

Practice Settings

The second prong of the strategy is the practice setting. Practice settings, for purposes of this Initiative, are defined as community health centers and clinics; managed care clinics; hospitals and emergency departments; private practices; urgent care centers; poison control centers; and work and/or school-based clinics. While the components target the practice setting, they also involve the professional associations and decision-making bodies that represent and/or influence the practice setting. These include, for example, the American Nurses Association, the American Academy of Pediatrics, the American Academy of Family Physicians, and the Migrant Clinicians Network. The following components apply across the continuum of systemic change — from raising awareness and assessment, to development of expected practice skills, to the support of “model practices” and system-wide incentives.

Component A: Make the case for practitioners — Develop an effective case statement to convince primary care providers of the need to incorporate occupational and environmental health and pesticide awareness into their practice settings.

Component B: Define practice skills and guidelines — Produce National Guidelines that recommend practice behaviors and guidelines for the recognition, management, and prevention of pesticide exposures, for all practicing health care providers; define accompanying content related to expected behavior; suggest methods of integration into practice and training settings; and provide access to relevant resource materials.

Component C: Assess knowledge and skills of practitioners — Conduct an assessment of the target audience of primary care providers to determine: (a) providers’ current knowledge and (b) how providers will best respond to educational programs and information resources. This assessment will be comprised of a literature review and a range of needs assessment analyses.

Component D: Secure official endorsements — Ensure the integration of the expected practice skills into practice settings by securing the official endorsements of key professional organizations and decision-making bodies specific to practice.

Component E: Demonstrate model programs — Mobilize practice settings to become population-specific and to incorporate environmental considerations (specifically pesticides) into prevention, education, diagnosis, and treatment. Achieve incremental, site-specific improvements in identification, early intervention, and prevention, as well as in measures of practice-specific health outcomes. By 2010, half of all primary health care practice settings in

the United States should incorporate environmental considerations in prevention, education, management, and referral.

Component F: Create incentives for change – Identify and promote a number of incentives to incorporate appropriate prevention, recognition, and management of pesticide-related health conditions into health care practices. Specifically: (1) provide grant support to practicing providers for interventions and research related to pesticide poisonings and exposures; (2) create free, readily available opportunities for continuing medical education involving pesticides and environmental health; (3) increase providers' awareness of the value of taking an occupational and environmental history for optimizing Evaluation and Management (E&M) coding and billing; (4) require knowledge of occupational and environmental health issues for certification and recertification; (5) require pesticide poisoning reporting for workers' compensation reimbursement and automatic workers' compensation reimbursement for work-up of suspected occupational pesticide-related health conditions; and (6) promote documentation of occupational and environmental history in medical records via incorporation into quality assurance/quality control mechanisms.

PRACTICE COMPONENT A:

Make the Case for Practitioners

Statement

Develop an effective case statement to convince primary care providers of the need to incorporate occupational and environmental health and pesticide awareness into their practice settings.

Expected Outcomes

- A written case statement that documents the key points of why practicing health care providers should care about the environments in which their patients live and work, especially with regards to potential pesticide poisonings and exposures, along with the accompanying scientific literature to support the need for well educated health care providers. This statement will be linked with the case statement for educational settings.
- Endorsement of the case statement by leading national professional associations and national bodies that work with practitioners.

Target Audience

Awareness and Motivation: This component is targeted at decision-makers and key strategic organizations that need to be convinced that the issue of pesticide poisonings and the need to educate health care providers about this issue are relevant to the practice settings of health care providers. This component also targets primary care providers who are not yet convinced that this is an appropriate subject for a national plan.

Proposed Activities

Activity #1

Research and develop a case statement, solicit peer review, and finalize with the input of key stakeholder groups in the field. The target audience for the case statement is the practicing health care providers and the organizations that work with them.

Points to be covered in the case statement:

- Importance of occupational and environmental health training and the breadth of the problem of pesticide-related health conditions.

