

## **Regional Report East Central Indiana**

The East Central Indiana data collection area was composed of Blackford, Delaware, Fayette, Grant, Henry, Jay, Madison, Randolph, Rush and Wayne counties. Local economic development officials from counties in this area participated in the data collection process. Energize East Central Indiana (ECI), a regional economic development organization representing the counties in the region, coordinated the effort and served as champions for the project in East Central Indiana.

### **Data Collection Process**

A kick-off meeting, hosted by ECI, was held in Muncie, Indiana at the ECI office on January 25, 2008. The purpose of the meeting was to provide an introduction to the project, train users on the survey instruments and officially begin the data collection process.

Four distinct survey instruments were created to facilitate the data collection process. The surveys were targeted to:

- For-profit companies doing business in the life science industry
- Healthcare providers
- Educational institutions
- Communities

For purposes of the project, the life sciences industry was broadly defined to include healthcare delivery, medical devices and equipment, pharmaceuticals, agriculture and veterinary products, private sector and university research, and support services.

Local economic development officials in each community were asked to disseminate the surveys to the appropriate parties in their community. The existing IHIF database was used as a starting point, although it was acknowledged that the database was incomplete. LEDOs were encouraged to add new companies to the list and remove any entities that should not be included.

The surveys were provided electronically in an Excel format and as an on-line application. Supporting documents, including an "About the Project" brochure, introductory letters, press releases and other public relations materials were provided by IHIF to support the data collection process.

Due to the overall project timeline, approximately one month was allocated for local data collection efforts.

### **Focus Groups**

To support the data collection efforts, a focus group was held in Muncie on March 6, 2008. The purpose of the focus group was to expand upon the written data gathered through the survey process and allow for discussion of the area's strengths and weaknesses as related to growth of the life sciences industry.

Attendees at the focus group included representatives of local communities, universities, companies, economic development organizations and service providers.

### **Focus Group Findings**

The focus group discussion covered a wide range of topics, including strengths and weaknesses, perceptions, education, infrastructure and business climate. Participants were asked to think about where the life science industry is going and how East Central Indiana fits into its future development.

The culture of collaboration in East Central Indiana is a strong asset along with the area's work ethic and experience in manufacturing. In addition to collaboration in economic development endeavors, there are strong partnerships and outreach efforts with colleges and universities including Ball State, Indiana University East, and Ivy Tech Community College. The Ball State Entrepreneurship Center and Human Performance Labs were cited as examples of excellent resources for the region and beyond.

The participants cited a trained workforce, technology investments in the communities, available land and close proximity to the orthopedics cluster as a strong basis for growing life science companies and opportunities in the region. The business climate in the area is seen as very positive and low cost.

The East Central region is close to airports in Indianapolis, Dayton and Cincinnati and has abundant water sources. In addition, the area is home to several alternative energy plants, growing agricultural enterprises, Hills Pet Food, and Really Cool Foods.

There are a variety of life science companies in the area including PA Labs (recently acquired by Labcor), one of the largest testing laboratory companies in the State. The company employs 500 people. The health and hospital service providers are highly regarded and are home to many clinical trials.

