Primarily Vermont

A Newsletter Dedicated to Those Who Deliver & Teach Primary Care

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Tobacco Use: Past and Current

In the fifty years since the first Surgeon General's report on smoking and health, the United States has lowered its smoking rate from 42 percent to 19 percent. "On the basis of more than 7,000 articles in the biomedical literature related to smoking and disease that were available at the time, the Advisory Committee to the Surgeon General concluded that cigarette smoking is:

- Associated with a 70% higher all-cause mortality rate among men
- A cause of lung cancer and laryngeal cancer in men
- A probable cause of lung cancer in women
- The most important cause of chronic bronchitis." [1]

In February 2014, acting Surgeon General Boris D. Lushniak, MD issued the 30th *Surgeon General Report* which significantly expands the list of illnesses that cigarette smoking has been scientifically proved to cause. In addition to those already mentioned, heart disease, type 2 diabetes, colorectal and liver cancers, erectile dysfunction, bladder and cervical cancers, and ectopic pregnancy have been linked to smoking and Dr. Lushniak added vision loss, tuberculosis, rheumatoid arthritis, impaired immune function, and cleft palates in children of women who smoke. [2]

Wikimedia Commons

Restricting smoking in workplaces and public places reduces exposure to toxic secondhand smoke, supports those trying to quit or remain quit, and changes the social norms around tobacco use. Smoking is banned on airplanes and in most airports, and almost 50 percent of the country is protected by smoke-free

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Inside

From the Editor

The welcome arrival of spring in Vermont will inevitably include ticks and mosquitoes, so we asked epidemiologist Erica Berl to cover vector-borne diseases (page 9) in this issue.

The "Ask Dr. Amidon" column is about the Adverse Childhood Experience (ACE) questionnaire. This edition also includes a summary of a Frymoyer project (page 4) and fostering effective communication skills for using an electronic health record with patients; on page 11 is a poster that prompts promising best practices.

The VT Department of Health, working with AHEC, Bi-State and other supporters recently submitted a federal grant proposal requesting funds to increase the dollars available for VT's 2015 educational loan repayment program for primary care practitioners and dentists; HRSA will announce its decision in the fall. There was an incredible team effort, within a tight turnaround, to respond to the grant requirements; thank you to all involved!

The regional AHECs are busy with summer programs to expose high school students from around the state to health care careers in week-long MedQuest sessions and the six-week CollegeQuest. These early workforce pipeline development efforts are part of 'growing our own' — the next generation of health care professionals. We thank VT hospitals, practices, educational institutions, community collaborators and individuals who partner with us on these important programs.

Elizabeth Cote, Director, UVM College of Medicine, Office of Primary Care and AHEC Program

(**Tobacco Use** *continued from cover*)

laws that cover bars, restaurants, and workplaces. Television ads and advertising near schools are no longer allowed. The United States has gone from no taxes on cigarettes in 1964 to an average nationwide tax today of $1.53 per pack, up 92 cents per pack since the end of 2002.[3] The decline in the smoking rate is slowing but smoking is still the largest cause of premature death in the country.

In 1964, smoking rates by state were not published, but by 1989 it was 21% for Vermont adults; today Vermont's rate stands at 17 percent. Still, of the estimated 75,000 adult Vermonters who smoked in 2010, half of those who continue will likely die of a smoking-related cause.[4] State efforts to reduce smoking include:

