PATHWAYS ©

COMMUNITY HEALTH ACCESS PROJECT

Pathways

Building a Community Outcome

Production Model

CHAP
COMMUNITY HEALTH
ACCESS PROJECT
Neighbors Connecting Neighbors

COMMUNITY HEALTH ACCESS PROJECT

**To improve health and social outcomes
through the support of Community Health Workers**

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Introduction

The mission of the Community Health Access Project (CHAP) is to improve health and social outcomes through the support of Community Health Workers (CHWs). The Pathways Model developed as a strategy to track and improve accountability for positive, measurable changes as the CHWs helped their clients work though, the system in dealing with specific health and social problems.

As an outreach agency, we are often asked, *"Is it really the system that should be held more accountable? … Isn't it the people receiving the service who are the problem?"*

Interestingly, CHAP has found though using Community Health Workers, that it is more often the system that is the problem. Long bus rides, rude appointment clerks, difficult paperwork, few minority providers, and little understanding about the importance of medical care and other services play a key role in determining a poor versus a favorable health outcome. *Either way – we all pay for the poor outcome.*

Drs. Mark and Sarah Redding, developers of the Pathways Model, gained significant experience with a community based outreach approach while working in Kotzebue, Alaska. In Alaska, Community Health Aides (CHAs) are hired from isolated communities and trained to reach out to at-risk families. The Community Health Aide Program has been in existence since the 1960s and today Alaska has some of the best health outcomes of all 50 states.

Three physicians started the CHAP program in Mansfield, Ohio in 1999. The initial focus of the program was on poor birth outcomes. To identify the geographic area to be targeted, birth certificates were reviewed for a five-year period. The address for each baby born low birth weight (LBW) was plotted on a county map. Two small census tracts representing approximately 7 percent of the county population were found to have almost 30 percent of LBW babies. All of the VLBW babies were born in these census tracts. The LBW rate for women in this area of Richland County was an astonishing 24 percent.

The families living in these 2 census tracts in Mansfield had significant barriers in accessing services. Even though census tracts 6 and 7 are located only a few miles from the local health department and obstetrical providers, a bus trip to these offices took an average of 4 hours roundtrip. The offices were built on the "bus lines", but the number of transfers needed to get there was not considered.

Women living in this high-risk community were identified through local churches and other community based organizations to serve as CHWs. 19-credit hour training through the local community college was created and CHWs were trained to reach out to their neighbors. CHWs are from and part of the community they serve. They are known and trusted by the clients and are knowledgeable about community resources. Registered Nurses and physicians in the field supervise CHWs. Using Alaska as the model to develop an outreach program using CHWs, and Pathways as the accountable outcome production model, Mansfield CHAP achieved a significant reduction in LBW for enrolled clients.

The CHWs soon determined that changing health outcomes for at-risk clients involved much more than just making a prenatal appointment. Finding a pregnant teenager with unsafe housing, no phone, no transportation, no insurance or medical provider required many specific and accountable steps to increase the chance of a positive outcome for her unborn child. If she had no place to live and no transportation, then she certainly wouldn't show up for a medical appointment. Partnering Community Health Worker programs from across the state of Ohio have found similar barriers for the neighborhoods they serve. Needed was a system or an accountability approach that could tie the social and cultural aspects together with the technical medical interventions and focus on achieving positive outcomes. This required a structured process to identify and define the problem and provide a step-by-step guide to problem resolution and a measurable positive outcome. The structured approach developed for positive outcome production became the Pathways Model.

Chapter

1

The Need for Increased Accountability

Understanding how Pathways© change the focus and accountability of health and human services begins with an overview of our nation's health. As seen in figure 1-1, the dollars spent on health care continue to climb each year. In some cases, the United States spends twice as much per capita on total health expenditures annually, and has worse overall health outcomes.
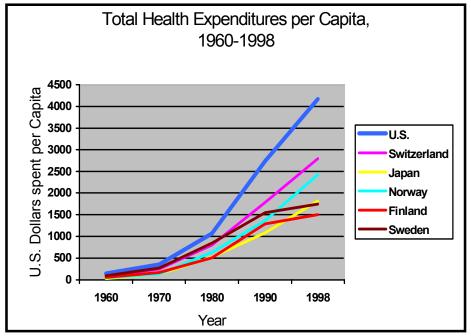
Total Health Expenditures per Capita, 1960-1998

Figure 1-1

Data recently released by the federal government show that health care costs rose to $1.6 trillion in 2002, to a record $5,440 per person. Health spending increased 9.3 percent in 2002, "advancing much faster than the rest of the U.S. economy for the second consecutive year," says a report published in the health policy journal *Health Affairs*.

In addition, the increase was more than twice the rate of growth of nation's gross domestic product.[1] In *Mirror, Mirror on the Wall: Looking at the Quality of American Health Care Through the Patient's Lens*, Commonwealth Fund researchers found that four other industrialized nations—Australia, Canada, New Zealand, and the United Kingdom—

outscored the United States in a survey of patients' perceptions of safety, efficiency, effectiveness, and equity, with the U.S. ranking next-to-last on measures of "patient-centered" care.[2]

Infant mortality has long been considered a key indicator for the overall health of a community. The Centers for Disease Control (CDC) has released preliminary data for 2002 that indicate an increase in the infant mortality rate (IMR) in the United States to 7.0 deaths per 1,000 live births from 6.8 in 2001. This is the first increase in infant mortality since 1957-1958. Birth data for 2002 indicate that the two key predictors of infant health, the percent of births born preterm (less than 37 completed weeks of gestation) and low birth weight (LBW), continued to climb, rising 1 to 2 percent for 2002. Since 1990 preterm and LBW rates have risen fairly steadily, preterm by 14 percent (from 10.6 to 12.1 percent) and LBW by 11 percent (from 7.0 to 7.8 percent).[3]

The Institute of Medicine (IOM) report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, defined health care disparities as differences that remain after taking into account patient needs and preferences and the availability of health care. The IOM report emphasized "evidence of racial and ethnic disparities in healthcare is, with few exceptions, remarkably consistent across a range of illnesses and health care services…and remain even after adjustment for socioeconomic differences and other healthcare access-related factors.[4]

Why are health disparities important in this discussion? The federal *Healthy People 2010* report states that "the health of the individual is almost inseparable from the health of the larger community", and . . . "the health of every community in every State and territory determines the overall health status of the Nation" (U.S. Department of Health and Human Services, 2000a).[5] Racial and ethnic disparities in healthcare slow efforts to improve the nation's health because there is a higher burden of disease and mortality among minorities.

Even though the United States is spending $1.6 trillion dollars in healthcare in 2002, we have more babies dying, growing health disparities and a population that is generally unsatisfied with the care they are receiving. This discrepancy in dollars spent versus positive health outcomes represents the fundamental problem in our healthcare system. The question worth asking is; **"What is the money being spent on?"** In many cases, money is being spent on activities with no financial tie to an outcome for the patient. If outcomes are to improve and spending decrease, the fundamental structure of the health and human service system in the United States must change. *We must define the health and social outcomes that are needed, one individual at a time, then hold the system accountable for producing positive outcomes.*

Infant Mortality Ranking, 1999	
1	Sweden
2	Japan
3	Singapore
4	Finland
5	Hong Kong
6	Norway
7	Switzerland
8	Austria
9	France
10	Germany
11	Netherlands
12	Australia
13	Canada
14	Denmark
15	Scotland
16	Italy
17	Spain
18	Northern Ireland
19	Czech Republic
20	England and
21	Israel
22	Belgium
23	Ireland
24	Greece
25	Portugal
26	New Zealand
27	Cuba
28	United States
29	Hungary
30	Slovakia

Figure 1-2

What does "activity-based" mean?

The physician in a private practice setting is held financially accountable for the activity of going in the room, talking with the patient, doing an examination, writing a note and selecting a diagnostic code. There is no financial accountability for doing appropriate child lead screening, making sure a child is up-to-date on immunizations, progress towards adult asthma or diabetes control. The accountability structure is no different in the areas of human services where caseloads, number of service hours, and other activity-based accountability is the standard, with no accountability for achieved client outcomes.

In the current environment of healthcare and human services, payment is tied to activities - lab tests, procedures, doctor's visits, and home visits. These activities may result in a positive outcome for the patient, or they may not. Certainly there are no financial incentives for positive outcomes. Clearly, providers practice within a code of ethics and follow basic standards of care – this is not the issue.   The issue is the disconnect between the activities performed and the results obtained.

The Pathways Model has demonstrated it is possible to connect activities to outcomes, both within agencies and across communities. Pathways provide a standardized accountable structure to shift the focus towards defined, positive outcomes. It is possible to reduce health disparities, reduce service duplication, maximize available resources and effectively care for more people through the use of the Pathways Model.   Specifically positive outcome production for at risk individuals holding resources (number of care managers) constant has demonstrated significant increases using this model.

Can we really change the system?

The Institute of Medicine's *Quality Chasm* report – calls for healthcare organizations, clinicians, purchasers, and other stakeholders to "align the incentives inherent in payment and accountability processes with the goal of quality improvement" (IOM, 2001).[6] In the IOM's most recent report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, six recommendations for improvements within the health system were identified. Recommendation 1-1 in the report indicates that ***racial and ethnic disparities in healthcare exist and, because they are associated with worse outcomes in many cases, are unacceptable.***

<u>**Recommendations for Health System Interventions from the Institute of Medicine:**</u>[4]

> **5-6   Promote the consistency and equity of care through the use of evidence-based guidelines.**

> **5-7   Structure payment systems to ensure an adequate supply of services to minority patients and limit provider incentives that may promote disparities.**

5-8   Enhance patient-provider communication and trust by providing financial incentives for practices that reduce barriers and encourage evidence-based practice.

5-9   Support the use of interpretation services where community need exists.

5-10   Support the use of community health workers.

5-11   Implement multidisciplinary treatment and preventive care teams.

As will be described in the following chapters, the Pathways Model incorporates many of the IOM's recommendations for health system interventions. The Pathway steps incorporate evidence-based guidelines. The outcome production model recognizes the importance of reducing barriers to care in achieving positive outcomes. The Pathways Model encourages tying financial incentives to positive outcome production. Community Health Workers are seen as a key piece of the model and Community Pathways are built through a multidisciplinary approach with focuses on prevention.

The problems with health disparities, rising health care costs and health outcomes need to be addressed in a new way if they are to change.

