

Occupational Health Management™

*A monthly advisory
for occupational
health programs*



Act before, not after, employees develop chronic health problems

Employees often surprised at results

Shock is a common reaction of employees at Ann Arbor, MI-based Domino's Pizza who find out they are at risk for a chronic medical condition after participating in a health assessment. "Many of our team members and their spouses had no idea they had high total cholesterol or were pre-diabetic," says **Joe Schuster**, benefits manager.

When Domino's set out to target employees who were approaching chronic conditions such as diabetes or cardiovascular disease, they looked for a vendor to do a comprehensive blood analysis and health assessment. The Blueprint for Wellness risk assessment service, offered by Lyndhurst, NJ-based Quest Diagnostics, was chosen. **(For more information, see resource box, p. 99.)** Employees who complete a survey and undergo diagnostic screening are given a confidential report on their health status and recommended interventions. Employers receive aggregate results and recommended actions.

They deliver compelling results. "A key finding is that many team members were simply not aware that they were already in or approaching a pre-chronic condition state," says Schuster. "The gaps in knowledge were, in several instances, quite alarming." For instance, only about 14% of employees who did the assessment reported that they thought they had high total cholesterol, but lab tests showed that the actual number was 40%.

An employee won't likely participate in a diabetes prevention program if he or she isn't convinced they are at risk, says Schuster. "The unfortu-

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EXECUTIVE SUMMARY

By identifying employees at risk for developing chronic health conditions, these individuals might be more likely to participate in wellness programs. Health care costs can be significantly lowered.

- Monitor improvements in clinical indicators and behavior changes.
- Offer pharmaceuticals at low or no cost.
- Have a multiyear plan for return on investment.
- If offering incentives, require participation by covered spouses.

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nate secret for a lot of plan sponsors like Domino's is that you can build a robust wellness testing program, and even cover the costs of the tests, yet still end up with very poor participation," he says. Domino's offered six on-site events, and the rest of the participants had their blood draws at a Quest Patient Service Center.

During the first year, 40% of employees and 44% of covered spouses participated, says Schuster. "We hope to exceed the 50% threshold for participation when we roll out year two of the program this fall," he adds. "We're just scratching the surface of what could eventually be considered a comprehensive health assessment program for all adult covered lives at Domino's." They have seen increased participation in their condition management programs: an 18% increase for the asthma program and 9% increase for the diabetic program.

A payroll contribution incentive is given to par-

ticipating employees of \$390 for individuals and \$780 for families, but covered spouses had to participate to receive the bonus. "One of our concerns was that although spouses make up only 20% of covered lives, they consistently make up 30-35% of our total claims incurred, and we had the least amount of data on potential risk areas for spouses," says Schuster. **(For more information on employee wellness trends, see related story on p. 99.)**

The Blueprint panel of tests is an "early warning system" regarding potential health risks today and further down the road, says Schuster. Many of the tests aren't ordinarily run, such as a blood test that can detect slight elevations of C-reactive protein associated with increased risk of cardiovascular disease, because health insurers feel they are not cost-effective or medically unnecessary in a broad-based testing program, he explains. "But a growing number of employers have done the math and determined that the savings from early identification and intervention can exceed the additional costs incurred from having a broader testing panel," Schuster says. "We are learning in concrete ways that physical appearance is not always the best predictor of an individual's health status."

Biggest opportunities ID'd

Domino's is linking its Blueprint data to prior medical claims data, with the goal of initially targeting two specific groups: those who haven't had a lot of claims incurred yet, but are on the cusp of developing a serious condition; and individuals with \$25,000 or greater in claims, who are at risk for developing additional medical conditions.

The data will identify the biggest opportunities for return on investment (ROI), with a multiyear proposal presented to the management team. Initial results from the Blueprint program have identified cardiovascular disease and weight as the two areas of intervention that offer the greatest potential financial impact for Domino's, reports Shuster.

To determine ROI, behavior changes or changes in clinical indicators values will be documented, such as out-of-range triglyceride scores that go back into the reference range. "We think we will be identifying a certain number of individuals to make the ROI positive. But we don't expect to see clear ROI until year three," says Schuster.

Ultimately, however, the program's success depends on the employees and spouses taking action on what they learn, says Schuster. Domino's is now looking for a third-party vendor to conduct

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Editorial Questions

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a "very aggressive outreach" program, to be rolled out in January 2008. Participating employees sign a form agreeing that the identified results will be accessible only to individuals within Domino's HIPAA Privacy Circle and to designated business partners who will provide services such as health coaching and condition management.

