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The Migrant Health News Source

Integrating Primary & Behavioral Health Care for Homeless People

NEED FOR INTEGRATED CARE

"Integrating behavioral health services into primary care is an idea whose time should have already come," writes Alexander Blount, Ed.D.[1] Here's why:

- **Nearly 70 percent of all health care visits have primarily a psychosocial basis,**[2] and about 25 percent of all primary care recipients have a diagnosable mental disorder, most commonly anxiety and depression.[3]
- **Two-thirds of homeless service users report an alcohol, drug, or mental health problem.**[4] These "behavioral health" disorders account for 69 percent of hospitalizations among homeless adults, compared with 10 percent of non-homeless adults.[5]
- **One-third of all patients with chronic illnesses, homeless or housed, have co-occurring depression.** Major depression in patients with chronic medical illnesses amplifies physical symptoms, increases functional impairment, and interferes with self-care and adherence to medical treatment.[6]
- **Half of all care for common mental disorders is delivered in general medical settings.**[7] Many patients—particularly ethnic minorities—perceive primary care as less stigmatizing than specialized mental health care.[6]
- **Half of mental disorders go undiagnosed in primary care.** Primary care physicians vary in their ability to recognize, diagnose, and treat mental disorders.[3]

These statistics only begin to tell the story. Traditionally, primary care, mental health care, and addictions treatment have been provided by different programs in various agencies, scattered throughout the community. People who are homeless—particularly those with mental illnesses and co-occurring

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Editor's Note

This issue of Streamline includes several articles on the integration of primary and behavioral health. Two of these articles originally appeared in Healing Hands, a quarterly publication of the Health Care for the Homeless Clinicians' Network, May 2006, vol. 10, no. 2 "Integrating Primary & Behavioral Health Care for Homeless People" and Linking HCH with Mental Health Services"). They are reprinted here with permission. This is just one of many areas in which MCN is collaborating with the Homeless Clinicians Network because of the many challenges to quality care that migrants and homeless patients have in common. A third article looks at the integration of primary and behavior health in practice in a migrant health center.

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substance use disorders—have difficulty navigating these multiple service systems. To address this need, HCH grantees are required to provide addiction services and referrals to specialists, as medically indicated, and to other health services, including behavioral health care.

Lack of time, training, experience, and resources makes fully integrated primary and behavioral healthcare difficult to accomplish in primary care settings. But referrals can also be problematic for indigent patients. "If someone who is living on the streets is hearing voices and has hypertension and a substance abuse problem, it's going to be virtually impossible for him to get care," says **James O'Connell, MD**, President of Boston Health Care for the Homeless Program.

Skilled screening, assessment, evaluation, and treatment of behavioral health disorders are crucial in the HCH setting because of their disproportionate impact on homeless people, notes **Matias Vega, MD**, Medical Director of Albuquerque HCH. "Inadequate treatment of serious mental illness and/or chemical dependency often precipitates and perpetuates individual and family homelessness." To address the complexity and acuity of behavioral health problems experienced by displaced people, many HCH projects have already added or expanded the behavioral health services they provide, as illustrated by the programs profiled in this issue.

BARRIERS TO INTEGRATED CARE

The need to integrate care for physical and behavioral health disorders is indisputable, but clinical, programmatic, and financial barriers can stymie even the most innovative and dedicated teams.

Clinical Barriers

There are different and often conflicting paradigms in "physical" versus "behavioral" health care and treatment of mental illness versus substance use disorders. Substantial differences in culture and language between clinical domains may create a chasm that is difficult to cross.

Programmatic Barriers

The pressures of a busy primary care practice leave clinicians little time to attend to each patient's needs. Visits typically last 13 to 16 minutes and patients have an average of six problems to address with their provider.[3] Lack of training for interdisciplinary care is also a significant barrier. "Most primary care doctors have limited training in psychiatry and a great deal of angst about treating people with serious mental illnesses," notes **Earl Lynch, MD**, Medical Director of the Santa Barbara County Public Health Department. Moreover, information sharing can be problematic in an interdisciplinary setting. Records, treatment plans, and information systems are different in primary and behavioral health care settings, and concerns about client confidentiality and HIPAA regulations may require high-level negotiation among collaborating agencies.