- Convincing arguments for why pesticides should be part of what health care providers address in their practice settings, with cited scientific data, along with relevance to the practice of health care and public health.
- Compelling arguments to gain the attention of primary care providers despite the fact that their time and attention are in high demand elsewhere.
- Emphasis that practitioners do not need to become experts, and reassurance that experts are available to work with them on specific clinical cases and/or community concerns.
- Reassurance that user-friendly tools exist for practitioners to use, along with user-friendly guides for teaching pesticide issues to practitioners through continuing education.
- Recommended amount of time to dedicate to pesticides in the clinic that is reasonable given the other demands on practice settings.

Activity #2

Promote case statement through effective dissemination mechanisms, including print and internet information sources.

Activity #3

Publish journal or newsletter articles in professional journals and publications.

Activity #4

Hold strategic meetings with professional associations and national leaders to seek their endorsement of the case statement. This includes identifying a subset of decision-makers who can be influenced by the case statement.

Stakeholders

- Professional associations
- Recertification bodies
- Continuing education organizations
- Collaborating federal agencies

Evaluation of Outcomes/Indicators of Success

- Case statement.
- Published articles in professional journals and newsletters.
- Position papers developed and adopted by professional associations.

Background

It is recognized that many key decision-makers are still unconvinced that this is an issue of concern. Although the supporting documentation exists, there is a need to pull the information together in a succinct case statement directly designed for practitioners.

Define Practice Skills and Guidelines

Statement

Produce National Guidelines that recommend practice skills and guidelines for the recognition, management, and prevention of pesticide exposures, for all practicing health care providers; define accompanying content related to expected behavior; suggest methods of integration into practice and training settings; and provide access to relevant resource materials.

Expected Outcomes

- National Pesticide Practice Skill Guidelines which recommend practice skills, content, insertion points into practice and training settings, and resources.
- Endorsement of National Guidelines by leading national professional associations.

Target Audience

Readiness to Change: This component is targeted at administrators of clinics and health care delivery systems, providers of professional development, and practitioners. The component assumes that the administrators and practitioners are convinced of the importance of this topic and are ready to make changes in their practices.

Proposed Activities

Activity #1

Define the basic practice skills for practice settings to ensure that all practicing primary care providers are prepared to address pesticide-related health conditions and exposures in their practice.

An outline of practice skills for practicing health care providers is shown in Table 9 on page 72. The intent of the table is to define expected practice skills for all practitioners. This table links with a complementary document for educational settings.

Activity #2

Produce National Guidelines to guide practitioners on the recognition and management of pesticide-related health conditions. A complementary report focuses on the educational settings where primary care providers receive their training.

The National Guidelines contain the following components:

- Recommended practice skills.
- Relevant content for each practice skill.
- Suggested points of insertion into practice settings.
- Suggested resources to teach content specific to each competency in practice settings.

The report is designed as a user-friendly guide on how to integrate pesticides content into practice skills. It serves as a supplementary practitioner guide to the *Recognition and Management of Pesticide Poisonings*. The report does not contain actual training modules or resources, but instead provides a listing of relevant resources.

Activity #3

Promote the National Guidelines with key stakeholders and solicit official endorsements and organizational support for the report, including dissemination to their members.

Stakeholders

- National professional associations for practicing primary care providers
- Practicing health care providers who have already developed tools and practice models

Evaluation of Outcomes/Indicators of Success

- The National Guidelines will include defined practice behaviors, content areas, insertion points, examples as necessary, and recommended resources.
- Endorsement by key professional organizations for providers.

Table 9

The preliminary list of “Expected Practice Skills” shown in Table 9 (page 72-73) is recommended as a useful goal for primary care providers seeking to provide the highest quality care to their patients. Further developed practice skills are available in 2002.

