PURDUE TECHNICAL ASSISTANCE PROGRAM // A YEAR IN REVIEW



### SOLUTIONS FOR SUCCESS



## FROM THE PRESIDENT



Welcome to the 2011 TAP annual report. Our achievements this year continue the impressive results that have characterized the hard work of TAP faculty, students and staff. Please join me in celebrating these successes.

Through TAP, a team of more than 100 Purdue faculty members, students and staff are modernizing manufacturing, providing innovation in the business sector, transforming hospitals, implementing electronic health records, improving population health and promoting energy efficiency.

TAP is a powerful tool for Purdue, helping Indiana assist its companies and organizations to become more competitive in a marketplace that stretches far beyond our state's borders. No matter the challenge, TAP is delivering meaningful solutions and services to all of Indiana.

Thousands of Indiana organizations and businesses have benefited from TAP's services and expertise, creating an economic impact in the millions of dollars since the Purdue program was launched in 1986. In 2010-11, TAP significantly expanded its service in Indiana and beyond in healthcare and energy efficiency

and continued its extensive work in the business sector.

TAP's strength stems from the talented pool of expert can do to improve efficiency and productivity.

Working with our many partners to make Indiana's future. Thank you for the part you play.

France A. Córdova President, Purdue University

- faculty, staff and students who have conversations daily with business leaders, agency directors and others from every corner of Indiana to determine what we
- economy stronger and improving the health and quality of life for our citizens is an essential part of Purdue's

#### FOR EXAMPLE. TAP:

- Assisted **504** businesses and **286** healthcare providers and trained **3,239** employees in performance improvement, advanced manufacturing and healthcare specialties.
- Reported impacts include **\$177.5 million** of sales increased or retained. \$16.6 million in cost reductions. **\$47.4 million** in increased investment, and 2,464 jobs created or saved.
- Enrolled more than **1,000** primary care providers in program to facilitate use of electronic health records. Of those. 200 physicians met requirements for federal incentive payments totaling **\$10 million**.
- Took Green Enterprise Development and Lean healthcare training programs nationally and added web-based versions.
- Was founding partner of National Digital Engineering and Manufacturing Consortium, expanding use of advanced modeling and simulation by small and large manufacturers.

### TAP'S MISSION

Purdue's Technical Assistance Program (TAP) offers training and consulting to Indiana businesses and organizations in a wide variety of industries including manufacturing, healthcare and technology to advance the state's economic prosperity, health and quality of life.

#### EXPERTISE FOR ANY NEED. TAP OFFERS SOLUTIONS FOR:

Cost reduction

- Energy efficiency and sustainability Business growth
- Systems implementation
- Six Sigma certification and quality assurance

- Performance improvement
- Product development
- Team building

- Competitive improvement
- Leadership development
- Green workforce training

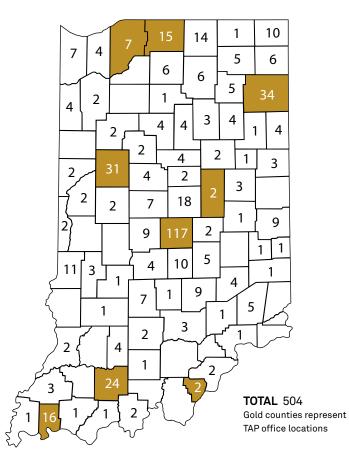
### SOLUTIONS FOR SUCCESS WHAT'S INSIDE:

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### MOVE INDIANA FORWARD

2010-11 FUNDING

#### INDIANA BUSINESSES SERVED FY 2011



#### **CLIENTS SERVED**

In 2010–11, TAP faculty, graduate students, and staff worked with more than **700** employers, hospitals, healthcare providers and governmental units in 88 counties across Indiana.

#### TRAINING

In 2010-11, TAP trained **3,239** Indiana employees in multiple areas including manufacturing, public health, healthcare and energy services.

\*Numbers in each county reflect clients served

#### ECONOMIC IMPACT DATA JULY 2010-JUNE 2011

INCREASED OR RETAINED SALES	\$177.5 MILLION
COST SAVINGS	\$16.6 MILLION
CAPITAL INVESTMENT	\$47.4 MILLION

#### EMPLOYMENT

JOBS ADDED/SAVED ..... 