"We want to make sure we have the right partners to activate our team members and their spouses to make what will be in some cases very difficult lifestyle changes," he says. "We are also looking at the medical vendors to see which one has the best precondition and condition management programs to support the Blueprint program."

Some employees may not want their employer or even a third-party vendor involved in their overall health status, acknowledges Schuster. "This is one area we plan to test to a greater extent in 2008," he says. "But, being a self-insured company, we are trying to send a message that early interventions are going to benefit all parties involved. We shouldn't have to apologize for wanting better health and a long-term lower medical trend as a goal."

For plan year 2008, Domino's is proposing that certain pharmaceuticals linked to the risk categories identified in the Blueprint data be offered at low cost or no cost. The concern is that a certain number of employees and spouses participating in Domino's medical plan are not taking their pharmaceuticals consistently, or may not take them at all, because of the cost involved, explains Schuster. "The company is concerned about being penny wise but dollar foolish with regard to the pricing of critical maintenance drugs. As much as it is financially possible, the company does not want the ability to pay to be an issue with compliance," says Schuster. "If just one chronic medical condition is prevented, the savings can far outweigh the additional testing and drug-offset costs involved."

Tailor wellness programs

At Booz Allen Hamilton, a global consulting firm based in McLean, VA, Blueprint for Wellness data is being used to target the best opportunities for wellness programs. Other than paying for the assessment, no incentives are offered for participation, but about 20% of its 17,000 employees participate, reports **Natalie Jackson**, the company's work-life program specialist.

"The report summarizes our top high-risk conditions and gives us a listing of interventions we

SOURCES/RESOURCE

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Blueprint for Wellness is a health risk identification solution and education tool for employers offered by Quest Diagnostics. Blueprint for Wellness services cost from \$50 to \$200 per participating employee. For more information about Blueprint for Wellness Incentive Programs, contact: Quest Diagnostics, 1290 Wall St. W., Lyndhurst, NJ 07071. Phone: (800) 654-7824. Web: blueprintforwellness.com.

might want to offer to our employees. Data can be broken down by site as well," says Jackson. "This gives us some type of direction with where to go with the programs we offer." Using the risk categories identified in the aggregated data, "Brown Bag" wellness opportunities were introduced to target hypertension and stress reduction at the Colorado Springs office, and a 12-week program was added to track activity level of employees, for example. Though employees are not contacted directly about interventions, it is clear that they are happy to gain information on their health. "I have had many employees approach me and say 'thank goodness for this opportunity.'" says Jackson. "They found out they were at high risk and are now taking steps to improve that. That is success to us." ■

Use integrated approach to prevent chronic conditions

Don't focus on medical, pharmaceutical costs alone

Preventative approaches are taking off with employers "like never before," and occupa-

tional health professionals are key players in this exciting trend, according to **Ronald Loeppke**, MD, chief strategic officer of health enhancement and productivity for Matria Healthcare, a Marietta, GA-based provider of health enhancement programs.

"I have been in the occupational and corporate health world for almost 25 years, and we are witnessing a tectonic plate shift for how employers are valuing this," he says. While only a handful of "early adopters" were investing in preventative approaches a few years back, it's now in the mainstream, says Loeppke. Employers are convinced that if they reduce health risks in their workforce, they will see sustainable cost reductions over time, he says.

As health care costs continue to skyrocket, more employers are facing the fact that employees with chronic conditions cost U.S. industries billions of dollars, says Tamara Y. Blow, manager of occupational health services at Philip Morris USA. "These costs are not only demonstrated in health care costs, but also in productivity," she says. "As a proactive approach, corporations are now utilizing futuristic approaches to managing health care costs. That approach is through lifestyle management."

Productivity loss

For every dollar spent on medical and pharmaceutical costs, employers are spending \$4 on health-related productivity losses, says a recent study.¹ "Medical and pharmaceutical costs are only the tip of the iceberg, and that is where people have focused for years. Now we are really seeing employers looking upstream and being very interested in prevention," says Loeppke, the study's lead author.

The interest is coming "out of the "C" suite,"

EXECUTIVE SUMMARY

Small, medium and large employers are taking steps to lower health risks of their workforce with the goal of lowering health care costs, but this is effective only if an integrated approach is used.

- Health-related productivity losses are more costly than medical and pharmaceutical costs.
- Target healthy workers and those on the verge of developing health problems.
- Track clinical indicators, presenteeism, and absenteeism in addition to costs.

which is CEOs, CFOs, and COOs, who are finding that the health of their workforce is linked to the bottom line profits of the company, Loeppke says. "Now, prevention and health enhancement is an investment to be leveraged, rather than a cost to be justified," he says. "We are seeing not only large employers, but small to medium size ones, recognizing the benefits of a healthy workforce. This is very exciting for occupational health."

