment since 2007 (Dept. of Commerce, 2010)
Related & Supporting Industry

• Clusters vs. isolated industries
  ◦ Greater Spokane Incorporated - $500 million over ten years to develop downtown Spokane health care cluster (Personal Interview, February 19, 2013).
  • Starting with the Biomedical and Health Sciences Building, which will have room for 18 to 24 principal researchers and 108 graduate and postdoctoral students.
  • Projected 300 new scientists should migrate to Spokane, and an additional $50 million in research spending
  • Aim at creating new technology and businesses that can be spun-off into the economy.
Health Care Cluster Performance

Case-mix Adjusted Charge per Discharge
(2011)

Hospital

Seattle Childrens
Virginia Mason Medical Center
Harborview Medical Center
Swedish Medical Center - First...
University of Washington Medical...
Providence Sacred Heart Medical...
Deaconess Hospital
Shriners Hospitals for Children - Spokane
providence Holy Family Hospital
Statewide Totals

Dollars

60,000
50,000
40,000
30,000
20,000
10,000
0
Health Care Cluster Performance

Local Health Services Cluster
Average Wage 1998-2010

- Spokane
- National
- Reno-Sparks

Year:

Average Wage:
20,000, 25,000, 30,000, 35,000, 40,000, 45,000, 50,000
**Cost of Living Index Comparison**

*Annual Average 2010*

- Seattle, WA, 121.4
- Bellingham, WA, 113.0
- Everett, WA, 111.3
- Portland, OR, 111.3
- Reno-Sparks, NV, 101.1
- Yakima, WA, 95.8
- Kennewick-Richland-Pasco, WA, 92.6
- Spokane, WA, 93.9
Hospital Compensation Of Employees
(Bureau of Economic Analysis)

<table>
<thead>
<tr>
<th>County</th>
<th>Compound Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>6.7</td>
</tr>
<tr>
<td>King</td>
<td>7.62</td>
</tr>
<tr>
<td>Pierce</td>
<td>3.47</td>
</tr>
<tr>
<td>Spokane</td>
<td>4.85</td>
</tr>
<tr>
<td>Yakima</td>
<td>1.2</td>
</tr>
</tbody>
</table>
ANNUAL WAGE MEAN COMPARISON

Health Care Occupation

Annual Wage Mean ($)

Reno-Sparks
Spokane
Cluster Competitiveness

- Largest Local Cluster

- Exists in populous area

- Little overarching economic competition

- Presence of significant health care related establishments

- Supporting Industries

- Readmission rate significantly less than National average
Life Science firms per City
(Pharmacy, Tech, Academic) WBBA Database
Economic Recommendations

- Diversify Cluster Development
- Information Technology
- Logistics Development Plan
  - Infrastructure Expansion
- Business friendly Legislation
  - Business and Occupation Tax
- Crime Reduction
Health Care Recommendations

- Educational Collaboration between Institutions
  - Encourage Business schools to develop healthcare management programs

- Hospital Collaboration
  - Collaboration for joint research facilities
    - Continued growth in health equipment technology

- Revolving Door Syndrome
References


- Personal Interview, Greater Spokane Incorporated. February 19, 2013.

References

- http://washington.providence.org/hospitals/sacred-heart-medical-center-and-childrens-hospital/about/history/
- http://www.deaconessspokane.com/About/Pages/History.aspx
- http://www2.providence.org/phs/Pages/default.aspx
- http://www.chs.net/company_overview/history.html
- http://www.seattlebusinessmag.com/article/infamous-bo-tax?page=0,0
- http://spokanestem.org/
- http://www.greaterspokane.org/infrastructure.html