Table 9: Expected Practice Skills**1. Take an environmental and occupational health history.**

- Providers should be able to take a basic environmental and occupational history to determine if a temporal relationship exists between exposure and symptoms.
- Ask patients 2-3 screening questions that would elicit possible exposure to a number of environmental factors (including but not limited to pesticides).
- Take an environmental health history with questions regarding where the patient lives, works, and plays.

2. Recognize the signs and symptoms of pesticide exposures and appropriately manage or refer patients.

- Recognize the signs and symptoms of pesticide exposures (both acute and chronic).
- Providers should be able to treat and manage health conditions associated with pesticide exposure or refer patients to appropriate specialists and resources, and follow up appropriately.
- Diagnose pesticide-related health conditions using appropriate testing procedures and treat pesticide exposures.

3. Identify risk factors for pesticide exposure and resulting health effects.

- Identify risk factors for pesticide exposure (e.g. occupation, location of home, susceptible populations such as children).
- Identify environmental factors that may possibly be linked to patient illness to ensure that chronic pesticide exposures are addressed.

4. Demonstrate key principles of environmental/occupational health and epidemiology and population-based health.

- Demonstrate an understanding of principles of environmental and occupational health, and epidemiology.
- Understand the temporal relationship between exposure and symptoms.
- Recognize that others may be ill (co-workers, family) and get a timeline of health problems for these or consult public health authorities for help in evaluating exposures.

5. Take steps to report pesticide exposure and support surveillance efforts.

- Understand the importance of surveillance and reporting.

– continued on the following page

Table 9 (continued)

- Be able to access and report data for local, regional, and national surveillance programs.
 - Report cases involving pesticide exposures as required.
 - Report concerns about pesticide exposures to the appropriate authorities, such as local and state health departments, EPA, NIOSH, federal OSHA, state OSHA or state departments of labor, or departments of agriculture.
- 6. Possess basic awareness of communities in which patients live.**
- Providers should possess a basic awareness of environments in which patients live, work, and play in order to anticipate possible encounters with exposure to pesticides.
 - Demonstrate an understanding of population-based health.
 - Demonstrate knowledge about the environment in which the practice is situated, with specific understanding of communities that may be at-risk for pesticide exposures.
 - Be aware of, and access, the resources available within the community and in the state or region, that could assist in pesticide exposures and illness.
- 7. Provide prevention guidance/education to patients.**
- Provide guidance to patients on how to prevent pesticide exposures.
 - Advise patients and provide basic education about pesticide exposure.
 - Counsel patients about minimizing unnecessary use of pesticides, refer patients to appropriate experts on safer work practices including, use of safety substances or alternative methods of pest control including integrated pest management.
 - Address the whole patient in the context of his/her life and/or community (e.g., link to social services, etc.).

Assess Knowledge and Skills of Practitioners

Statement

Conduct an assessment of the target audience of primary care providers to determine: (a) providers' current knowledge; and (b) how providers will best respond to educational programs and information resources. This assessment will be comprised of a literature review and a range of needs assessment analyses.

Expected Outcomes

Baseline data indicating the level of training currently taking place in practice settings, current knowledge of practicing providers, and identification of best mechanisms to reach and train providers, and to equip them with user-friendly tools.

Target Audience

Awareness and Motivation: This strategy targets health care practitioners to determine their level of awareness; their motivation, or lack of motivation, for this topic; their knowledge and skills base; and the most effective ways to reach them through educational interventions, model programs, and resources.

Proposed Activities

Activity #1

Conduct a literature review to locate survey data and evidence of level of knowledge, attitude and skills of health care providers related to pesticide-related health conditions.

Activity #2

Where literature review is lacking in data, conduct a combination of audience assessment analyses to be able to effectively collect baseline data and draw conclusions on the following questions:

- To what extent are the recognition and management of pesticide-related health conditions included in the continuing professional development of primary care providers?
- What is the extent of the knowledge, attitude, and skill base of practicing primary care providers with regard to pesticide issues? Are they at the stage of needing to raise awareness, improve their knowledge and skills, or obtain resources?