Occupational health professionals understand the clinical and business side of medicine, so they are the best people to drive this trend, explains Loeppke.

An integrated approach looks at all aspects of health-related costs, instead of focusing on cost reduction for only one area, such as pharmaceuticals, says Loeppke. He likens this approach to squeezing one side of a balloon to reduce costs, but then the other side bulges out because costs go up in other areas.

"Integration has been talked about for years, but now it is really happening," he says. To develop a blueprint for action at your company, measure the full health and productivity costs related to the burdens of illness and health risk in your employee population, Loeppke recommends.

Occupational health professionals can accomplish this step by first doing a health and productivity risk assessment of the population, to identify health risk categories, he says. Second, they can analyze the medical and pharmaceutical claims cost categories to identify the prevalence rate of medical conditions that are the main cost drivers, says Loeppke. By taking these steps, the burden of illness and health risk unique to your population will guide your investments in integrated population health enhancement strategies for your entire population, says Loeppke.

"Some workers are on the verge of their first diagnostic event, while others are healthy now and want to stay that way," he says. "We need to address all those elements to really do effective population health management, along with individual health management, in order to achieve a sustainable impact on costs over time."

Redefine your ROI

When it comes to wellness programs, employers are moving beyond a purely financial interpretation of return on investment (ROI), says Loeppke. Many different methodologies are used to calculate ROI, he says. "But the bottom line is that we consistently are finding that these initia-

tives do provide a positive return," he says.

He recommends using the term value of investment (VOI) to include other components that need to be tracked along with financial return. Some examples are: Has the rate of preventative screening increased? Have clinical indicators improved? Is presenteeism and absenteeism going down? "All those indicators should be pointing in the same direction," Loeppke says.

Integrated population health management requires integrated population health measurement, says Loeppke. To yield the greatest value from your investment, you need to pull together all the data sources across the continuum of health and productivity enhancement, and translate the integrated data into actionable information, he explains. "The health of the workforce is inextricably linked to the productivity of the workforce, and therefore, the health of the bottom line for employers," says Loeppke. "In fact, good health is good business."

Reference

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SOURCES/RESOURCE

For more information on reducing health risks in the workforce, contact:

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Matria Healthcare provides incentive programs to improve health and lifestyle areas that are increasing health care costs. The firm also performs health and productivity assessments to identify and target specific risk factors. Costs vary based on the number of employees participating and the types of products and services provided. For more information, contact: Matria Healthcare, 1850 Parkway Place, Marietta, GA 30067. Phone: (800) 454-4598. Fax: (800) 982-1740. E-mail: matriawellness@matria.com.

Potential problem with urine drug screening

Warn employees: Niacin overdoses can be deadly

Some employees are taking excessive doses of niacin, also known as Vitamin B₃, in a misguided attempt to defeat drug screening tests, says a new study.¹ This mistake could send the worker to the emergency department — or worse.

Researchers from The Children's Hospital of Philadelphia and the University of Pennsylvania reported on two adults and two adolescents who suffered serious side effects from taking large amounts of niacin, also known as vitamin B₃, in mistaken attempts to foil urine drug tests.

Both adult patients suffered skin irritation, while both adolescents had potentially life-threatening reactions, including liver toxicity and hypoglycemia, as well as nausea, vomiting, and dizziness. One of the teens also experienced heart palpitations. All four patients recovered after treatment for the adverse effects.

Because niacin is known to affect metabolic processes, there is a completely unfounded notion that it can rapidly clear the body of drugs such as cannabis and cocaine, in order to pass drug tests that are becoming increasingly common among employers, notes study author **Manoj K. Mittal**, MD, a fellow in emergency medicine at The Children's Hospital of Philadelphia.

Various online sites advocate the use of niacin to pass urine drug tests. An Internet search by the study authors for the key phrase "pass urine drug test" and the word "niacin" yielded more

EXECUTIVE SUMMARY

Emergency departments report caring for employees who have overdosed on niacin because they have wrongly believed this vitamin will mask drugs in their system during drug screening tests.

- Some patients took 300 times the daily recommended dose.
- Life-threatening symptoms include liver toxicity and hypoglycemia.
- Counsel employees that niacin can be dangerous when taken in large amounts.

than 84,000 results.

