From the Director's desk

Collaboration is the theme of this issue of *PHINews*. Most dictionaries define the term "collaboration" as coming from the Latin "co" (together) and "labora" (work) to arrive at "the act of working together," but one interesting variation supplied by *Random House* is "to cooperate traitorously with an enemy that is occupying your country." Here at the Centers for Disease Control and Prevention (CDC) within the National Center for Public Health Informatics (NCPHI), we are working to be a good partner and to increase use of the former definition and to reduce the latter!

John P. Anderton

PHIN is dedicated to improving both the science of informatics and its practical implementation within local settings. Adapting standard tools to specialized needs helps everyone when persons share their successes, challenges, workarounds, and tips to succeed. Surely this is the best of collaboration under the first definition.

In this issue of *PHINews*, you will read about how NCPHI's Countermeasures Response Administration (CRA) project helped all 50 states with managing a mass vaccination preparedness exercise. Public health practice has always been global in scale; however, and the article about Dr. Janise Richards' detail explores advances in informatics outside our borders.

Collaboration is also multi-dimensional—PHIN is part of the Nationwide Health Information Network (NHIN). Check out the stories about the biosurveillance demonstration between four Health Information Exchanges and CDC's BioSense program, as well as Epi-Info's first steps into the world of open-source development.

Send us your thoughts to PHIN@cdc.gov and participate in the production of this resource. No better way to break down walls than to extend a constructive comment to improve a community. Thanks for the opportunity to introduce this issue of *PHINews*.

John P. Anderton, PhD, MPA
Associate Director for Communications Science, NCPHI
CDC/NCPHI/Office of Communications

In and around PHIN

by Marshall Quin

On the PHIN site

- PHIN website
- PHIN communities
- NCPHI website

PHIN Headquarters, Atlanta, GA

- The American Medical Informatics Association (AMIA) met with NCPHI's External Workforce Development program on January 14, 2009, to discuss strategic initiatives and plans surrounding public health informatics workforce development. For more information, contact Laura Franzke.

- The Division of Emergency Preparedness and Response (DEPR) launched an open source portal to support the Influenza Module of the BioSense application. This tool, LifeRay, will enhance CDC's ability to adopt Service Oriented Architecture (SOA). For more information, contact Barry Rhodes.

- On September 1, 2008, the BioIntelligence Center (BIC) within BioSense initiated enhanced surveillance in the Gulf Region for syndromes and sub-syndromes potentially related to Hurricane Gustav. The state of Texas experienced technical difficulties with its automated surveillance system, which prevented public health personnel from accessing their health care activity data. BioSense was used as a supplement to the state's Disaster Medical Assistance Team (DMAT) data to monitor illness and injury potentially due to the hurricane. The state health department also used BioSense data specifically to give an update on the number of carbon monoxide poisonings, and more broadly as to whether certain injuries/illnesses were significantly higher than baseline. Reports summarizing observed counts, expected counts, and the number of facilities with significant increases over baseline were provided to the Director's Emergency Operations Center (DEOC) and to the National Center for Environmental Health (NCEH). For more information, contact Michelle Podgornik.

- On October 15-16, 2008, the BIC provided support to the DEOC in a CDC-wide pandemic influenza exercise. Reports described potential influenza-related healthcare activity identified by the BioSense system. For more information, contact Steve Benoit.

In and around *(continued)*

- On November 3, 2008, the BIC initiated enhanced surveillance in preparation for the 2008 U.S. Presidential election and subsequent transition, and during Super Bowl XLIII in Tampa, FL, on January 25, 2009. Reports summarizing anomalies were provided to the DEOC, the BioPHusion Center, the National Biosurveillance Integration Center (NBIC) at the Department of Homeland Security, and the Office of the Assistant Secretary for Preparedness and Response (ASPR) at the Department of Health and Human Services. For more information, contact Michelle Podgornik.

- The BioSense program has begun sending out weekly reports of BioSense influenza data to BioSense users through Epi-X notification. The reports present national-level graphs (and summarized data) of influenza activity. The reports represent BioSense data up to the most recent Saturday. For more information, contact Craig Hales.