Financial Barriers

Funding interdisciplinary care is a significant hurdle to providing integrated services. There are few, if any, economic incentives for primary care and behavioral health care providers to collaborate.[3,8] Funding for mental health services is more restrictive than for general health care. Many community mental health agencies will only serve individuals with insurance. "Only 4 percent of our patients are insured," says **Bart Irwin, Ph.D., MSW**, Assistant Director of Family Health Centers, an HCH grantee in Louisville, KY. "For the 96 percent who are uninsured, it is almost impossible to get mental health care."

Even if patients qualify for Medicaid, reimbursement for behavioral health services provided in primary care settings can be problematic. For example, Irwin says, he is unable to bill Medicaid for mental health services his HCH project provides because the state has an exclusive contract with a mental health agency. There are also limitations to reimbursement for non-physician providers, such as social workers or master's level psychologists, but most HCH projects don't have the resources to hire their own psychiatrist. Finally, integrated care initially may be more costly than usual care, and cost offsets often do not accrue to the organization or agency that funds collaborative services.[8]

APPROACHES TO INTEGRATED CARE

As Blount notes, "The terms 'collaborative care' and 'integrated care' are growing in usage but not in specificity or agreed meaning."[1] He proposes a continuum of collaborative care, from coordinated to co-located to fully integrated care:[1]

- **Coordinating care** between separate agencies that are treating the same individual takes a level of effort that often frustrates clinicians and hampers efforts to integrate services.
- **Co-location** of primary care and behavioral health services in the same site, fosters communication between medical and mental health providers and may give primary care clinicians a greater sense of security in addressing behavioral health disorders.
- **Integrated Care** presupposes "one treatment plan with behavioral and medical elements."[1] Co-location is not sufficient to ensure integrated care.

Primary Mental Health Care

Development of a single treatment plan is only a small component of the primary mental health care model developed and taught by clinical psychologist Kirk Strosahl, Ph.D.[9] A principal with the Mountainview Consulting Group of Zillah, WA, Strosahl has provided technical assistance and training on integrated care to more than 100 community health centers around the country.

"The current behavioral health system is labor intensive, and few people get services that are needed by many," Strosahl says. He believes that is unacceptable. In the primary mental health care model Strosahl recommends, the mental health provider or "behaviorist" functions as a member of the primary care team, providing consultations to medical providers and brief, targeted interventions. The behaviorist is located near an exam room where patients can be seen for 15–30 minutes to focus on specific behavior changes, such as diet modification, medication compliance, or tobacco cessation.

"You can see very ill people in 20-minute visits because you're not treating all pathology," Strosahl says. "You're picking specific targets for self-management." Most often, the primary care provider will work directly with the patient to implement the behavioral change plan. "The behaviorist's job is to help primary care providers intervene effectively, because 90 percent of general medical care is behavior change," says Strosahl. Individuals who need a more intensive level of care are referred to a mental health specialist.

Strosahl believes it is important for the primary care provider to employ the behaviorist, rather than contract with a mental health center. Others are concerned that this may limit access to the specialty mental health sector for patients who need it. The Boston HCH Program contracted with a local mental health agency for a psychiatrist and a social worker to join its street outreach team. "The Department of Mental Health has the lion's share of mental health resources. If we're not part of that system, we're always going to be on the outside," warns Dr. O'Connell.

ADVANTAGES OF INTEGRATED CARE

"The advantages of a fully integrated approach are obvious," according to Strosahl.[9] Studies of collaborative care models for treating depression as part of primary care indicate that these models improve clinical outcomes, functioning and quality of life, and are cost-effective.[6] Researchers have also found that integrated care appears to reduce access disparities for ethnic minorities. Indeed, despite the barriers and regardless of the specific approach, HCH projects that provide some level of integrated care are sold on its benefits. ■

The Primary Mental Health Care Model in Practice in Migrant Health

At Community Health Clinic Ole in Napa, California, Rosemary Nichol, a Behavioral Health Consultant, is part of the clinical team. Over the past year, Clinic Ole has implemented the "warm hand-off" model of integrating primary and behavioral health for the largely migrant patient population. While the model has some challenges, the overall experience has been "very positive" according to Beatrice Bostick, the clinic's Executive Director.

The term "warm hand-off" means that patients presenting with mental health needs (regardless of the reason for their appointment) are able to be seen by behavioral health professionals during that encounter. Instead of making an additional appointment for these patients, their metal health needs are addressed immediately and onsite together with the primary care providers.