References:

[1]Levit, K., et. al., *Health Spending Rebound Continues in 2002.* Health Affairs*, January/February 2004; 23 (1): 147-159.

[2]Davis, K., et. al., *Mirror, Mirror on the Wall: Looking at the Quality of American Health Care Through the Patient's Lens.* The Commonwealth Fund. January 2004.

[3]Kochanek, M.A., Martin, J. A. *Supplemental Analysis of Recent Trends in Infant Mortality.* National vital statistics reports; vol 52 no 13. Hyattsville, Maryland : National Center for Health Statistics. February 11, 2004.

[4]Institute of Medicine, Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Smedley BD, Stith AY, Nelson AR (Eds.). Washington, DC: National Academies Press; 2003.

[5]U.S. Department of Health and Human Services. *Healthy People 2010* (2nd ed.). 2 vols. Washington, DC: U.S. Govt. Print. Off.; November 2000.

[6]Institute of Medicine, Committee on Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academy Press; 2001.

Chapter

2

Pathways

The Pathways Model is a tool that can, if properly used, shift the focus of the activity-based health and human service systems to outcomes. Pathways are unique in that the outcomes are tracked at the level of the individual being served. It is the sum of the individual outcomes that will begin to impact the persistent problem of health disparities. Each step of the Pathway addresses a clearly defined action towards problem resolution. Many steps deal with social and cultural issues and these steps are just as important as the traditional activities of the health and human service systems. Pathways have been developed for many issues, including homelessness, pregnancy, medical home, immunizations, lead exposure, childhood behavior issues, just to name a few. One client (or patient) may be assigned too many different Pathways depending on the problems identified.

At first glance, Pathways may resemble clinical guidelines or protocols. They are, however, quite different. In a protocol, accountability is not in a specific sense taken into consideration. If the patient does not show for follow-up appointments or the medication isn't being taking correctly, then the provider is not held accountable as long as he/she "followed the protocol". This is not the case in a Pathway. The Pathway is not considered complete until an identified problem is successfully resolved.
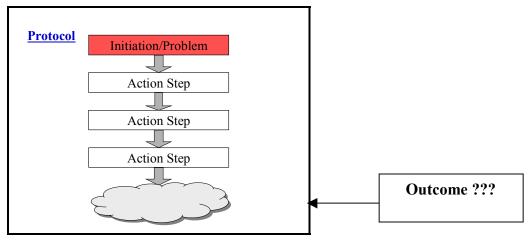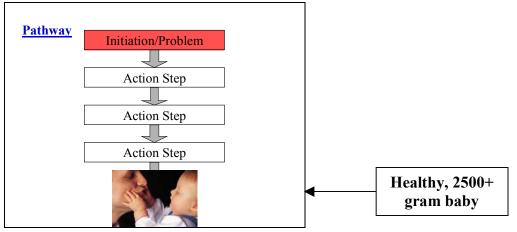
Figure 2-1

Figure 2-2

Building Pathways

As the Pathways Model is deployed to improve community health and social service outcomes, basic regional needs assessments, geomapping and other data are evaluated to determine the areas of greatest need. The information required for these evaluations is readily available and often duplicative in many communities. As a result of these evaluations, Pathways can be developed to specifically address the highest priority health and social outcomes.

 Pathways are built from the bottom – the **Completion Step.** The Completion Step is the successful resolution – outcome -- of an identified problem. This outcome must be a variable that can be measured. The Completion Step is clearly defined, easy to measure and based on accepted criteria. When an agency or community meets to build Pathways, the first task is to prioritize what the desired, measurable outcomes will be.

As previously indicated, a Pathway is not complete until the problem has been resolved. The Completion Step documents that the client has achieved all requirements for confirmed resolution or definitive improvement of the problem identified in the Initiation Step. The Completion Step clearly defines the desired positive outcome.

Particular qualifiers of the Completion Step may be required. For example, in CHAP's Employment Pathway, the client must remain employed for one month before the Pathway is documented as completed. In the Pregnancy Pathway, the baby must be viable and weigh at least 2500 grams at birth. These qualifiers may be stated as part of the Completion Step or be further described in the Quality Assurance manual that supports the Pathways process.

Completion Steps must result in a defined positive outcome. For example, a client's receipt of a flyer on smoking cessation provides no evidence that this represents any defined positive outcome. The client must achieve some clear decrease in smoking or complete a training/treatment process that has been proven through evidence-based mechanisms to decrease smoking. If a client has been given bus tokens and a medical referral, these alone do not define positive outcomes - unless it is confirmed that the client was actually seen by a medical provider.

Evaluation is quite simple with this model – by counting the number of completed Pathways. If a program is tracking the number of enrolled children up-to-date on immunizations, count the completed Immunization Pathways. If a program needs to report on the number of normal birth weight pregnancies, then it simply tallies the number of completed Pregnancy Pathways. If a funding agency is trying to determine which agency is most successful in getting clients signed up for health insurance, it can compare completed Health Insurance Pathways by agency.

Examples of Completion Steps:

(The Completion Step must define problem resolution/positive outcomes.)

Pathway	Completion Step
Health Insurance	Client confirmed to have insurance
Medical Home	Client has kept appointment with provider
Immunization	Client up-to-date on immunizations
Developmental Screen	Client has completed a developmental screen

Figure 2-3

Once the Completion Step is clearly defined, the next Pathway step to be built is the **Initiation Step**. The specific problem to be addressed, as well as the target population, is identified in this first step. The Initiation Step must clearly define who meets the criteria for the Pathway. It is critical that the Initiation Step and Completion Step be carefully defined in order to maintain the accountability and credibility of the Pathway.

The information included in the Initiation Step may be further qualified by the Quality Assurance manual or guidelines. The Initiation Step must be easy to understand and specific as to the manner of documentation. In some cases, the Initiation Step is very straightforward - such as the client is unemployed or is pregnant. Some Pathways benefit from the utilization of national guidelines or rating scales to define problems - such as out of control diabetes, hypertension, obesity, etc. Resolution of the identified problem will be documented in the Completion Step and the connection between Initiation and Completion must be clear.

Examples of Initiation Steps:

Pathway	Initiation Step
Health Insurance	All children < 21 years old and expectant mothers in target area who need insurance.
Lead Screening	Any child in target area > 6 months of age.
Pregnancy	Any woman in target area confirmed to be pregnant through a pregnancy test
Immunization Referral	Any child < 6 years of age in target area behind on immunizations.

Figure 2-4

The next series of Pathway steps are termed **Action Steps.** These steps are evidence-based interventions that build upon one another leading to a positive outcome. . There may be up to 5 Action Steps before reaching the Completion Step. More than 4 - 5 Action Steps causes the model to lose strength in simplicity and increases the documentation requirements. When significantly more Action Steps are needed, more than one Pathway may be needed.

The Action Steps are ordered by priority. For example, if the first step in getting a child's immunizations up to date is believed to be educating the family about the importance of immunizations, then that should be the first Action Step. When the Pathways Coordinator/Community Health Worker is working through the Pathway steps, the Action Steps may not be completed in series (one after the other). One of the key features of Pathways reporting is finding the steps that took the longest to complete. These "rate- limiting- steps" are the ones that may be delaying or restricting the Pathways process. Addressing issues related to the rate-limiting-steps will often improve the outcome production process.

Pathway – Common Structure

Initiation Step
Defines the problem and target population
Examples: high risk pregnancy, asthma in poor control, lack of medical home, etc.

Action Step 1
Provide standardized education to the client/family regarding the problem identified

Action Step 2
Identify and develop a plan to eliminate identified barriers to receiving services related to the problem
(Barrier codes are used to aid in tracking and reporting – see back of card)

Action Step 3
Assist client/family in identifying qualified provider or agency to resolve identified problem. This may include scheduling appointment, arranging transportation, submitting forms, etc.

Action Step 4
Confirm that appointment/referral was kept and appropriate services provided. In some cases, confirm services (medications, therapies, etc.) meet national guidelines. Assist client with follow-up recommendations and compliance with treatment plan.

Completion Step (must be measurable outcome)
- Confirm resolution or significant improvement of identified problem (i.e. normal birth weight, improved control of diabetes, immunizations up to date)

or

- Confirm that client is receiving an evidence-based service proven to be effective in resolving or improving the identified problem (i.e. smoking cessation program)

Figure 2-6

Evaluation Using Pathways

The Pathways Model relates well to the same type of evaluation strategies used in the American industrial model. Pathways allow for evaluation of how more outcomes can be produced with existing resources. What is holding up the process? Which interventions, agencies or specific steps in the process require additional attention to help increase production? Which agencies or individuals are most successful and what can be done to learn from them to increase outcome production?

The Pathways Model is designed to document the amount of time taken to complete each step. This becomes very important when identifying **rate- limiting- steps** in the process. A rate-limiting- step is where the outcome production is delayed or suddenly stops. For example, in the Health Insurance Pathway, it can be clearly identified if the process has stopped because the client did not correctly complete the forms or if the forms have not been processed by a CHW supervisor or provider. The task of identifying rate- limiting- steps is very useful in highlighting unexpected barriers at the agency and community level.

As in the business production process, a malfunction can result in a substandard product... The same can be true with Pathways. All the steps of the Pathway can be completed in a timely manner, and still the confirmed positive outcome is not achieved (i.e., baby is born low birth weight). In the production process, a Quality Assurance team evaluates the production steps, and the same is true with Pathways. Examination of incomplete Pathways provides data to help identify barriers in positive outcome production.

In addition, a risk screen, Risk Factor List, is used to determine the level of complexity of each client. A pregnant teenager with housing issues, no health insurance and history of substance use will usually be more challenging and require more time intensive attention than an experienced mother with few issues. The risk screen is useful in classifying clients' as low, medium or high risk. Productivity can then be tracked in relation to a client's level of complexity.

Summary

The Pathways Model is a useful tool in positive outcome production. Pathways can be used within an agency, a community or statewide to focus on and track outcomes. A Pathway simply defines the problem to be addressed, the desired positive outcome, and the key intervention steps required to achieve the outcome. By reporting on common variables – Pathways – it is possible to compare different employees, agencies or communities to learn and share successful strategies. The goal is to increase positive outcome production to impact health and social service disparities.