#### TOTAL: **\$9,456,668** FROM **244** FUNDING SOURCES

#### \$3,069,544

Service fees from business and healthcare for training and technical assistance

\$1,827,381 State funding for business assistance

\$671.287 Indiana Economic Development Corporation funding for manufacturing assistance

#### \$553.889

Indiana State Department of Health funding for public health initiatives

#### \$350,007

Indiana Office of Energy Development funding for energy efficiency programs

#### \$2,536,454

U.S. Health and Human Services funding for electronic health records implementation

#### \$111.484

Indiana Department of Homeland Security funding for emergency preparedness

### \$336,622

Other

## ADVANCE MANUFACTURING

#### MANUFACTURING EXTENSION PARTNERSHIP (MEP)

The Technical Assistance Program/Manufacturing Extension Partnership (MEP) served more than 500 Indiana companies with workforce training and production needs from July 2010 to June 2011. Purdue MEP programs assist Indiana companies with advanced manufacturing efforts and continuous improvement principles as core workforce training and production strategies.



#### ENDRESS+HAUSER GROUP

Swiss-based Endress+Hauser Group, a global leader in measurement instrumentation, services and solutions for industrial process engineering, made a \$20 million investment in its production and calibration facility in Greenwood, Ind. To improve and formalize training at the new facility, Endress+Hauser tapped Purdue and its Manufacturing Extension Partnership. The goal: Implement Lean Manufacturing principles as the next logical step in its continuous improvement process. Employees and supervisors received a total of 3,200 training hours.

#### THE RESULTS:

- The final assembly redesign team re-examined areas of workflow, batch reduction implementation and station layout. Result: A 48 percent reduction in processing time.
- Targeting point-of-use storage (POUS) and process layout, this unit saw a 70 percent drop in operator movements and a 24 percent cut in unit cycle time. Result: 1,200 more meters are produced annually.
- Overall production has increased 20 percent facility-wide, and quality and delivery performance are at their highest levels.



**"THE PARTNERSHIP BETWEEN PURDUE'S** TECHNICAL ASSISTANCE PROGRAM AND THE ENDRESS+HAUSER FLOWTEC DIVISION HAS SPARKED A COMPLETE MINDSET CHANGE AMONG ALL OF OUR ASSOCIATES AT THE GREENWOOD FACILITY. OUR EMPLOYEES ARE NOW FULLY COMMITTED TO CHANGING OUR FACILITY FOR THE BETTER AND TO **IMPROVING OPERATIONS.**"

Hans Peter Blaser, General Manager, Endress+Hauser Flowtec USA, Greenwood, Ind.





#### THERMA-TRU

Therma-Tru is the nation's leading manufacturer and most preferred brand of fiberglass and steel exterior doors, with its lineup of entry and patio-door systems including decorative glass doorlites, sidelites and transoms and door components. Officials at Therma-Tru, whose facility in Butler, Ind., employs 700 people, knew they needed to keep pushing to maintain their lead. To cut costs, bolster production, streamline processes and establish metrics to gauge improvement, Therma-Tru partnered with Purdue's Manufacturing Extension Partnership (MEP). Working with Matt Kramer, Therma-Tru's continuous improvement manager, more than 30 engineers and support personnel have been formally trained in Six Sigma and Lean Manufacturing concepts. Plans are in place to expand training for more employees.

#### THE RESULTS:

- To address a defect problem that had hampered production ment system using Gage Repeatability and Reproducibility, or R+R, methods. The defect was reduced by 95 percent the first two years, with savings exceeding \$100,000.
- Therma-Tru cut by 50 percent the rate of returned doors, known
- and the process is being rolled out to its other 22 presses.
- By streamlining production and minimizing variability across its lines, variation has been reduced and productivity continues to climb. The plant has increased capacity by nearly 30 percent over the last two years.

for more than a decade, Therma-Tru adopted a new measure-

as Return Goods Authorization, or RGAs. Officials say savings in labor and product costs from this effort have been substantial.

To pinpoint the cause of a variation in cycle times for two molding presses, Therma-Tru implemented a standardized process that's now regularly audited. Cycle times were reduced by 25 percent

"THROUGH OUR COLLABORATION WITH PURDUE. FURTHER IMPROVEMENTS ARE POSSIBLE WITH THE ADVANCED TOOLS WE HAVE GAINED FROM TAP'S SIX SIGMA AND LEAN MANUFACTURING TRAINING. ELIMINATION OF WASTE IS OUR ULTIMATE GOAL. THE CLOSER WE GET TO THIS GOAL, THE MORE IT BENEFITS THE COMPANY. OUR EMPLOYEES AND THE CUSTOMER."