Niacin is readily available as an over-the-counter vitamin supplement, and people often assume it is completely safe because as a water-soluble vitamin, it is easily excreted from the body. "However, the body has its limits, and some of these patients took 300 times the daily recommended dose of niacin," says Mittal. He points to a report in the medical literature of a patient who suffered liver failure, requiring a liver transplant, after taking excessive doses of niacin.

Occupational health nurses and managers need to be aware of the potential adverse effects of niacin and of the misguided use of this vitamin by patients seeking to interfere with urine drug screening, warns Mittal. "They can counsel these patients that not only is niacin ineffective at this, it is actually dangerous and life-threatening when taken in large amounts," he says.

Niacin sometimes can cause flushing of the skin, itching, and rash, says Mittal. If a physician doesn't know that the patient has ingested large amounts of niacin, he or she would likely conclude these symptoms indicate anaphylaxis, a life-threatening condition brought on by an allergic reaction, he adds. "Treating a person for anaphylaxis could be very dangerous for a person who is actually suffering from niacin overdose," says Mittal.

With the prevalence of urine drug screening by prospective employers, more patients with niacin toxicity may end up in the emergency department, predicts Mittal. "People who are desperate to pass a urine drug test may believe the misinformation about niacin increasing metabolism and clearing drugs out of their system," he says. "People have this idea that vitamins are benign, when in fact they can be very powerful and even toxic."

This information should be included in employee drug education programs if your company has them, says **Kay N. Campbell**, EdD, RN-C, COHN-S, FAAOHN, global health and productivity manager at Research Triangle Park, NC-based GlaxoSmithKline. "I don't think many of us would be thinking this way, so this is a good call to action on being aware of what employees are doing, other than the usual recreational or pharmaceutical drugs," she says.

Reference

1. Mittal MK, Florin T, Perrone J. Toxicity from the use of niacin to beat urine drug screening. *Ann Emerg Med* 2007 Apr 4; [Epub ahead of print]. doi:10.1016/j.annemergmed.2007.01.014. ■

Health coaches offer personalized health plans

Approach focuses on behavioral changes

Duke Integrative Medicine in Durham, NC, takes health coaching to a new level by providing coaching by highly trained health care personnel who work closely with their clients to help them follow their personal health plan.

"What we do is more than just motivate people to change. It's helping connect their behavior to their values and to what matters most to them," says **Julie Kosey**, MS, CPCC, ACC, integrative health coaching manager at Duke Integrative Medicine.

It is the first major academic medical center to develop a specified role for the health coach on the clinical team. The program's success was demonstrated in a study of 154 outpatients with one or more known cardiovascular risk factors who received a personalized health plan and worked with a health coach to set and achieve goals. At the end of the 10-month study, participants experienced a reduction in risk for coronary heart disease as measured by the Framingham risk score.

A health coaching program tailored for a subset of high-risk Duke employees and their dependents resulted in fewer hospitalizations and lower emergency department costs for those who would have qualified for the program but did not participate, says **Ruth Wolever**, PhD, director of research at Duke Integrative Medicine and assistant professor of psychiatry at Duke Medical Center.

Kosey says, "Health care has long been about treating disease to return a person's body and mind to an acceptable state of health, and separately, people have sought the support and guidance of coaches to help them move to new levels. Health coaching brings these two worlds — health coaching and personal coaching — together."

Integrative medicine combines state-of-the-art medical treatments and evidence-based complementary therapies and focuses on the whole person, rather than a disease or condition to help the patient achieve optimal health. In addition to traditional therapies, participants in integrative medicine programs may receive services including physical therapy, nutritional therapy, movement and exercise, health psychology, stress reduction and mind-body interventions, botani-

als, and acupuncture.

Wolever says, "Our mission at Duke Integrative Medicine is to be a catalyst to shift the way that health care is practiced, to move to a more patient-centered approach."

During what is called an "immersion experience," each patient collaborates with physicians and other health care professionals and develops a plan tailored to his or her needs, then works with the health coach to reach the goals set out in the plan. The depth of the program is what distinguishes Duke Integrative Medicine's health coaching from those offered by other entities, Wolever says.

"I presented at a teleconference with several disease management entities. At the end, someone asked the typical caseload of each program. One said 250, another said 500. Our health coaches work with no more than 30 people at a time," she adds.

Often people have a lot that they need to do to become healthy, Wolever says. "They want to work on some of [those things], and they don't want to work on others," she says. "One thing the integrative health coaches do better than traditional health care providers is stay focused on what is important to the client."

The multidisciplinary team at Duke Integrative Medicine includes physicians, nutritionists, exercise physiologists, and health coaches as well as ancillary services such as psycho-social services, acupuncture, and massage therapy.