- A cigarette tax of $2.62 per pack; a proven strategy for reducing tobacco use.
- Expanding coverage for Medicaid enrollees to receive tobacco cessation counseling from their physicians.
- Encouraging medical providers to "Ask, Advise and Refer – to 802QUITS.org" (or 800-QUIT-NOW) with their patients who smoke or use smokeless tobacco like chew, snuff, or dissolvable tobacco products. Quit referrals performed by providers are shown to increase the likelihood of a successful quit. Using counseling and nicotine replacement therapy (NRT) together more than doubles a person's chances of quitting over a cold turkey attempt.
- Providing free Nicotine Replacement Therapy, which is a set of seven Food and Drug Administration (FDA)-approved products that are proven to help smokers be successful in their quit attempt. Several of the NRTs require a prescription but 802QUITS offers free gum, patch, and/or lozenges to Vermonters, shipped directly to their homes.
- Supporting the Vermont Smoke-Free Colleges Initiative, in connection with The National Tobacco-Free College Campus Initiative. Harry Chen, MD, Vermont Commissioner of Health, kicked off the campaign this year at the University of Vermont which has a Steering Committee studying the proposal and preparing for a tobacco-free UVM in the near future. Nearly 1,100 colleges have smoke-free policies in place (none in Vermont). A tobacco-free policy does not require anyone to quit using tobacco but it does prohibit use while on campus, and tobacco-free laws have been shown to increase cessation.
- Working to keep young people from starting to smoke by restricting access to tobacco products and tobacco substitutes (e-cigarettes) and supporting measures to create smoke and tobacco-free public places including schools, parks and grounds. The Department of Health also strives to get resources out to students and youth to get them to quit smoking or chewing if they have started, such as the Not-on-Tobacco (N-O-T) program, and the state's Quitline (1-800-QUIT-NOW) which serves individuals 13 years and older with information and quit counseling.
- A new issue of concern is the danger of liquid nicotine for e-cigarettes. Rhonda Williams, Chronic Disease Prevention Chief at the VDH, states, "We are monitoring this very closely and looking at how other states are seeking to address it. Lethal exposure to liquid nicotine should never happen, and as seen in recent Centers for Disease Control (CDC) data, incidents nationally are involving young children."

Sources:

1. www.surgeongeneral.gov/library/reports/50-years-of-progress, Chapter One
2. www.nytimes.com/2014/01/17/health/list-of-smoking-related-illnesses-grows-significantly-in-us-report
3. "50 Years of Tobacco Control Drastically Reduces the Scourge of Tobacco," www.acscan.org
4. "Tobacco Use," HealthyVermonters 2020, Vermont Department of Health, www.healthVermont.gov/hv2020/report.aspx (accessed on April 28, 2014)

Primarily Vermont

Primarily Vermont is published by The University of Vermont College of Medicine Office of Primary Care, sponsor of the Vermont AHEC Program (www.vtahec.org).

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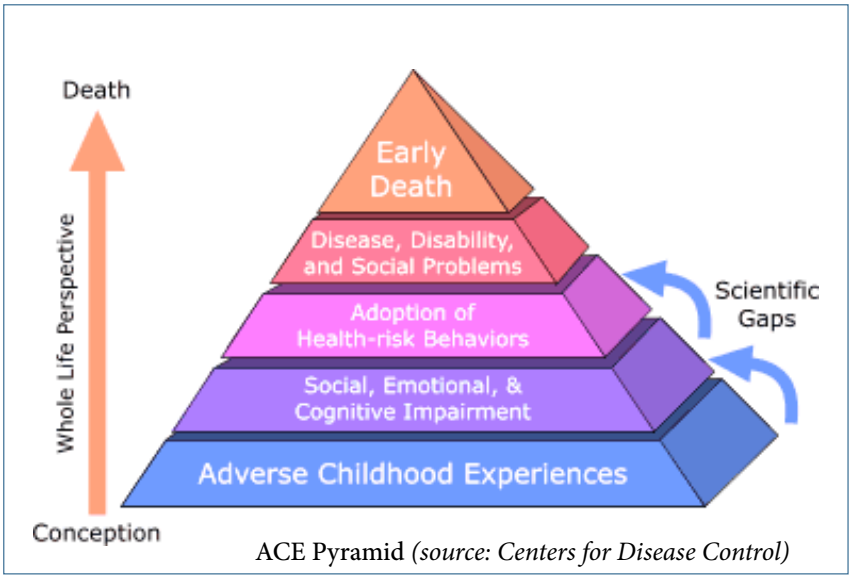
Ask Dr. Amidon:

What is the Adverse Childhood Experience (ACE)?