The warm hand-off at Clinic Ole is designed to support the primary care provider and to offer critical behavioral health services to a vulnerable population. All patients seen by the behavioral health team are first and foremost medical patients of the clinic. This team approach means that not only do patients get more holistic care, but the medical providers are better informed about behavioral health interventions.

At Clinic Ole a warm hand-off can be triggered in different ways. All patients seen in the clinic are given a health assessment that includes an 10-item behavioral health screen (see sidebar for the questions asked). This assessment is given orally by the medical assistants and takes approximately 5 minutes per patient. If a patient answers "yes" to four or more of the symptoms listed then that patient is flagged as possibly needing a warm hand-off to the behavioral health team in addition to seeing their medical provider. The health assessment is given at every patient visit, unless a patient has been seen in the past 30 days.

The health assessment screen does not identify all patients who may be experiencing mental health issues. In many cases, a warm hand-off can also be triggered by the medical provider who may pick up on mental health needs during the regular visit.

Unless it is a very serious mental health issue, the behavioral health consultant will work with patients for about 15 minutes to come up with a plan of action. After an initial consultation, patients can be scheduled for up to 4-6 additional follow-up visits if needed. However, in practice, a lack of behavioral health staff means that clinic staff must be very selective about which patients receive more extensive follow-up.

After the initial warm hand-off visit, the behavioral health consultant always goes back to confer with the medical provider and together they determine the next steps. Ms. Nichols notes that while "the behavioral health consultant is very knowledgeable about mental health issues, it is ultimately the medical provider who chooses whether or not to medicate a patient".

The behavioral health team is also called in for more pragmatic resource challenges such as helping people find places to live, sources of childcare and help with parenting skills.

Rosemary Nichol says that her team sees a lot of grief in their migrant patient population. Clinic Ole is the only source of Spanish grief counseling services in Napa county. One of the behavioral health assistants is working on her own to become an expert in grief counseling.

The clinic also works with what they call the "cold hand-off" model which is the more traditional method of referring patients to behavioral health who are then scheduled for an appointment at a later date. As a general rule, the clinic prefers to use this model only with patients who have an established relationship with the behavioral health team. When there is no prior relationship then the no-show rate is high.

Last year, out of a total of 13,700 unduplicated patients, over 1,200 were referred to a behavioral health consultant in either the warm or the cold hand-off model.

Because of the success of the integrated primary and behavioral health model, the clinic has been able to attract the attention of a local psychiatrist who started volunteering in the clinic. She is now employed for 2 half days and sees many of the more severely mentally ill patients. Ms. Nichols says that this collaboration could "not have worked without the behavioral health program because the psychiatrist would have been overwhelmed with cases of simple depression".

The biggest challenge for the program is that currently the state of California does not reimburse for services provided by Masters in Social Work (MSWs), Marriage/Family Therapists (MFTs), or Advanced Social Workers (ASWs). In order to receive reimbursement the patient must be seen by a Licensed Clinical Social Worker (LCSW) or a psychologist, both of which are in short supply. At the moment much of the funding for the services provided by the behavioral health team is drawn from the general clinic fund.

The Clinic Ole staff has seen a significant improvement in the services they provide to their migrant population. In spite of the funding challenges, the staff is very committed to seeing this model of care continue to grow.

If you have questions about this model you may contact Rosemary Nichol at RNichol@clinicole.org. ■

Screening questions asked on the Clinic Ole Intake Form. The bilingual Medical Assistants ask these questions rather than asking patients to fill out the form.

1. Have you recently lost interest in activities you usually enjoy?
2. Have you been irritable?
3. Have you had either an increase or decrease in your appetite?
4. Are you experiencing Head/back/stomach pain?
5. Have you experienced an increase or decrease in the amount of time you sleep?
6. Are you experiencing fatigue or no energy that is unrelated to work?
7. Do you feel guilty?
8. Do you feel sad or anxious?
9. Do you have suicidal thoughts?
10. Do you have concerns about your drug/alcohol use?

Linking HCH with Mental Health Services

Federal agencies that fund primary care services (HRSA) and behavioral health services (SAMHSA) are "natural partners because the head is not disconnected from the body," HRSA Administrator Elizabeth M. Duke, Ph.D., told an interagency listening session in 2003.[8] In the fall of 2002, the two agencies—together with the Assistant Secretary for Planning and Evaluation (ASPE) in the U.S. Department of Health and Human Services—jointly funded the *Collaboration to Link Health Care for the Homeless Programs and Community Mental Health Agencies*. This collaboration was designed to build capacity for mental health screening and assessment in HCH programs and to promote outreach and engagement in community mental health agencies.

The 3-year grant program funded 12 projects around the country for a total of $3.1 million. Grantees included seven HCH-led sites in Albuquerque, Boston, Chicago, El Paso, Louisville, Pittsburgh, and Tacoma; and five sites led by community mental health agencies in Aurora and Denver, CO; Hazard, KY; Las Vegas, and Tucson. The National Center on Family Homelessness, in partnership with the Vanderbilt University Center for Evaluation and Program Improvement, are completing a cross-site evaluation of the project.

RANGE OF APPROACHES

Among grantees, the most common service integration strategies were *co-location* (offering services in the same place but not necessarily at the same time) and *joint staffing* (with clinicians available in the same place, at the same time), *cross referral*, and clinical case management, according to **Dawn Jahn Moses**, Director of Public Education and Policy for the National Center on Family Homelessness and Project Director of the cross-site evaluation.

Of these approaches, Moses says project directors found co-location and joint staffing to be most effective, improving access to services, facilitating communication between providers, and increasing cross-learning. Preliminary results of the evaluation indicate more stable housing for clients, decreased inpatient service use, some increased outpatient service use, increases in the number of people reporting an income or receiving entitlements, and clients reporting increased satisfaction with life.[10] Brief profiles of six SAMHSA/HRSA grantees, along with some key lessons learned, follow.

Taking Psychiatry to the Streets

"The only model of care that makes sense is getting clinicians to work together in teams within systems of care that offer a full array of services," Dr. James O'Connell says. At Boston HCH Program, that means taking medical and mental health care to the streets. Their grant funded a psychiatrist and licensed clinical social worker from the Massachusetts Mental Health Center to accompany the program's street outreach team, serving people with the most severe illnesses who most need coordination of care.

Their ultimate goal was to replicate the street team's success in getting patients to accept ongoing medical treatment by increasing their level of comfort with mental health services as well. "When you establish a relationship with people, they will follow you back to where you can provide more sophisticated care," he explains. Individuals engaged by the psychiatrist on the streets, often over a cup of coffee, receive follow-up services at the mental health center.

Major challenges included differences in working style and record keeping; they resolved the latter by maintaining separate records for medical and mental health care but placing a copy of the mental health note in the medical file. Sustainability is also an issue, now that the grant has ended.

"We're having a difficult time getting money to free up the psychiatrist," O'Connell acknowledges. Still he thinks the project was an unqualified success. "This is the type of care I used to dream about," he says.

Contact: James O'Connell, (617) 414-7763, *joconnell@bhchp.org*

One-Stop Shopping

Centro San Vicente operates a homeless health care clinic in the Opportunity Center in El Paso, a shelter in which multiple medical and social services are located. Though the local mental health authority visited the shelter, there was little if any coordination with health services, notes **Olivia Narvaez, BSW, LBSW**. "This grant allowed us to break through workplace cultures and develop a common goal." The project team created the Homeless Clinic Mental Health Counseling Center to fill the gap in services and coordinate care received from multiple providers.

All clinicians and case workers from the agencies serving shelter guests meet biweekly to develop a single treatment plan for each client so that "all providers can reinforce each other's treatment recommendations," Narvaez says. Clients sign a release authorizing information sharing to facilitate joint treatment planning. In addition to regular meetings, all staff attends "cross-training circles" to discuss key clinical and management issues, such as HIPAA regulations.

Having multiple agencies under the same roof is convenient for both clients and providers, but emphasizes the different approaches to addressing clients' needs, observes **Alec Kissack, LPC**, Director of the Counseling Center. Still, he notes, "the benefits of one-stop shopping far outweigh the challenges." Centro San Vicente will continue project services with a HUD services only grant. *Contact:* Alec Kissack, (915) 351-0233, *akissack@csv.tachc.org*

Multidisciplinary Outreach Teams

Because Kentucky River Community Care (KRCC) has had a longstanding relationship with Hazard Perry County Community Ministries, the HCH grantee in Hazard, KY, the

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SAMHSA/HRSA grant was a logical extension of the work they've done together. With grant funding, the two agencies developed a modified Assertive Community Treatment team they call the Appalachian Homeless Assertive Services Partnership (AHASP), which includes a psychiatrist, nurse practitioner, therapist, social worker, and family health navigators, says **Sue Baker, BSW**, AHASP Facilitator. The family health navigators are paraprofessional staff employed by Community Ministries who have specialized training in mental health services, notes HCH Project Director **Ruth ("Rosie") Woolum, BS**.