The Public Health Grid project initiated several activities:

- Working with the American Association of Poison Control Centers to facilitate poison control center data; integration into BioSense;

- Developing an 'Aggregate Minimum Data Service' containing approximately 4-7 data variables. These data elements would be used to provide biosurveillance summary data across jurisdictions for situational awareness purposes;

- Setting up collaboration meetings with technology and public health partners (e.g., Argonne National Laboratory, The Advanced Practice Center at Tarrant County Texas Public Health) to share achievements and challenges in this area of research;

- Submitted article in early January to the *Journal of the American Medical Association* (*JAMA)* on the value of a Public Health Grid; and

- Continuing CDC's Security Certification & Accreditation (C&A) process for Grid components.

For more information, contact Tom Savel.

In and around *(continued)*

Communities of Practice

- On Feb 23 - 24, representatives from the five PHIN Communities of Practice (CoPs) and the PHIN Community met in Atlanta to kick off the Communities of Practice Council. Leaders of the Communications and Alerting, Enterprise Architecture, Information Links (HIE), Laboratory Messaging, and Vocabulary and Messaging CoPs shared priorities and challenges for their CoPs. The PHIN CoP representatives also worked to identify synchronicities, explore connections to the National Health Information Network (NHIN), and continued to clarify roles and responsibilities of this Council that guides the development and evolution of CoPs for PHIN. To read about the Council Kickoff, to join one of these Communities, or for further information about PHIN CoPs, please visit http://www.cdc.gov/phin/communities. For more information, contact Mamie Jennings Mabery.

Joint Public Health Informatics Taskforce

In January, with support from NCPHI through a cooperative agreement with the Public Health Informatics Institute, representatives from the Joint Public Health Informatics Taskforce (JPHIT) convened in Atlanta to develop a common informatics policy agenda. JPHIT was created to forge a consensus strategy and provide coordinated action to achieve a shared informatics framework for public health agencies and partners. JPHIT is comprised of seven organizations that recognize the value of collaborating on shared informatics priorities:

- National Association of County and City Health Officials (NACCHO)
- Association of State and Territorial Health Officials (ASTHO)
- Association of Public Health Laboratories (APHL)
- Council of State and Territorial Epidemiologists (CSTE)
- National Association of Health Data Organizations (NAHDO)
- National Association of Public Health Statistics and Information Systems (NAPHSIS)
- Public Health Data Standards Consortium (PHDSC)

For more information, contact Traci Camilli.

In and around *(continued)*

PHIN Certification

- NCPHI's Division of Alliance Management and Consultation (DAMC) is pleased to announce that the Colorado Department of Public Health and Environment is the first jurisdiction to achieve PHIN Certification in the area of PHIN Direct Alerting. While the PHIN Certification Criteria validated Colorado's ability to send a Direct Alert Message to the CDC using PHIN standards and security, it demonstrated their commitment to implement PHIN Standards and Practices and improve their overall capacity to exchange electronic public health information across jurisdictional lines. This ability is a benefit to both emergency and day-to-day operations. Colorado is also the second jurisdiction (behind Indiana) to achieve PHIN Certification in the area of PHIN Varicella Case Notification Message – Send. For more information, contact Mark Winarsky

NEDSS

- The National Electronic Disease Surveillance System (NEDSS) team is beginning a strategic planning process for NEDSS that will map to CDC goals. The process is being facilitated by the Public Health Informatics Institute (PHII) and will consist of a series of stakeholder meetings to identify key issues, and strategies and objectives to address those issues moving forward. The focus is on the NEDSS project role in supporting reportable disease surveillance activities. This plan will also link with the National BioSurviellance Strategic Plan and the BioSense Strategic Plan, along with other agency initiatives. The first stakeholder meeting was held March 4—6, 2009, bringing together state, territorial, and local NEDSS coordinators. The March 6, 2009 meeting focused on the NEDSS Base System (NBS), the CDC-developed integrated surveillance application, and how to move this application forward. The output from this meeting will be combined with future stakeholder meetings to create a first draft of the strategic plan, which will then be reviewed and edited by all stakeholder groups, including CDC internal and external partners. For more information, contact Jennifer Ward.

Epi Info™ goes open source

by *Jay Jones*

NCPHI's Epi Info™ team recently released the application's code to the public, making it the first PHIN application to go open source. "Because the code is out there, other developers and other entities can use the Epi Info™ code to add features, contribute enhancements, and make it a much better product," according to Enrique Nieves, Acting Division Director for the Division of Integrated Surveillance Systems and Services responsible for the Epi Info™ open source project. Enrique adds: "Going open source will also help us grow a wider user base, and as we grow, we will attract more users who want to help with development."