Chapter

3
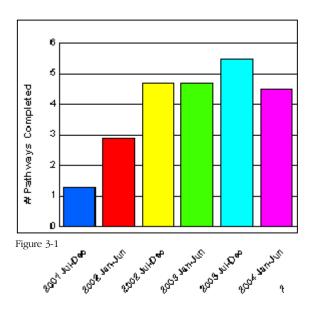
Beginning Results for CHAP and Partnering Agencies

Data

The Community Health Access Project (CHAP) began using Pathways in July of 2000. . The bar graph below demonstrates that as CHAP began to focus on producing outcomes instead of recording activities, the rate of outcome production increased substantially and has been maintained. This data is presented from CHAP's Knox County, Ohio site. A similar increase for the Pregnancy Pathway was demonstrated from CHAP's Mansfield and Columbus, Ohio sites. This increase in outcome production has been demonstrated for each of the six key Pathways that CHAP has studied. The data demonstrates an outcome production model increases production without increasing resources.

Number of Pregnancy Pathways Produced Per Six-Month Period per CHW (Average Number Produced per Unit Time per CHW)

Figure 3-1

The graph below represents the percent of Mansfield CHAP's pregnant clients that delivered low birth weight (LBW, birth weight below 2500 grams). The census tracts where Mansfield CHAP is located were geomapped to demonstrate a beginning LBW rate of 24 percent. The service area and client population did not substantially change across this study period. The introduction of Pathways in 2000 improved the quality of CHAP's Community Health Worker case management services represented by the improvement in low birth weight. This graph has not been updated. We are pleased to report that of the 29 births from Mansfield's focus area since the Jan 2003 there has been only one LBW infant born.

Low Birth Weight Rate For CHAP Clients 1999-2002
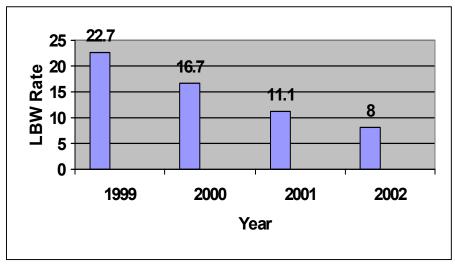
Figure 3-2
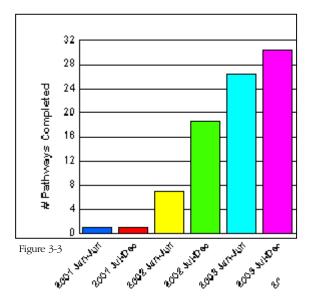
As a result of the Federal Healthy Community Access Program (HCAP) grant awarded to the Ohio Department of Health (ODH), the CHAP Pathways Model has been replicated in several Ohio communities. The ODH HCAP grant funded four community-based outreach programs and assisted each of those programs in training, database support, quality assurance and evaluation using the Pathways Model. MomsFirst in Cleveland, Healthy Moms, Healthy Babies in Youngstown, Rural Opportunities Incorporated, and CHAP were all part of the initiative under the leadership of the Ohio Department of Health.

ODH worked with the outreach sites to build common Pathways addressing pregnancy, lead screening, immunizations, medical home, smoking in pregnancy, and health/social service referrals. The implementation of the Pathways Model for each site involved much more than a change in paperwork or process. Each site worked with case managers and Community Health Workers to focus on converting to an outcome/Pathway production case management model. Quality assurance and standardized reports helped the process improve at each site.

ODH held meetings with all involved sites to share lessons learned and provide for networking in the areas of quality improvement, program efficiency and increased outcome production.

The following graph demonstrates the Pathway production increase for the Youngstown Healthy Moms Healthy Babies HCAP site. Each bar represents the average number of Referral Pathways produced per CHW at this site **over time.** This represents significant improvements in production efficiency as this is the average number produced per Community Health Worker.

<u>Youngstown – Healthy Moms, Healthy Babies</u>
Number of Health and Social Service Referral Pathways Produced
Per Six Month Period Per CHW

Figure 3-3

The HCAP initiative impacted more than 60 Community Health Workers across Ohio and thousands of clients. The evaluation process is ongoing.

Youngstown's Healthy Moms, Healthy Babies led the way toward better quality assurance and reporting. Healthy Moms, Healthy Babies utilizes Community Health Workers for outreach to expectant mothers and small children to help overcome barriers in prenatal and pediatric care. This program represents a model for close monitoring and supervision of CHWs. This methodology has obviously been very successful as represented in the above results.

Rural Opportunities Incorporated has implemented Pathways in an extremely rural setting of North Western Ohio. Its Community Health Workers are migrant farm workers who provide outreach to other migrant farm workers. Technical, geographic, and cultural challenges have been substantial and addressed with determination. Their beginning success is remarkable.

Implementation of networks to allow computerized data collection has been one of the greatest challenges for the ODH HCAP program. The database currently used in the HCAP grant works well to focus and document Pathways and helps in monitoring accountability, tying the supervisor to the Community Health Worker.

The problems with the database came in establishing stable and dependable networks. Programs that were not spread across multiple sites did not have significant difficulties, but programs that required internet based networks had significant down time and required extensive technical support. Some of these issues can be eliminated by converting the current system to a web-based system. Other factors included a lack of access to high speed internet (especially for rural sites), outdated electrical wiring in older buildings, lightning storms and other problems inherent in the underserved communities where Community Health Workers are based.

Multiple public and private information technology approaches are becoming available capitalizing on web based technology to assist in the Pathways documentation and reporting process. CHAP is working to hold the fundamental model of Pathways consistent within these various technology approaches without limiting their development and potential to assist other programs and community networks.

Although better technological solutions are being considered, these experiences emphasized the need to base case management on the Pathways Model and not the "technology". The Community Pathways program in Richland County has developed its Pathways Model with a simple paper-based process that can be tabulated by hand or entered into a database at a central location. As the Pathway Model develops into a system to serve the poorest of the poor communities, a variety of approaches to achieve equitable levels of outcome production and accountability must be achieved.

To recognize the value of the Community Health Worker, CHW certification was in 2003 legislatively credentialed under the Ohio Board of Nursing as part of House Bill 95. This positive outcome was also in many ways related to the networking and common communication which was enabled by the ODH HCAP grant. This initial dream of CHAP and others to achieve a professional status for Community Health Workers in Ohio similar to Alaska's was significantly assisted though the collaboration, guidance and direct involvement of Community Health Workers from across the state.

The Community Setting

First Steps

The Pathways Model can be applied to agencies, collaborative groups of agencies, communities and across a state. In this discussion we will focus on the community application.

Pathways are highly effective in a community setting. Most communities have a wide array of resources and services to deal with most of the health and human service issues that families face. However, that the communication between programs and agencies are limited and sometimes nonexistent. For a variety of reasons – funding, politics, and personalities – programs are often structured in a way that requires clients to come to them. This may work for some vulnerable families, but not for most disenfranchised families for whom "outreach" is the structure required to reduce or remove health disparities.

The first step in using the Pathways Model in a community setting is to determine the key outcomes or priority areas that need to be addressed. If prior needs assessment processes have determined that low birth weight is a concern, then those programs, providers and agencies that work with pregnant women should collaborate in impacting the reduction in low birth weight – community wide. This collaborative will then build the Pathways for the community.

If the primary outcome is to have babies born normal birth weight – that becomes the Completion Step of the Community Pathway. Discussion then centers on the Initiation Step – what population will be targeted with this Pathway? Is it cost effective to target all potentially pregnant women in the community, or is it more reasonable to focus in those areas of the community where the poor birth outcomes are most prevalent?

The CHAP program used geo-mapping technology to target pregnancy intervention. By mapping low and very low birth weight births for a five-year period in Richland County, it became clear that certain areas of the county had much higher incidences of poor birth outcomes than others. Strikingly, all of the very low birth weight births in those five years were experienced in two census tracts. This same geo-mapping strategy can be used for most health and human service issues for which data is being collected.

The partner agencies should develop, or modify existing, Pathways to meet the specific needs of the community or target population to be served. Action Steps can be added or modified in the Pathway; however, the Completion Step and Initiation Step should not change during this process.

BUILDING THE INFRASTRUCTURE

Community Hub
In most communities, the infrastructure required is not in place to implement the Pathways Model. How is the information to be coordinated and tracked? Who or what agency is going to be responsible? How will evaluation and quality assurance information are used to improve outcome production? These are key questions that must be addressed before implementation of the Pathways outcome production model.

A centralized data collection site – or **Community Hub** - must be established. The most likely Hub candidate is an existing agency that has experience in building networks and tracking data within the community. In Richland County, Ohio, the Youth and Family Council became the Hub because it was a natural extension of its current activities. The Hub is the "spoke of the wheel" – and it must be supported by other collaborative agencies, programs and providers working within the Community Pathways Model.

A key advantage of this model is that duplication of services can be greatly reduced. The Community Hub should register Pathways as they are initiated. This can be done through a paper-based system, but efficiency is greatly increased through a web based data collection system.

HIPAA
All health and human service programs are by now intimately familiar with HIPAA – The Health Insurance Portability and Accountability Act. Sensitive client information is protected through a variety of requirements outlined in the act. It is possible, however, to work within the HIPAA specifications and share necessary data among agencies. Richland County has developed a consent and release of information form that is acceptable under HIPAA. Data collection systems can also designed to meet the HIPAA specifications. All clients receive a notice of privacy practices before protected information is collected.

Forms for Data Collection
In addition to the release of information form, there are some key data collection forms that need to be in place prior to Pathways implementation. An **enrollment form** should be developed by collaborative agencies to capture the key pieces of information that all agencies will need – such as demographics , the agency enrolling the client, and date such information is submitted to the Community Hub. This form also serves as a request to initiate Pathways, with the submitting agency indicating which Pathways it would like to initiate. The Hub reviews the community database to determine if another agency is already working with that client on the issues identified.

This request and review process is critical to the Community Pathways Model. It is not unusual to have more than one agency or program making contact with a family in need. In the Richland County Community Pathways program, initial data evaluation revealed that more than one agency visited the same families within a 24-hour period. If an agency has already been identified as working with a client or family, then the request by another agency to initiate Pathways is denied.

In some cases, an agency may be assigned to a family, but for some reason may not be effectively working to resolve the key issues. To address these situations, the Hub needs to set parameters for how long a Pathway should remain open. If the Pathway is relatively simple, such as determining if a child has been screened appropriately for lead poisoning, then date of completion can be determined. For example, if it has been one month and the child still has not been screened, then another agency may be more effective at achieving the desired outcome. This will be discussed further in the quality assurance section.