By Charles D. MacLean, MD, Professor of Medicine and Associate Dean for Primary Care,
UVM College of Medicine Office of Primary Care and Area Health Education Centers (AHEC) Program

The Adverse Childhood Experiences (ACE) Study is a large cohort study that was initiated between 1995-1997 at Kaiser Permanente, with support from the Centers for Disease Control and Prevention. The conceptual model is based on the observation that health risk behaviors that are known to be associated with disease are over-represented in people with social, emotional and cognitive impairment, which in turn, may be related to adverse childhood experiences. The goal of the study was to fill the scientific gaps noted in the ACE Pyramid by collecting information about childhood maltreatment and family dysfunction and assess for correlation with future physical and mental health, healthcare utilization, and mortality.



ACE Pyramid *(source: Centers for Disease Control)*

Why are people interested in the ACE?

Over the past two decades the findings from the ACE have shown correlations between adverse childhood experiences and a wide variety of health outcomes. The hope is that through earlier recognition and a more thorough understanding of how adverse childhood experiences result in worse health outcomes, we will be able to proactively respond and prevent some of these downstream consequences and improve overall health.

What are some of the findings from the ACE study?

The study team defined 10 types of adverse experiences in the three broad categories of Abuse (emotional, physical, sexual); Neglect (emotional, physical); and Household Dysfunction (violence, substance abuse, mental illness, separation/divorce, incarceration). The baseline prevalence of these experiences (collected among 17,337 patients in the Kaiser population) was surprisingly high—for example the most common category of physical abuse was found among 28.3% of individuals. The prevalence of household substance abuse was 26.9%.

What is the ACE score?

The ACE score is a simple sum of the number of adverse experiences, so may range from 0-10. Only about a third of participants in this study had no adverse experiences at all, while 12.5% had four or more. The ACE score is associated in a graded fashion with a wide variety of health problems, from substance abuse, to depression, to heart disease, COPD, and others.

How might the ACE be used in clinical practice?

Questionnaires are used throughout primary and specialty care. Many primary care questionnaires include screening for substance abuse, depression, domestic violence and other items that are included in the ACE. It is important to remember that the ACE study was conducted as a large epidemiological cohort study, not as a routine clinical activity. In 2010, five states collected ACE information on the Behavioral Risk Factor Surveillance Survey (BRFSS).

While it may be appealing to want to take all of these factors into consideration when assessing a person's overall health and risk for future disease, the ACE questions are not ones that are suited to casual administration. If a practice is

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In memory of one of UVM's finest teachers, Dr. Ellsworth Amidon (1906-1992). When difficult questions arose, the response often was "Ask Dr. Amidon." Dr. Amidon was the first chair of the Department of Medicine at the UVM College of Medicine and at Mary Fletcher Hospital, where he was also the medical director.

AHEC Faculty Research Projects

Medication Management Study

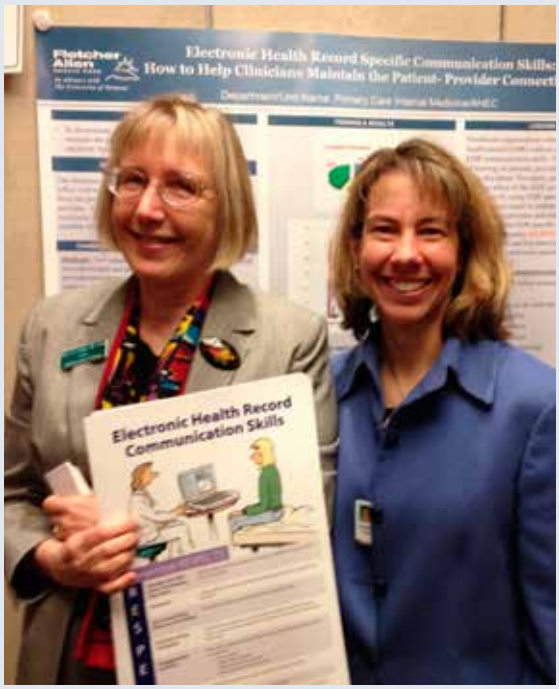
A two-year population-based medication management pilot study in collaboration with seven primary care practices and pharmacists identified over 700 drug therapy problems related to dosing, adherence, and unnecessary drug therapy. Problems identified by pharmacists involved medications common in primary care, such as cardiovascular or diabetes medications, medications used for mental health (i.e. depression), and high-risk medications, such as anticoagulants. The estimated savings realized by having a pharmacist in primary care practices was $2 avoided for every $1 spent on a pharmacist. The study recommendations include integrating pharmacists into Vermont primary care practices, that they be either specialty trained in primary care or employed by the same organization as the practice, and that the Guidelines for Pharmacists Integrating into Primary Care Teams, published in the *Canadian Pharmacists Journal*, be followed. The two-year study was funded by the University of Vermont Office of Primary Care and the Vermont Department of Health, and led by Amanda G. Kennedy, PharmD, BCPS and Charles D. MacLean, MD, Professor of Medicine and Associate Dean for Primary Care.

