



Pacific JITC Breaking New Tech Ground for MHS

INNOVATION RESEARCH PROJECTS JOIN FORCES TO SHOW NEW CAPABILITIES

Kihei, HI - The Pacific Joint Information Technology Center (Pacific JITC) recently sponsored the collaboration of two of its research projects to demonstrate a joint interoperability between cutting edge technologies.

The collaboration was initiated by Mr. Mark Goodge, Chief Technology Officer and Deputy Director, IATDD, during the November 2014 quarterly In Process Reviews (IPR) of the Pacific JITC's research and development projects that benefit Military Health Systems (MHS). On February 26, 2015, the results of the operation effort were presented during the Pacific JITC's first quarterly IPR of 2015 at the Integrated Test & Evaluation Center (ITEC).

The first of these innovation research Projects, the Theater Mobile Blood Management Project, examines and prototypes the next generation Theater Blood business analysis, research, modeling, and prototyping.

The second initiative, the Theater Medical Information Program—Joint (TMIP-J) Gap Analysis Project, simulates the TMIP Maritime common operating infrastructure of deployed shipboard systems in order to document and analyze the existing theater message transmission and business process flows for the Navy and Marine Corps platforms.

These two projects collaborated in a knowledge transfer pertaining to Theater

systems deployment and data transfer. The two teams established a Proof-of-Concept toward a fast integration of Theater Mobile Blood services into the To-Be Theater Architecture.

The Mobile Theater Blood Management Project created a web service to provide transfusion data. The TMIP Gap Analysis Project called the Theater Blood service and was able to successfully consume and transmit the transfusion data.

"The Research Initiative for Mobile

Theater Blood Management addresses the urgent need for all military operational facilities/units/vessels to have the capability of conducting the full blood inventory, donor, and transfusion management functions across all mission profiles, in-

cluding offline/disconnected operations," explains Matthew Rauls, Technical Product Manager at Akimeka, LLC.

"The current Theater Blood (TBLD) component of the Theater Medical Store (TMDS) is a web-based application requiring stable Non-classified Internet Protocol Router Network (NIPRNet) access to TMDS to conduct the operational blood management mission."

The mission profiles associated with the Naval Fleet Forces shipboard environment while underway, as well as early entry, disaster response/humanitarian assistance (DR/HA) and other austere operational environments do not have assured NIPRNet connectivity. This operational capability gap presents potential risks to patient safety and an inability of ... (cont. pg 2)

... this collaboration is force enabling to the health service support mission and to the warfighter...

OPERATIONS NOTES

Research Support

The Pacific JITC offers a broad range of experience, expertise and support for biotech research, funding, and execution.

Our capabilities include program/project management, regulatory compliance, research design/methods, proposal writing, statistical analysis, and subject matter expertise in clinical informatics, telehealth, medicine, and health psychology.

For information on how you can benefit from these services, please contact Dr. Trish Jordan at patricia.jordan@pacifichui.org.

Password Resets

Many password resets are due to password expiration. In typical environments where account passwords expire, The ITEC would like to remind project users that account passwords expire after 60 days and there is a 24 hour waiting period to change temporary passwords. The ITEC recommends users set calendar reminders to change passwords a week before the password expires. Once a password expires, users no longer have VPN access to a system in which they formerly would have been able to change their password. In addition, the ITEC would like to remind projects that designated administrators can perform password resets. The ITEC encourages administrators and Project Managers to educate staff accordingly.

The ITEC is managed by the Pacific Joint Information Technology Center, which focuses on rapidly researching, testing, and developing warfighter medical solutions and products through pilots or prototypes in support of the DoD.

The ITEC can be reached at 808-270-9700 or at support@pacificjitc.com.



Breaking New Ground (cont.)

...operational forces with a blood management mission and the enterprise to comply with statutory and regulatory guidance requiring the total lifecycle asset visibility of blood products from the donor to the transfused patient or destruction.

“The Theater Blood—Mobile (TBLD-M) provides the capability to conduct the full blood inventory, donor and transfusion management mission in the off-line/disconnected mode, and when connectivity is reestablished, synchronize transactional data between the facility and the enterprise,” explains Rauls.

The Mobile Theater Blood Management Initiative provides a number of offline blood capabilities including collection/blood banking capabilities, offline blood inventory management capabilities, and offline blood transfusion capabilities.

The projects demonstrated the capability to share blood transfusion information with any authorized system utilizing a service-oriented architecture implementation of a transfusion web service. The collaboration demonstrated the flexibility of a services-based architecture in abstracting the complexities of peer-to-peer data exchanges.

“The Mobile Theater Blood Management Initiative and this collaboration are force enablers to the health service support mission and to the warfighter,” Rauls says, “through the ability to provide total lifecycle asset visibility of blood products in the operational environment, and to share that information across operational units and medical treatment facilities through the utilization of a services-based architecture and secure messaging framework.”

The TMIP Gap Analysis Initiative is being performed by Eleu Pacific Partners. Chris Picklo, Program Manager and Director of operations at Eleu Pacific Partners,

explains, “The current TMIP-J consists of several disparate legacy systems that are complex and require significant time to test and deploy newly developed capabilities before introduction into production.”

The TMIP Gap Analysis team captures and documents the current ‘As-Is’ theater systems architecture in an effort to understand, recommend, and demonstrate how medical services can migrate from the current architecture to enhanced SOA/ESB based architecture capabilities, and to improve the overall user experience.

“One beneficial outcome of the TMIP

Gap Analysis research to the warfighter can be seen in our most recent prototype demonstration,” adds Picklo. “By building a longitudinal medical record and moving it ahead of the wounded service member, critical information can be captured and shared to potentially save crucial time during the golden hour.

“The Mobile Theater Blood Management and TMIP Gap Analysis collaborative demo highlights a primary goal of the TMIP Gap Analysis research effort: The development of a practical, technical means of fostering collaboration between various TMIP stake-holders,” explains Picklo.

By reducing or altogether eliminating duplicate efforts, the TMIP Gap Analysis approach offers significant gains in efficiency. Additionally, the approach incentivizes the use of existing features, serving as a catalyst for the development of powerful new capabilities.

Picklo is confident that the collaboration is force enabling since optimization of next generation Theater systems results in maximizing performance, minimizing cost, and ensuring maximal security.

... critical information can be captured and shared to potentially save crucial time during the golden hour.

OPERATIONS NOTES

Cybersecurity

The ITEC recently received approval from the Defense Health Agency to house personally identifiable information (PII) and protected health information (PHI). This designation means that the ITEC can now provide more relevant datasets as you develop prototypes and conduct research. Due to the sensitivity of this data, these datasets will only be available via Nonsecure Internet Protocol Router Network (NIPRNet).

All users accessing the ITEC NIPRNet must have an ADP/IT-II clearance. Even if your project does not currently need access to PHI/PII, the ITEC recommends that users obtain this clearance level as soon as possible.

Your facility security officer can initiate the ADP/IT-II process in e-QIP. Contact the ITEC at

support@pacificjitcitech.com with further questions. You can find out more about ADP in the linked presentation:

[Automated Data Processing for Public Trust Positions](#)
(<http://goo.gl/M7R3Hw>)

The ITEC is managed by the Pacific Joint Information Technology Center, which focuses on rapidly researching, testing, and developing warfighter medical solutions and products through pilots or prototypes in support of the DoD.

The ITEC can be reached at 808-270-9700 or at support@pacificjitcitech.com.