There has been much talk about HIEs in New Jersey, which are in various stages of development and operation. One of these is the Camden Health Information Exchange, which is operating in full swing. NJPCA interviewed Sandi Selzer, Director of the Camden Health Information Exchange to gain a better understanding of how this successful HIE came to be and how it operates within Camden, NJ. Sandi works for the Camden Coalition of Healthcare Providers, the organization that operates the Camden HIE.

**NJPCA: Can you please give some history of the Camden Health Information Exchange?**

Sandi: The Camden HIE was developed as a result of the Coalition's partnerships with the healthcare providers in Camden. Over the course of several years, the Coalition built a level of trust with, and interest among, the providers in improving health together. The approach was a bit different from other HIEs, where the decision to implement HIE technology happens first. It was more of a bottom-up approach versus a top-down approach, which is how the Coalition addresses all of its programs.

**NJPCA: What's the size of your HIE staff?**

Sandi: The day-to-day operations of the HIE is managed by two full-time staff, a director (me) and a program manager (Katie Licata). The HIE also has an Oversight Committee which includes representatives from each of the hospitals and leadership from the Coalition.

**NJPCA: What's the relationship of the Camden Coalition to the HIE?**

Sandi: The Camden HIE is one of several programs developed and managed within the Camden Coalition of Healthcare Providers. The Coalition is a non-profit, grant-funded organization with a mission to improve the quality and accessibility of healthcare for Camden residents. Other Coalition projects focus on care transitions, care management and coordination, and patient education, all with the goal of improving care and reducing healthcare costs. Our care management team (which was highlighted in the 2011 New Yorker article, "The Hot Spotters") focuses on the highest cost and highest risk patients in Camden. The HIE is a tool used by many of the Coalition's projects, in addition to its everyday use by healthcare providers in Camden to better serve their patients.

**NJPCA: What model is used for the technical infrastructure?**

Sandi: The HIE is a cloud-based centralized HIE model, versus a federated decentralized model. It operates in real-time with direct interfaces to each of the member hospitals. When there is an event in the hospital, such as an admission, discharge, transfer, or diagnostic result, that data immediately flows into the HIE. For example, when lab results are posted in the hospital's electronic system, they are also posted in the HIE and available to providers.
NJPCA: *How do you face the challenge of interfacing with so many different systems?*

Sandi: We haven't had any serious barriers to interfacing with hospital systems, even though each hospital may be using a different system, and there are many systems within each hospital. Interfacing issues not addressed during development will surface during the testing phase, where the vendor sees that information is not flowing properly. Each new member challenges our vendor and the way the system is programmed. This uncovers numerous opportunities to standardize the way data is stored and transmitted. All our partners are willing to work within their own systems-when possible-to meet the needs of the HIE. It's been a good experience.

NJPCA: *How did you decide which technical infrastructure model to use?*

Sandi: We chose our HIE vendor because they provided a basic model HIE system at an affordable cost that fit the needs of the Coalition. We didn't want to price ourselves out of the opportunity to have a city-wide HIE, and the solution provided all the components we were looking for. The Camden HIE is about more than just providing data to healthcare providers-it is a necessary tool in the Coalition's goal to improve population health using a data-driven approach. The centralized HIE model that our vendor supports is better suited for research and reporting.

NJPCA: *How long did the development process take?*

Sandi: Developing and executing the agreements with the vendor and member hospitals were the timeliest part of the process. Once the agreements were in place, developing and launching the HIE took under one year to accomplish. By choosing a basic platform that didn't include a lot of bells and whistles to program and manage, we were able to link to and pull in the data and launch the HIE in a relatively short period of time. Our goal was to get it started, and then build on the HIE content once it was up and running.

NJPCA: *Were there any surprises along the way?*

Sandi: I wasn't with the Coalition prior to the launch of the HIE, but my understanding is that the surprise was how seamless the process went was once the agreements were in place. The IT department of each hospital was on board and easy to work with, and there were no major barriers in developing the technology. There were no unpleasant surprises - everyone was excited to do this.

NJPCA: *What use cases do you support? What use cases do you plan on supporting in the future and when?*

Sandi: Since we are one of the ARRA-funded HIEs in New Jersey, we will support all use cases developed by the NJHIT Commission. Our development roadmap is based on the needs of the patients and providers of Camden, along with our obligation and interest in supporting the state-wide exchange of healthcare data through NJHIN. The use cases guide that state-wide roadmap, so all the grant-funded HIEs are working to incorporate them into our planning processes.

NJPCA: *Who are your current members?*
Sandi: The founding members of the Camden HIE are Cooper Hospital, Virtua Health, and Our Lady of Lourdes Medical Center. Underwood Hospital will join the HIE in early 2012, and Kennedy Hospital is projected to join the HIE later this year as well.

**NJPCA:** What about the FQHCs, I know they are listed, are they hooked up yet?

Sandi: Currently, Project H.O.P.E. and CAMcare's internal medicine physicians have access to view data in the HIE, which means their providers can see data, but no data is flowing from these practices into the HIE at this time. We also have four additional private practices that have view-only access. We're adding the rest of the primary care providers in Camden, so by the end of this year, all primary care physicians in Camden will be able to view data in the HIE.