Dan Gurney, Engineering Services Manager, Therma-Tru



### CONNECT TO CAMPUS

TAP opens the door to Purdue for industry and others looking to tap its faculty's technical and business expertise or to hire the University's undergraduate or graduate students who are now ready to take their next career step. TAP provides no-cost, confidential consulting with the assistance of Purdue faculty from across all 11 of its colleges and schools for a full range of business and technical issues. This expertise ranges from advanced manufacturing and business management and strategy to human resources and product design and engineering. More than 40 Purdue faculty members are affiliated with TAP, working closely on projects aimed at making companies more efficient, effective, productive and profitable.



#### MID-LAND MEALS INC.

Nutrition is not only the business of **MID-LAND MEALS** but its passion. The not-for-profit organization relies on 50 employees to prepare and deliver 1,400 meals a day to the young, elderly and disabled in Benton, Carroll, Clinton, Fountain, Montgomery, Tippecanoe, Warren and White counties. That's 350,000 meals every year from its eastside Lafayette facility, which was built in 2002 and expanded in 2010. All told, Mid-Land Meals manages 16 of the 280 meal sites across the state, using its fleet of vehicles and expanded kitchen and modern refrigeration system. To expand, Mid-Land Meals has undergone a transformation, functioning more like a business. Mid-Land Meals also has an advantage. Of the state's 15 Area Agencies on Aging, only five have their own kitchen, including Mid-Land Meals. And those areas without kitchens rely on caterers. To manage that growth and to be more competitive, officials contacted Purdue TAP. Purdue management professor Charlene Sullivan and graduate students Mamta Dabral and Aravind Ramamoorthy met with a Mid-Land Meals team to develop a business model outlining costs for bids on providing food service for other Indiana regions, specifically south of Indianapolis. The result: Mid-Land Meals in fall 2011 expanded its reach, winning a bid among several competitors to deliver services to the Columbus region in southeast Indiana.

"I LOVE THE WAY WORKING WITH PURDUE TAP MAKES YOU EXAMINE YOUR OWN ORGANIZATION CLOSER. THEY GIVE YOU OTHER IDEAS AND WAYS OF LOOKING AT YOUR OWN PROGRAMS AND HELP YOU SEE YOUR STRENGTHS. IT IS WONDERFUL TO HAVE PURDUE HELP US BECOME BETTER KNOWN ACROSS THE STATE."

Elaine Brovont, Executive Director, Mid-Land Meals Inc., Lafayette, Ind.



**"CATERING BIDS ARE** VERY COMPETITIVE, AND PURDUE HELPED US FIND A BREAK-EVEN AMOUNT SO WE COULD DETERMINE EXACTLY WHAT TO BID AND TO BE SURE THE PLAN FOR GROWING OUR OPERATION WAS ECONOMICALLY FEASIBLE.

Sandy Brettnacher, Director of Administrative Services, Mid-Lands Meals Inc., Lafayette, Ind.

#### MANUFACTURING HUB

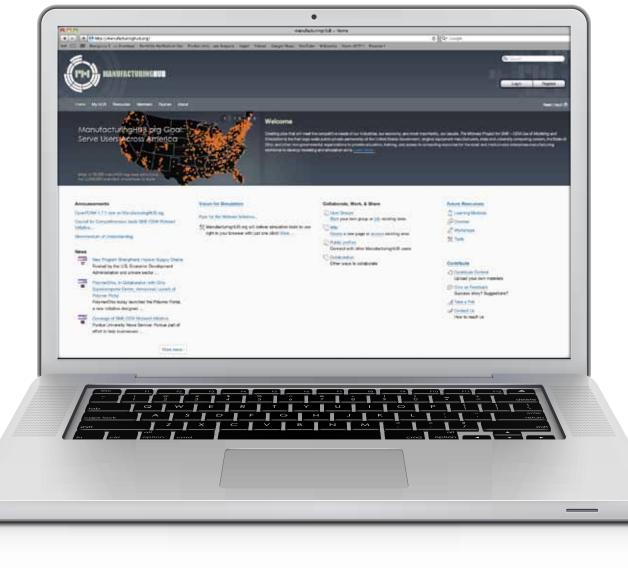
Helping small- to medium-sized manufacturers innovate can be a key step to growing their business, customers and jobs. To position the nation as a leader in cutting-edge manufacturing, Purdue TAP partnered with Purdue-led ManufacturingHUB.org to provide powerful software tools in easy-to-use, web-based form.