The Epi Info™ user base is already quite large, with over a million users worldwide. In its twenty-year existence, many CDC developers and contractors have worked on Epi Info™, resulting in code that needed to be updated to bring it up to today's real-time, Internet-age standards and to make it suitable for release to the open-source community of developers. The Epi Info™ code is comprised of many components, including Visual Basic, Access, SQL, C#, etc.

To ensure a successful transition to open source, there are currently three versions of Epi Info™. Epi Info 3.5.1 is the latest release of the application and has been deployed to the Epi Info user base. Epi Info 7™ and Epi Info Community Edition (CE) share identical code; however, Epi Info 7™ is being developed at the CDC and Epi Info CE has been posted on the Web for open-source developers to use.

- **Epi Info 3.5.1**™: The current version of Epi Info™ is the final version to be released to its user base using the existing code.

- **Epi Info 7**™: This next version of Epi Info™, is currently in the early stage of the development process (Pre-Beta version). Epi Info 7™ will replace version 3.5.1 and will include modules and other enhancements created and/or suggested by the open source community.

- **Epi Info Community Edition (CE)**: Epi Info 7™ code that has been released to the open source community. Epi Info™ CE will be developed independently from Epi Info 7™ by the open source community, who will then submit code contributions to the CDC for consideration of inclusion in Epi Info 7™.

Epi Info™ *(continued)*

".NET™ is a very difficult program to move to open source, so we created Epi Info CE outside the CDC firewall; the new code that is developed by the open source community does not cross back over the firewall to CDC," says Nieves. The versions of Epi Info™ that are inside the CDC firewall (3.5.1. and Epi Info 7™) have to meet strenuous federal security requirements. Nieves says that they put Epi Info™ CE outside the CDC firewall so that they "could use the world as our development laboratory. Now, users who have access to Epi Info CE can develop and send us information about their contributions. We can then evaluate it and determine if it is something we can incorporate into Epi Info 7™. If it is, we then put it through CDC and other federal security requirements." This process will ensure that CDC/NCPHI takes the best of what the open-source community offers while maintaining an application that meets federal security requirements for its Epi Info™ user base.

Enrique Nieves

By design, the process is not cyclical. The Epi Info™ team will receive code enhancements from the community, but they will not update the code and return it to the open source community. This process is necessary to ensure the application continues to meet federal security requirements and is vetted by the CDC before it goes to the existing user base. Eventually, there will be a fork in the two development efforts: Epi Info CE will be one product, and CDC's Epi Info 7™ will be a CDC-supported product that meets federal security requirements.

However during the entire process, the communication and evaluation will be ongoing and bi-directional. Nieves says that "right now, we're working on the communication process between the users and us. We have a Web board for users to submit their enhancement ideas. There is also another board called MyEpiInfo, which is completely independent and supplies a forum for developers to collaborate."

Though still very early in the process, Nieves' division is currently working on a draft document that describes how they took Epi Info™ to open source, which includes the collaborative work they did with CDC's Office of General Counsel in reviewing various open source licenses to consider the most appropriate one for CDC.

In the future, Epi Info™ may be the Microsoft Office™ of epidemiology, a suite of products for outbreak management. The major difference is that it will be created by user feedback and contributions in an open source environment.

Epi Info™ *(continued)*

Enrique adds: "As long as users know how to compile code, they can go and compile the Epi Info CE code, load it into their computer, and begin working. There still are some high-level statistical modules that we are now beginning to add to Epi-Info 7™. But if you want to develop a database, it's ready to go."

For more information:

- The current website on CDC.gov: www.cdc.gov/epiinfo (available for download Epi Info™ 3.5.1)
- User Forum: http://cms.myepi.info/
- Epi Info™ Community Edition: http://www.codeplex.com/EpiInfo
- Epi Info™ Friends Group on Google: http://groups.google.com/group/EIFriends?hl=en (Restricted to invited members. To become a member, contact the group owner at andy.dean@gmail.com)
- Epi Info™ in Italy: http://www.epiinfo.it/
- Epi Info™ in Brazil (Portuguese): http://www.epiinfo.com.br/ead/
- Epi Info™ in Spain: http://www.cica.es/epiinfo/

5th NHIN Forum showcases biosurveillance data exchange

by Claudia Vousden

The Nationwide Health Information Network (NHIN) held its fifth national forum in December, 2008, to mark the conclusion of the trial implementations designed to create a secure foundation for health information exchange (HIE) and launch the new focus on production. The Forum, sponsored by the Office of the National Coordinator for Health Information Technology (ONC), showcased the fruition of recent work done through the NHIN Cooperative.