To capture the key information for initiating Pathways, an initial **Checklist** is used. The Checklist includes "trigger questions" – to which answering "yes" to the question indicates that a Pathway should be assigned to that client. The Checklist, completed with the Enrollment Form, is important because unless the question is asked, a client may not choose to volunteer information. A family may not indicate it has no medical provider because they have lost their health insurance; a woman may not share information about her abusive home situation unless questions related to these issues are asked.

As indicated in Chapter 2, within the first few visits with a new client, a **Risk Factor List** should be completed. This form identifies the major risk factors faced by the client – especially those that can be modified. Strategies using numerical scoring of each area of risk can be utilized to help classify a client as low, medium or high risk.

Training

The Pathways Model is a unique and innovative method of doing business for health and human service agencies. Training is essential for successful implementation and data collection.   Furthermore, the reasons for adopting the Pathways Model must be clearly explained to agency staff.

The first step in training is to identify a **Pathways Champion (PCh)** at the agency. The PCh becomes the "agency specialist" in Pathways and the model. The Pathways trainer, CHAP or another similarly experienced agency, first meets with the PCh to review in detail the work processes at the agency. The agency's work processes should be incorporated within the Pathways Model as it is reasonable to do so. The trainer will work with the PCh to identify potential roadblocks and clarify any questions about implementation. Subsequently, the agency staff attend a one-day training session that includes justification for adopting the Pathways Model, how to use Pathways, the quality assurance and evaluation process and the established outcome objectives for the community.

The PCh is integral in the train-the-trainer model. By working closely with an experienced Pathways trainer, the PCh gains the skills necessary to work with agency staff. As the agency implements the Pathways Model, the trainer and PCh meets with each staff member, on a one-to-one basis, to make sure there is a clear understanding of the model. This review process, which should take place within one week of implementation, is a critical component of the Pathways Quality Assurance process.

Quality Assurance

As with other production models, an ongoing quality assurance and evaluation process it is required for Pathways. Otherwise, faulty processes may be continued. . Quality assurance looks at each step of the process to determine where outcome production is being slowed or is below standards. As discussed in Chapter 1, this quality assurance approach is required if the growing health disparities are to be affected.

One of the Central Hub's responsibilities is to work with partner agencies to develop standard production reports. Again, because the desired outcomes are common across all involved agencies, it is possible to compare outcome production. Reports can show how many Pathways are pending or completed by each staff member of each agency. There is great value to this report, one such value being the identification of the most productive and successful case managers. This provides an opportunity to study and reproduce best practices. In addition, delays in the processes (Steps) will be highlighted – either within an agency or within the community.

An example of how these reports can be used to correct barriers occurred in the Knox County CHAP program. Pathway production reports quickly identified that pregnant women in the county were waiting for extended periods to receive prenatal care. In examining the individual Pathway steps, it became clear that the rate -limiting step was in obtaining health insurance. Knox County is a rural county in Ohio with a limited number of health care providers. The local Jobs and Family Services agency required a physician's confirmation of pregnancy prior to enrolling pregnant women for Medicaid. Unfortunately, medical providers were not accepting new patients without health insurance! This barrier to care was easily resolved once all involved partners were made aware of the problem. .

Quality Assurance is a dynamic process and should be utilized to find needed process improvements – not as a punitive measure. Quality assurance should provide continual feed back to the Central Hub and partner agencies on those areas of the production process that need attention, highlighting barriers to outcome production. To improve and increase outcome production (i.e. normal birth weight babies, children up-to-date on immunizations), barriers and delays must be identified and corrected.

PATHWAYS-OUTCOME PRODUCTION

Putting the Pieces Together

This section is designed to follow a case study with an actual client to provide an understanding of the process.

> *DJ is seventeen and pregnant. She has been living with her boyfriend's family since her Mom found out about her pregnancy. She hasn't been to school for the past 3 weeks. She doesn't have insurance, and she hasn't seen a doctor for her pregnancy. Her friend convinces her to talk with the minister at church.*

The minister is the **finder** in the Pathways Model. The minister is aware of the Community Pathways Model and knows that help is available for DJ. Finders and community members learn about the model through a community awareness campaign. Although the minister will not start the Pathways, she has become a participant in the process and will have DJ sign a *Consent Form* to have her information turned in to the Central Hub.

Upon receipt of the consent form, the Central Hub confirms that no other agency is working with DJ and assigns DJ to a **Pathways Coordinator (PC).** . This step is critical in working towards eliminating duplication of services within the community.

The Pathways Coordinator contacts DJ and provides her with the *Notice of Privacy Practices* for the Community Pathways project. Upon her review and understanding, DJ signs the *Release of Information Form* to allow collection of key information. The PC then works with DJ in completing the *Checklist* to identify and assess other potential issues. . Any "yes" response on the checklist will trigger a Pathway. For example:

PREGNANCY CHECKLIST

Yes	No	General Health	Q#
	√	I would like to start off by asking if you have any questions or concerns that you would like to tell me about.	
√		Do you need health insurance for yourself? If yes, determine Healthy Start/HF eligibility, 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	1
√		Do you need prenatal care? Consider Referral Pathway,	
√		Do you need a primary care doctor? If yes, which services do you usually use? 1-ER, 2-Urgent care, 3- Walk-in Clinic, Consider Medical Referral Pathway.	1

Yes	No	Home and Transportation	Q#
√		Do you need help with transportation to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	4
√		Do you have problems with providing: 1-Housing (1A - About to be evicted, 1B - Homeless), 2-Food, 3-Clothing, 4-Utilities. Consider Referral Pathway(s).	1B

Figure 4-1

A full version of the Pregnancy Checklist is in the Appendix, but for this example, we assume that DJ answered "yes" as indicated above. The PC uses this information to complete the Pathway Type request section of the form. The Pregnancy Checklist has qualifiers (Q#) that help track information in more detail.

DJ should have the following Pathways started:
- Health Insurance
- Medical Provider
- Pregnancy
- Referral - transportation
- Suitable Housing

The _Enrollment Form_ is completed and submitted to the Central Hub. This registers DJ into the data collection system and indicates when the Pathways were initiated. It is now the responsibility of DJ's Pathways Coordinator to work through the issues by using the appropriate Pathways and respective Action Steps. Standard reports track the PC's progress in resolving DJ's issues.

Once the Pathways Coordinator documents that DJ has secured health insurance and reports completion of the Health Insurance Pathway,   it is identified that DJ still has not had a prenatal visit – she is stuck at step 4 of the Pregnancy Pathway. The PC's focus now turns to the barriers keeping DJ from seeing a prenatal care provider and working to get her to an appointment.

Pregnancy Pathway

Initiation Step
Any woman in target area confirmed to be
pregnant by a pregnancy test.

Provide Pregnancy Education Package.

Determine and document woman's:
1. Insurance Status
2. Source of Prenatal Care

If applicable, identify and eliminate barriers to
getting prenatal care. (Use barrier codes.)
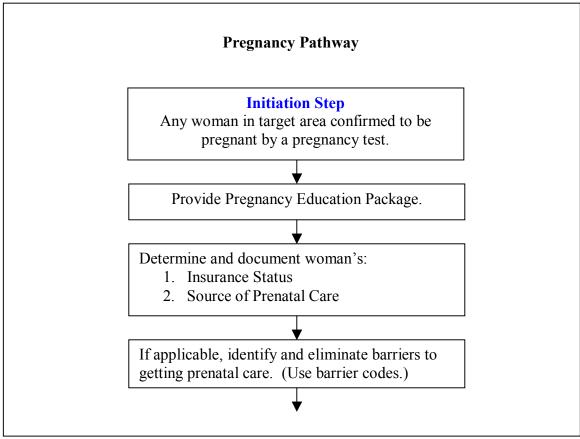
Figure 4-2

The Pathways Coordinator must confirm that DJ has actually kept her first prenatal appointment – it is not acceptable to simply document that a referral was made. The Pathways Model focuses the activities towards achieving a measurable, positive outcome. The activities are important as individual steps, but it is the outcome that is most significant. If DJ's barriers are not addressed and resolved, and she delivers a low birth weight baby, the Pathway is not complete. Through evaluation of the processes, the PC determined that DJ did not have transportation available and obtained transportation assistance for DJ through one of her neighbors.

The relationship between DJ and the PC was sound and DJ understood the importance of complying with the PC's recommendations. The result was the delivery of a viable new born.

Building an Outcome Model

1. Define the critical outcomes to produce with each Pathway

Pregnancy

Medical Home

Insurance (HS/HF)
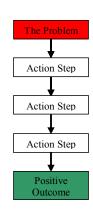
Lead

Substance Abuse

Stable Housing

2. Build the Pathways; Initiation, Action and Completion steps for each Pathway.

The Problem

Action Step

Action Step

Action Step

Positive Outcome

3. Build the checklists of questions to find which Pathways may be needed.

Yes	No	Question
		Any problems in general
		Do you need insurance?
		Do you need a Primary Dr?
		Do you have transportation?
		Domestic Violence?
		Substance Abuse?
		Current health issues?
		Education/Employment?
		Safety Issues?

4. Integrate Pathways and checklists into the care coordination process allowing documentation of outcome production. The Pathways can be evaluated, barrier steps identified and outcome production increased.

Building Successful Outcomes

Figure 4-3

Pathways Potential

America can lead the way for reduced disparities and cost savings through prevention.

The most important parts of any system are the basic components comprising its make up. The United States health and social service system (the most well financed in the world) provides payment for pieces and parts of the system that are activity based but that do not individually accomplish results.
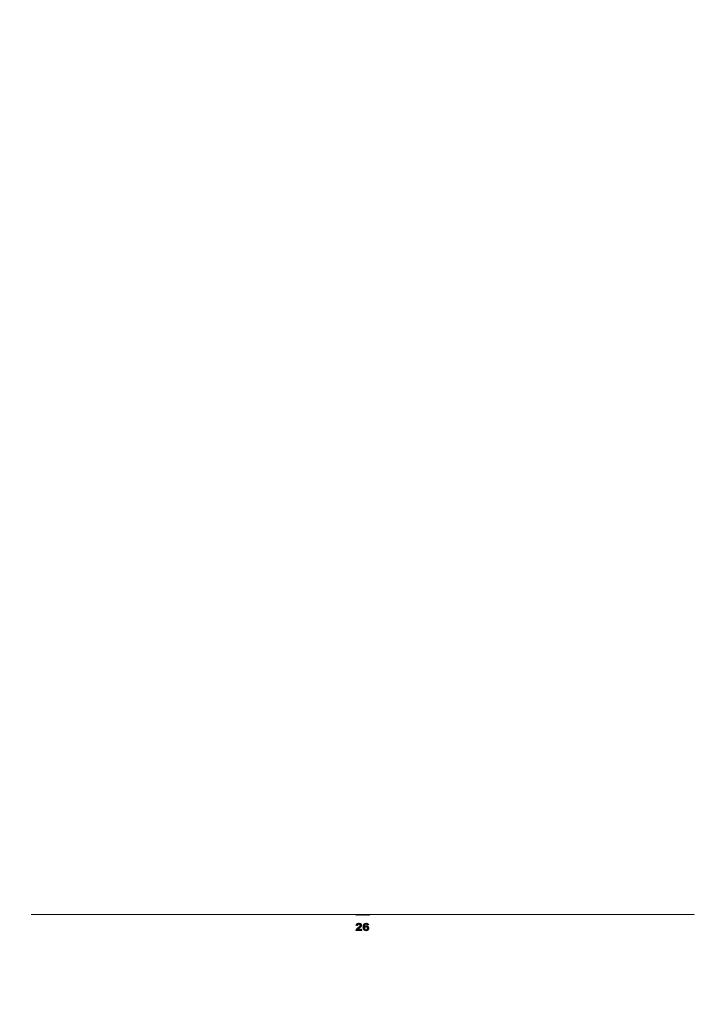
The components of the activity-based structure include and are not limited to: clinic visits, lab tests, surgical procedures, social service appointments, case notes, and hours of service. . However, accountability is not part of the current system.

Pathways provide outcome-based deliverables that are accountable and can be used as standards of positive outcome production. . In the Pathways Model the components are designed to provide for problem resolution. The Model incorporates accountability for achieved outcomes that leads to increases in positive outcome production without corresponding increases in the expenditures of resources. In short, the pathways Model improves health and social service outcomes and saves money.

CHAP, the Community Health Access Project, has been using Pathways since 2001.   The outcome production of Pathways related to pregnancy and other key issues has doubled, and in some cases tripled, in the past few years.

Richland County, Ohio has for several years been involved in a community-wide (Community Pathways) outcome production model. . Agencies focused on common issues – such as pregnancy or birth to three populations – came together and developed common Pathways for use by all participating agencies. Standard reports were developed to track outcome production by agency and as a community.   This common outcome report has helped Jobs and Family Services, Help Me Grow and other county funding agencies better evaluate how to invest limited resources. Areas of significant duplication and inefficiency have been identified and effectively changed. And, as reported earlier, health outcomes have been positively affected.

In another example, the Ohio Department of Health served as the lead agency for the Community Access Program (CAP) to expand the Pathways Model to five sites across Ohio.   These sites are community outreach sites serving rural and urban populations with significant cultural and demographic differences. The CAP project is beginning to show accountability for outcomes. All five sites – representing more than 50 case management workers – are using the same Pathways to achieve specific outcomes.

The Pathways Model is effective in focusing on those who are most at risk. Each Pathways client enrolled is risk scored so there is focus on the individuals and families most at risk. The managed care 80-20 rule states that 80% of the costs are related to less than 20% of those served. If, through risk scoring, focus can be placed on producing positive preventive health and social outcomes on the 20% of the Medicaid population that is most at risk, a large number of catastrophic health outcomes that cost the system the most can be prevented. The CHAP program is successful because it focuses on improving outcomes in the at risk communities that are experiencing poor outcomes.

By far the most important aspect of focusing on positive outcomes is to improve the strength, vitality and overall health status of the community. At risk communities can not be expected to flourish and develop when 25% of the infants (in the most impoverished) are born low birth weight. Low birth weight and other negative health and social service outcomes, which are devastating to communities, and to the U.S. as a whole, are for the most part preventable. Needed is an accountable process model that helps the most vulnerable to have the best possible health and social service outcomes. The Pathways Model provides a solution that defines and builds the desired outcomes and incorporates accountability for producing them.

Appendix

Specific Definitions

Action Steps

These steps in the Pathway are evidence-based interventions that build upon one another to lead to a positive outcome. The first Action Step immediately follows the Initiation Step. Ideally, there may be up to 5 Action Steps before reaching the Completion Step. More than 4 - 5 Action Steps for a Pathway may cause the model to lose strength in simplicity and increases the documentation requirements. When more than 5 Action Steps are needed, then more than one Pathway may need to be built.

The Action Steps are ordered by priority. For example, if the first step in getting a child's immunizations up-to-date is determined to be educating the family on the importance of immunizations, that should be the first Action Step. When the Pathways Coordinator is working through the Pathway steps, the Action Steps may not be completed in series (one after the other). One of the key features of Pathways reporting is finding the steps that took the longest to complete. These "rate- limiting- steps" are the ones that may be delaying or restricting the Pathways process. Addressing issues related to the rate limiting steps will often speed up the production process.

In some cases, the Completion Step may be finished before all of the Action Steps are completed. This may not be ideal, but it is a reality of the process. For example, a client who is enrolled in the Pregnancy Pathway late in her third trimester may deliver a healthy normal weight newborn before the education step or other steps of the Pathway are completed. Pathways without all Action Steps completed simply need to be evaluated to ensure overall quality of the outcome production system.

Agency Pathways

Agency Pathways are developed to be used within a single agency. These Pathways are not integrated into a multidisciplinary team approach. CHAP used agency-based Pathways for several years prior to the development of Community Pathways. Agency Pathways can help an agency focus on outcome production and provide a system of accountability and quality assurance. Community Pathways, however, significantly strengthen the Pathways Model of outcome production. Most issues faced by a client or family require the cooperation of more than one agency or provider. Linking community partners together in a quality outcome production process improves accountability and overall outcome production.

Checklist (Trigger Questions)

Checklists are used in the Pathways Model to screen community members for health or social problems. An initial Checklist is used to capture the key information for initiating Pathways. The questions on the Checklist are considered "trigger questions" – answering "yes" to the question indicates that a Pathway should be assigned to that client. For example, the checklist question may be, "Do you need a medical primary medical doctor?" If the answer is yes, then a Medical Home Pathway can be initiated.

The Checklist is important because unless the question is asked, a client may not choose to volunteer pertinent information. A family may not volunteer it is behind on health insurance payments, having no access to a provider. A woman may not volunteer information about her abusive home situation. The right questions need to be asked.

Checklists are most effective when they are simple and short. Ideally, Checklists should be limited to one page of questions. Checklists can be further modified with "qualifiers" to strengthen the data collected. For example, with the Checklist question: "Do you smoke cigarettes?"- the qualifier for the question may be: "If yes, 1 = less than ½ pack-per-day; 2 = less than 1 pack-per-day; 3 = 1-2 packs-per-day; and 4 = more than 2 packs-per-day".

Checklists can include questions that are not trigger questions for a Pathway. General questions or demographic data collection questions may be included. The majority of questions on the Checklist, however, should be part of the outcome production process.

Community Pathways

Community Pathways are used across multiple agencies in a community. In other words, the exact same Pathway is used and recorded by many different providers and agencies. The Pathways Model has greater strength and efficiency when used in the community setting.

Community Pathways allow for common reporting mechanisms across very different health and human service agencies. Focusing on "best practices" of agencies achieving positive outcomes can increase outcome production. Barriers to outcome production can be identified and brought to the attention of the larger community. Simply coordinating services for a family through the Pathways Model can impact outcome production. For example, young mothers have been found to be under disciplinary action by one agency because they are not spending enough time at home with their children, while at the same time under disciplinary action from another agency for not working enough.

Community Pathways Hub

The Community Pathways Hub is the central data collection site. The Hub is usually an agency that has experience in building networks and tracking data within a community. In Richland County, the Youth and Family Council became the Hub because it was a natural extension of its current activities. The Hub is the "spoke of the wheel" – and all other agencies, programs and providers working with the Community Pathways Model must support it. The Hub must be the center of accountability, ensuring that the participating agencies work through the Pathways according to established Quality Assurance guidelines.

The Community Pathways Hub must be respected and be granted some authority by the participants in order to make effective interventions and recommendations on the outcome production process. The Hub is responsible for accurately recording Pathways data and generating standard reports. The Hub is charged with presenting the information to the larger community for discussion and planning.

The Pathways Model in a community setting can reduce duplication of resources by having the Community Pathways Hub registering Pathways as they are initiated. This can be done through a paper-based system, but efficiency is greatly increased through a web based data collection system. (See page XX, Appendix)

Completion Step

The Completion Step of the Pathway is the successful resolution - outcome - of an identified problem. This outcome must be a variable that can be measured. The Completion Step should be clearly defined, easy to measure and based on accepted criteria. A Pathway is not considered to be complete until the problem identified in the Initiation Step has been resolved as specified in the Completion Step.

Particular qualifiers of the completed outcome may be required as part of the Completion Step. For example, in CHAP's Employment Pathway, the client must remain employed for one month and the employer must verify this through submission in writing before the Pathway is registered as completed. In the Pregnancy Pathway, the baby must be viable and weigh at least 2500 grams. These qualifiers may be stated as part of the Completion Step or be further described in the Quality Assurance manual that supports the Pathways process.

Completion Steps cannot define the completion of a process that does not result in a defined positive outcome. For example, if a client has received a flyer on smoking cessation there may be no evidence-based mechanism to state that this represents any defined positive outcome for that client. The client must achieve some clear decrease in smoking or complete a training/treatment process that has been proven through evidence-based mechanisms to decrease smoking. If a client has been given bus tokens or a referral placed for services, a positive outcome is not recorded until it has been confirmed that the client has seen a medical provider.

Direct Service Provider
The Direct Service Provider is the appropriately qualified individual or agency that provides the specific service outlined in the Action Step of the Pathway. Documenting that the Action Step is completed means that an appropriate agency or individual completed the step. The qualifications for the Action Step completion should be outlined in the Quality Assurance manual. For example, in the Developmental Screening Pathway, only a provider appropriately trained in the Denver II Screening process can complete that Action Step.

Enrollment Criteria
Enrollment criteria are specific requirements that a program or funding source may have for a client to be eligible to receive services. The acceptance of the client may require enrollment criteria such as Medicaid, at or below 200 percent of poverty, etc. Most programs have a specific enrollment document that captures demographic information on the client (i.e. name, address, Medicaid number, number of children, etc).