Participants in the integrative health coaching program become involved in a number of ways. During the immersion experience, participants work with a variety of disciplines over a three-day period, then work closely with a health coach to follow the personalized health plan the multidisciplinary team recommends.

There are multiple pages of suggestions, Kosey says. "This is overwhelming for most people. Together we create a plan that helps them choose what is most important to them out of the whole big picture. The plan shifts and changes as they try out different things," she says. The integrative medicine center offers enrollment programs that include consultations with the health care team, coaching sessions, and personal health plans as well as personalized group programs for businesses, families, and groups as well as day and half-day programs.

"The concept of this program is to empower the patient through education and skill building. It's a holistic program that gives patients access to

providers with different views who can help them create a health plan," Wolever says.

When participants enroll in the health coaching program, the coaches help the participants identify what they want to work on, be specific, and look at how the changes they want to make would influence their life as a whole, Kosey says.

In most situations, the participant and the health coach develop specific goals in each session and discuss what worked and what didn't the next time they talk. **(For more on health coaching at Duke, see story, below.) ■**

Duke's health coaching sees ripple effect

Health coaching is all about helping people identify what is important to them and how they can go about it, says **Julie Kosey, MS, CPCC, ACC**, integrative health coaching manager at Duke Integrative Medicine in Durham, NC. Duke Integrative Medicine provides health coaching by highly trained health care personnel who work closely with their clients to help them follow their personal health plan.

The most critical piece of the process is whether the person is ready to make the changes, Kosey says. "So many people see their physician who may say that the most important thing they can do is quit smoking," she says. "They're not ready to do that, so they don't do anything."

For instance, when a health coach meets with a smoker, if that person says they want to start walking for exercise, the health coach helps them get started in the process. "There's often a ripple effect. They start walking and find they are short of breath and this encourages them to stop smoking," Kosey adds.

The participants may want to have the energy to play with their grandchildren, or to be around for their daughter's wedding, or to be able to climb a mountain. Whatever their goal, the health coach helps them reach it.

A lot of health coaching has a disease-management focus, such as encouraging patients to manage their blood sugar and report the results the next week, Kosey says. "What we are doing is to help the person understand what differences it would make in their life if they got their diabetes under control," she says. Integrative health coaching is not just about accountability,

but it is about helping the person learn about themselves, Kosey says. "We help them engage in personal reflection in addition to, or instead of, a specific action," she says.

Individual coaching sessions typically are 30 to 40 minutes long. Group coaching sessions are an hour in length and may take place in person or over the telephone via conference calls.

The integrative health coaches have master's degrees in health promotion or behavioral change, such as health psychology, and are trained in how to help people change the way they relate to the world and how they behave. Duke Integrative Medicine provides training for the coaches on motivational interviewing, assessing readiness to change, and on mindfulness, along with clinical training that gives them the knowledge to work with members of the interdisciplinary team. The coaches are trained to recognize symptoms that indicate that people need to seek medical care. ■

Health program saves \$1.70 for every dollar spent

Inpatient admissions down, member satisfaction up

A health management plan for persons with chronic conditions has generated a 1.7-to-1 return on investment and glowing responses to satisfaction surveys for Health Alliance Plan (HAP) in Detroit.

Health Alliance Plan began the HAP HealthTrack program in August 2004 with a program for heart failure and expanded it to include other chronic conditions after the heart failure component showed a decrease in hospitalization and an increase in recommended care. For instance, from 2003 to 2005, the number of inpatient admissions among HAP members with congestive heart failure declined by 65%. Use of ACE inhibitors among members with heart failure increased from 38% prior to the program's implementation to 78% in 2005. The percentage of members with LDL cholesterol levels below 100 mg/dt increased from 61% in 2003 to 70% in 2005.

In addition to the financial gains and improvement in member health, this program has enhanced member satisfaction, says **Richard Precord**, MSW, director of clinical care manage-

ment for the Detroit-based health plan. "This year, we've had about close to a 70% return rate on our surveys," Precord says. "We have evaluated the first 117 surveys returned, and 100% of members who talked to a case manager reported being satisfied or very satisfied."

Members at high risk for hospitalization or complications from the disease work with an RN case manager, and, if indicated, a behavioral specialist or pharmacist, who helps them learn to self-manage their conditions. "We have developed a member-centric chronic care registry rather than a disease-specific registry. We approach our members holistically, rather than from the standpoint of a disease," Precord says.