During the welcome address, Dr. Robert Kolodner, National Coordinator of the ONC, noted, "Over the last few years, ONC has promoted and funded multiple, new interlocking activities and processes and have funded, incubated, guided, and launched a number of new organizations that are necessary to develop and sustain a reliable, secure, interoperable, nationwide health IT infrastructure." Emphasizing the need to establish and support widespread use of the standards for interoperability and seamless transfer of data and information, Dr. Kolodner added, "The NHIN has been conceived and designed to create the complementary process for testing and improving these standards through routine information exchange among a large number of different users. More than 20 organizations formed the NHIN Cooperative, which is responsible for the wonderful demonstrations being showcased at the conference."

Biosurveillance Use Case

To show the progress in biosurveillance implementation, the NHIN Forum included a demonstration of how the biosurveillance use case can be implemented using the NHIN Gateway to transmit data from HIEs to state health departments and CDC's BioSense program. Previously, to advance biosurveillance use case implementation, the CDC contracted with three HIEs to develop a biosurveillance implementation guide. The guide addresses the data recommendations, known as the Minimum Biosurveillance Data Set (MBDS), established by the American Health Information Community (AHIC). Notably, in addition to the AHIC MBDS, the guide also addresses data for three other public health preparedness areas of interest—influenza-like illness, influenza, and pneumonia.

NHIN Forum *(continued)*

Those participating on the demonstration panel represented the CDC, Indiana State Department of Health, Marion County (Indiana) Health Department, Minnesota Community Health Information Collaborative, New York State Department of Health, Northwest Public Health Information Exchange, Regenstrief Institute, and Washington Department of Health. Using artificial test data for a gastrointestinal disease outbreak scenario, participants demonstrated the roles and actions of their respective organizations in a progression of phases from the capture of the biosurveillance data to detection of the increase in gastrointestinal disease at the national level and response to the outbreak at the state and local levels. The demonstration highlighted how electronic data sharing among HIEs and public health agencies can result in better collation of clinical and public health data, faster access to information, enhanced situational awareness, and more rapid and efficient response. One member of the panel, Dr James Howell, Veterinary Epidemiologist at the Indiana State Department of Health described the process as "far superior to the old paper method or even faxes, when we might not know what was happening for two or three days. Now we know it the day it's happening—so it does offer us a different perspective on delivering public health services."

> *The CDC, ONC, and NHIN continue to work together to develop capacity to use the NHIN Gateway beyond the test environment for data transmission from state health departments to the CDC.*

MBDS Exchange

Also in mid-December 2008, Inland Northwest Health Services successfully received the MBDS with real data from the largest hospital in Spokane, Washington, and, in turn, successfully delivered it to the Washington Department of Health. The other two HIE sites, Indiana's Regenstrief Institute and New York Health Information Exchange for Public Health, subsequently have engaged in successful MBDS exchange.

The CDC and HIEs expect gradual increases in the respective geographic coverage areas. Meanwhile, in keeping with the next steps on the path to production and new focus of the NHIN Collaborative, the CDC, ONC, and NHIN continue to work together to develop capacity to use the NHIN Gateway beyond the test environment for data transmission from state health departments to the CDC. The collaborators anticipate establishment of this capacity in late 2009.

For more information

- NHIN Cooperative

Notes from the field: AIDS relief and informatics

by Janise Richards

I would like to thank the *PHINews* editors for the invitation to write "notes from the field" regarding informatics-related activities I have undertaken within the Global Aids Program, Epidemiology and Strategic Information Branch. Currently I am working on two projects in support of the President's Emergency Plan For Aids Relief (PEPFAR):

- Health system strengthening through human capacity development in informatics; and
- Assessment of patient monitoring systems.

