

# UP AND RUNNING HELPS PIONEER THE WAY IN HEALTH CARE TRENDS AND HAS BEEN DOING SO FOR A DECADE

## An Emerging Health Specialty

“As Western medicine moves away from crisis management and towards prevention, this field is exploding,” related David Rosenthal, president and owner of Physicians Insight of Lakeland, Florida.

Founded by Rosenthal in 2007, Physicians Insight provides access to clinical interpretations for health care practitioners utilizing infrared thermography (IRT) in the detection and prevention of health-related issues.

The International Association of Medical Thermography states, “Infrared is not new to the world of science and physics, but it has now become personal in the world of health care.”

Abnormal body temperature is a natural indicator of illness or injury, and IRT is a fast, passive, non-contact, and non-invasive alternative to conventional clinical means for monitoring body temperature.

For Rosenthal, creating Physicians Insight was a necessity borne of his wife’s invention. Carol Chandler, a licensed Doctor of Oriental Medicine and practicing clinical thermographer, founded Med-Hot Thermal Imaging, which sells FLIR Thermal Imaging systems in conjunction with proprietary value-added software. Much like X-rays and CT scans, thermal imagery requires trained clinicians for reading and interpretation.

Answering the call, Rosenthal began developing Physicians Insight to serve as an online reporting portal. Practitioners could post images to a secure website, and consulting physicians could then read those images and produce and post a report back to the website for practitioners to retrieve. Practitioners and consultants are independent of Physicians Insight, with the company serving as a conduit and a storehouse.



# A Technological Challenge

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Though the concept sounds straightforward, there were obstacles. “The security of a web-hosted, password-secured database compliant with HIPAA regulations was the big challenge. Remember, this was 2007,” Rosenthal recalled. Like a bank transaction, individual accounts had to be kept isolated from one another. When a patient had images on file from different practitioners, however, those had to be accessible for the interpreting physicians but excluded from view of the thermographers themselves. “That sort of linkage and layers within the database while maintaining appropriate confidentiality of medical records is unusual,” said Rosenthal.

What Rosenthal noticed was a glaring absence of software developers who could provide or understand what he was looking for. “We were searching for someone who could do this and went through several vendors, and no one we dealt with had a clue how to build this thing.” Between the required depth and security as well as the specific needs of the health care industry, Physicians Insight was stuck in the concept stage.



# An Up and Running Solution

“Peter Hanson sent me back a diagram that looked like the wiring schematic for the shuttle,” reminisced Rosenthal with a chuckle, “but it was exactly what we needed.”

After many attempts, Rosenthal thankfully met Up and Running’s founder, Peter Hanson. “He knew exactly what I was talking about, and we were off and running from there....I knew he was the right guy the minute we started talking.” With some limited documentation regarding the business needs and participation in protracted phone conversations around the functionalities Rosenthal would need, Hanson produced a plan to move forward.

“He sent me back a diagram that looked like the wiring schematic for the shuttle,” reminisced Rosenthal with a chuckle, “but it was exactly what we needed.” Rosenthal worked almost daily with Hanson for nearly five months to build the final site and database. To get Physicians Insight up and running as quickly as possible, Hanson and the UAR team fashioned a minimum viable product almost immediately that would serve until the more robust final iteration was in place.

Once complete, the application included a custom codebase for governing core process flows for how images are interpreted and reviewed. This was coupled with custom integration with camera platforms for image transfer and patient data organization. To ensure high availability of so much data, redundant servers were implemented for both the web and database.

For ease of use, included were a custom spell-check for medical terminology as well as a templated system for interpretation reports. A follow-up engine was developed to manage when interpretations need to be done and also when patients should return.

The building blocks have changed over time, but the current stack includes RHEL, PHP, PostgreSQL, Apache, and GlusterFS.

The Physicians Insight project is one among many examples of UAR's successes. Since 1995 Up and Running has been designing and rolling out custom enterprise and web-based solutions across the world focused on the engines of robust websites, with particular expertise in database management and security. As for that initial conversation yielding the schematic, that is a result of the communication skills UAR considers as core to its business as code writing.



## An Enduring Partnership

“We work together regularly, as there are always changes we need or additions, and they are as responsive as ever.”

“Pete is always there if I need him, but mostly these days I work with some of the other technical leads,” Rosenthal said of a relationship he considers foundational to his business model and reflective of UAR's belief that all staff are leaders and managers.



“We work together regularly, as there are always changes we need or additions, and they are as responsive as ever.” While Hanson is no longer his day-to-day contact, Rosenthal gets the same level of service at UAR, where all lead developers have more than ten years' experience, and all others have at least five years' experience and are never allowed to work directly with a client until they have tested successfully internally. Now a decade into the relationship, Rosenthal would recommend UAR to anyone seeking a software solution, and he cannot imagine a change in the partnership that got Physicians Insight up and running.

# About Up and Running

We partner with clients to solve important technical problems by building, implementing, and servicing complex software solutions for customers of any size in any industry.

Started in 1995 while founder Pete Hanson was a sophomore in high school, Up and Running Software began as a technical services firm and evolved into a developer of custom software solutions. Customer happiness and open communication have been the focus since day one, plain and simple, resulting in long-term relationships with any type of client, from non-profits to startups to the Fortune 10. Thanks to this mindset, Up and Running is fortunate to have served an impressive array of clients, including giants such as General Electric (GE), Henry Schein, Sanofi, and Hearst, as well as venture-backed startups at every phase, from formation to growth.

Its over two decades of custom software development, legacy system support, and migrations drive the engines of solutions that thousands of businesses and millions of people rely on daily. That experience has resulted in hands-on depth in most software development stacks, from the command line systems in the back office to ones that gracefully handle any screen size worldwide. A commitment to QA and process improvement drives scalable results, producing long-term software assets with high ROI. Up and Running's work passes FDA & DEA audits, rolls up global treasury data, manages nuclear assets and railroads, delivers vaccines, and enables neuroscientists and researchers.

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Let us know your preference, and we'll connect you with either a technical architect directly or a non-technical sales representative.