Test Names Confuse Kidney Damage Screening

Confusingly similar test names and test result ranges as well as design errors in test ordering systems are among the leading factors contributing to substantial, undetected long-term failure to correctly screen for kidney damage in patients with diabetes, according to a study published recently in the American Society for Clinical Pathology *Lab Medicine* journal. The study focused on proteinuria testing, a laboratory test used to determine kidney damage. The research was led by UVM College of Medicine researchers Charles D. MacLean, MD, Professor of Medicine and Associate Dean for Primary Care, and Benjamin Littenberg, MD, Professor of Medicine and Director of General Internal Medicine Research.

Frymoyer Grant Fosters EHR Communication

Mary Val Palumbo, DNP, APRN, GNP-BC, Director of Nursing Workforce Research, Planning and Development for AHEC, used a UVM Frymoyer Scholar Grant to establish student nurse practitioners' communication challenges during history taking when using the Electronic Health Record (EHR) for the first time. The analysis identified promising best practices for patient-provider communication when the EHR is used. One outcome of this study is the development of the poster on page 11 that advises practitioners to remember RESPECTS when using the EHR with patients.



Mary Val Palumbo, DNP, APRN and Marie Sandoval, MD with RESPECTS poster.

(**Dr. Amidon** *continued from page 3*)

interested in using the ACE as a routine, careful consideration should be given to how to collect and record the information, when and where it should be administered, clinical response, and other considerations.

Are there studies of widespread implementation of the ACE?

There are no formal studies adapting the ACE to routine practice. The U.S. Preventive Services Task Force (USPSTF) uses a formal, evidence-based process to recommend for and against screening for a wide range of problems. While the USPSTF does recommend routine screening for alcohol abuse, smoking, and depression, they found that there is insufficient evidence to recommend for or against screening for family and intimate partner violence or illicit drug use.

This is important because in the current Vermont legislative session House bill H.762, *An act relating to the Adverse Childhood Experience Questionnaire* proposed to require practices to use the questionnaire in assessing patients' health risks. For more information and the latest updates see www.leg.state.vt.us and search under the "find a bill" section.

The Vermont Agency of Human Services hosted an ACE Conference last October. To see conference presentations, go to www.humanservices.vermont.gov and search for "VT ACE Conference."

What are available resources to learn more about ACE?

A commonly used "ACE Calculator" is available at acestudy.org or at www.cdc.gov/ace/.

Save the Date!

UVM Office of Primary Care "Bridging the Divide" Conference on Thursday, November 6 at The Inn at Essex:

"Integrating Pharmacy and Primary Care"

Register at:
http://cme.uvm.edu
or (802) 656-2292

Spring Briefs

VT Medical Board Issues New Rules on Prescribing Opioids

The Vermont Medical Practice Board has issued new rules to prevent abuse of prescription opioids. The 21-page document is the first update on rules for prescribing opioids in nine years. Under the new policy, physicians are encouraged to conduct a "social and vocational assessment of patients needing pain medications and screen them for any history of mental health disorders and alcohol or drug abuse." It also advises physicians to consult the Vermont Prescription Monitoring System, the statewide database that tracks all prescription of controlled substances to ensure patients are not seeking opioids from multiple sources. The new rules also recommend that physicians use pill counts, urine tests and other procedures to ensure the drugs prescribed are being used properly.

In related news, Vermont has restricted access to a new class of painkillers in response to concern by law enforcement and public health professionals that the drug Zohydro could worsen drug abuse. Vermont's emergency rules require that prescribers of Zohydro conduct a thorough medical evaluation and risk assessment of the patient. The Vermont Medical Society supports the rule.