Together, Baker and two family health navigators conduct outreach and perform medical and mental health screening. Team members transport clients to KRCC for mental health care and to Community Ministries' Little Flower Free Clinic for primary care, unless they already have a local medical provider in the community. AHASP staff also helps clients meet basic needs, remind them about appointments, and "work with them until they tell us they don't need us anymore," Baker says.

Baker meets with the family health navigators each morning to discuss the clients they will see that day. KRCC and Community Ministries meet monthly, and both agencies also participate in bimonthly community stakeholders meetings. In addition, the two agencies cross-train each other's staff. This close collaboration benefits the clients they serve. "I know when patients leave my clinic they have access to the level of services they need," Woolum says.

AHASP services are continuing with funding from a HRSA Expanded Medical Capacity grant. *Contact:* Sue Baker, (606) 436-5761, ext. 7301, *sue.baker@krccnet.com*

Boundary Spanner

When Family Health Centers of Louisville began partnering with Seven County Services, the local mental health agency, their goal was to establish walk-in mental health services at Phoenix Health Center, which offers walk-in medical services for homeless people. "We soon became overwhelmed with mental health needs, so we went to an appointment system," notes Bart Irwin. They also designated a Masters-level social worker as a "boundary spanner" between the medical and mental health staff.

The boundary spanner, whose title was mental health coordinator, assessed patients and made appointments for them to see the psychiatric nurse practitioner or a psychiatrist who worked onsite 2½ days per week. When the Seven County Services' staff were unavailable, the mental health coordinator met with the primary care practitioners, "who were sometimes uncomfortable treating people with serious mental illnesses," observes Irwin. Because the boundary spanner was familiar with project participants' medical and mental health needs, "primary care providers felt confident enough to refill or alter medications," Irwin adds.

Though the Louisville project did not develop a multidisciplinary treatment team, "we achieved a certain level of integration by locating all providers off one major hallway," Irwin says. "We kept bumping into each other." Project staff maintained one treatment record at the HCH clinic, and each provider contributed to it.

Family Health Centers has applied for a SAMHSA Treatment for the Homeless grant to sustain project activities. *Contact:* Bart Irwin, (502) 772-8558, *birwin@fhclouisville.org*

Psychiatric Nurse Practitioner

The need to increase access to mental health services while reducing their cost drove the collaboration between the Metropolitan Development Council (MDC) of Tacoma, an HCH grantee, and two local mental health agencies, according to MDC Vice President **Doug Swanberg, MSW**. "Prior to the grant, we had a psychiatrist one day a week, but we were turning away patients who needed mental health care," says **Sheri Adams, MSW, CSW**, HCH Director. The SAMHSA/ HRSA grant allowed MDC to add an extra day of psychiatric services, with a twist. Rather than having a psychiatrist see a limited number of patients for psychotherapy, the agency contracted for the services of a psychiatric nurse practitioner to see a greater number of patients per day for brief interventions, typically involving medication management.

"Our ultimate goal was to connect our patients to long-term case management in the mental health system, but this proved difficult due to financial constraints of our mental health partners," who could not provide free or subsidized care to uninsured individuals, Adams explains. MDC case managers arrange for any follow-up services that patients require.

A nurse and a mental health case manager conduct a joint assessment of each patient. Staff is still exploring ways to share records, Adams says. "We have joint clinical staff meetings, but we don't have integrated charts." Medical and mental health staff attends joint training sessions on such topics as motivational interviewing and the chronic care model.

MDC will continue project services with a HRSA Expanded Medical Capacity grant. *Contact:* Sheri Adams, (253) 597-4194, *sheri@mdc-tacoma.org*

Client-Centered Care

The partnership between COPE Behavioral Services and El Rio Health Center was designed to be client-centered. "We shifted the paradigm to emphasize the client's immediate needs," and services are provided to address those needs first, says Mary Specio.