Staff are cross-trained to work with members with all of the conditions in the program and attend regular in-services on the various conditions. They can call on a certified diabetic educator if needed when they work with members with diabetes. They have a high prevalence of comorbidities, Precord says. "For instance, many of our members with heart failure also have diabetes," he says. There aren't very many members who have just one condition, he says. Staff members look at all the needs and work with them on all conditions, Precord says.

Members are identified for the program by a variety of methods. The health plan automatically analyzes medical claims, pharmacy claims, and laboratory claims and values every month to identify members with chronic conditions. The computerized system also looks for gaps in care that may indicate that a member's disease is not being well-managed. For instance, the program flags members with diabetes who have not had regular hemoglobin A1c tests as well as those whose test results are outside the normal range.

The enrollment packet sent to new members includes information about the program along with the insurer's web site and a telephone number to call for more information. If the data show that new members are not managing their chronic disease well or have not had the recommended tests and procedures, they are referred to the program for appropriate intervention. Their data system also identifies members who were admitted to the hospital with a chronic disease or who have had a coronary event and been hospitalized as soon as they are discharged so that a staff member can call them, Precord says. "We also get referrals from physicians and other providers," he says.

The names of members who are identified

with chronic illnesses and gaps are forwarded to an enrollment center where the staff make outbound calls to members to discuss the program and schedule them for a telephone appointment with a staff member. "There are health risk indicators for each condition that prompts a telephone call," Precord says. For instance, a member who has a high LDL cholesterol level or someone who has made a visit to the emergency department is referred.

The staff members have the member's health profile, medication, labs, and utilization data at their fingertips when they call the members. They complete an extensive assessment over the telephone and, based on the assessment and other information, the staff members identify goals and work with members to set priorities, Precord says.

In the past, the staff would get a member's name and number and then call the doctor's office to obtain clinical information, he says. They have put together a methodology to prioritize, Precord says. They are risk stratified before the nurse calls them, and the relevant clinical data are readily available to the nurse, he says. "It's a much more efficient way of doing things," he says.

Staff members frequently contact members over the first three months, then taper off the calls when the members begin to better manage their condition. Many are trying to manage multiple conditions, which can be very overwhelming, Precord says. The staff work with them on getting the conditions under control and eliminating barriers to appropriate care, he says. Since there is a high prevalence of depression among people with chronic conditions, the disease management staff may co-manage members with the behavioral health team when appropriate.

HAP staff go through training on motivational interviewing and behavioral changes so they can more effectively engage members and facilitate healthy behavioral changes. Helping to manage chronic diseases is not as simple as just calling them and telling them what to do, Precord says. Staff need to find out what motivates people to change, he adds. ■

Health management program promotes self-management

Health Alliance Plan (HAP), a Detroit-based health plan, promotes self-management of

chronic diseases. During the early weeks members are in the program, staff work with them to develop action plans and to set health goals.

The staff call on HAP's clinical pharmacists for a consultation if a member isn't taking their medication or has questions about the medication. For instance, the staff can make a referral to the pharmacist if an asthmatic is using his rescue medicine too much or if a diabetic has questions about getting his LDL cholesterol under control.

The clinical pharmacists educate them on how and when to take their medication. The pharmacists may contact their physicians to discuss medication or dosage changes.

Those with chronic obstructive pulmonary disease, heart failure, and diabetes who are at high risk for hospitalization are eligible for HAP's telemonitoring program. They receive a small appliance that plugs into the telephone line. The appliance beeps every morning to remind them that they need to answer a series of questions. For instance, those with heart failure are asked to weigh themselves and answer a series of questions that assess their symptom knowledge and behavior patterns.

The system automatically flags those whose answers indicate health problems.

The system helps HAP identify people early when they have difficulties and gives staff the opportunity to intervene, says **Richard Precord**, MSW, director of clinical care management. They may be scheduled for the next phone call from a staff person next week, but there may be signs of a deteriorating condition today, Precord says. Staff can take action to help them get needed care or avoid a potential visit to the emergency department or hospitalization, he says.

Staff work hand-in-hand with physicians to teach them to manage their condition. They emphasize that they are helping them follow the treatment plan from their physician, Precord says.

The health plan sends provider bulletins and newsletters to physicians to let them know that the program is available to support their plan of care. When a patient is identified as needing their services, HAP sends a letter to the physician with details about the patient's condition and the goals the patient and the staff have set. The plan sends physicians regular updates as the patients work toward meeting the goals.

"If something urgent arises, the nurses alert the members' physicians by telephone and work with them to get the condition under control," he says. ■

Want to prove your value? Audit it!