PEPFAR's emphasis is on decision-making by in-country teams in collaboration with the host government and implementing partners. To facilitate this process, PEPFAR's participating US Government (USG) agencies have formed cross-agency technical working groups (TWG). The Health Information Management Information System TWG (HMIS TWG) provides technical assistance to in-country teams, and its goals include improving the provision of HIV care, treatment, and prevention services through the adoption of information

Steve Yoon, Gonza Namulanda, and Janise Richards at the Kenyatta National Hospital

technology; strengthening national monitoring and evaluation systems; assisting host governments in designing and implementing enterprise architectures for health information systems; increasing interoperability; increasing human capacity around health information system planning, design, and implementation; and conducting assessments/evaluations of implemented health information systems.

Building Human Capacity in Informatics

To improve the informatics-related knowledge and skills of staff responsible for in-country health information systems, I have been working with in-country teams in South Africa, Kenya, and Mozambique. The South Africa project is the most extensive and focuses on developing training modules that cover health information system terminology, data and information use, information technology, planning, policies, trouble shooting, and general management. Initially, we plan to present the modules within USG-South Africa lead workshops. Once the initial cohorts of learners are trained, the modules would be used by these learners to train others at their offices and health care facilities. We also plan to adapt the modules for use in other PEPFAR focus countries.

Notes from the field *(continued)*

Assessing Patient Monitoring Systems

This HMIS-TWG assessment project started in 2007 in collaboration with USG-Kenya, the Kenyan Ministry of Health (MoH) and the University of California, San Francisco (UCSF). During this assessment, we interviewed staff at 6 PEPFAR supported health care facilities regarding their electronic patient monitoring systems and through a hands-on examination with the system we gathered data on the systems' functionality, reliability and data quality; over 50 health care and technology staff were interviewed and over 1000 system-related data points were collected. The Kenyan MoH has been using the final report we submitted in June 2008, as a catalyst to develop national standards for health information systems to be used in Kenyan health facilities. Learning of the success of the Kenya assessment, USG-Mozambique and the Mozambique Ministry of Health (MISAU) requested a similar, but more comprehensive assessment.

> *"Informatics issues are similar no matter on which side of the world you are working."*
>
> Dr. Janise Richards

The Mozambique assessment began in October 2008 and is divided into three phases:

Phase One: In Phase One, we collected HIV treatment and care data forms used by the PEPFAR implementing partners in Mozambique; developed a data base reflecting the data collected on these forms; and conducted an analysis based on the HIV-related indicators required by MISAU and recommended by WHO. We found that all the implementing partners collect all the MISAU required and most of the World Health Organization (WHO) recommended HIV-related indicators. Also, we recognized the need to partner with the Universidade Eduardo Mondlane (UEM) Health Informatics students to conduct Phases Two and Three. Our goal is to provide the students with knowledge and experience to independently conduct future information systems assessments.

Phase Two: Phase Two begins in mid-February 2009. In this phase, we will be providing a week-long workshop on conducting information systems assessments for the UEM Health Informatics students. After the workshop, the students and the assessment team will conduct the first assessments at implementing partners' headquarter offices in the capital city of Maputo.

Phase Three: During Phase Three, scheduled for late April 2009, the entire assessment team will visit 2-3 facilities in each of 11 Mozambique provinces for a total of 38 HIV care and treatment facilities to be assessed. We plan to visit rural and urban, small and large, paper-based patient record and electronic patient record, and multi-care treatment sites.

Notes from the field *(continued)*

While conducting these two projects, I have learned valuable lessons. First, informatics issues are similar no matter on which side of the world you are working. Second, it takes a world of informaticians to raise the quality of health information systems. Also, I've learned how integral these projects are to the mission of PEPFAR. Not only do these health information systems provide the data and information needed for point of service treatment and care, these systems offer an aggregate snapshot of the millions of men, women and children, whose lives have been positively affected by the HIV prevention, treatment and care programs supported by this initiative.

Dr. Janise Richards is a Senior Advisor for NCPHI in the Division of Knowledge Management Services on detail to the Global Aids Program.

For more information

- PEPFAR website: www.pepfar.gov

NCPHI and NCIRD: Collaboration for critical events

by Marshall Quin

NCPHI applies informatics to support other CDC centers that focus their expertise and abilities on specific diseases and hazards to human health. The National Center for Immunization and Respiratory Diseases (NCIRD) is one of the largest of those centers and focuses on the many serious health threats that can be prevented with immunizations. The Countermeasure and Response Administration system (CRA) was developed by NCPHI in collaboration with NCIRD. NCPHI has just completed a second CRA functional exercise with NCIRD's Immunization Service Division (ISD) and state and local partners, using seasonal influenza vaccination clinics to track administration of vaccine as a proxy for response operations during an influenza pandemic.

CRA

In 2002, the threat of bioterrorism first brought NCPHI and NCIRD together to quickly develop a standard method to record the nationwide administration of smallpox vaccine in health care workers using the Pre-event Vaccination System (PVS), the predecessor of CRA. Initially data collected by the PVS information system was restricted to smallpox. With input from state and local health departments, data requirements for the top threats to public health were determined and the design elements for a more flexible system—CRA—were identified.

CRA is well suited to track vaccine utilization during an influenza pandemic. However, being able to receive data from all 62 independently functioning "Project Areas" presents a major challenge. Project Areas include the 50 states, 4 major metropolitan areas, 8 U.S. territories, and freely associated states that are grantees of the CDC Public Health Emergency Preparedness (PHEP) program.

To successfully receive data from Project Areas, CRA offers three options:

1. existing Project Area Immunization Information System (IIS) or other system;
2. aggregate reporting using the CRA application; or
3. individual level reporting through a CRA Web browser, which then aggregates data.

NCPHI and NCIRD *(continued)*

Development of such a complex information system made collaboration between NCPHI and NCIRD essential due to the need to regularly interact and test capabilities of each CRA stakeholder, or project area.

Exercises

Seasonal influenza vaccination clinics offer excellent testing and development vehicles for CRA. Annually, state and local health departments conduct such clinics and record administration of flu vaccine. NCPHI's partnership with ISD on exercises started with a two-month pilot test from November 1 to December 31, 2007, followed by the Doses Administered eXercise (DAX) in 2008, that spanned three months, starting October 1, 2008.

> *CRA is able to support data collection from Project Areas reporting doses administered weekly, as would be expected during the early stages of a pandemic.*

DAX 2008 was a large and complex functional exercise with Project Areas reporting on eight clinics over a continuous four-week period. DAX 2008 used CRA's enhanced technical system with the capacity to monitor vaccine doses administered according to pandemic influenza vaccine tiered general population priority groups (see http://www.pandemicflu.gov/vaccine/allocationguidance.pdf).

The improved system also helped to identify technical gaps, equipment needs, and operational barriers. DAX 2008 helped identify staff training needs while giving a better awareness of the overall cost to clinics and Project Areas. Ultimately, during DAX 2008, CRA was able to track 613,615 numbers of doses administered to "general population priority groups". More importantly, CRA is able to support data collection from Project Areas reporting doses administered weekly, as would be expected during the early stages of a pandemic when vaccine supplies may not be sufficient to vaccinate all individuals who wish to be vaccinated.

Future Plans

NCPHI plans to complete the CRA base system development by the summer of 2009 and continue working with NCIRD to further test and enhance CRA. Another exercise is planned for 2009. Depending on priorities, future projects between the two Centers may focus on the exchange of critical information with project areas' Immunization Information Systems.

For more information

- Guidance on Allocating and Targeting Pandemic Influenza Vaccine

New NCPHI website launched

On February 23, 2009, NCPHI released its new Internet site, one that offers information on the divisions that make up the Center, as well as a sleek new look and feel.

According to Lynn Gibbs-Scharf, Director of the Division of Alliance Management and Consultation within NCPHI, "We wanted to create a more detailed Web presence for NCPHI, one that spotlights the divisions and provides a place on the Internet where the world can watch us grow and a place where informaticians can visit to read and view the latest content on the new field of informatics."

NCPHI's DAMC team worked with the other divisions to develop content for the site and also released an updated NCPHI intranet site at the same time as the Internet site.

"We have big plans for the future," says Scharf, "and we hope the informatics community will make visiting our site a part of their daily activity."

Please visit us at http://www.cdc.gov/ncphi

PHINews Feedback

As we enter our second year of publishing *PHINews*, we'd like to know what you think about our e-zine, how you use it, and what you'd like to see in the future.

Click the button below to answer a few questions. We will publish the findings in future issues, and we will work to implement any improvements you suggest.

See you next issue!

The *PHINews* staff

PHINews Feedback

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