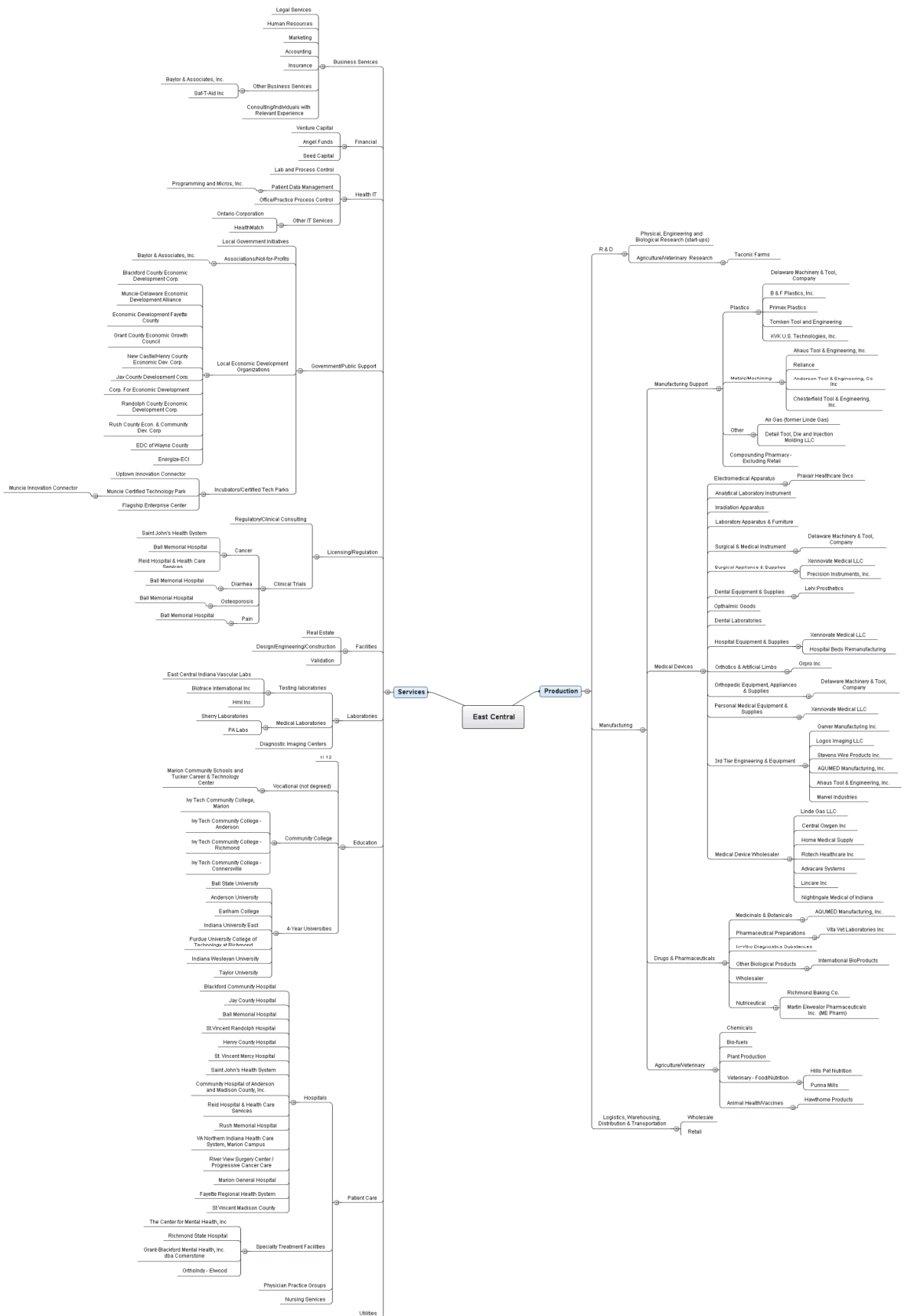
Concern was expressed about low educational attainment in the region, the appearance of some areas, and the lack of emphasis placed on marketing the area and telling the positive story of opportunity in the East Central region.

### **Data Collection Results and Existing Business Analysis**

At the beginning of the process, IHIF's database contained data on approximately 56 life science entities in the ten county region. These entities include companies, educational institutions and healthcare providers. Comprehensive research was conducted by the economic development organizations in the region, resulting in the identification of many new companies. Surveys were disseminated to targeted contacts, resulting in 40 completed surveys. In total, 16 new companies were added to the list, resulting in 72 total companies in the final database. Information on these 72 companies is included in the region's asset map. The complete database of companies included in the asset map is available at [www.ihif.org](http://www.ihif.org).

It is important to note that the asset map is not all-inclusive. The data collection process, as outlined above, was as comprehensive as possible. However, as with any survey, the response rate was not 100%. Although independent research was conducted, there is no doubt that assets are missing. The Indiana Health Industry Forum will continue to add to the database and the asset map in the future.

# Existing Business Structure Asset Map



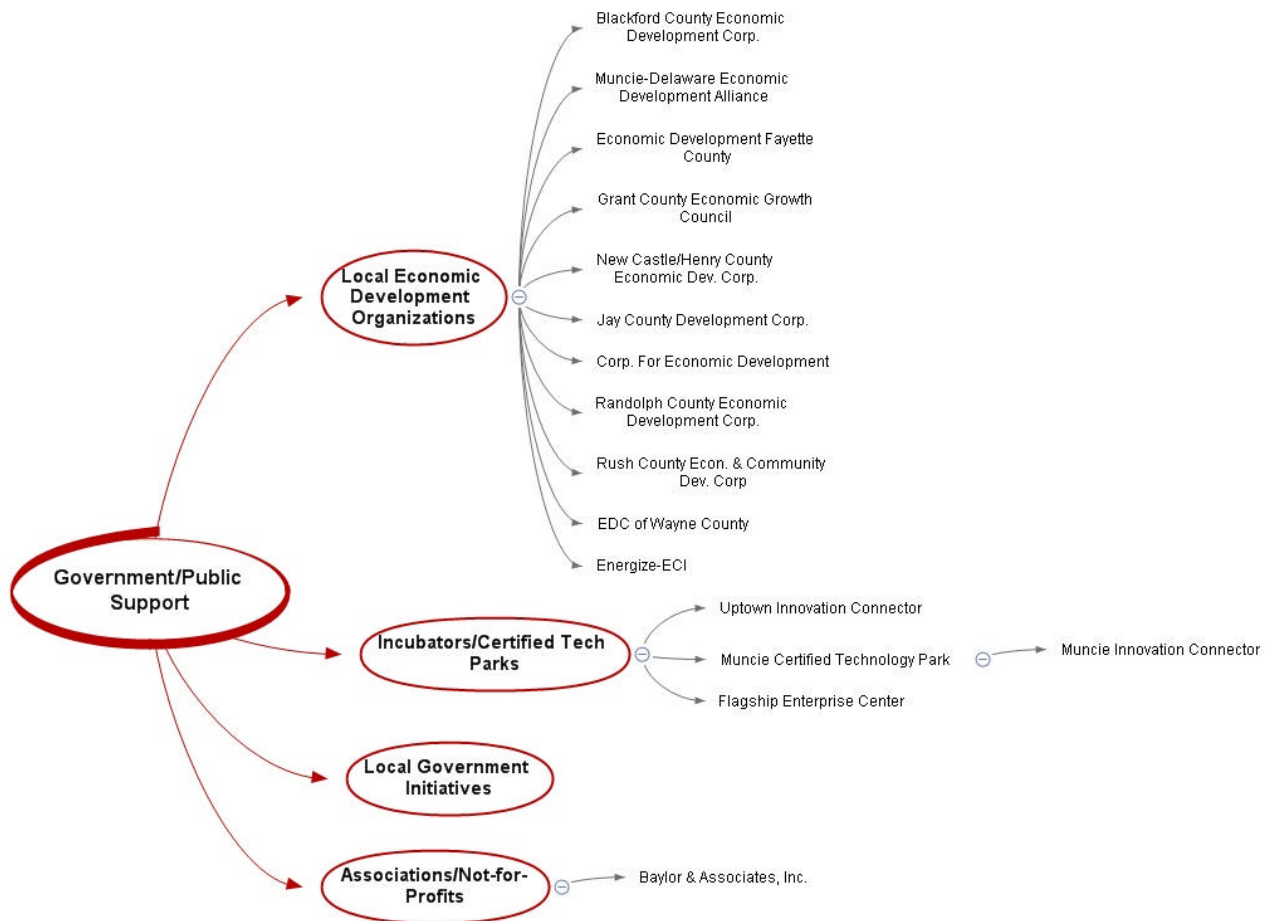
The asset map for East Central Indiana creates a visual representation of the life sciences industry in the region, broken down between the service sector and the production sector. Areas of strength and weakness in the industry clearly emerge.

On the service side of the map, the area shows strength in education and patient care. In both of these areas, there is a well-development network of assets. The map shows weakness in the areas of business services, facilities and financial support for life science companies. The weakness is partially attributable to the region's proximity to both Fort Wayne and Indianapolis. These types of support services are readily accessible within a reasonable driving distance in both of these markets.

The production side of the map shows strong activity in manufacturing support and medical devices, with some activity also in drugs and pharmaceuticals. Logistics and warehousing is a sector that could be further developed in the region. The central location and good highway system in the region are assets. The map also shows little activity in the research and development cluster.

The following discussion highlights the major branches of the asset map in more detail.

**Government/Public Support**



This branch of the asset map includes those government and non-profit entities that support the development of the life science industry, locally and state-wide. The availability of two strong tech parks in the region will assist in the expansion of entrepreneurial activity in the region.

**Clinical Trials**

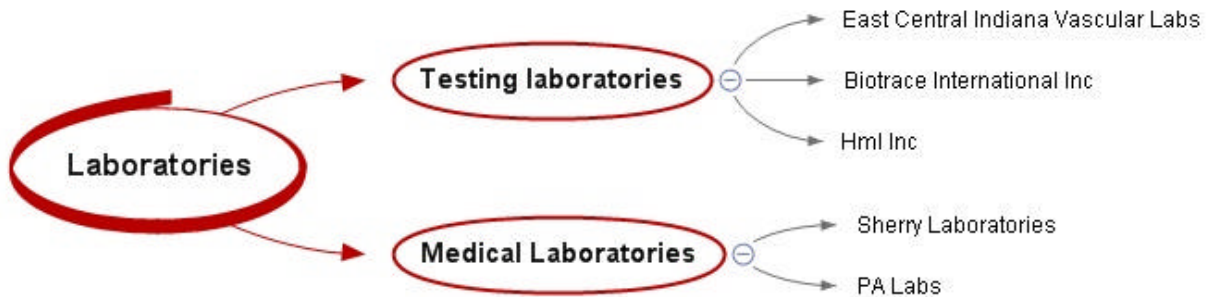


Several hospitals in the area are involved in clinical trials. Three primary focus areas for trials in this region are osteoporosis, pain, cancer and diarrhea. Clinical trials can provide both income and research opportunities to hospitals and physicians that participate. Trials also provide reduced cost or free medical care to patients who participate, as well as giving them access to cutting-edge healthcare.

Trials take place in four stages. Preclinical trials, the first step in the testing process of bringing a new drug to market, are done before any testing on humans can be conducted and may involve years of experiments on human and animal cells. Human testing is done in the next three phases. Phase I studies assess a drug's safety, using a relatively small number of healthy volunteers. Phase II studies are primarily concerned with efficacy. These studies are often done using control groups and are typically "blind", meaning that neither the patient nor the doctor knows if the drug or a placebo is being administered. Phase III studies are done using several thousand patients. Testing on a large scale provides a more thorough understanding of the drugs effectiveness and side effects. Phase IV studies, often called marketing studies, are used to compare a drug with other drugs on the market and to monitor long-term effectiveness, cost and impact on a patient's quality of life.

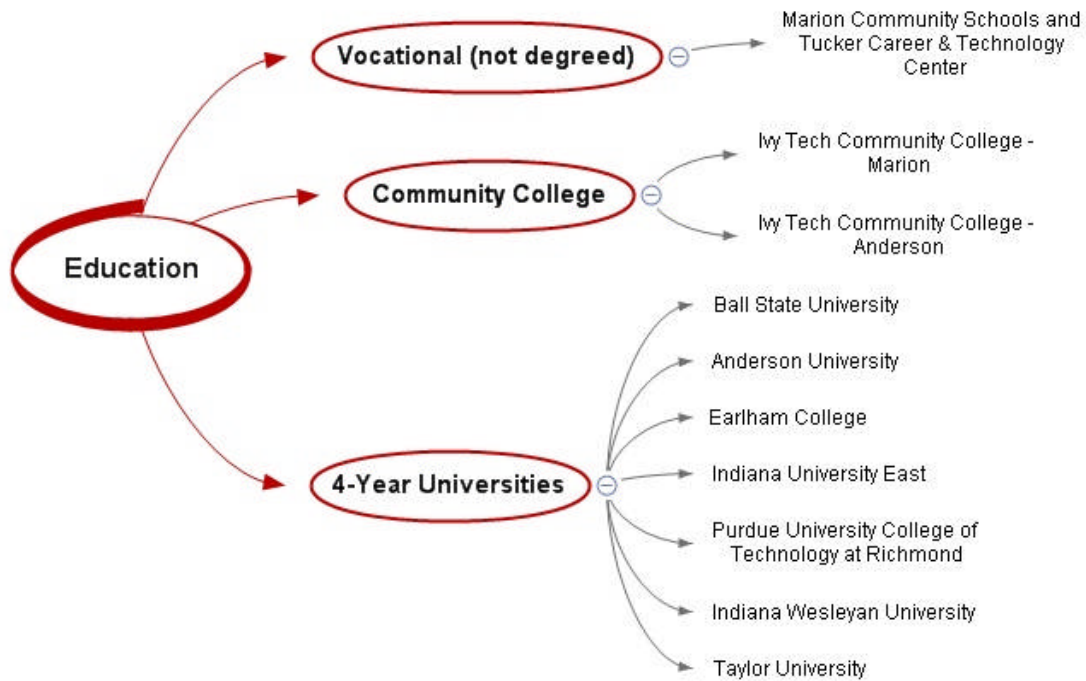
The East Central region may have the potential to increase clinical trials activity. There are a number of nursing programs in the region, providing a good source of workers for contract research organizations (CROs). CROs, which administer clinical trials for drug companies, are typically staffed heavily by nurses. Hospitals in the area are already involved in trials, which can spur innovation in healthcare.

**Laboratories**



East Central, specifically Delaware County, has a tremendous strength in testing and medical laboratories. Due to the lack of diagnostic imaging centers in the region, this is a potential cluster for growth.

