

Case Study: Healthcare network applies location intelligence to meet community needs

Focused on quality, affordable care

This case study is based on a leading healthcare network which serves more than 100 Northern California communities through dozens of hospitals and health care facilities, staffed by more than 50,000 doctors, nurses, clinicians and other employees. The organization is committed to providing patients with the safest, highest quality, accessible and affordable care. From 2000 to 2013, it invested more than \$10 billion on advanced patient care technology and on facility construction necessary to meet the needs of its communities.

Business challenge

The healthcare network has made a commitment to operate more efficiently, improve customer service and make health care more affordable for their patients; part of that goal included reducing overall expenditures by optimizing care in the context of patient demand. More specifically, they needed to use visual analysis to identify areas of high patient density as compared to resource density, to collaborate with other organizations to expand the health care system network and to locate high densities of patients with a particular condition or disorder.

While the health care system did have a mapping program in use, employees — especially casual and occasional users — found it difficult to use. Output looked less than professional — a significant problem because the organizations' analyses is often used for government reporting and educational purposes. Collaboration capabilities were limited.

Solution

The healthcare network turned to Precisely for help with its geocoding and mapping efforts. Precisely deployed a solution that unites two pieces of Precisely software, Spectrum Spatial Insights and Point Level Geocoding.

Spectrum Spatial Insights is used for data visualization, market assessment and site analysis. It aids users in better understanding both general demographic and patient-specific data. The application's web-based platform, data repository and reporting tools centralize and store demographic, patient, competition and segmentation information for use throughout the organization.

Client profile

- A not-for-profit health system serving more than 100 Northern California communities with approximately 5,000 physicians, and 48,000 employees, 24 acute care hospitals, dozens of outpatient surgery and specialty centers and other health care services, including home health and hospice and medical research and education/training
- Major service lines include cardiac care, women's and children's services, cancer care, and orthopedics.
- Mission is to enhance the health and wellbeing of people in the communities they serve, through a not-for-profit commitment to compassion and excellence in health care services

Spectrum Spatial with Point Level Geocoding provides them with detailed data down to the address level. It can help the organization determine areas for expansion by analyzing opportunities and competitive intensity around potential sites while also helping to determine geographical gaps in health care coverage in the network's operating region. Data is easily imported or exported via reporting tools and a management interface.

Benefits

Data analysts have used Precisely to identify "frequent utilizers" of emergency room care and are beginning to match these patients with census data to determine where they live. It's the first step in assessing why these patients use the emergency room so often. On the business side, organization's professionals are using HealthPoint 360 to chart strategies for future growth. The health care system has used the mapping capabilities to compare distances between existing facilities and those of potential partners, determining how to fill geographical gaps in the system's health care coverage. The healthcare network's professionals appreciate the speed. "We don't have to spend days on a mapping project anymore," said Mike Skeen, system development analyst. "Now, it's more like an hour."

In addition, the organization has used the software solution to map catchment areas for competing health care systems, to see if any are drawing potential patients away may also help chart the right locations for future health care facilities. Professional looking analysis produced by the software solution incorporates easily into reports and presentations.

Whatever future projects the company plans, the health care system knows it can depend on Precisely's continued support. "The customer service has been fantastic," said a Data Analyst. "Precisely is always available, always helping out. With a lot of other companies, after you buy the software, you're on your own. With Precisely, the team has been really open and honest. They provided software alternatives to meet our needs, and we can still go back to them when we have requests or questions."

Technology used

- Spectrum Spatial Insights
- Professional Services

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– Data Analyst