Four UVM Medical Students Awarded Freeman Legacy Scholarships




Emily Hadley Strout, Jennifer Hanson, Tara Higgins, and Leah Fox of the UVM Class of 2016 have each been awarded a $5,000 Freeman Foundation Legacy Medical Scholarship toward their tuition costs. The program was started by UVM in 2010 to honor the Freeman family and Foundation for their long history of support for College of Medicine students. Recipients sign a letter of intent to practice medicine in Vermont.

Allopathic/Osteopathic Single Accreditation System

The Accreditation Council for Graduate Medical Education (ACGME), the American Osteopathic Association (AOA), and the American Association of Colleges of Osteopathic Medicine (AACOM) have formed a single accreditation system for graduate medical education programs in the United States. The single accreditation system will allow graduates of allopathic and osteopathic medical schools to complete their residency and/or fellowship education in ACGME-accredited programs; currently the ACGME and AOA maintain separate accreditation systems for allopathic and osteopathic educational programs.

July 1, 2015 to June 30, 2020 is an extended transition period for AOA-accredited programs to apply for and receive ACGME recognition and accreditation. Two new Osteopathic Review Committees will be created to evaluate and set standards for the osteopathic aspects of GME programs seeking osteopathic recognition. MD and DO graduates who have met the prerequisite competencies will have the opportunity to access any GME program of transfer from one accredited program to another without being required to repeat education. Efficiencies will be realized because there will be no need to sponsor "duly accredited" or "parallel accredited" allopathic and osteopathic medical residency programs.

Dates for 2014-15 Grand Rounds for School Nurses

Grand Rounds for School Nurses will be presented in the next academic year on: **September 16 and November 19, 2014; January 13, March 18, and May 12, 2015**. Sessions will be from 3:30-5 p.m. at the 13 Vermont Interactive Technologies (VIT) sites.

Prescription Drugs Take-Back Days

Vermonters are turning in more prescription drugs during the National Prescription Drug Take-Back Days and at police department drug drop off boxes, according to Vermont State Police. In 2012, 3,405 pounds of prescription medications were collected; in 2013 the figure rose to 5,822.5 pounds. There are currently 22 drop off boxes in police and sheriff departments; the list can be seen at www.vsp.vermont.gov/drugdiversion. The spring National Prescription Drug Take-Back Day was April 26; the fall take back day is generally the last Saturday in September.

American Physicians Shifting to Jobs with Salaries

American physicians are increasingly taking salaried jobs, according to the American Medical Association (AMA). The shift from private practice has been most pronounced in primary care but specialists are also making the change. Last year, 64 percent of job offers filled through Merritt Hawkins, a national physician placement firm, involved hospital employment, compared with just 11 percent in 2004. Today, about 60 percent of family doctors and pediatricians, 50 percent of surgeons, and 25 percent of surgical subspecialists, such as ophthalmologists and ear, nose and throat surgeons – are employees rather than independent practitioners or business owners, according to the AMA.

Fletcher Allen Trauma Center Recertified

Fletcher Allen Health Care has earned recertification as a Level I Trauma Center following a rigorous review by the American College of Surgeons (ACS). The designation is the highest accreditation given to trauma services. Studies show that being treated in a Level I Trauma Center increases a seriously injured patient's chances of survival by an estimated 20 to 25 percent. Centers that receive ACS certification must provide: expert care for every aspect of injury from pre-hospital care

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(**Briefs** *continued from page 5*)

through rehabilitation; immediate access to a full range of specialists and equipment 24 hours a day; and treatment areas and operating rooms reserved for trauma cases. Fletcher Allen admits approximately 1,200 trauma patients per year from Vermont and northern New York; it has been a Level I Trauma Center since 1994 and is the only one in Vermont. It is one of 102 hospitals with this status, out of 5,000 hospitals in the U.S.

Americans' Eating Habits Studied

A study in the journal *Health Affairs* indicates that adding grocery store options to so-called "food deserts" in rural and urban areas does not necessarily result in people eating any healthier. The study looked at the major effort being made in Philadelphia and it shows that six months after two grocery stores opened in "food deserts" there, no noticeable difference was seen in body-mass index or fruit and vegetable consumption. To date, no research has shown a causal relationship between expanding access to healthy food and reduced obesity rates.