MANUFACTURINGHUB

TAP will help up to 50 Indiana manufacturing companies improve their engineering design and innovation capacity with access to sophisticated, complex modeling and simulation tools made uniquely easy to use by ManufacturingHUB.org. Initially, the focus is on simulation of gas and liquid flows, prediction of the strength of mechanical parts, and supply-chain management to improve interactions between large manufacturers and their key suppliers.

TAP officials are collaborating with George Adams, director of ManufacturingHUB.org and deputy director of Purdue's nanoHUB.org, which has been used by 178,000 people for nanotechnology research and education in the past year. Together, they are assisting Purdue with its role as a founding partner of the National Digital Engineering and Manufacturing Consortium (NDEMC), which was launched in March 2011 to provide education, training and access to computing resources to help manufacturers' workforces develop modeling and simulation skills.

TAP and ManufacturingHUB.org are a solution provider to the first NDEMC project, the Midwest Project for SME – OEM Use of Modeling and Simulation. The Midwest Project is led by the Council on Competitiveness, a nonpartisan group of CEOs, university presidents, labor leaders and Fortune 100 OEM manufacturers Procter & Gamble, John Deere, General Electric and Lockheed Martin. The project is focused on small- to medium-sized manufacturers (SMEs) in Ohio, Illinois and Indiana.



"POWERED BY PURDUE'S HUBZERO WEB PLATFORM, MANUFACTURINGHUB.ORG WILL DELIVER SIMULATION TOOLS THAT ARE EASIER TO USE THAN EVER BEFORE TO SMALL- TO MEDIUM-SIZED MANUFACTURERS TO HELP THEM BECOME MORE GLOBALLY COMPETITIVE. TOGETHER, WE WILL IMPROVE INNOVATION CAPACITY IN THE U.S. MANUFACTURING SUPPLY CHAIN, CREATING JOBS AND GROWING OUR ECONOMY."

George Adams, Director, ManufacturingHUB.org

### THINK GREEN

www.greenmanufacturing.purdue.edu

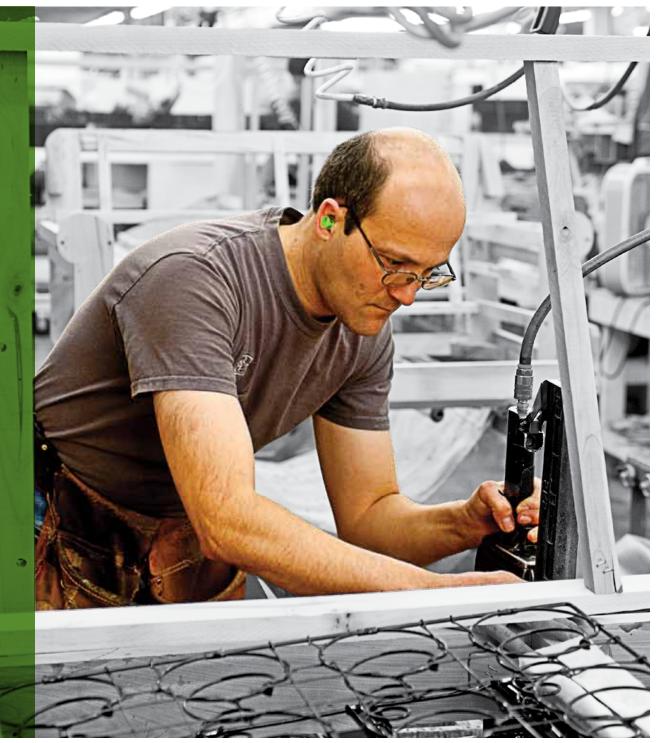
TAP works with manufacturers and others interested in learning how to apply sustainable, environmentally friendly practices in the workplace. Green Enterprise Development provides workforces with hands-on activities, simulations and case studies to teach environmental sustainability that leads to process improvement.