LESSONS LEARNED FROM HCH GRANTEES ABOUT THE INTEGRATION OF PRIMARY AND BEHAVIORAL HEALTH SERVICES

Based on their participation in the SAMHSA/HRSA collaboration, HCH grantees and their community mental health agency partners suggest the following guidelines for success:

- **Build a good relationship** with your mental health providers. Without this, collaboration will be difficult.
- **Get complete buy-in** from the administration of both agencies. Agree on your goals and objectives. Know each agency's limits.
- **Conduct a needs assessment** to determine service gaps and how you plan to fill them.
- **Locate funding.** This could a grant, third-party reimbursement, or State or county monies.
- **Find the right providers.** People and personalities matter.
- **Hold regular meetings** with your team, your agencies, and your community. Ongoing communication is absolutely imperative.
- **Cross-train your staff.** Use mental health and medical providers to train program staff and have new outreach workers shadow their experienced colleagues.
- **Take a client-centered approach.** This reduces the friction that might result when providers feel they need to see a client first.
- **Don't give up on your patients or your partners.** Collaboration takes time. Keep the big picture in mind.
- **Use data to prove your success.** Good data can parlay success into new funding.
- **Remember that collaboration isn't always about money.** You can enhance services by sharing data and reallocating existing staff.

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Improving Access to Workers Compensation Benefits One Step at a Time:

Exploring the Meaning of Reasonable Medical Certainty

By Shelley Davis, JD

Agriculture consistently ranks as one of the most hazardous industries in the nation. Yet many farmworkers do not receive workers compensation when they are injured on the job. In a recurrent series, this column will address some of the obstacles preventing farmworkers from receiving the workers compensation benefits to which they are entitled. The information provided here is general in nature and not intended to be legal advice.

Workers compensation is a form of state-regulated insurance. While each state's plan is somewhat different, we will focus here on principles that are generally applicable nationwide. The basic scheme is that employers, such as growers or crew leaders, buy workers compensation insurance policies, and employees file claims for benefits when they suffer a work-related illness or injury. When a claim is approved, a worker can receive medical treatment, rehabilitation, and/or replacement wages and a dependent of a deceased worker can receive funds for burial and/or survivor benefits. In the agricultural context, a frequent initial question concerns the employment relationship itself, i.e., proving that a specific entity is the employer. Once that hurdle is overcome, the inquiry focuses on whether the injury or illness at issue is job-related. Medical reports often provide the crucial evidence on this question.

To support a claim, the worker will need a health professional to attest, to a reasonable medical certainty, that the illness or injury arose from work activities. In evaluating a patient's injury or illness, a clinician will normally consider the signs and symptoms, the patient's history, and the results of any appropriate diagnostic tests. By contrast, health professionals rarely concern themselves with the cause of the problem (e.g., whether a back injury was caused by moving furniture at home or carrying bags of fruit at work). In workers compensation cases, however, determining the cause of the ailment is of critical importance. Indeed, to be successful, the workers must prove that it is more likely than not that her ailment was caused by employment-related activities.

Often, in determining the cause of a condition, the health professional will have to put together the available information and draw reasonable inferences from it. For example, in one Florida case, a number of farmworkers began to experience nausea, vomiting, cramps, weakness and numbness in the limbs some hours after they began picking oranges in a particular block. The crew leader called 911, and about 20 workers were taken to area hospitals. For most, the symptoms resolved quickly. Only one worker became very ill and continued to experience symptoms for months afterward. He later filed a claim for workers compensation. The grower subsequently disclosed that the grove had been treated with the n-methyl carbamate carbaryl. But the pesticide application appeared to have been conducted in compliance with all then-existing label requirements. In addition, none of the workers who had been tested that day, appeared to have depressed levels of cholinesterase (a blood enzyme), which would have indicated exposure to a carbamate. Nonetheless, after evaluating all the available information, a physician concluded, to a reasonable medical certainty, that the worker had suffered an acute pesticide illness due to carbaryl exposure. In reaching this conclusion, the doctor noted that the patient's symptoms were consistent with exposure to carbaryl, as were those suffered by his co-workers. The physician further determined that the onset of symptoms was about 2-3 hours after the exposure began. The finding of carbaryl exposure not negated by the fact that a single test did not show cholinesterase depression or that many the symptoms were short-lived, because the cholinergic effects of carbamates, are transitory and often of short duration. Moreover, since none of the workers knew their baseline cholinesterase levels, a single test is often insufficient for determining depression. Finally, it was noted that none of other suggested causes, such a flu or food poisoning, fit the whole constellation of facts. The physician's finding of pesticide poisoning was ultimately upheld by an administrative law judge and the worker received benefits.