An audit tool verifies performance

How do you prove the value created by the employee health service? Perhaps you can show a reduction in injury rates or workers comp claims. Or you demonstrate broader impact from a wellness initiative.

One systematic way to demonstrate your results is through an internal audit. You can check your services against compliance and performance goals and compare your policies with your actions.

Mary Asherbranner, RN, BSN, MSHA, COHN-S, director of client operations at CHD Meridian Health Care in Nashville, TN, a provider of contractual employee health services, conducts a comprehensive audit every two years and “mini-audits” once a quarter.

Audits are an effective way to validate what you are doing and to uncover weaknesses that you need to correct, says Asherbranner. “We can show that we’re providing the best care and that we’re using not only industry standards, but best practices,” she says.

For example, to check compliance with chemical safety, an audit would prompt you to verify the Material Safety Data Sheets (MSDS) for all chemicals. When new chemicals or new products are introduced, do they go to a safety group for approval? “That would be one process that I would expect should happen automatically,” says Asherbranner.

That review of the MSDS system would not just be a paperwork function. You also would make sure that employees have easy access to the information — for example, online — and that they know how and when to refer to the MSDS. The audit would verify that employees know how to respond to a spill and which chemicals they work with require special handling.

Identify risk potential

Here are some steps to take when setting up an audit:

- **Identify areas of the greatest potential risk.**

You can’t include everything on a single audit, nor should you try. You want to have the greatest possible impact. Work with your risk managers

to identify areas of potential liability and review your injury data for risk of injury to employees.

Consider near-misses. “If you don’t have a system in place to record a near-miss, you need one,” Asherbranner says.

- **Break the audit into components.**

Decide what specific items you need to verify. Set up a checklist on an Excel spreadsheet with each measure. When you conduct the audit, you may look at one area at a time, such as the respiratory protection program or management of the employee health clinic. *[Editor’s note: A sample is available with the online version of Occupational Health Management. If you’re accessing your online account for the first time, go to www.ahcpub.com. Click on the “Activate Your Subscription” tab in the left-hand column. Then follow the easy steps under “Account Activation.” If you already have an on-line subscription, to go www.ahcpub.com. Select the tab labeled “Subscriber Direct Connect to Online Newsletters. Please select an archive.” Choose “Occupational Health Management,” and then click “Sign on” from the left-hand column to log in. Once you’re signed in, select “2007” and then select the September 2007 issue. For assistance, call customer service at (800) 688-2421.]*

- **Don’t try to conduct the audit all at once.**

“Look at it on a section-by-section basis,” says Asherbranner. “That makes it more manageable.”

Maintain a focus on the issues you’ve identified. It’s easy to get sidetracked into other areas, but remember that you selected the items for their potential impact on your operations.

- **Validate your findings.**

If you are auditing compliance with blood-borne pathogen policies, for example, you’ll want to talk to nurses and make sure they can explain the policy. Do they know how to report an injury? Do they know where the exposure control plan is?

By auditing your program, you can make sure that competencies are maintained and that safety procedures are followed on an ongoing basis. ■

NIOSH updates list of hazardous drugs

Comments accepted through Sept. 20

As many as 62 new drugs may be added to the list of potential workplace hazards by the National Institute for Occupational Safety and

Health (NIOSH).

NIOSH first identified hazardous drugs in its 2004 in its alert titled *Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings*. Since then, the Food and Drug Administration has approved about 70 new drugs, and another 60 drugs have received warnings based on reports of adverse events among patients. The National Institutes of Health also has updated a hazardous drugs list.

NIOSH evaluated those drugs and compiled a list of 62 that potentially could present an occupational hazard to health care workers. NIOSH is accepting comments on the list, and some of the drugs may be removed if they are determined to present a minimal hazard.

The drugs are rated according to their toxicity and other characteristics. For example, cyclophosphamide, an antineoplastic drug, is often administered in a liquid form through an intravenous (IV) bag. The coated tablet may not be hazardous to health care workers, however, says **Thomas Connor**, PhD, a research biologist with NIOSH in Cincinnati who specializes in occupational hazards of hazardous drugs. "Whether it's an occupational risk depends on how it's used and the dosage," he says.

NIOSH is soliciting comments on its list of hazardous drugs. It uses five criteria to define a drug as hazardous in the workplace: Carcinogenicity, teratogenicity or other developmental toxicity, reproductive toxicity, organ toxicity at low doses, genotoxicity, and structure and toxicity profiles of new drugs that mimic existing drugs determined hazardous by the above criteria. "We want to make the process as visible as possible. That's why we're going through an extended review process," says Connor.