Purdue's Green Enterprise Development Program, offered through its TAP Energy Efficiency & Sustainability (EES) group, provides a platform for manufacturers and others to implement sustainable, environmentally friendly practices in the workplace. The program includes more than 64 hours of instruction, best practices training, exercises, interactive simulations and case-study analyses and can be delivered onsite or in public workshops. TAP EES partnered with the Society of Manufacturing Engineers (SME) to create the SME Green Manufacturing Specialist Certificate exam, the nation's first comprehensive, independently validated credential in the area of sustainable manufacturing.

**"SINCE WE ARE GETTING** PAID FOR A MAJORITY OF THE SCRAP MATERIALS WE RECYCLE, WE ARE NOW MAKING MONEY RATHER THAN PAYING TO HAVE THE WASTE HAULED AWAY. BY EMBRACING THE LEAN CONCEPTS TAUGHT TO US BY PURDUE TAP, WE ARE SAVING MONEY AND LOOKING AT THINGS IN A MORE SUSTAINABLE WAY. IT'S DEFINITELY A WIN-WIN SITUATION."

Steve Lehman, President, Smith Brothers Furniture, Berne, Ind.



#### SMITH BROTHERS FURNITURE

SMITH BROTHERS of Berne Inc. has built a reputation in crafting highquality and stylish furniture with nearly 275 employees and buyers in more than 20 states and Canada.

Smith Brothers wanted to complement its advanced manufacturing processes by curbing its energy and waste costs. So the Indiana furniture maker partnered with TAP to put ideas into action. Some new measures were small: a mandate that all lights and equipment should be shut off when not in use. Another led to the creation of a companywide Sustainability Team. In the first year alone, Smith Brothers saved an estimated \$35,000. In addition, the company:

- Reduced solid waste sent to a landfill by 40 percent by recycling products such as cotton, fiber, plastic and paper.
- Saved \$15,000 per year in electricity costs by purchasing an ultrasonic air leak detector and implementing a compressed air leak detection and repair program.
- Created a "Green Team" tasked with implementing environmentally friendly projects such as installing photo/heat sensors to automatically turn off lights in restrooms and cafeterias, and establishing new energy management policies.
- Reduced heating and cooling costs by venting production-related waste heat through the roof.

"WITH THE HELP OF PURDUE'S GREEN ENTERPRISE DEVELOPMENT PROGRAM, WE LEARNED HOW TO PACKAGE OUR ENERGY AND WASTE COSTS INTO A SINGLE MEASUREMENT TOOL. NOW, WHEN WE DEVELOP A NEW CHAIR OR SOFA. WE EXAMINE HOW TO UTILIZE LESS MATERIAL FOR MAKING A NEW PIECE OF FURNITURE. MANY OF OUR CUSTOMERS ARE IMPRESSED THAT OUR COMPANY IS MAKING SUCH A COMMITMENT TO IMPROVE THE ENVIRONMENT."

Melissa Fey, Sustainability Facilitator, Smith Brothers Furniture, Berne, Ind.



# **14** IMPROVE HEALTHCARE

#### HEALTHCARE TECHNICAL ASSISTANCE PROGRAM (HealthcareTAP)

HealthcareTAP improves healthcare delivery for provider-clients by deploying multidisciplinary teams of Purdue faculty and staff armed with a combination of industrial and biomedical systems engineering expertise as well as pharmacy, medical and nursing best practices. Using both industry-proven and innovative solutions, HealthcareTAP focuses on quality of care, safety and efficiency for hospitals, ambulatory care, long-term care and public health settings.

#### INDIANA HEALTH INFORMATION TECHNOLOGY EXTENSION CENTER (I-HITEC)

The newest addition to the Purdue Technical Assistance Program (TAP) family of services is the Indiana Health Information Technology Extension Center (I-HITEC), also known as the Purdue Regional Extension Center. I-HITEC operates under a grant funded through the American Recovery and Reinvestment Act and the Department of Health and Human Services to assist providers in adopting and implementing electronic health records to an appropriate level of meaningful use.

#### IMPACT BY THE NUMBERS

- Hospitals: 52
- Public Health Entities: **39**
- Physician Practices: 154 (employing 1,037 physicians)
- Others: 68

#### **INDIANA HEALTHCARE PROVIDERS SERVED** FY 2011



As one of Indiana's newest and most advanced medical facilities, **COMMUNITY HOSPITAL SOUTH** is a model for healthcare delivery in the state. This year, the hospital served 36,000 patients, and nearly 70 percent of them were admitted through its emergency department (ED).

Anticipating a need for a larger ED, hospital officials three years ago revamped it to the tune of \$11 million, adding a 19,000-square-foot addition that brought the ED's number of private patient rooms to 26. With patients being treated at a growth rate of 25 percent per year, Community Hospital South officials turned to HealthcareTAP to determine how they could make their ED even more efficient. The mission: To significantly reduce the time it takes for patients to be admitted through the ED for treatment — from a little more than 2 hours to a goal time of 1 hour.

A team led by project manager Theresa Knotts, a trained registered nurse and a performance improvement manager for HealthcareTAP, determined several issues that contributed to longer waits in the ED. In addition to the inherent safety risk for patients, the issues involved bottlenecks of patients waiting for available beds as well as tests that could be better handled once the patient was admitted.

Following HealthcareTAP's analysis and recommendations, Community Hospital South created two ED admission stations alongside the information desk in the ED waiting area. In addition, a smaller, private patient exam room just off the waiting area was added. Overall communication has improved as well, thanks to five walkie-talkies now used by ED nurses and staff. "THE EMERGENCY DEPARTMENT IS
THE FRONT DOOR OF THE HOSPITAL.
SIXTY-FIVE TO 70 PERCENT OF ALL
HOSPITAL PATIENTS COME THROUGH
THE EMERGENCY DEPARTMENT.
BY PARTNERING WITH PURDUE'S
HealthcareTAP TEAM, WE ARE
IMPLEMENTING NEW PROCEDURES
THAT WILL ENSURE OUR PATIENTS
AND THEIR FAMILIES THE BEST
HEALTHCARE EXPERIENCE POSSIBLE."

Sarah Knisley-King, Director, Emergency Department, Community Hospital South, Indianapolis, Ind.



**"PURDUE BRINGS GREAT** EXPERTISE TO THE TABLE — A FRESH, UNBIASED PERSPECTIVE AND A STRONG SYSTEMS ORIENTATION OFTEN LACKING IN OUR INDUSTRY, WE HAVE MADE SOME VERY POSITIVE. PATIENT-ORIENTED CHANGES TO OUR EMERGENCY DEPARTMENT PROCESSES THAT WE BELIEVE WILL **GIVE US A DEFINITE** COMPETITIVE ADVANTAGE IN OUR MARKETPLACE."

Tony Lennen, Chief Executive Officer, Community Hospital South, Indianapolis, Ind.

#### **ELECTRONIC HEALTH RECORDS**

#### PUBLIC HEALTH





Nurse practitioner Beth DeKonink, from left, and Dr. Monika Rajmaira of Capabilities meet with Monica Arrowsmith of I-HITEC.

Mark Draves

#### CAPABILITIES, MARION, IND.

The road to more efficient and effective healthcare is sure to focus on the way hospitals, healthcare centers and clinics, and physicians interact with computers. Rural healthcare provider **CAPABILITIES INC.** of Grant County is working closely with the Indiana Health Information Technology Extension Center (I-HITEC) at Purdue to meet new federal standards involving electronic health records (EHR). These standards require that healthcare providers use their EHR systems in meaningful ways in order to increase patient engagement, reduce racial disparities, improve safety, increase efficiency, better coordinate care and improve population health.

By meeting certain criteria for digital communication — such as e-prescribing, online patient access to lab results and electronic immunization data transmission — primary-care providers become eligible for federal stimulus monies from the Centers for Medicare and Medicaid Incentive Program to offset EHR implementation costs. I-HITEC moves its clients toward the new Meaningful Use Standard by applying a combination of readiness assessments, training, gap analyses, workflow redesigns and security assessments.

According to Mark Draves, chief executive officer of Capabilities' parent company Carey Services, the transition from paper to electronic information is about better healthcare. "An important feature of electronic health records is that it allows us to help the provider assertively manage the care for the individual patient with a focus on wellness and preventive care," he said. "Plus, the technology facilitates continuity of care, providing benchmarks that will help usher in personalized medicine."

As of June 2011, I-HITEC is under contract to assist more than 1,000 Indiana physicians and nurse practitioners with their EHR goals. Subsidized assistance is available to assist a total of 2,200 providers.