For purposes of workers compensation, a clinician's opinion can be based on a conclusion that is probable or more likely than not, i.e., one that is supported by 51% of the evidence. This is far different from the 80-90% certainty that a clinician normally uses in making a medical diagnosis. When operating in the workers compensation arena, however, legal standards apply. Thus, the clinician can attest to a conclusion, based on a reasonable medical certainty, when she finds that the conclusion is supported by at least 51% of the evidence.

For more information about Workers Compensation please contact Shelley Davis from Farmworker Justice at *sdavis@nclr.org* or 202-783-2628. ■

PESTICIDE UPDATES

1) The US Environmental Protection Agency has is issued its final decision to phase out the 10 remaining uses of the organophosphate insecticide azinphos-methyl (AZM) over the next few years. This phase-out will encourage and facilitate transition to safer alternatives and reduce risks to farm workers, pesticide applicators, and aquatic ecosystems. EPA is phasing out the use of AZM on brussel sprouts and nursery stock by September 2007; almonds, pistachios and walnuts by October 2009; and the remaining uses, apples, blueberries, cherries, parsley and pears by September 2012. During the phase-out the agency is decreasing application rates and increasing buffer zones. All other uses of AZM have been voluntarily cancelled by the registrants. To facilitate the transition to safer alternatives, growers, registrants, and other stakeholders will meet with EPA periodically during the phase out to discuss alternatives to AZM. The pesticide manufacturers have also agreed to develop training materials to educate workers regarding how to avoid unnecessary exposure. For additional information,: *http://www.epa.gov/oppsrrd1/op/azm/phaseout_fs.htm*
2) A new study published in *Pediatrics* (Rauh, Virginia A. et. al. "Impact of Prenatal Chlorpyrifos Exposure on Neurodevelopment in the First 3 Years of Life Among Inner-City Children" Pediatrics Vol. 118 No. 6 December 2006) found that children exposed prenatally to the insecticide chlorpyrifos had significantly poorer mental and motor development by age three and were at increased risk for behavior problems.
3) Farm Worker Pesticide Project (WA) and Pesticide Action Network collaborated with farm worker community members to measure chlorpyrifos drift in Washington's Yakima Valley. The results are detailed in their new report Poisons on the Wind (December 2006) which is available at *www.panna.org*.

NIOSH Agricultural Centers

The National Institute for Occupational Health and Safety funds nine regional Agricultural Centers throughout the country for the purpose of protecting and improving the health and safety of the nation's farmers, farmworkers, and consumers. The NIOSH Agricultural Centers were established as part of a Centers for Disease Control and Prevention (CDC) / NIOSH Agricultural Health and Safety Initiative in 1990. The Centers were established by cooperative agreement to conduct research, education, and prevention projects. Geographically, the Centers are distributed throughout the nation to be responsive to the agricultural health and safety issues unique to the different regions.

Pacific Northwest Agricultural Safety and Health Center

Established in 1996, the Pacific Northwest Agricultural Safety and Health (PNASH) Center works to prevent occupational disease and injury among agricultural operators, workers, and their families in the Northwest. The Center is housed in the University of Washington's School of Public Health and Community Medicine, and integrates expertise from multiple disciplines, institutions and community partners.

SAFE AND SUSTAINABLE AGRICULTURE

The theme of the PNASH Center is "promoting safe and sustainable agricultural workplaces and communities." The health and safety of workers is essential to a sustainable agricultural workplace. The benefit of healthy workers is seen at the farm and, by extension, in rural communities that are the sustenance of the agricultural economy.

PNASH ACTIVITIES

Center activities address distinctive issues in Northwest agriculture. It is our aim to translate this research into information and best practices for both our region and the nation.

PNASH researchers have explored health concerns such as chemical exposures, hearing loss, musculoskeletal stress, skin disease, and traumatic injury. In addition to the general agricultural population, special groups served include farm children and teens, Hispanic workers, and older workers.

