



Connect government systems faster.

Click here for InterSystems.



# GOVERNMENT HEALTH IT

OUR SITES CURRENT ISSUE SPOTLIGHT ON SUBSCRIBE BLOGS WEBCASTS INDUSTRY INSIGHTS EVENTS JOBS ABOUT US

Print | Email | Comment | Subscribe

Search GovernmentHealthIT



Advanced Search

## DOD funds project to develop brain trauma detector

By Peter Buxbaum  
Published on May 6, 2008

### Related story links

[Pentagon testing helmet-mounted trauma sensor](#)

### Newsletters

Subscribe to the [Government Health IT newsletter](#) to receive all the latest in news, features and online resources.

The Defense Department has granted the Brain Trauma Foundation of New York City \$4.6 million to develop an eye-tracking device that will enable military personnel to determine if a soldier has been subjected to traumatic brain injury, or TBI.

An initial product is scheduled delivery by the end of this year, said Dr. Jamshid Ghajar, president of the foundation, with improvements during the remainder of the four-year grant period.

Ghajar's research has shown that TBI occurs when a blast causes a rapid rotation in the neck and head that tears tissue in the brain's interior, resulting in a reduced ability to concentrate. Ghajar's device is designed to measure how well a patient's eyes are able to follow a moving object.

Optimal human attention involves the ability to synchronize what is going on in the present with an expectation of what will happen next, Ghajar explained. In TBI cases, "the timing is off, and the victim tries to compensate."

The device being developed will have patients view a moving dot using virtual reality goggles. The device will take readings of the eye reaction every millisecond and calculate the mean reaction time.

"We'll get a thousand data points every second," Ghajar said. "This should be able to give us a reading on TBI in 30 seconds. The fastest test available now takes 20 minutes."

The device will also include a high-speed camera to capture eye movements and software to analyze the signal. There will be a color-coded readout with green indicating no injury, yellow meaning that the patient is showing signs of compensating and red signaling that the soldier should immediately return to base.

The Brain Trauma Foundation, together with its partner on the project, the Boston-based engineering firm Foster-Miller Inc., are developing a database of normative values for eye reactions taking into account the subjects' age and level of fatigue. This is being done by testing soldiers stationed at the U.S. Army Soldier Systems Center, in Natick, Mass.

Most viewed | Most E-mailed

Panelists' consensus on e-prescribing: Go for it!

Florida HIE picks Web-based tool

Medicare PHR pilot is underway in South Carolina

For-profit HIEs are the answer, entrepreneur says

The Army's health IT hothouse

Health IT pilot

Making CPOE happen

Store-based clinics face rocky regulatory landscape

Government Health IT InSight eSeminar "Medicaid's health IT makeover"

Government Health IT presents **Rick Friedman**, director of the division of state systems for the Center for Medicaid and State Operations with the U.S. Department of Health and Human Services, in this recent eSeminar regarding how the federal Centers of Medicare and Medicaid Services is partnering with state Medicaid and health and human services officials to bring Medicaid into the digital age. **Paul McCloskey**, Government Health IT editor, moderates.

ACU-2000 IP

Digitally converging radio systems with SIP telephones, networks & devices

- SIP-based gateway
- Your existing infrastructure
- Real-time communication
- Wide area interoperability
- Operation continuity



Raytheon

**ACU-2000 IP**

**Digitally converging radio systems with SIP telephones, networks & devices**

- SIP-based gateway
- Your existing infrastructure
- Real-time communication
- Wide area interoperability
- Operation continuity



**Raytheon**

**HEALTH IT TOPICS**

- Ambulatory Care
- Classics
- Clinical Decision Support
- CMS
- Community Health Care
- Disease Surveillance
- Electronic Health Records
- ePrescribing
- Identity Management
- Imaging Systems
- Inpatient Systems
- Legislation
- Military Health
- ONCHIT
- Patient Safety
- Pay for Performance
- Privacy
- RHIOs
- Security
- Standards
- Surveys
- Telehealth
- Veterans Affairs

**Marketplace: Products and Services from our sponsors**

**[Cast Your Vote for Mirror Image](#)**

When it comes to streaming video and content delivery, we are your best candidate. With Mirror Image, no budget approvals are needed, no infrastructure investments and no POs required. Choose Mirror Image and get a FREE month of service. [Click here.](#)

**[Best Practices for Using Barcodes in Documents](#)**

Optimize scan settings, improve barcode accuracy, and increase recognition speed. Gain a better understanding of barcode recognition technologies to help you make more successful implementation choices. Download guidelines from Pegasus Imaging.

**[Will HAIPE® Encryptors Work for You?](#)**

Spirent Federal helps HAIPE® manufacturers and government agents to precisely quantify their encryptors' functionality and performance. The extreme accuracy of Spirent TestCenter™ helps identify potential application performance issues. [Click here.](#)

**[We Can't Control The Weather...](#)**

but we can control the delivery of your web content. Mirror Image is delivering content for the National Oceanic Atmospheric Administration (NOAA). To learn more about the services that we provide for NOAA, [click here.](#) Call to request a free trial.

**[Experience ADT Federal Systems SecTech '08](#)**

THE Security Technology Forum for Government Security Professionals. Over 40 leading-edge security demos. Solutions for government security, law enforcement and emergency managers. June 10-11 Washington D.C. Free Registration

[Home](#) | [About](#) | [Advertise](#) | [Contact](#) | [Custom Media](#) | [Editorial Calendar](#) | [Events](#) | [List Rental](#) | [Privacy Policy](#)  
[Reprints/Linking Policy](#) | [Subscribe](#) | [Site Map](#)

© 1996-2008 1105 Media, Inc. All Rights Reserved.



# GCN



## The Technology Authority for Government

To subscribe, advertise or learn more about our integrated media offerings, visit [www.GCN.com](http://www.GCN.com)