Finished Incomplete Pathway
A Finished Incomplete Pathway defines a Pathway that has no further work to be done. The Pathway is removed from the client plan without reaching the desired positive outcome. Examples of Finished Incomplete Pathways would include: a pregnant woman delivers a low birth weight baby; a family refuses to immunize its child; an unemployed client fails to show up consistently for work.

Finished Incomplete Pathways are unfortunate, but a necessary part of the outcome production model. They occur particularly in client populations that are difficult to track and where clients move or change service providers frequently. They can provide a rich source of data to focus on barriers to the outcome production model.

HIPAA
The Health Insurance Portability and Accountability Act of 1996 (HIPAA) is the first-ever federal privacy standards to protect patients' medical records and other health information provided to insurance plans, doctors, hospitals and other health care providers. HIPAA took effect on April 14, 2003. Developed by the Department of Health and Human Services (HHS), these new standards provide patients with access to their medical records and more control over how their personal health information is used and disclosed. HIPAA represents a uniform, federal floor of privacy protections for consumers. . Before collecting any health information, HIPAA requirements and client sign-off must be addressed with HIPAA compliant forms.

Initiation Step

The specific problem to be addressed, as well as the target population, is identified in this first step of the Pathway. The Initiation Step should clearly define who meets the criteria for the Pathway. It is critical that the Initiation Step and Completion Step be carefully defined in order to maintain the accountability and credibility of the Pathway.

The information printed in the Initiation Step may be further qualified by the Quality Assurance manual or guidelines. The Initiation Step must be easy to understand and describe the problem to be addressed in a manner that will be easy to clearly document. In some cases, the Initiation Step is very straightforward - such as the client is unemployed or is pregnant. Some Pathways benefit from the utilization of national guidelines or rating scales to define problems - such as out of control diabetes, hypertension, obesity, etc. Resolution of the problem identified in the Initiation Step will occur in the Completion Step and the connection between Initiation and Completion must be clear.

Pathway

The Pathways Model is designed to shift the focus of the health and human service systems from activity-based structures to that of recognizing the importance of positive outcomes. Pathways are unique in that the outcomes are tracked at the level of the individual. It is the aggregate of the individual outcomes that will begin to address the persistent problem of health disparities. Pathways may be used within an agency (Agency Pathways) or across a community (Community Pathways). Each step of the Pathway addresses a clearly defined action towards problem resolution. Many steps deal with social and cultural issues facing a client, and these steps are considered to be just as important as the traditional activities of the health and human service systems.

The Pathway starts with a clearly defined problem (Initiation Step). The Initiation Step is immediately followed by evidence based Activity Steps to address the problem. The Pathway is considered to be complete only when the final defined positive outcome has been achieved (Completion Step). One client may have many different Pathways depending on the problems identified.

Pathways Coordinator / Community Health Worker

The Pathways Coordinator (PC) is the primary case manager for the client and helps the client work through each step of the Pathway. The Pathways Coordinator may help the client work through multiple Pathways simultaneously such as Health Insurance, Medical Home, Housing, and Dental.

The Pathways Coordinator does not necessarily complete each one of the Pathway steps, but does lead the client through the steps and documents step completion. As an example, in the Developmental Screening Pathway the PC may not be qualified to provide the Denver II Developmental Screen defined in the Action Step. The Pathways Coordinator would help find a qualified Denver screener and ensure that the client received the screen. Based on the results of the screen, as documented in the Pathway, the PC would work to ensure appropriate follow-up and treatment.

In the CHAP program, the Pathways Coordinator is the Community Health Worker. CHWs from the community often have a very close and effective relationship with their clients. CHWs have the cultural skills and trust of the client that allows them to reach out to clients who might not otherwise access services within the health and human service systems.

The specific training, experience and other skill requirements for Pathways Coordinators should be outlined in the Quality Assurance guidelines established by the community or agency using Pathways.

Pathways Registration

Clients enrolled in the Community Pathways Model may have several different agencies working with them. A Pathways Coordinator may identify that a client needs a Pathway that is currently in process by another Pathways Coordinator. Pathways Registration allows the Pathways Coordinator to check with the Community Pathways Hub and confirm that another agency is not already working with the client. This step greatly reduces duplication of limited resources within a community.

When a Pathways Coordinator determines that a Pathway is needed, they are not restricted in any way from starting it. It is simply understood through the Pathways Model that if the Pathway is completed in duplication, the PC will not receive credit for that Pathway. When a database process for Pathways is in place, this registration process with the Community Pathways Hub can occur over the internet in real time.

For example, a Pathways Coordinator has just identified a client who is pregnant. The client has many different issues and is involved with multiple agencies. She does not remember or understand that she was just placed on a Pregnancy Pathway two days ago by a different Pathways Coordinator from a different agency. As part of starting her on the Pregnancy Pathway, the PC checks with the Central Hub to register the new Pregnancy Pathway and is advised the client is already receiving this service.

Positive Outcome

The positive outcome is the documented and confirmed resolution and/or substantial improvement of an identified health or social problem. Examples of positive outcomes would include: child confirmed to be behind on immunizations is now up-to-date; an at-risk pregnant client delivers a viable, normal birth weight baby; a child at risk for lead poisoning receives appropriate family education, screening and follow-up; and a client confirmed by national standards to be out of diabetic control is now in control using the same national standards. The positive outcome is defined in the Pathways Model as the Completion Step. The positive outcome must be objectively defined and measurable.

Risk Factor List

Within the first few visits with a new client, a Risk Factor List will be completed. This form identifies the major risk factors faced by the client – especially those that can be modified. The Risk Factor List can be generated through a questionnaire that addresses health, social, emotional, educational and employment-related risk factors. Standardized scoring systems have been developed to allow each client to receive an overall risk score. This risk score helps to classify a client as low, medium or high risk. A client scored as high risk may require more of a Pathways Coordinator's time. The risk score can be used when evaluating case loads and offering incentives for successful completion of Pathways.

The CHAP program uses the Risk Factor List at enrollment and then updates the list every 6 months. It is possible to see a reduction in some modifiable risk factors as the client's needs are been adequately addressed.

Sample Checklists

CHW PREGNANCY CHECKLIST

Yes	No	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about?	
		Do you need health insurance for yourself? If yes, determine Healthy Start/HF eligibility, 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	
		Do you need prenatal care? Consider Referral Pathway,	
		Do you need a primary care doctor? If yes, which services do you usually use? 1-ER, 2-Urgent care, 3- Walk-in Clinic, Consider Medical Referral Pathway.	

Yes	No	Home and Transportation	Q#
		Do you need help with transportation to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	
		Do you have problems with providing: 1-Housing (1A - About to be evicted,1B - Homeless), 2-Food, 3-Clothing, 4-Utilities. Consider Referral Pathway(s).	

Yes	No	Nutrition, Safety and Habits	Q#
		Do you plan to breast feed?	
		Are you currently taking prenatal vitamins?	
		Do you smoke cigarettes? 1-Less than half pack per day, 2-Half to whole pack per day, 3-One-two packs per day, 4-More than 2 packs per day, 5-Interested in decreasing or quitting. Consider Smoking Cessation Pathway . Please indicate any level of reduction in smoking during pregnancy.	

Yes	No	Employment, Training, Financial Support	Q#
		Are you looking for a job? 1-need help finding a job, 2-need help with resume, 3-need training before getting job, 4-felony record	
		Are you currently sanctioned? 1-By DJFS, 2-The courts.	
		Do you have enough money each month to pay all of your bills? Consider Money Management Pathway.	

Yes	No	Emotional Health and Support	Q#
		Do you feel like you are under stress?	

Yes	No	Current Medical Issues	Q#
		Are you currently being treated for any of the following conditions? 1-Infections, 2-Asthma, 3-Chronic Medical Conditions, 4-Mental Health Problems. Write in type of illness and details.	
		Are you taking any medicines? 1-Prescribed by a doctor, 2-Over-the counter medications, 3-Herbal or alternative medicines? List all medications currently taking.	

Q# = Qualifier number for question

Yes	No	Current Pregnancy	Q#
		Have you been told by a health care provider that you were in preterm labor during this pregnancy? 1-on medication, 2-on bed rest, 3-hospitalized	
		Have you had any infections during this pregnancy? 1-bladder, 2-kidney, 3-sexually transmitted disease, 4-vaginal, 5-respiratory, 6-other (document in chart)	
		Did your health care provider tell you that you have any medical problems with this pregnancy? 1- diabetes/gestational diabetes, 2-more than one baby, 3 - high blood pressure/preeclampsia, 4-anemia, 5-inadequate weight gain, 6- problems with the placenta, 7- Leaking amniotic fluid, 8- Anemia, 9- Rh Negative Blood type, 10 - other: 1-	

Yes	No	Signs of illness	Q#
		Have you had any? 1-Contractions, tightening or pain in the abdomen, 2-Back/flank pain, 3-Spotting/bleeding, 4-Swelling hand or face (NOT ankles), 5-Severe headaches, 6-Blurred vision **Immediate notification of supervisor for any Yes answers.**	
		Have you had any: 1-Breathing problems, 2-Pain with urination, 3-Fever or chills, 4-Vaginal discharge, 5-Vomiting, 6-Diarrhea, 7-Excessive tiredness, 8-Other.**Immediate notification of supervisor for any Yes answers.**	

Q# = Qualifier number for question

CHW POSTPARTUM CHECKLIST

Yes	NO	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about?	
		Do you need health insurance for yourself? If yes, determine Healthy Start/HF eligibility, 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	
		Do you need a primary care doctor? If yes, which services do you usually use? 1-ER, 2-Urgent care, 3- Walk-in Clinic, Consider Medical Referral Pathway.	

Yes	NO	Home and Transportation	Q#
		Do you need help with transportation to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	
		Do you have problems with providing: 1-Housing (1A - About to be evicted,1B - Homeless), 2-Food, 3-Clothing, 4-Utilities. Consider Referral Pathway(s).	

Yes	NO	Nutrition, Safety and Habits	Q#
		Are you breastfeeding 1-breastfeeding only, 2- supplementing with formula, 3-having difficulty with Breast feeding, 4-breast feeding going well.	
		Are you having difficulty breastfeeding?	
		Do you need help childproofing your home?	
		Are you taking prenatal vitamins?	
		Do you smoke cigarettes? 1-Less than half pack per day, 2-Half to whole pack per day, 3-One-two packs per day, 4-More than 2 packs per day, 5-Interested in decreasing or quitting. Consider Smoking Cessation Pathway .	

Yes	NO	Employment, Training, Financial Support	Q#
		Are you looking for a job? 1-need help finding a job, 2-need help with resume, 3-need training before getting job, 4-felony record	
		Are you currently sanctioned? 1-By DJFS, 2-The courts.	
		Do you have enough money each month to pay all of your bills? Consider Money Management Pathway.	

Yes	NO	Emotional Health and Support	Q#
		Do you feel like you are under stress?	

Yes	NO	Current Medical Issues	Q#
		Are you currently being treated for any of the following conditions? 1-Infections, 2-Asthma, 3-Chronic Medical Conditions, 4-Mental Health Problems. Write in type of illness and details.	
		Are you taking any medicines? 1-Prescribed by a doctor, 2-Over-the counter medications, 3-Herbal or alternative medicines? List all medications currently taking.	

Q# = Qualifier number from question

Yes	NO	Reproductive Health	Q#
		Are you sexually active now? 1 - One partner, 2 - Multiple sex partners	
		Are you currently using a family planning method? 1- Abstinence, 2- Natural FP, 3- Condoms, 4- Diaphragm, 5- Shot, 6- Pill, 7- IUD, 8- Sterilization, 9 - Other	
		Are you having problems making it to your 6 week check up appt? 1- If yes initiate Referral Pathway.	

Yes	NO	Signs of illness	Q#
		Have you had any 1-Breathing problems, 2-Pain with urination, 3-Fever or chills, 4-Vaginal discharge, 5-Vomiting, 6-Diarrhea, 7-Excessive tiredness, 8-Abdominal pain, 9-Depression 10-Bleeding longer than 4 weeks?. **Immediate notification of supervisor for any Yes answers.**	

Q# = Qualifier number from question

CHW Adult Non-Pregnant Female

Yes	No	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about?	
		Do you need health insurance for yourself? Determined Healthy Start/HF eligibility, 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	
		Do you need a primary care doctor? If yes, which services do you usually use? 1-ER, 2-Urgent care, 3- Walk-in Clinic, Consider Medical Referral Pathway.	

Yes	No	Home and Transportation	Q#
		Do you need help with transportation to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	
		Do you have problems with providing: 1-Housing (1A - About to be evicted,1B - Homeless), 2-Food, 3-Clothing, 4-Utilities. Consider Family Stabilization Pathway and Home Eviction Pathway	

Yes	No	Nutrition, Safety and Habits	Q#
		Do you smoke cigarettes? 1-Less than half pack per day, 2-Half to whole pack per day, 3-One-two packs per day, 4-More than 2 packs per day, 5-Interested in decreasing or quitting. Consider Smoking Cessation Pathway .	

Yes	No	Employment, Training, Financial Support	Q#
		Are you looking for a job? 1-need help finding a job, 2-need help with resume, 3-need training before getting job, 4-felony record	
		Are you currently sanctioned? 1-By DJFS, 2-The courts.	
		Do you have enough money each month to pay all of your bills? Consider Money Management Pathway.	

Yes	No	Emotional Health and Support	Q#
		Do you feel like you are under stress?	

Yes	No	Current Medical History	Q#
		Are you currently being treated for any of the following conditions? 1-Infections, 2-Asthma, 3-Chronic Medical Conditions, 4-Mental Health Problems. Write in type of illness and details.	
		Are you taking any medicines? 1-Prescribed by a doctor, 2-Over-the counter medications, 3-Herbal or alternative medicines? List all medications currently taking.	

Q# = Qualifier number for checklist question

Yes	No	Reproductive Health	Q#
		Do you need an appointment for a Pap Smear? If yes, 1- Needs a primary care provider, 2- Has provider, needs an appointment Initiate Referral Pathway).	
		Are you sexually active now? 1 - One partner, 2 - Multiple sex partners	
		Do you think you might be pregnant now? If yes, initiate general pregnancy pathway.	
		Are you currently using a family planning method? 1- Abstinence, 2- Natural FP, 3- Condoms, 4- Diaphragm, 5- Shot, 6- Pill, 7- IUD, 8- Sterilization, 9 - Other	

Yes	No	Signs of illness	Q#
		Have you recently had any? 1-Breathing difficulty, 2-Pain with urination, 3-Fever or chills, 4-Vaginal discharge, 5-Vomiting, 6-Diarrhea, 7-Excessive tiredness, 8-Abdominal pain, 9-Other. **Immediate notification of supervisor for any Yes answers.**	

Q# = Qualifier number for checklist question

CHW Pediatric, Birth - 1 Year

Yes	No	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about your baby?	
		Do you need a primary care doctor for your baby? If yes, which services do you most commonly use? 1-ER, 2-Urgent care, 3- Walk-in Clinic, Consider Medical Referral Pathway.	
		Do you need health insurance for your child? If yes, determine Healthy Start/HF eligibility, 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	

Yes	No	Home and Transportation	Q#
		Do you need help with transportation for your child to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	
		Do you have problems with providing any of the following for your child: 1-Housing (1A - About to be evicted,1B - Homeless), 2-Food, 3-Clothing, 4-Utilities, 5-Furniture, 6-Car Seat, 7-Crib	

		Nutrition, Safety and Habits	Q#
		Is your baby having any problems with feeding? If yes, document in chart.	
		Is your baby breast feeding?	
		Do you need a working smoke detector? If yes, 1-smoke detector provided and education given	
		Does baby sleep on his/her stomach? If yes, give detailed information about importance of putting baby on his/her back to sleep.	
		Do you need child care?	
		Did you go over age appropriate safety information?	

Yes	No	Development	Q#
		Did you discuss brain development and the importance of talking to, reading to, holding and interacting with the baby?	
		Did you discuss the importance of strengths-based parenting (encouraging your child)?	
		Has your baby been diagnosed with any developmental delays or problems? If yes, screen completed and normal, 2 - screen completed and abnormal, Consider Developmental Referral Pathway.	

Yes	No	Disease Prevention	Q#
		Does anyone in your home smoke? 1-Client, 2-Partner/Spouse, 3-Other Initiate Smoking Cessation Pathway and discuss effects of second hand smoke.	
		Is your baby missing any immunizations? Consider Immunization Pathway	

Q# = Qualifier number for question

Yes	No	Current Medical Issues	Q#
		Are you giving your baby any medicines? 1-Prescribed by a doctor, 2-Over-the counter medications, 3-Herbal or alternative medicines, 4 - Prescribed by a doctor, but cannot afford.	
		Is your baby currently being treated for? 1-Infections, 2-Asthma, 3-Chronic Medical Conditions. Write in type of illness and details.	

Yes	No	Signs of Illness	Q#
		Is your baby having: 1-Difficulty breathing, 2-Vomiting, 3-Diarrhea, 4-Feeding problems, 5-Fever or chills, 6-Jerking of arms or legs, 7-Change in skin color (blue lips, yellow skin) 8-Other, Consider Sick Child Pathway. **Immediate notification of supervisor for any Yes answers.**	

Q# = Qualifier number for question

CHW Pediatric, 13 Months - 3 Years

Yes	No	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about your child?	
		Do you need a primary care doctor for your child? If Yes which services do you most commonly use? 1-ER, 2-Urgent care, 3- Walk-in Clinic, Consider Medical Referral Pathway.	
		Do you need health insurance for your child? If yes, determine Healthy Start/HF eligibility, 1-Client eligible (Initiate Healthy Start/HF Pathway), 2-Client not eligible.	

Yes	No	Home and Transportation	Q#
		Do you need help with transportation for your child to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	
		Do you have problems with providing any of the following for your child: 1-Housing (1A - About to be evicted,1B - Homeless), 2-Food, 3-Clothing, 4-Utilities. Consider Referral Pathway(s)	

Yes	No	Nutrition, Safety and Habits	Q#
		Is your child having any problems with eating? If yes please provide details.	
		Is your child's main drink milk?	
		Do you need a working smoke detector? If yes, 1-smoke detector provided and education given	
		Do you need child care for your child?	
		Did you go over age appropriate safety information?	

Yes	No	Development	Q#
		Did you discuss brain development and the importance of talking to, reading to, holding and interacting with the child?	
		Did you discuss the importance of strengths-based parenting (encouraging your child)?	
		Has your child been diagnosed with any developmental delays or problems? 1-Screen completed and normal, 2-Screen completed and abnormal, Consider Developmental Referral Pathway.	

Yes	No	Disease Prevention	Q#
		Does anyone in your home smoke? 1-Client, 2-Partner/Spouse, 3-Other Initiate Smoking Cessation Pathway and discuss effects of second hand smoke.	
		Is your child missing any immunizations? Consider Immunization Pathway	

Q# = Qualifier number for question

Yes	No	Current Medical Issues	Q#
		Are you giving your baby any medicines? 1-Prescribed by a doctor, 2-Over-the counter medications, 3-Herbal or alternative medicines, 4 - Prescribed by a doctor, but cannot afford.	
		Is your baby currently being treated for? 1-Infections, 2-Asthma, 3-Chronic Medical Conditions. Write in type of illness and details.	
		Has your child been exposed to or infected with lice? If yes, Initiate the Lice Eradication Pathway	

Yes	No	Signs of Illness	Q#
		Is your child having: 1-Difficulty breathing, 2-Vomiting, 3-Diarrhea, 4-Fever or chills, 5-Other, Consider Sick Child Pathway. **Immediate notification of supervisor for any Yes answers.**	
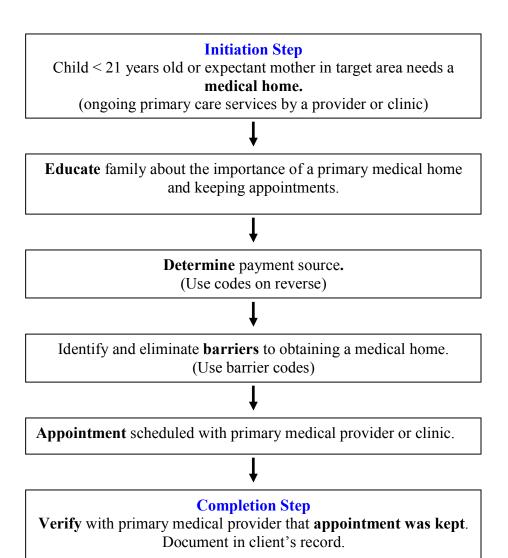
Q# = Qualifier number for question

CHW Adult Male

Yes	No	General Health	Q#
		I would like to start off by asking if you have any questions or concerns that you would like to tell me about?	
		Do you need a primary care doctor? If yes, which services do you most commonly use? 1-ER, 2-Urgent care, 3- Walk-in Clinic. Consider Medical Referral Pathway.	
		Do you need health insurance? If yes, determine Healthy Start/Healthy Family eligibility, 1-Client eligible (Initiate HS/HF Pathway), 2-Client not eligible.	