- What level of comfort do practitioners have addressing pesticides with their patients and in communities? What do practitioners need to feel more comfortable in addressing pesticides in their practice settings?
- What resources, and in what format (e.g., traditional lecture material, teaching modules, web-based, audio cassette, CD, video conference, satellite), do practitioners need most?

Activity #3

Produce a final report with recommendations for use in the development of the Initiative.

Stakeholders

- Professional associations that represent practitioners
- Continuing education programs, organizations that offer continuing education
- Practicing clinics and health care delivery systems
- Practicing providers



“It is not clear that we really know what [resources] health care providers want and need.”

— Allen James, MBA, CAE
Responsible Industry for a Sound Environment

Evaluation of Outcomes/Indicators of Success

- Comprehensive literature search documenting the findings of studies that have surveyed practicing primary care providers.
- Report with baseline data and conclusions/recommendations.

Background

Any good plan has at its core a strong assessment component to collect baseline data on existing knowledge and skills, as well as to determine the most effective mechanism for reaching the target population. This component will collect vital information not only for this Initiative, but also for the entire field of health care provider education. The assessment will also include a chance to determine where the target population presents itself along the continuum of change described in the section on Target Audience.

Do most people lie at the beginning of the continuum where they will respond best to activities that raise their awareness and motivate them to care about this issue? Or are they ready to make changes in their practice and in need of the necessary tools and educational resources? The assessment will answer these, and other key questions, to inform the implementation process and subsequent evaluation.

PRACTICE COMPONENT D:

Secure Official Endorsements

Statement

Ensure the integration of the expected practice skills into practice settings by securing the official endorsements of key professional organizations and decision-making bodies.

Expected Outcomes

Professional organizations, influencing bodies, and practitioners will agree that the expected practice skills are essential to the ongoing training of primary care providers and will integrate or support their integration into practice settings.

Target Audience

Awareness and Motivation: This component targets key recertification and continuing education bodies and professional associations for practitioners. The emphasis is on raising awareness and motivating decision-makers to bring about change in practice that provides lifelong learning to health care providers.

Maintenance/Sustainability: This component also targets key professional associations to endorse and support the implementation and outcomes of this Initiative over the long-term. This Initiative will only be successful if its expected outcomes are institutionalized into the practice settings for health care provider training.

Proposed Activities

Activity #1

Promote expected practice skills and case statement with professional organizations to garner their involvement and support in implementing interventions to improve the knowledge, attitudes, and skills of practicing health care providers.

Activity #2

Highlight the specific recommendations in the National Guidelines on expected practice skills, along with specific examples of how practice settings can integrate the content into the ongoing training of providers.

Activity #3

Publish editorials in nationally recognized journals on specific strategies from the National Guidelines, along with user-friendly tools for providers.

Activity #4

Develop a position paper on the need for expected practice skills, to be posted on the internet and for use in meeting with credentialing bodies and decision-makers.

Activity #5

Identify and promote incentives for professional associations to be involved in the Initiative, including financial incentives in the form of grants, technical assistance for clinics, community-based interventions and research, instructional teaching and training aids, expert consultants, clinical access, release time for professional development, and establishing appropriate clinical sites for additional training.

Stakeholders

- Professional specialty organizations
- Licensing boards
- National professional associations

Evaluation of Outcomes/Indicators of Success

- New position papers by targeted organizations that support the integration of recommended pesticide content into practice settings.
- New requirements by professional decision-making bodies that require professional education to teach about health effects from pesticides.
- Published journal articles in professional newsletters and peer-reviewed journals.

PRACTICE COMPONENT E:

Demonstrate Model Programs

Statement

Mobilize practice settings to become population-specific and to incorporate environmental considerations (specifically pesticides) into prevention, education, diagnosis, and treatment. Achieve incremental, site-specific improvements in identification, early intervention, and prevention, as well as in measures of practice-specific health outcomes. By 2010, half of all primary health care practice settings in the United States should incorporate environmental considerations in their pesticide-related prevention, education and management activities, and in the referral of pesticide-related health conditions.

Expected Outcomes

- Demonstration projects (distributed geographically across the United States) that model practice settings where pesticide-related health conditions are an integrated part of the provision of care and community outreach.
- Evaluation of demonstration models and creation of a “models that work” guide for the field and other practice settings.
- Creation of a tool kit that can be used by other practice settings that want to set up a model program.
- Launching of nationwide effort to redesign 50 percent of all practice settings.

Target Audience

Maintenance/Demonstration: This component targets specific practice settings that are ready to become part of a cadre of model practices across the country that will change the way they practice, specifically addressing potential health effects from pesticide poisonings and exposures. The target audience in this case has been convinced that this is an important issue and has increased its knowledge and skills in this area. Model practices may also be located in areas of higher impact, such as farmworker clinics and urban settings.

Proposed Activities

Activity #1

Mobilize practice settings that currently address environmental health/pesticide issues. Identify current leaders among practice settings and encourage them to spread the word on what they already do.

Activity #2 (option 1)

Secure funding, create a program description, and develop an RFP to solicit proposals from 5-10 clinical/community sites to receive financial support over three years to create a practice model. Ensure that the funded sites represent the range of practice settings and the breadth of pesticide issues (e.g., urban and rural, agricultural and non-agricultural, diversity of cultures and literacy rates). Ensure that some programs are located in states with pesticide poisoning surveillance programs.

Activity #2 (option 2)

Secure funding, create a program description, and develop an RFP to solicit small proposals from 100 clinical/community sites to receive financial support over 1.5 years to create a practice model. Ensure that the funded sites represent the range of practice settings and the breadth of pesticide issues (e.g., urban and rural, agricultural and non-agricultural, diversity of cultures and literacy rates). Ensure that some programs are located in states with pesticide poisoning surveillance programs.

Activity #3

Define the major components of the proposed practice model, allowing for flexibility by the specific site. Ensure that the models are grounded in theories and experience about how change actually happens so as to learn from other experiences in practice settings. One model that has been recommended is the Diabetes Collaborative (see box on page 82).

Activity #4

Establish a coordinating body to manage the project and the creation of the consortium of pilot sites, and to create the plan of action for the project. Among the tasks of this body are:

- Create a consortium of the pilot sites that use the proposed model as a guide for developing their own specific practice intervention plan (including what they want to do, the intervention, the evaluation and the implementation of the proven change).
- Build a technical assistance component that can work with sites in designing the intervention, piloting the intervention and evaluating its success.
- Convene pilot sites on a regular basis by conference call and in-person meetings to share success stories, challenges, and lessons learned.
- Establish an evaluation mechanism for the sites and the national project to determine the success of the creation of new models. Evaluation would be both formative and summative.

Activity #5

Launch nationwide effort to redesign 50 percent of practice settings based on findings from the model sites.

Stakeholders

- Professional associations
- Practice settings
- National coordinating organization
- Funding agencies and partners
- Organizations that have created practice change models

Evaluation of Outcomes/Indicators of Success

- RFP completed and funding secured for pilot program.
- Chosen sites underway in developing practice models.
- Five to ten practice change models with evaluation components and identified success stories.
- Publication of model programs.
- Effective dissemination of practice models nationwide.
- Enhanced reporting of acute pesticide-related illness cases.

Background

The key to changing practice is demonstrating how changes in day-to-day activities actually make a difference in health outcomes of patients and communities. This strategy was generated by the Practice Workgroup as a way to model expected changes and to evaluate what practice changes actually lead to the overall goal of the Initiative — to increase the recognition, management and prevention of pesticide poisonings and exposures. There are two recommended options for this strategies: (1) fund a large number of demonstration practice sites to make several small practice changes and evaluate the outcome, or (2) fund a small number of demonstration practice sites to overhaul their practices and bring about substantial change. Both options offer different rewards and utilize the resources in different ways. In either case, there are model organizations that have developed such an effort for other health conditions, such as the Diabetes Collaborative (see box on page 82).