PNASH has been awarded seven new projects for the 2006-2011 program cycle, as well as an annual pilot project program that will offer small grants to regional investigators to explore new ideas and respond to emerging needs. Our current work includes:

- ***Minimizing occupational pesticide exposures*** through the identification of exposure risk factors, including individual genetic susceptibility, development of improved monitoring methods, and partnering with workers and producers to develop best practices to prevent exposures.
- ***Examining if bacterial pathogens on livestock are carried into the family home.***
- ***Determining if pesticide exposures affect children's neurological development.*** (Conducted through partners at Oregon Health and Sciences University.)
- ***Developing an educational program using 'reality tales"*** on how to prevent ladder injuries and heat illness.
- ***Implementing farmworker community-based participatory research*** projects to enable Hispanic communities in Washington and Idaho to address their health and safety concerns.
- ***Communicating pesticide health risks*** to health care providers (from community health workers to physicians), producers, workers and their families.
- ***Improving education for health students*** (medicine, nursing, physician assistant) in the diagnosis, treatment, and prevention of pesticide poisoning. (EPA cooperative agreement with a regional and national scope.)
- ***Contributing to national initiatives*** such as with the National Tractor Safety Initiative.

The PNASH Center has embraced the model of research-to-practice, and collaborates with stakeholders to ensure that our work is relevant, and that health and safety solutions are effectively placed in hands of agricultural workers and producers, health and safety professionals, health care providers, and public agencies.

For more information about the PNASH Center, call 1-800-330-0827. Or visit http://depts.washington.edu/pnash ■

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"For example, we may need to reduce a patient's anxiety before he sees the medical provider." The grant paid for three COPE staff members to work in the HCH clinic. "They had walk-in hours and so did we," Specio says. Following the primary mental health care model (see lead story), COPE staff saw patients for brief, focused interventions. "We used motivational interviewing and stages of change to facilitate our client's entry into behavioral health care," she adds.

The HCH clinic is located adjacent to COPE's intensive case management services, where clients can be linked to ongoing care. Project staff developed a set of innovative tools and techniques. To address conflicting data sharing regulations, they developed an abbreviated mental health case note that went into the medical record. To help engage clients, staff planned social activities at the clinic, such as a barbeque in the parking lot. They also developed a detailed locator form that helped them track clients, resulting in a 90 percent follow-up rate. The Tucson team will continue services with a SAMHSA Treatment for the Homeless grant. *Contact:* Mary Specio, (520) 205-4724, *maryspecio@copebhs.com* ■

SOURCES & RESOURCES

1 Blount, A. (2003). Integrated primary care: Organizing the evidence. Families, Systems and Health, 21, 121–134.

2 Fries, J., Koop, C., & Beadle, C. (1993). Reducing health care costs by reducing the need and demand for medical services. The New England Journal of Medicine, 329, 321–325.

3 U.S. Dept. of Health and Human Services. (2001). Report of a Surgeon General's working meeting on the integration of mental health services and primary health care. Rockville, MD: Author. www.surgeongeneral.gov/library/mentalhealthservices/mentalhealthservices.PDF4.

4 Burt, M.R., Aron, L.Y., Douglas, T., et al. (1999). Homelessness: Programs and the people they serve. Washington, DC: Interagency Council on the Homeless.

5 New York City Depts of Health and Mental Hygiene and Homeless Services. (2005). The health of homeless adults in New York City. www.nyc.gov/html/doh/downloads/pdf/epi/epihomeless-200512.pdf.

6 Unützer, J., Schoenbaum, M., Druss, B.G., & Katon, W.J. Transforming mental health care at the interface with general medicine: Report for the President's Commission. Psychiatric Services, 57(1), 37–47.

7 Reiger, D., Narrow, W., Rae, D., et al. (1993). The de facto US mental and addictive disorders service system: Epidemiologic Catchment Area prospective 1-year prevalence rates of disorders and services. Archives of General Psychiatry, 50, 85–94.

8 Substance Abuse and Mental Health Services Administration. (2003). SAMHSA/HRSA listening session. Primary care and behavioral health: Exploring opportunities for better partnerships. Unpublished draft.

9 See Strosahl, K. (2001). The integration of primary care and behavioral health: Type II change in the era of managed care. In N. Cummings, W. O'Donohoe, S. Hayes, & V. Follette (Eds.). Integrated behavioral healthcare: Positioning mental health practice with medical/surgical practice. New York: Academic Press.

10 To receive a copy of the final cross-site evaluation when it becomes available, send e-mail to dawn.moses@familyhomelessness.org.

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