**NJPCA:** We have been wrestling lately with NJIIS as far as submitting immunization records. We've read theoretically that HIEs would be a neat way for FQHCs to pass their immunization information to the state registry. I'm afraid, based on what you said of view-only, our two FQHCs under your umbrella would not be able to do that via the HIE at least until they get two-way activity next year sometime.

Sandi: That's correct. In addition to a two-way data feed, the HIE platform would need to include the ability to send data to the immunization registry, so it's more complicated than just having a bi-directional interface.

**NJPCA:** Do you plan to expand beyond the Camden city limits? If so, when?

Sandi: Our goal is to expand the HIE beyond Camden City at the appropriate time based on need and ability. Our primary focus now is to go deep in Camden and get it right here first. Our decision to expand will be based on what is best for patient care and the providers using the HIE, as well as supporting broader exchange of data with other healthcare systems and other HIEs in the State. Adding more ZIP Codes to our database of patients is easy enough to do, so when the time is right, we'll begin to do that.

**NJPCA:** Does the model you use support potential secondary uses of data? Do you anticipate any secondary uses?

Sandi: Yes, our model supports secondary use of data, and we have received IRB (Institutional Review Board) approval from our three primary hospitals to conduct population health research using the HIE data, and the Coalition just hired a Director of Research who will lead that effort.

**NJPCA:** Do you currently interface with other HIEs? If so, which ones, how, and why?

Sandi: Not at this time - but it is the goal of NJHIN to implement statewide data exchange in some capacity by the end of 2012. Connection to other HIEs would be a strategic decision of the Coalition that we have not yet made.

**NJPCA:** Can the HIE support MU requirement #14 (“Exchange clinical information”)?
Sandi: The HIE includes diagnostic results which meets the MU requirement for exchanging that type of clinical information. There are several other requirements, such as medications, allergies, and so forth. Most of those items are in discharge summaries or case notes, which are included in the HIE. We do not, at this point, support exchange of the CCD document.

NJPCA: So, your ability to exchange clinical information would satisfy MU for #14 for our two FQHCs who are members?

Sandi: They would meet that requirement only if they had a bi-directional interface with the HIE and it was exchanged directly and not via a CCD.

NJPCA: Do you interface with NJIIS? If so, how do members submit immunization records via your system?

Sandi: Not currently, but immunization data is one of the NJHIT use cases, so it is on our roadmap for inclusion. Most providers can already access immunization data from their own systems, but having it will provide additional value to the HIE.

NJPCA: If you had to interface with ten different systems/clients or members, it is more likely that you interface with ten different systems or was it fewer than that?

Sandi: We interface with many more than ten systems in your scenario. Each current HIE member (hospital) has numerous systems within their hospitals, including registration systems, diagnostic systems, billing systems, in addition to their clinical EHR. Therefore, each connection we make with a hospital typically involves working with more than just one system.

NJPCA: Do you anticipate any problems with interfacing with additional systems in the future?

Sandi: No. We don’t foresee any technical challenges to adding systems. The challenge with adding interfaces is always one of resources and time.

NJPCA: Do you have a live demo that I use to see the system in operation?

Sandi: We do not have a live demo right now. I can do a demo for anyone using test patients, but we are not set up to provide temporary log-ins for demonstration purposes.

NJPCA: What kind of training is given subscribers?

Sandi: We provide two-hour mandatory HIPAA training to all new subscribers and users. We then host another two-hour system training session on-site. The good news is that the system is easy to navigate. Once a practice begins using the HIE, our program manager Katie Licata visits them frequently for the first few weeks until they are comfortable, after which we visit at least once per month and also have telephone support for them.

NJPCA: Is there a fee for membership?
Sandi: Membership fees for the HIE vary by type and size of entity, and our membership model will continue to develop as the HIE expands its breadth and depth. Currently, each of the hospitals we partner with pay $50,000 annually for membership in the HIE.

**NJPCA: Do you have a sustainability plan? If so, what is it?**

Sandi: Long term sustainability is a concern of all HIEs. We are fortunate that the cost of our system is reasonable, and because it's a functioning HIE, we can begin to look into ACO and other reimbursement models, as well as subscription models, for long term sustainability. At this point, long term sustainability rests on our membership fees, but we are considering other options.

**NJPCA: Are you charging for secondary data now? Is that a possibility in the future?**

Sandi: We currently use the data for our own research. I don't think other uses of secondary data are off the table, but it hasn't been discussed, at least in meetings I've attended!

**NJPCA: Can/does your HIE support Patient-Centered Medical Home? If so, how?**

Sandi: PCMH is something the Coalition has already been working on with our practices through grant funding. The HIE will be a tool - in addition to all the other work we are doing - to support PCMH.

**NJPCA: Any final thoughts?**

Sandi: I'd just like to reiterate that the success of the Camden HIE is a result of the Coalition's time and effort in building relationships and trust among providers in the city first, which made the technology much easier to implement. Another key to our success was building a basic HIE model to get the data flowing - we didn't try to build an HIE that was too elaborate for our patient and provider population. Many small provider offices in Camden are barely getting by and have the most basic of needs. If we developed an expensive and elaborate HIE, they would be overwhelmed and wouldn't get any benefit from it. Focusing on the needs of your patient and provider populations, along with ongoing collaboration, are critical elements to a successful program. The Coalition is a great vehicle to bring large, competing institutions together with small practices toward a common goal. Everyone agrees that our patients need it, and they deserve it. We have to keep reminding ourselves of that.