The Diabetes Collaborative is a multi-year initiative sponsored by the Health Resources & Services Administration and the Bureau of Primary Health Care, in partnership with health centers, primary care associations, and clinical networks. Its goal is to eliminate health disparities and ensure access to quality primary care for racial and ethnic minorities and for underserved populations. Among underserved and minority populations, diabetes is a virtual epidemic, with 1.2 million patient visits in 1996 alone, and lost resources and human productivity estimated at over \$92 billion annually.

The project aims to redesign diabetes management to effect a measurable change in health status among the approximately 60,000 diabetic patients at the 92 participating health centers, and uses adaptations of learning methods devised by the Institute for Healthcare Improvement. The project was developed as part of the Breakthrough Series Workgroup of the Clinicians National Forum.

The improvement model is based on three fundamental questions: (1) What are we trying to accomplish? (2) How will we know that a change is an improvement? and (3) What changes can we make that will result in an improvement? The national measure of success for the first phase of the project is meeting the goal of over 90 percent of the 60,000 diabetic patients in the target population receiving two HbA1c blood tests per year, at least three months apart. A short-term trial-and-learning method called PISA (Plan, Do, Study, Act) provides the framework for implementing changes and learning from them. An example of PISA in action might be:

- **Plan:** The diabetes team at Rocky Road Health Center predicted that a registry of diabetic patients would improve the measurement of HbA1c. Setting up this system took three weeks. During that time, the center also established protocols for glucose measurements and ran a trial utilizing patient self-management for home glucose measurements.
- **Do:** The registry was tested for two weeks with one volunteer nurse practitioner and her diabetic patients. After the diabetes flowsheet was revised to reflect the registry information, the collection went well.
- **Study:** The time spent on completing the flow sheet increased from one minute to two minutes and it took an additional three minutes to enter data into the registry. Waiting time for diabetic patients increased an average of eight minutes. Of the patients with diabetes, only half had appropriate testing of HbA1c; but after the trial, all of the patients had current values.
- **Act:** After a team meeting with the executive director and finance officer in charge of the information system, the health center adapted a scannable flow sheet form they had learned about from the Midwest Clinicians Network. To cut down on cycle time, the medical records were reviewed the night before to identify gaps and pre-enter data.

Source: Migrant Clinicians Network

Create Incentives for Change

Statement

Identify and promote a number of incentives to incorporate appropriate prevention, recognition, and management of pesticide-related health conditions into health care practices. Specifically: (1) provide grant funding to practicing providers for interventions and research related to pesticide poisonings and exposures; (2) create free and readily available opportunities for continuing education involving pesticides and environmental health; (3) increase providers' awareness of the value of taking an occupational and environmental history for optimizing Evaluation and Management (E&M) coding and billing; (4) require knowledge of environmental health issues for certification and re-certification; (5) require pesticide poisoning reporting for workers' compensation reimbursement and automatic workers compensation reimbursement for work-up of suspected occupational pesticide-related health conditions; and (6) promote documentation of occupational and environmental history in medical records, via incorporation into quality assurance/quality control mechanisms.

Expected Outcomes

- Increased attention paid by primary care providers to pesticide poisoning and exposures based on incentives to change practice.
- Creation of new or improved incentives in the following areas: monetary incentives; legal incentives; community-based incentives; and peer/professional incentives.

Target Audience

Awareness and Motivation: This component targets health care system administrators and funders to create incentives for providers to address pesticide-related health conditions. This component is designed to motivate and convince decision-makers that specific changes can and should be made in grant funding, continuing education, E&M codes, re-certification, workers' compensation, and quality assurance. This component will also provide “ready-made” language on recommendations for proposed changes.

Proposed Activities

Activity #1

Provide grant support to practicing providers for interventions and research related to pesticide poisonings and exposures:

- Urge federal agencies (CDC, NIH, EPA, HRSA, NIOSH, NIEHS), state agencies, and private foundations to support intervention and research projects conducted by practicing primary care providers.
- Publicize models developed through grant support.
- Create a centralized source of information about grants and grantees.

Activity #2

Create free and readily available opportunities for continuing education involving pesticides and environmental health:

- Connect continuing education (CE) courses on pesticides to major national meetings.
- Offer free CE credits in a variety of settings.
- Offer CE credits in local settings and support experts to go out to local clinics to provide pesticide education.
- Establish free, web-based continuing education.
- Encourage and fund NIOSH Education and Research Centers (ERCs) to hold local continuing education courses on pesticides.
- Address barriers such as competing priorities for providers, cost of hosting continuing education programs, and lack of provider interest.

Activity #3

Increase providers' awareness of the value of taking an occupational and environmental history for optimizing Evaluation and Management (E&M) coding and billing. See next page for a brief summary of how E&M coding could be upgraded.

Activity #4

Require knowledge of environmental health issues for certification and re-certification:

- Identify priority professional certifying bodies.
- Recruit high-profile supporters from each of the relevant disciplines.
- Create sample objectives and questions on environmental health issues.
- Approach certifying bodies about including questions.
- Coordinate outreach to the certifying bodies.
- Address barriers such as institutional inertia, competing priorities, and lack of perceived problem.

According to the 1997 Health Care Financing Administration Documentation Guidelines, in order for a provider to bill for a “comprehensive” visit for a new outpatient, a new inpatient, or a new consult, the provider must document taking *all* of the following; a past medical history (PMH), a family history (FH), and a social history (SH). The social history is defined as an “age-appropriate review of past and current activities.” For follow-up visits and emergency department visits to be designated as comprehensive, two out of the three histories must be documented. It may be possible to convince health care providers that taking an occupational/environmental medicine history will help them to fulfill the SH requirement for billing for a “comprehensive” visit, particularly for new patients.

The billing codes affected are:

- New outpatient visit codes 99204 and 99205
- New outpatient consults 99244 and 99245
- New inpatient consults 99254 and 99255
- Initial hospital care 99222 and 99223
- Emergency department 99285

These HCFA Documentation Guidelines apply only to Medicare patients; however, most third-party payers have adopted the same guidelines for their reimbursement schedules. Considerable research will need to be done to determine if this approach is viable.

Activity #5

Require pesticide poisoning reporting for workers' compensation reimbursement and automatic workers' compensation reimbursement for work-up of suspected occupational pesticide poisoning. See, for example, Washington State's program described on page 86. The goals are for work-related pesticide health effects to be universally reimbursed, including relevant diagnostic testing; mandatory reporting of pesticide-related health effects for workers' compensation reimbursement; and standardized weight-of-evidence for claims reimbursement for pesticide-related illnesses. Tasks include:

- Target high-priority states for change.
- Gather information about model state workers' compensation laws (especially California and Washington).
- Win support of professional organizations, advocacy groups, and state agencies.

Washington State has moved into the forefront in reporting of occupational diseases. Under state law, the Department of Labor and Industries (L&I) and the Department of Health (DOH) both have responsibilities for addressing chemically-related illnesses (CRI)—illnesses known or suspected to be caused or substantially worsened by exposure to chemicals in the workplace or other environments.

To increase efficiency and provide more consistent handling of chemically-related claims, L&I established a single CRI unit with responsibility for all chemically-related claims. Claims adjudicators in the CRI unit receive special training on chemically-related injuries and illnesses. L&I has also contracted with an occupational medicine physician to provide additional medical review of the more complex claims and to ensure that appropriate testing and work-ups are done. L&I averages about 200 claims per month.