Yes	No	Home and Transportation	Q#
		Do you need help with transportation to health and social service appointments? If yes, how do you get to appointments now? 1-Bus, 2-Own car, 3-Relative's car, 4-Other.	
		Do you have problems with providing: 1-Housing (1A - About to be evicted,1B - Homeless), 2-Food, 3-Clothing, 4-Utilities. Consider Referral Pathway(s).	

Yes	No	Nutrition, Safety and Habits	Q#
		Do you smoke cigarettes? 1-Less than a half pack/day, 2-Half to whole pack/day, 3-One to two packs/day, 4-More than 2 packs/Did you go over age appropriate safety information? day, 5-Interested in decreasing or quitting. Consider Smoking Cessation Pathway .	

Yes	No	Employment, Training, Financial Support	Q#
		Are you looking for a job? If yes, 1-need help finding a job, 2-need help with resume, 3-need training before getting job, 4-felony record.	
		Are you currently sanctioned? 1-By DJFS, 2-The courts.	
		Do you have enough money each month to pay all of your bills? Consider Money Management Pathway.	

Yes	No	Emotional Health and Support	Q#
		Do you feel like you are under stress?	

Yes	No	Current Medical History	Q#
		Are you currently being treated for any of the following conditions? 1-Infections, 2-Asthma, 4 - High Blood Pressure, 5-Other Chronic Medical Conditions, 5-Mental Health Problems. Write in type of illness and details.	
		Are you taking any medicines? 1-Prescribed by a doctor, 2-Over-the counter medications, 3-Herbal or alternative medicines? List all medications currently taking.	

Yes	No	Reproductive Health	Q#
		Are you sexually active now? 1 - One partner, 2 - Multiple sex partners	
		Are you currently using a family planning method? 1- Abstinence, 2- Natural FP, 3- Condoms, 4- Diaphragm, 5- Shot, 6- Pill, 7- IUD, 8- Sterilization, 9 - Other	

Q# = Qualifier number for question

Sample Pathways

Medical Home Pathway

Initiation Step
Child < 21 years old or expectant mother in target area needs a
medical home.
(ongoing primary care services by a provider or clinic)

⬇

Educate family about the importance of a primary medical home
and keeping appointments.

⬇

Determine payment source**.**
(Use codes on reverse)

⬇

Identify and eliminate **barriers** to obtaining a medical home.
(Use barrier codes)

⬇

Appointment scheduled with primary medical provider or clinic.

⬇

Completion Step
Verify with primary medical provider that **appointment was kept**.
Document in client's record.

Pregnancy Pathway

Initiation Step

Any woman in target area **confirmed** to be pregnant by a pregnancy test.

↓

Provide Pregnancy Education Package.

↓

Determine and document woman's:
1. Insurance Status
2. Source of Prenatal Care

↓

If applicable, identify and eliminate **barriers** to getting prenatal care. (Use barrier codes)

↓

- Confirm that **appointment** has been scheduled with prenatal care provider.
- **Develop written Agency Coordination Plan in client's record.**

↓

Confirm that woman kept 1st prenatal appointment.
Document:
- Date of 1st appointment and next scheduled appointment.
- Due date
- Concerns identified during prenatal visit.

↓

- Confirm prenatal appointment at least monthly.
- If appointment not kept, identify and eliminate **barriers** to prenatal care. Update Agency Coordination Plan in chart. (Use barrier codes)

↓

Completion Step

Healthy baby weighing more than 5 pounds, 8 ounces (2500 gm)

- Document baby's birth weight, estimated age in weeks and any complications.

Immunization Referral Pathway

Initiation Step
Any child < 6 years of age in target area behind on immunizations.

↓

1. Educate family about the importance of immunizations and keeping appointments.
2. **Education sheets reviewed.**

↓

Identify and eliminate potential **barriers** to obtaining immunizations. (Use barrier codes)

↓

Appointment scheduled with provider for missed immunizations.

↓

Confirm with provider that child kept appointment.
- Record current immunization status using approved standard log.
- If appointment not kept, identify and eliminate **barriers** to keeping appointment. (Use barrier codes)

↓

Completion Step
Child is **up-to-date** on all age appropriate immunizations.

Lead Pathway
Sample

Initiation Step
Any child in **> 6 months** of age.

↓

Provide **lead education** to all families with young children.
Give education sheet.

↓

Ask whether child has ever received a blood lead test and
document lab results in child's chart.

↓

Any child receiving **Medicaid** is required to have blood
lead tests at 12 and 24 months of age.

↓

If child does not receive Medicaid, check zip code and refer
to high-risk areas for county:
- **High-risk zip code** – child needs blood lead test.
- **Low-risk zip code** – use *Risk Assessment Questionnaire* on reverse to determine if child needs a blood lead test.

↓

Identify and eliminate **barriers** to child getting a
blood lead test. (Use barrier codes)

↓

Appointment scheduled with provider to do lead test or to
write prescription for blood lead test.

↓
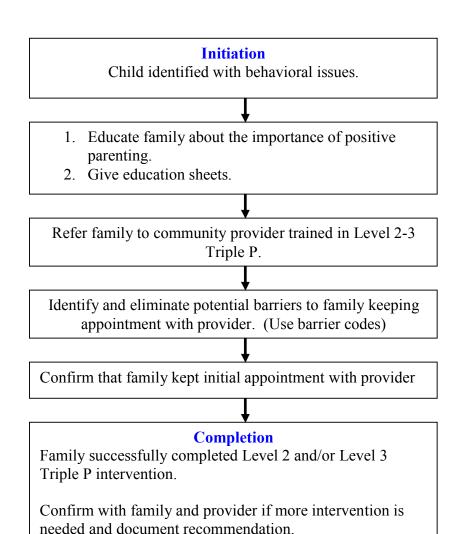
Completion Step
Confirm that appointment was kept and **document** results
of lead blood test in client's record.
< 10 μg/dl = non-elevated
≥ 10 μg/dl = elevated
1. Refer to public health nursing at local health department.
2. Initiate **Developmental Screening Pathway.**

Triple P Level 2-3 Behavior Pathway
Sample

```
┌─────────────────────────────────────────────────────┐
│                     Initiation                        │
│          Child identified with behavioral issues.     │
└─────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────┐
│  1.  Educate family about the importance of positive  │
│      parenting.                                       │
│  2.  Give education sheets.                           │
└─────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────┐
│  Refer family to community provider trained in Level 2-3 │
│                      Triple P.                        │
└─────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────┐
│  Identify and eliminate potential barriers to family keeping │
│     appointment with provider.  (Use barrier codes)   │
└─────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────┐
│  Confirm that family kept initial appointment with provider │
└─────────────────────────────────────────────────────┘
                            │
                            ▼
┌─────────────────────────────────────────────────────┐
│                     Completion                        │
│  Family successfully completed Level 2 and/or Level 3 │
│  Triple P intervention.                               │
│                                                       │
│  Confirm with family and provider if more intervention is │
│  needed and document recommendation.                  │
└─────────────────────────────────────────────────────┘
```

BUILDING OUTCOMES

Sample Outcome Reporting

Pathways

CCC	AE	EN	DEV	DV	EMP	EMS	HE	HS	IMM	MR	TRN	AV	EX	FP	GP	LC	LD	M	PL	PP	R	SC	SM	T1	T2	T3	Total
1-Aug																											
Reshelle Butler		1		2				4	11	2			1	3	2					1	26			1	1	1	56
Bobbi Davis		3						4	2					1	2						2			1	1		16
Penelope Day								1	2					1						1	14						19
Miriam Keim																											0
Claudia Montgomery								5	1	1				2		3				1	20			1		1	35
Renee Swain								3	4	1			2	1		3					7				1	2	24
Connie Ward					1			1	3				8	1							8				1	4	27
Totals August		4		2		1		18	23	4			11	8	3	8				3	77			2	4	9	177
1-Jul																											
Reshelle Butler	1						1	1	9	5			2	2	4						8			2	1	1	35
Bobbi Davis			1					1	1	1				1	1	2					1				1	1	10
Penelope Day								1	6				2	1	1						16			1		2	30
Miriam Keim																											0
Claudia Montgomery		1					1	1	6					1	1									1		1	12
Renee Swain									6	1				1	1	4					12			1	1		26
Connie Ward		1	1					1	2					1							13				2	4	24
Totals July	1	2	2				2	4	30	7			2	6	6	6					50			4	5	10	137
GRAND TOTAL	1	6	2	2	1	0	2	22	53	11	0	0	13	14	9	14	0	0	0	3	127	0	0	6	9	19	314

	AE	AS	DEV	DV	EMP	EMS	HE	HS	IMM	MR	TRN	AV	EX	FP	GP	LC	LD	M	PL	PP	R	SC	SM	T1	T2	T3

Pathways
- AE-Adult Education
- EN-Enrollment
- DEV-Development
- DV-Domestic Violence
- EMP-Employment
- EMS-Emergent Medical Situation
- HE-Home Eviction
- HS-Healthy Start
- IMM-Immunization
- MR-Medical Referral
- TRN-Truancy

Pathways
- AV-Abnormal Vital Signs
- EX-Exiting Client
- FP-Family Planning
- GP-General Pregnancy
- LC-Lice
- LD-Lead
- M-Money Management
- PL-Pre-term Labor
- PP-Post Partum
- R-Refferal
- SM-Smoking
- SC-Sick Child
- T1- 1st Trimester
- T2- 2nd Trimester
- T3- 3rd Trimester

Pathways Appropriate Use – Agency Sign Off

The undersigned agency and individual agree to utilize the model of Pathways as defined in the Community Health Access Project - Pathways Manual. The utilization of this outcome production model and tool is specifically to define, document and improve the quality and efficiency of specific positive health and social outcomes. The undersigned agency and individual agree to work towards the specific guidelines defined in the manual for this and only this purpose and to seek technical assistance when needed from CHAP or another entity certified by CHAP. Any breech of this use of the Pathways model is unauthorized.

Agency

_____

Agency Representative Name   Title

_____   _____

Signature

_____

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