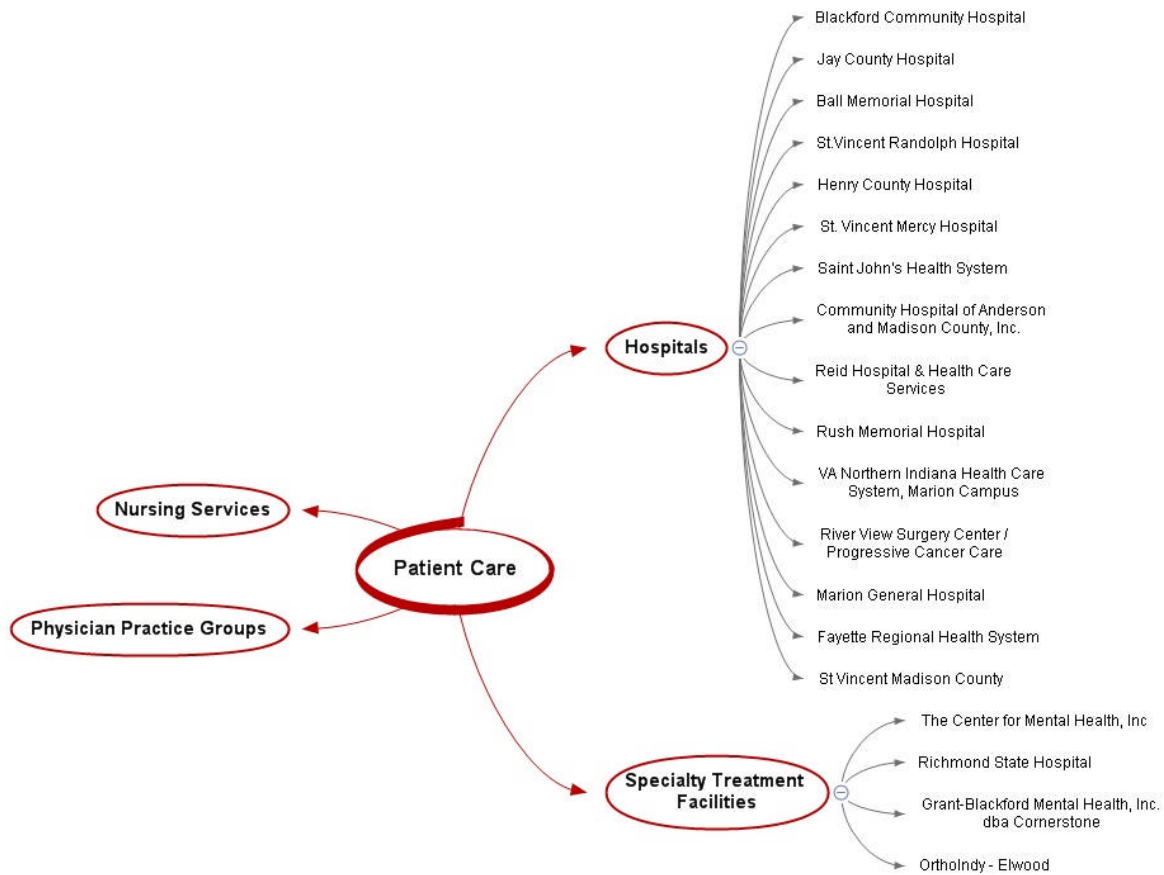
**Education**



East Central Indiana’s numerous post secondary educational institutions make it one of the strongest areas around the state for educational attainment opportunities. With four Ivy Tech Community College campuses throughout the region, the area can serve the growing need for healthcare delivery professionals such as nurses and laboratory technicians.

The seven four year institutions in the region attract not only students to the area, but serve as major employers with highly educated workforces.

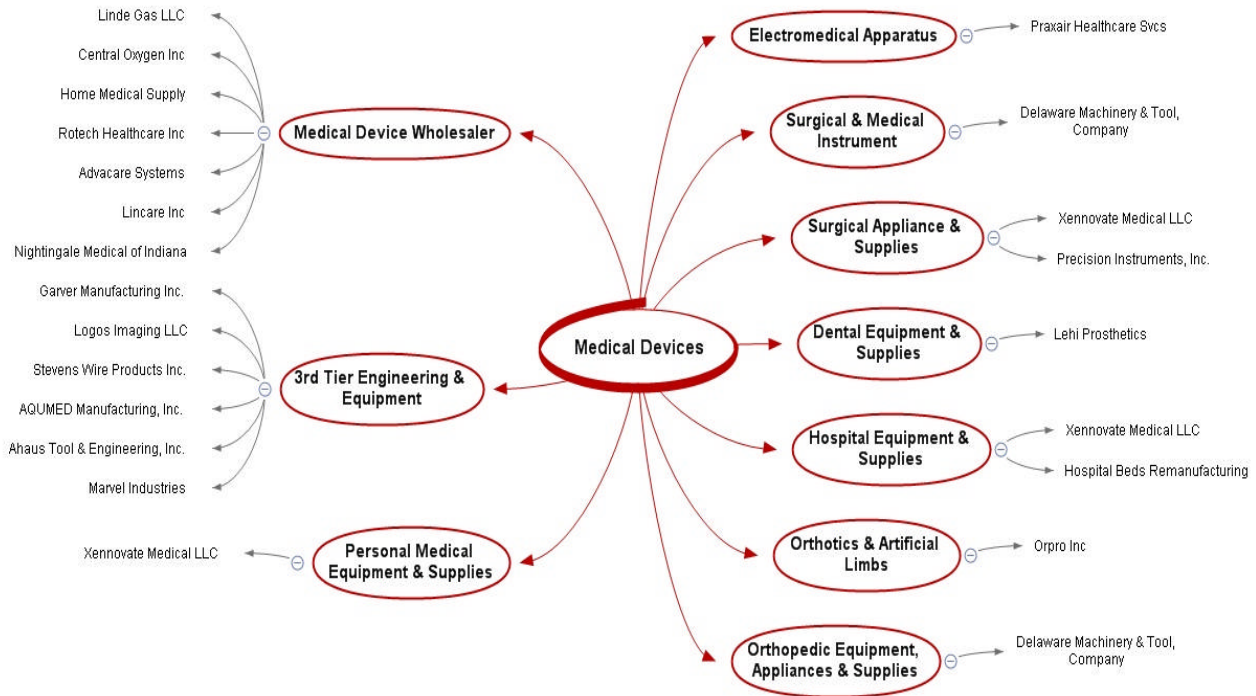
**Patient Care**



East Central Indiana’s health and hospital delivery system is strength to the region. Residents have local medical options in each county. Strong regional hospitals serve as anchors in larger communities, offering more advanced technology and services. This includes Richmond’s Reid Hospital & Health Care Services, which has 230 beds, and Muncie’s Ball Memorial Hospital. Ball Memorial Hospital was recently ranked number one in Indiana for cardiac surgery based on clinical outcomes according to the Tenth Annual HealthGrades Hospital Quality in America Study.