Some of the key provisions of Washington's workers' compensation system include:

- An injury/illness incident is eligible for a claim to be filed whenever medical treatment is provided.
- For all claims filed, the costs for diagnostic evaluations to determine if the injury/illness is work-related are covered. Although the claim may eventually be rejected if it is determined not to be work-related, the initial visit(s) and testing are paid for.
- Individuals with accepted claims are eligible for time loss (wage replacement) if they lose more than three days of work.
- Health care providers are required to file a claim if the worker feels the condition is work-related.

The CRI unit has recently started to identify clusters of chemically-related illnesses, particularly involving a single employer with more than one claim for a specific exposure event. The goals include early intervention to reduce exposures and prevent future morbidity and mortality. For example, a cluster of carbon monoxide poisonings was identified, triggering efforts to reduce future exposures in the plant where the poisonings occurred. CRI staff find this process also improves the adjudication of claims by grouping together the claims from a particular employer.

Since 1990, DOH has been responsible for investigating pesticide-related illness incidents and developing a database of pesticide-related problems. L&I provides detailed reports to DOH to enable DOH to include workers' compensation claims in their investigations. Some consider the claims process to fulfill their reporting requirements, although there is a longer delay when L&I reports claims to DOH than when a health care provider reports directly to DOH at the time a patient is evaluated. It is not clear if this mechanism is sufficient or could be improved.

Source: Mary Miller, Washington State Department of Labor and Industries

- Approach state Workers' Compensation Commissions for changes.
- Build key leadership supporters including workers' compensation attorneys, labor, farmworker groups, clinicians, and public health groups.
- Address barriers such as lack of leadership, cost, and decentralized state authorities.

Activity #6

Promote documentation of occupational and environmental history in medical records, via incorporation into quality assurance/quality control mechanisms. Quality assurance/quality control mechanisms could also be used to promote documentation that providers have given pesticide information to certain at-risk groups (e.g., parents of toddlers, farmworkers, pregnant women). Activities include to:

- Create consensus on minimum necessary documentation through a committee process.
- Research the scope, authority, and current priorities of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).
- Approach the JCAHO to require documentation of occupational and environmental medicine (OEM) history and pesticide education.
- Approach targeted major managed care organizations to require documentation of OEM history and pesticide education.
- Approach family medicine and Ob/Gyn to include OEM history and pesticide education in their chart review for certification/recertification.
- Determine whether this is a priority activity area, and address barriers such as institutional inertia, extra burden on hospitals, clinics, and JCAHO, and time pressure.

Stakeholders

- Federal agencies and foundations that support research and interventions
- Professional associations
- NIOSH Educational Resource Centers
- Health care centers and hospitals
- Community clinics
- Worker's compensation partners

Evaluation of Outcomes/Indicators of Success

- Increase in number of grants and level of support available to practicing primary care providers.
- Increase in publications of research findings and interventions undertaken by providers.
- Report on success stories and lessons learned in the field.
- Adoption of models in other settings.
- Increase in number of continuing education offerings.
- Increase in number of people attending continuing education programs and number of people completing web-based credits (percentage increase in participation each year).
- Short-term and long-term changes in Evaluation and Management coding and workers' compensation.
- Questions added to recertification exams of professionals.
- Workers' compensation systems in target states are changed to reimburse for work-up of suspected pesticide poisoning, and payment is linked to reporting of pesticide exposures to state registries.
- Quality assurance/quality control mechanisms in targeted health care organizations are changed to incorporate review of documentation of an occupational and environmental history.

Background

One of the most effective ways to bring about change is to build incentives into existing requirements and activities of health care plans and practitioners. There are certain key points of entry into the health care system that require providers to address specific issues in their practices. For example, by integrating pesticide components into workers' compensation, E&M coding, and quality assurance, the Initiative can ensure that pesticide issues will become institutionalized into health care practice.