The Pacific Innovation Collaborative (PIC)

The Pacific Innovation Collaborative Health Information Technology Project is a Department of Health & Human Services Health Resources and Services Administration funded network of eight community health centers and two health plans in Hawaii and Washington. The intent of the network is to design and develop an electronic infrastructure for community health centers in separate states to exchange patient information based on performance measures important to the network. The overall aim is to utilize eletronical medical record systems to reduce health disparities by improving the safety, quality, efficiency and effectiveness of health care delivery.

PROJECT PARTNERS

Federally Qualified Health Centers

- Community Health Centers of King County (CHCKC)
- Healthpoint
- Family Health Centers (FHC)
- International Community Health Services (ICHS)
- Kalihi-Palama Health Center (KPHC)
- NeighborCare Health
- Waianae Coast Comprehensive Health Center (WCCHC)
- Waimanalo Health Center (WHC)

Health Plans

- AlohaCare
- Community Health Plan of Washington (CHPW)

Regional Aggregation Sites

- Hawaii Patient Accounting Services (HPAS)
- PTSO of Washington

PROJECT YEARS

The project is comprised of four phases:

- Phase 1: Planning/Testing (2007-08)
- Phase 2: Expansion of Infrastructure (2008-09)
- Phase 3: Implementation (2008-10)
- Phase 4: Final Evaluation & Review (2010-11)

HEALTH INFORMATION TECHNOLOGY (HIT)

Health Information Technology (HIT) refers to a wide variety of computer applications, which includes electronic medical, health, and dental record systems, patient portals, personal health records, chronic disease management systems, data warehouse/reporting systems, and digital imaging systems, to name a few.

Through the PIC project, AAPCHO has created a data repository, in which project members share data and provide technical assistance and facilitation of shared care management (team-based care). This data repository helps improve communication between providers and their patients and is believed to improve individual health center performance.

PERFORMANCE MEASURES AND THE PIC REPOSITORY

With improving health center performance in mind, project members carefully chose measures to track through a combination of claims, practice management system, and electronic health record data [Table 1]. From a health center perspective, these measures, both clinical and process-based, were selected to have an impact on the timeliness; effectiveness; efficiency; and the safety, risk management, and quality of care provided to patients.

PIC Measures
1. Patients with 4 DTaP, 3 OPV/IPV, 1 MMR, 3 HepB, 3Hib, and Varicella vaccinations by age two
2a. Patients with either Type 1 or Type 2 Diabetes whose HbA1c is > 9
2b. Diabetic patients with a behavioral health (mental health or substance) diagnosis whose HbA1c is > 9
3a. Patients less than seven years old who have had a primary care visit within the last 12 months
3b. Patients greater than six years old who have had a primary care visit within the last 24 months
3c. Third next available appointment
4a. Patients seen in the ER with low complexity problems
4b. Patients seen in the ER who follow up with primary care
5. Patients with well-child visits: (a) in the first 15 months, (b) at 3-6 years old, (c) at 12-21 years old
6. Patients for whom early notification of pregnancy was made to the health plan

Table 1

PERFORMANCE MEASURES AND THE PIC REPOSITORY (CONT.)

Tracking the six measures outlined in Table 1 would allow project sites to improve on overall health center performance and provision of care. For example, capturing data for patients with Type 1 or Type 2 Diabetes whose hemoglobin levels are greater than 9% (Measure 2a) would allow a health center to better track the progress of these patients over time, and tailor its diabetes management strategies to improve its patients' health outcomes.

Once collected, process measure data from all sites are sent to regional database repositories in Oahu, Hawaii and Seattle, Washington. AAPCHO serves as the project's central repository, electronically collecting data from the regional databases [Figure 1]. The central repository aggregates clinical information and provides reports for all project sites to view and share.
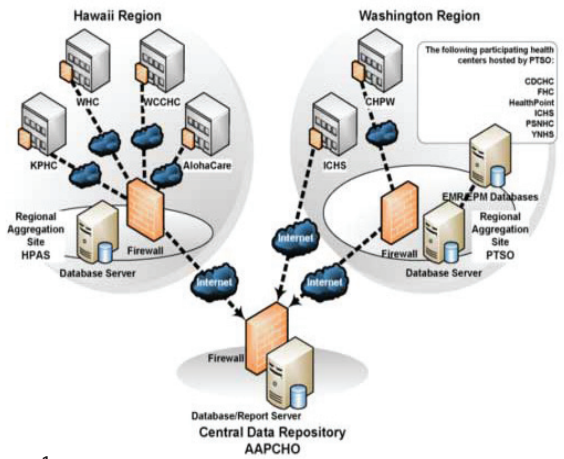

Figure 1

Practice	Report Month	M5 HEDIS Well Child Visits					
		M5a Den	M5a WC	M5b Den	M5b WC	M5c Den	M5c WC
Health Center 1		194	92%	306	66%	244	34%
Health Center 2		100	89%	207	57%	343	49%
Health Center 3		1127	87%	2099	51%	2601	35%
Health Center 4		242	81%	423	65%	811	45%
Health Center 5		466	93%	1005	64%	1543	38%

Figure 2 - A sample clip of the dashboard outlines HEDIS well child visits for patients in (a) the first 15 months, (b) at 3 to 6 years, and (c) at 12 to 21 years from January to June 2008. (Data downloaded 10-11-10)

PIC DASHBOARD

A PIC comparative dashboard [Figure 2] was created as a user-friendly summary report of aggregate data for the measures listed in Table 1. The dashboard was developed as a model for project health centers to view this data across multiple health centers. It enables users to view trend analysis and is beneficial for the future development of HIT activities, such as AAPCHO's Pay-for-Performance and Enabling Services HIT projects.

PROJECT IMPACT

The PIC HIT network is a Health Center Controlled Net¬work. The creation of this network has provided the op¬portunity for project health centers to optimize limited resources to share HIT models and practices. The hope is that by building infrastructure to share and exchange HIT, project health centers can utilize this technology to provide better quality care for their patient populations.

REFERENCES

• For more information, please contact Research Associate Heather Law, MA at hlaw@aapcho.org. You may also visit the PIC web page at http://research.aapcho.org.

• For information about utilizing and opitmizing HIT at health centers, reference Moore, R., Rachman, F.D., Lardiere, M.R. (2010). Using health information technology to improve quality. Health Center Controlled Network Series Information Bulletin, 15, 14.

• For more information and opportunities for implementing and utilizing HIT, visit the following websites:

1. Office of the National Coordinator for Health Information Technology website at http://healthit.hhs.gov.

2. Agency for Healthcare Research and Qual¬ity National Resource Center HIT website at http://healthit.ahrq.gov

3. Health Resources and Services Administration Health Information Technology website at http://www.hrsa.gov/healthit/

4. National Association of Community Health Centers HIT web page at http://www.nachc.com/Health Information Technologies (HIT).cfm