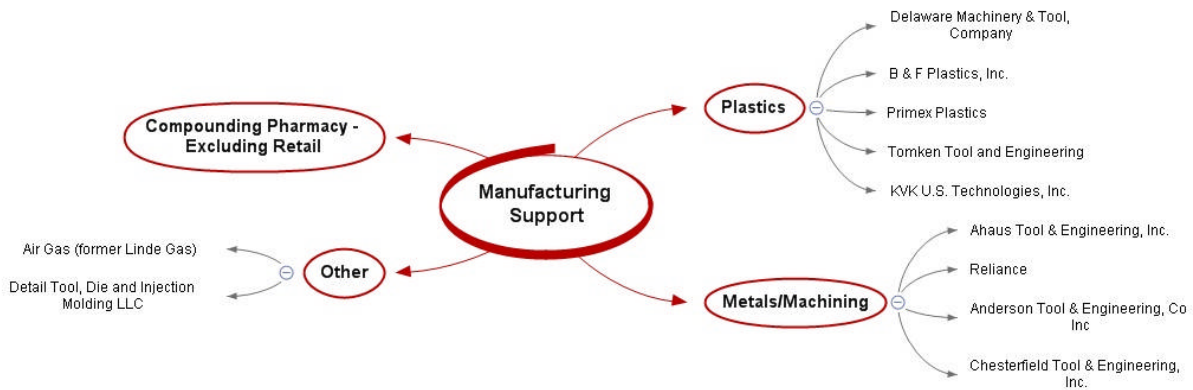
The combination of approximately twenty various hospitals and specialty treatment facilities in the East Central Region present opportunities for growth of the healthcare workforce, increasing their role as an economic driver to the state’s economy.

## Medical Devices



The medical device wholesalers, 3<sup>rd</sup> tier engineering & equipment providers, and the various other medical device specialty companies that are in the region have the opportunity to support prototype production for the life sciences. As illustrated in the map above, East Central's has existing strengths in 3<sup>rd</sup> tier engineering & equipment and medical device wholesalers.

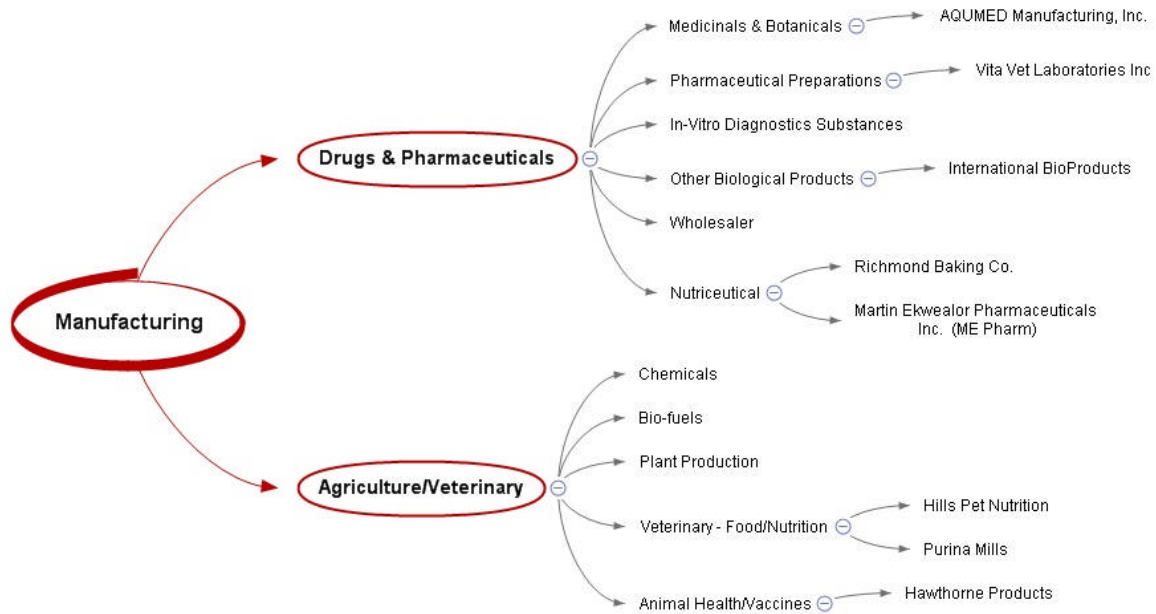
## Manufacturing Support



As previously stated, East Central Indiana's rich history in manufacturing has been an asset for the region. As the manufacturing industry has changed over the past several decades, companies with specializations in plastics and metals have found ways to transition their products and services to accommodate the life sciences industry. The study recognizes that additional companies in these industries may exist in the region but are not represented on the map above. Any such companies that were not found during the data collection process can be added to the map at any time.

East Central has a cluster of small to mid-size companies that specialize in plastics and metals/machining that can serve as the base for advanced developments in these industries.

## Manufacturing



East Central Indiana is the home of several pioneers in the nutraceutical industry. Richmond Baking Co. not only produces its own products but has the opportunity to be a partner in the nutraceutical production. Based on the data received, the Richmond area contains several companies that can serve as catalysts for the growth of this industry. However, both Grant and Delaware counties have the infrastructure to support nutraceutical and enrich food production companies.

## Gaps in the Asset Map

While the asset map in the region is fairly well-developed, there are some areas of weakness. The availability of venture capital and angel funding in the region is very limited. While it is widely recognized that the entire Midwest is lacking in this area, increased capital is needed to support entrepreneurial development in the area.

Business services that specifically support life sciences are not readily available in the region. These services include human resources, marketing, accounting, legal and consulting assistance. Likewise, real estate services such as validation, design and construction specific to life science applications are not abundant in the area. Given the proximity to Indianapolis and Fort Wayne, East Central Indiana could be a satellite location for firms in these larger markets.

On the production side, the availability of skilled workers with a depth of manufacturing experience should be attractive to manufacturing support companies in the industry. There is an opportunity to increase activity in all branches on the production side of the map.

## Building a Life Science Environment

The asset map and corresponding database provide a comprehensive listing of the life science companies in the region. As part of an existing business strategy, the database should be reviewed and updated annually. The companies in the database should be incorporated into the local economic development office's existing business outreach programs.

- Because talent, new technology and rapid change are hallmarks of the life science industry, having a strong network of related companies is especially important to these firms. A business retention strategy for life science companies must include offering networking and educational opportunities.
  - Utilize existing networking opportunities
    - IHIF Life Science Luncheon
    - Indiana Biomedical Entrepreneur Network
    - Kelley School of Business Life Science Forums
    - The IHIF Annual Innovation Conference
    - Programs at local colleges and universities
    - Seminars devoted to life science topics
- Keep life sciences companies informed about legislative and program developments at the state and local level. These issues can directly impact the bottom line of a company, but many companies don't have the time or the expertise to stay abreast of changes.
  - Provide legislative updates specific to life science issues
  - Provide information about incentive programs that are especially applicable to life sciences companies such as the Venture Capital Tax Credit, 21<sup>st</sup> Century Fund and others. Comprehensive information is available at [www.iedc.gov](http://www.iedc.gov).
- Network with existing venture capital firms locally and throughout the Midwest. Gather information about their investment targets, funding levels and strategies. Serve as a source regarding venture capital opportunities to local companies.
- Learn about the life science industry. The life science industry is truly unique. The critical issues facing the industry are different than those facing Indiana's traditional industries such as durable good manufacturers and logistics firms.
  - Regularly review publications (listed below) that are applicable to local life science companies.
  - Review information from local universities regarding research initiatives, funding sources, new programs.
  - Follow national and international initiatives that impact healthcare, research & development and regulatory issues.

## Clinical Trials

Conducting clinical research is a mandatory and very expensive requirement for bringing a new drug or device to market. Companies need not only to identify patients but also need to be sure the people collecting and analyzing the data are responsible and accountable. Anything that can be done to reduce the time and paperwork to get a product into a clinical evaluation setting ultimately helps to reduce the associated costs.

- The Indiana Health Industry Forum (IHIF) has formed a task force to investigate how Indiana can streamline the process for drug and device clinical trials. The goal is to reduce the costs incurred by Indiana companies conducting those trials and to encourage out-of-state companies to conduct more of their trials in Indiana. Any company or hospital involved in (or interested in becoming involved in) clinical research should be encouraged to participate.

## **Contract Manufacturing**

Indiana's manufacturing expertise translates across the board to the health and life science industries. Whether a client is working to bring a new pharmaceutical or biopharmaceutical to market or developing and testing a medical device, contract and outsource service providers can help every step along the way.

- **Devices**
  - Contract services may include: development of plastic or metal parts, software development, machining or tooling, prototyping, design & engineering, sales & distribution, regulatory and patent guidance
  - Many existing companies may have competencies that can be used to manufacture medical/surgical instrumentation and devices.
- **Pharmaceuticals/Biopharmaceuticals**
  - Contract services may include: discovery, analysis, formulation, scale up manufacturing, clinical research, regulatory and patent guidance, modeling, logistics and cold chain storage.
  - BioCrossroadsLINX program - BioCrossroadsLINX advances Indiana's drug development sector and facilitates connections with the biotechnology and pharmaceutical industries. Home to more than 40 contract drug development companies and their 6,000 employees, Indiana's technology, resources and spirit make it a premier drug development and manufacturing center in the U.S. These contract service providers support the growing outsourcing needs of the pharmaceutical and biotechnology industries. This program provides a web-based service to identify service providers in Indiana.