The revision of the list of hazardous drugs is just one step NIOSH has taken to increase safety in the workplace in this area. NIOSH has issued guidance on protecting health care workers and conducting medical surveillance. "We are raising awareness of this problem," says Connor, noting that NIOSH has been getting more inquiries about how to best protect health care workers from exposure to hazardous chemicals.

(Editor's note: The proposed list of hazardous chemicals is available at www.cdc.gov/niosh/review/public/105/default.html. NIOSH is accepting comments through Sept. 20 through an online form available at that web address. E-mail nioshdocket@cdc.gov, fax to (513) 533-8285, or send written comments to NIOSH Mailstop: C-34, Robert A. Taft Lab, 4676 Columbia Parkway, Cincinnati, OH 45226.) ■

AHRQ: Bad news on gender discrepancies

Although there are signs of improvement in some conditions, differences in the quality of health care provided to men and women continue to persist, according to the latest News and Numbers from the Agency for Healthcare Research and Quality (AHRQ).

Women were more likely than men to be hospitalized for high blood pressure in 2003: 56 versus 38 per 100,000 population. Hospitalization for high blood pressure can usually be avoided if patients have good quality primary care.

Women age 50 and older were less likely than men to receive recommended colorectal cancer screening: 50% compared with 54% in 2003.

There are disparities among women by race and ethnicity. For example, although only half of all white women are screened for colorectal cancer at age 50 or older, among Hispanic and black women the rates are even lower: 38% and 44%, respectively. ■

CE Objectives

The CE objectives for *Occupational Health Management* are to help nurses and other occupational health professionals to:

- Develop employee wellness and prevention programs to improve employee health and productivity.
- Identify employee health trends and issues.
- Comply with OSHA and other federal regulations regarding employee health and safety.

COMING IN FUTURE MONTHS

■ Strategies to get best possible data to calculate ROI

■ Offer the right incentives for wellness participation

■ Ensure unique health needs of veterans are met

■ Foolproof ways to prove your worth to leaders

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CE Instructions

Nurses and other professionals participate in this continuing education program by reading the issue, using the provided references for further research, and studying the questions at the end of the issue.

Participants should select what they believe to be the correct answers, then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing this semester's activity, you must complete the evaluation form provided in the June issue and return it in the reply envelope provided in order to receive a letter of credit. When your evaluation is received, a letter of credit will be mailed to you.

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CE questions

9. Which is a result of Domino's Pizza identifying employees at risk for chronic conditions, according to **Joe Schuster**, benefits manager?
 - A. To save costs, covered spouses were not asked to participate.
 - B. Drugs that can prevent individuals from developing chronic conditions will be offered at low or no cost.
 - C. Return on investment is clearly visible after the first year.
 - D. Only individuals incurring high claims are being targeted.
10. Which is true regarding employers reducing health risks in their workforce, according to **Ronald Loeppke**, MD, chief strategic officer of health enhancement and productivity for Matria Healthcare?
 - A. An integrative approach will achieve sustainable cost reductions over time.
 - B. Employers will see the biggest return on investment by solely focusing on pharmaceutical costs.
 - C. Employers spend more on pharmaceuticals than health-related productivity losses.
 - D. A purely financial view of return on investment should be taken.
11. Which is true regarding employees taking niacin overdoses to pass drug screening tests?
 - A. Niacin overdoses are completely harmless because the vitamin is water-soluble.
 - B. The only symptom reported was skin irritation.
 - C. Niacin overdoses can help employees to "fool" drug tests.
 - D. Niacin overdoses can result in serious side effects.
12. Duke Integrative Medicine's multidisciplinary team includes which of the following?
 - A. Nutritionists
 - B. Exercise physiologists
 - C. Acupuncture
 - D. All of the above

Answers: 9. B; 10. A; 11. D; 12. D.

Excerpt: Occupational Health Audit Form

Policy No.	Section	Component	Expectation	Outcome: Pass/Fail
3.5	Staff	Areas/tasks requiring the use of respirators have been identified (29 CFR1910.134)		
3.5.1		Employees working in respirator-required areas receive an initial medical evaluation. Additional medical evaluations are done if the Respirator Questionnaire answers change or employee's medical or physical status change.		
3.5.2		Employees working in respirator-required areas receive annual training.		
3.5.6		Employees working in respirator-required areas receive annual fit-testing.		
3.5.7		Employees working in respirator-required areas complete the OSHA Respirator Questionnaire during their initial physical evaluation and before their fit-testing.		

Source: Mary Asherbranner, RN, BSN, MSHA, COHN-S, CHD, Meridian Health Care, Nashville, TN.