"BY WORKING WITH I-HITEC, WE WERE ABLE TO MINIMIZE DISRUPTION TO OUR PHYSICIANS CLINIC AS WE BEGAN IMPLEMENTATION OF AN ELECTRONIC HEALTH RECORDS SYSTEM. THERE WAS NO WAY WE WOULD'VE KNOWN WHAT ELECTRONIC HEALTH RECORDS VENDORS WERE OUT THERE OR WHICH ONES TO CHOOSE. THE HELP FROM PURDUE WAS INVALUABLE."

Dr. Monika Rajmaira Capabilities, Marion, Ind Purdue's HealthcareTAP is working with the **INDIANA STATE DEPARTMENT OF HEALTH** to create a strategic plan for healthy Hoosiers. A team led by HealthcareTAP's Population Health Initiatives Program Manager Deb Koester and its Manufacturing Specialist Jim Stephens facilitated the drafting of an Indiana State Health Improvement Plan. The document was written with input from 30 officials in healthcare, academia, nonprofit organizations, state and local health departments, and government. This five-year public health blueprint calls for "optimal mental, physical, social and intellectual well-being for all Hoosiers, leading to a healthy, vibrant and prosperous state."

Drawing on Purdue's strengths in both healthcare and engineering, the plan provides a systems approach to address health promotion through measurable outcomes, and to improve the delivery of critical healthcare services. In addition, the plan encompasses the statewide H1N1 After Action Review process, hospital preparedness planning, health department staff training on quality improvement, community health assessments and improvement planning.



"THE PURDUE HEALTHCARE TECHNICAL ASSISTANCE PROGRAM HAS BEEN INSTRUMENTAL IN HELPING PUBLIC HEALTH PROFESSIONALS AT THE LOCAL AND STATE LEVEL CONVENE

THE NECESSARY COMMUNITY STAKEHOLDERS AND COLLABORATIVELY DEVELOP A COLLECTIVE KNOWLEDGE OF THE BARRIERS TO PUBLIC HEALTH IN ORDER TO DEVELOP EFFECTIVE SOLUTIONS."

Dr. Deborah McMahan, Allen County Health Commissioner, Fort Wayne, Ind.

# 05

TAP advanced Indiana's economy in 2010-11 by connecting companies and organizations with Purdue resources and assisting them in implementing state-of-the-art technologies. More than 700 employers in 88 Indiana counties partnered with TAP, driving Purdue's mission to grow businesses, create jobs and improve our quality of life.

### TAP PARTNERS

TAP is a partner with many governmental, public, and private organizations including:

#### PURDUE PARTNERS:

- Regenstrief Center for Healthcare Engineering
- Center for Medication Safety Advancement
- Center for Regional
   Development
- Burton D. Morgan Center for Entrepreneurship
- Center for Advanced
   Manufacturing
- Global Business Engagement Initiative
- Regional Campuses
- ManufacturingHUB.org

#### STATE PARTNERS:

- The State of Indiana
- Indiana Department of Workforce Development
- Indiana Economic
   Development Corporation
- Indiana Office of Energy Development
- Indiana State
   Department of Health
- Indiana Department of Homeland Security

#### FEDERAL PARTNERS:

- Manufacturing Extension
   Partnership
- Centers for Disease Control and Prevention
- Department of Energy
- Department of Health and Human Services
- Economic Development Administration

#### OTHER PARTNERS:

- Indiana Hospital Association
- Partners for the Indiana Health Information Technology Extension Center (IHITEC) can be found at: www.ihitec.purdue.edu/partners
- Society of Manufacturing Engineers

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"AT TAP, WE WORK IN TANDEM WITH THE ROLE THAT PURDUE PLAYS AS A LAND-GRANT UNIVERSITY. TAP LEVERAGES PURDUE'S TALENT TO ADVANCE INDIANA'S ECONOMY, HELP CREATE JOBS AND ENSURE AN IMPACT THROUGH OUR PROGRAMS AND EXPERTISE. IT'S EXCITING TO PARTNER WITH COMPANIES AND ORGANIZATIONS THAT SHARE A SPIRIT OF ENTREPRENEURSHIP DESIGNED AT KEEPING INDIANA A VIABLE, THRIVING HOME TO NEW AND GROWING BUSINESSES."

#### David R. McKinnis Director and Assistant Vice President for Engagement

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