## Regional Strategy Recommendations

As a result of our investigation and based upon the assets recognized within the study area, we would like to offer the following growth strategy recommendations for the region:

### **Business Attraction and Growth**

*\*Disclaimer – Inclusion on this list in no way constitutes an endorsement, representation of interest or future business intent, or existence of a relationship with the Indiana Health Industry Forum, it's consultants or affiliates.*

- **Medical devices** – The recommendation is based upon the existing production assets available in the region. Opportunities appear to exist to expand research and development for medical devices statewide, particularly through partnerships with companies in the Warsaw cluster. Additional opportunities appear to also exist with some of the smaller specialty engineering companies in the area directed to prototype development and small run production.
  - Some companies in this field are:
    - DePuy Orthopaedics
    - Smith & Nephew
    - Stryker
    - Cook
    - Zimmer Holdings
  - Some important trade shows for this industry are:
    - Medical Device & Manufacturing East & Midwest
    - FIME International Medical Expo
  - Industry Publications:
    - IEEE Engineering in Medicine and Biology Magazine
    - Medical Device & Diagnostic Industry
    - Medical Product Manufacturing News
    - Medical Device Technology
- **Nutraceuticals, enriched foods, enriched animal feeds:** This recommendation is due to the nature of the existing manufacturing base and skill sets prevalent in the area. These industry types also tend to be large utility users so the East Central region benefits from strong utility infrastructure and natural resources.
  - Some companies in this field are:
    - NBTY, Inc.
    - Bayer Health Care
    - Perrigo Company
    - Nestle
    - Mead Johnson Nutritionals (BMS)
    - Abbott Laboratories
    - Purina
  - Some important trade shows for this industry are:
    - Natural Marketplace
    - Expo East
    - Southeast Natural Products Trade Show
  - Industry Publications:
    - Nutritional Outlook
    - Contract Manufacturing & Packaging

## **Entrepreneurial Growth: Hospitals**

- **Hospitals as an Idea Generator**

In many instances hospitals are among the largest employers in a county but often overlooked as a source of innovation and technology resources. Whether or not a hospital is conducting clinical research on the premises, doctors and nurses may have ideas for new products or have created techniques to solve common problems.

- Develop good working relationships with individual hospitals and work to be seen as a source of encouragement and guidance for people exploring ideas.
- Be familiar with areas of clinical research in your area (see map)
- Be familiar with centers of excellence

- **Tech Transfer & Innovation**

While some hospitals have excellent technology transfer mechanisms to encourage staff to explore opportunities as a means to encourage professional growth, others may not consider their facilities as fertile ground. High tech equipment and procedures can be found in many rural hospitals, especially as hospitals compete for patients by advertising the latest and greatest equipment, staff, and facilities.

- Have a referral network to local hospitals for companies that may want to explore the adoptability of their new medical device. Early feedback from authoritative sources can help refine a product and make it more likely to succeed on the market.

- **Be aware of the dynamics of the hospital business model.**

Collaboration between providers is unlikely (again, competing for patients), unless they are in separate patient markets. For-profit and not-for-profit hospitals are affected by insurance reimbursement policies. Opportunities to decrease costs and increase staff efficiency are in high demand. Many hospitals are exploring implementing quality systems.

- Check with IHIF for referrals to hospitals with innovative programs
- IHIF Economic Development Network
- Refer to IHIF for industry specific service provider information and other business development resources.

- **Attracting Talent**

As with the rest of the life science industry, extreme competition exists. Attracting and keeping medical talent is key to the success of local healthcare providers.

- Be familiar with new equipment purchases. The opportunity to work with current technologies is attractive to doctors and may help to encourage their relocation to more rural areas.
- Quality of life is a high motivator for attracting doctors and their spouses. Many times a spouse will be as educated as the candidate that is looking in your area.
- Develop a local spousal employment referral network
- Assess local intellectual capital – promote number of Ph.D, M.D. and Master's level degreed professionals.
- Continue to focus upon education and training support for health care delivery professionals within the region. The demographic trends of the US and the State of Indiana is driving the need for medical professionals, from orthopedic surgeons to home health care workers. The existing educational and training resources available within the area make this a clearly identified target for the area.

## **Additional Regional Strategies**

- Seek opportunities to further capitalize on the region's strategic location between Indianapolis and Ft. Wayne and between Indianapolis and Dayton building upon the area's transportation assets. The area has a natural geographic advantage and the recent rise in oil prices is forcing many companies, including life science companies, to rethink their distribution strategies including how inventory is held. The region's proximity to large population bases and its strong transportation infrastructure makes the area a natural for logistics investments.
- Continue to seek opportunities to collaborate and market the region's assets jointly with other portions of the state. The East Central area can benefit greatly from joining in marketing and promotion efforts with the rest of the state by highlighting the critical mass of life science resources available, the area's geographic location within these assets, and through cost sharing with the other regions.
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- The community should look to build upon the strong contract laboratory testing skill sets available within the community to encourage expansion and to attract new investments within the field. The community appears well positioned to expand this service to other neighboring markets (Dayton, Indianapolis, and Ft. Wayne.)
- The region can explore opportunities in Gerontology and partner with programs at Ball State University.

## **Summary**

The Indiana Health Industry Forum's Statewide Asset Mapping and Strategic Planning project is the first of its type in the state. The regional analysis and recommendations developed through this process are just a starting point. IHIF will be available to assist local communities in adding to the asset map, further developing strategies and creating successful implementation plans for these strategies.

For more information on this project or regarding IHIF's programs, please visit [www.ihif.org](http://www.ihif.org).