Recent studies by the U.S. Department of Agriculture indicate, however, that Americans say they are consuming fewer calories and cutting back on fast food, cholesterol and fat. Working-age adults consumed an average of 118 fewer calories a day in the 2009-2010 period than four years earlier; they also report reading the nutrition labels on food at grocery stores more often, and eating more home-cooked meals, though the economy may have contributed to that trend. In 2012 the obesity rate did not increase compared with the prior year, in any state except Arkansas. "Cutting out 100 calories a day isn't much," said Marion Nestle, professor of nutrition, food studies and public health at New York University. She said that for most people, eliminating at least 350 calories a day is necessary to lose weight. "This is a step in the right direction, but it's not nearly enough."

ADA Advises Fluoride Toothpaste Before Age 2

Parents should use a tiny smear of fluoride toothpaste to brush baby teeth twice daily as soon as they erupt, instead of waiting until children are older, according to new guidelines from the American Dental Association (ADA). The advice overturns the ADA's decades-old recommendation to start using a pea-size amount at 24 months of age. The ADA emphasizes, however, that only the tiniest amount of fluoride toothpaste should be used to minimize the risk of mild discoloration, white spots or streaking of the teeth, a condition called fluorosis that is caused by ingesting fluoride toothpaste at a young age. The change comes after a systematic review of 17 studies published in *The Journal of the American Dental Association* (JADA).

Bridging the Divide: Integrating Pharmacy and Primary Care

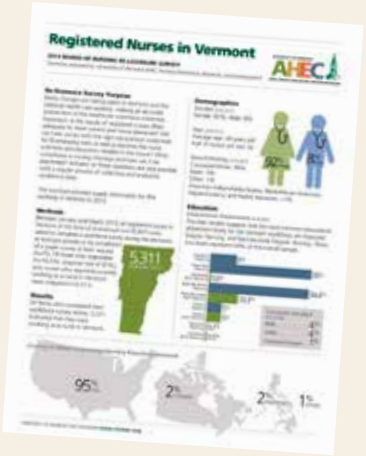
The annual UVM Office of Primary Care Conference on "Bridging the Divide" will take place on Thursday, November 6 at the Inn at Essex, Vermont and will explore "Integrating Pharmacy and Primary Care."

Vermont Now Second Healthiest State

In America's Health Ranking for 2013, Vermont dropped to second healthiest state in the country, after Hawaii. The Vermont Health Department says Vermont, long ranked as the healthiest state, had the highest rate of high school graduation and the second lowest rate of violent crime, premature death and the percentage of people who lacked health insurance. Vermont also ranked high for its lower rate of obesity at 23.7 percent, diabetes at 7.3 percent, and number of physicians at 170 per 100,000 people. But the state ranked lower in its childhood immunization rates, a statewide outbreak of whooping cough, and a greater prevalence of high-risk or binge drinking.

Survey of Vermont Nurses

The 2013 Board of Nursing Re-licensing Survey of Vermont registered nurses has been completed by the UVM AHEC Nursing Workforce, Research and Development Initiative. The survey indicates that 16,518 registered nurses responded and among those, 5,311 are currently working as registered nurses in Vermont. Results also show that half of the nurses are over the age of 50 and the average age is 49 years old. The complete summary is available at www.vtahec.org.



GSK Stops Paying Doctors to Promote

GlaxoSmithKline (GSK), Britain's biggest drug maker, has stopped paying physicians for promoting its drugs and for them to attend medical conferences, as well as ending prescription targets for its marketing staff. GSK and the U.S. Government agreed to a $3 billion settlement in 2012 over charges it provided misleading information on certain drugs. The drug company is still paying fees to physicians who carry out company-sponsored clinical research, advisory activities, and market research, which it said is essential to provide insights on specific diseases.

Vermont School Cooks Share Healthy Recipes

"New School Cuisine: Nutritious and Seasonal Recipes for School Cooks by School Cooks" is a cookbook for school cooks that shares creative recipes that also meet USDA guidelines, celebrate the quality of food that can be served and set an example. