The HUB model is all about **risk**. It is about the comprehensive identification and reduction of risk. The HUB is also about building infrastructure for communities to be able to use resources more efficiently and effectively to address risk and improve outcomes.

Our mantra is “find – treat – measure”. Find the right people first, and then complete a comprehensive risk assessment. In the HUB world – that is an Initial Checklist. Look at everything that is getting in the way of good health outcomes – access to health care, housing, employment, safety, education, etc. – because it all matters. When risks are identified, they are then translated into Pathways. A Pathway is a tool developed to track one identified risk factor through to a measurable outcome. And finally, we measure everything that we do within the HUB.

So, why do we need one more model? Let’s start with a family:
Marcus is a 6-year-old boy that was in the Akron Children’s ED last night with an asthma attack. This is actually Marcus’s 2\textsuperscript{nd} visit this month to the ED. The first time he came, the doctor treated his exacerbation, and made sure that he had a follow-up appointment to see his PCP and develop an asthma action plan. He was also given some prescriptions to better control his asthma.

After this 2\textsuperscript{nd} visit, a home visitor was sent to see Marcus at home and provide asthma education. . . this is what she found:

- Marcus’s mom – Marisol – is newly pregnant. She has had a lot of morning sickness and has just lost her job from missing too much work. She hasn’t started prenatal care, and her car isn’t working again. She received a letter from Marcus’s pediatrician that she has missed too many appointments and will need to find another medical home for him. She knows that she cannot make the rent payment and will have to leave this apartment.
- Marisol’s mom lives across town in a one-bedroom apartment. Marisol will probably move in with her during the pregnancy, but GM smokes 1 ½ ppd. GM also just found out she has Type II diabetes and is pretty stressed out.

What is the next move?

In reality, we have a lot of care coordination services in most communities. Marisol may have a case manager through her Medicaid managed care plan, Mrs. Garcia might have been referred to a diabetes self-management class. Marcus has a home visitor helping with his asthma diagnosis. The problem is that these services are provided as silos; and the care coordinators aren’t communicating with each other.

In some cases, families can have 5 or more care coordinators coming into their home working on specific issues – only a few risk factors at a time. The HUB approach seeks to remedy this through a comprehensive approach to risk reduction.

In a community with a HUB . . . and luckily Akron, Ohio has a HUB . . . this is how it would look:

- Marcus came to the ED the second time, and his provider recommends to Marisol that she receive community-based care coordination through the HUB. Marisol agrees and a referral is sent to the HUB.
The HUB looks at the information and confirms that someone isn’t already working with Marcus – eliminating duplication is a big part of the HUB’s function! The HUB determines which care coordination agency would be best suited to work with Marcus and his family.

The referral is sent to the supervisor at the agency, and a community-based care coordinator is assigned (community health worker, social worker, nurse, etc.). By community-based, we mean someone who spends most of their time in the community.

The CHW receives the referral information and contacts Marisol to set up a time to meet.

At the first visit:
- The very first thing that happens is that a release of information (ROI) form is signed. Marisol needs to fully understand what it means to be part of the HUB.
- A Client Intake form is completed – very similar to most demographic intake forms.
- An Initial Checklist is completed for EACH family member who will be receiving care coordination services.
- This doesn’t all have to happen at one visit . . . but to be enrolled into the HUB, the ROI, Client Intake and Initial Checklist for each person must be completed.

Based on the information gathered, the CHW then initiates Pathways and reviews the plan of care with her supervisor.
Let’s talk about Pathways for a minute. Pathways are the standard measuring tools that are unique to the HUB model. There are 20 Core Pathways which means that we are measuring things the same in Oregon and Ohio. Each Pathway represents one risk factor – for example, Marcus needs a new medical home. He would be assigned the Medical Home Pathway, and that Pathway is not completed until his CHW has confirmed that he is established as a patient. In reality, all Pathways cannot be completed. If that’s the case, then the Pathway is closed as “finished incomplete”. The outcome was not achieved, but all of the work to try and complete the Pathway and the reason why it couldn’t be completed is recorded. This is really important information to start to build a bigger picture of what is and what isn’t working within a community.

**20 Standard Pathways:**
- One risk factor at a time
- Outcome achieved = finished PW & Payment!
- Outcome not achieved = finished incomplete PW

Again - Pathways are the basic measurement tool used in the Pathways Community HUB Model. Pathways can overlay existing programs. It is possible to compare individual community care coordinators, care coordination agencies, HUBs, regions, etc.

We can learn from each other – one HUB may be great at working with connecting women to postpartum care, and another HUB may have strategies in place to prevent hospital readmissions. Using standardized Pathways will help to improve research around the model and community-based care coordination.
Let's look at Marcus and his family again:

- Marcus, his mom and his GM now are enrolled into the HUB
- Each one of them has Pathways assigned based on their identified risks
- Funding is linked to completed Pathways. More than one funder is needed to really make this model work. In order to build a sustainable HUB, multiple funders are essential.
- The family’s CHW has the time (and dollars to cover her time) to be able to tackle some of the bigger issues that this family faces – housing, employment, transportation, education.
- The CHW can communicate back to the health care system through an integrated care plan.
- The family is engaged until the Pathways are closed. That means continued home visits by the CHW. Once the Pathways are resolved, the family is discharged from the HUB, but the information is retained in case they come back at a later time.
We published an article in the 2015 *Maternal and Child Health Journal* about our initial experience using Pathways. This study was a collaborative partnership between the Community Health Access Project (CHAP), the Ohio Department of Health (ODH), the Ohio State University (OSU) and the Centers for Disease Control (CDC). We looked at a high risk population of women for low birth weight (LBW): 68% minority, 25% age 18 or younger, 39% tobacco users, 85% unmarried. The case matched control group was chosen from the same census tracts as the women receiving the intervention. Over four years, the LBW was 6.1% in the intervention group and 13% in the control group. There was no statistically significant difference in access to or utilization of health care services. On average, though, the women in the intervention group had 5.6 Pathways.

The initial pilot of the Pathways Community HUB Model was in Richland County, Ohio from 2005 – 2008. Care coordination agencies that were working with high risk pregnant women participated. Over four years, the county-wide LBW dropped from 9.7% to 8.0%. Ohio’s LBW did not change over this time period.
The Northwest Ohio Pathways HUB – based in Lucas County – has shown similar reductions in LBW rates. This demonstrates that the model can work in other communities as long as there is fidelity to the model.

Other communities have used the HUB approach to work with adults with chronic conditions, behavioral health and substance abuse issues. Most communities implement a HUB with a targeted population, and then expand to other at-risk groups over time.

So, let’s review the basics. Pathways are the measurement tool used within the Pathways Community HUB Model. When a risk is identified through the comprehensive risk assessment ➔ it is translated into one of the 20 Core Pathways. Pathways are unique in that they end in a measurable outcome. Payments are tied to completed Pathways (completed outcomes). This is an integral part of the HUB model, and cannot be left out.

The 20 Core Pathways cannot be changed. It is recommended that a HUB implement all 20 Pathways before seeking to add additional Pathways. Any request for development of a new Pathway is submitted to the Pathways Community HUB Institute for review. The use of
standardized Pathways has allowed for the development of billing codes and modifiers. In addition to streamlining contracting, standardized Pathways will help us all move forward with research around the Pathways Community HUB Model.

Think of the HUB as “air traffic control” for community care coordination. The HUB links care coordination agencies together and tracks Pathways (outcomes) across the region. HUB staff are responsible for streamlining the referral process, developing transparent algorithms to place referrals at agencies, eliminating duplication of services, tracking and reporting outcomes and contracting with funders. The HUB staff cannot provide care coordination services, because it must remain neutral.

**Pathways Community HUB Certification is critical!**

Sponsored by the Agency for Healthcare Research and Quality (AHRQ), the Community Care Coordination Learning Network (CCCLN) was a component of the Health Care Innovations Exchange that fostered knowledge transfer about quality improvement in care coordination. The CCCLN’s mission was to improve the health status of underserved populations at high risk for disparities in health and health care. The CCCLN represented a network of 17 directors, representing 16 distinct Community HUBs in 10 states. The Learning Community work received high accolades from AHRQ and resulted in an AHRQ publication.

It was the recommendation from the learning network that a certification process for the HUB model be developed. **Fidelity to the model is essential – it became clear that using some components of the model, and leaving out others, did not lead to risk reduction and positive outcome production.**
The Pathways Community HUB Certification Program (PCHCP) is a program of the Rockville Institute. PCHCP’s work evolved from the establishment of a collaborative partnership involving the Community Health Access Project, Communities Joined in Action, the Georgia Health Policy Center, and the Rockville Institute in 2013. Initial funding was provided by the Kresge Foundation to develop and pilot a HUB certification process as a way of standardizing and formalizing the implementation of community the Pathways Community HUB Model of care coordination.

Today, there are 11 prerequisites that must be met before a HUB can move forward with certification. Then, there are 18 standards to be met to qualify for national Pathways Community HUB certification. There are different levels of certification status based on how many standards have been met. The Rockville Institute can provide technical assistance about the certification process.

### Key Points in Building a HUB

- The HUB must be a neutral entity in the community and cannot employ its own care coordinators.
- There is only one Pathways Community HUB in a community or region.
- The HUB must be based in the community or region it serves.
- There must be a Community Advisory Board made up of members reflecting the community or region the HUB serves.

### Pathways Community HUB Model

- Removes “silos” and fragmentation
- Uses existing community resources efficiently and effectively
- Focuses on common metrics to identify & track risks (risk reduction)
- Holistic community care coordination one care coordinator
- Pays for outcomes – sustainable
- Owned by the community

For more information on the model, please contact:

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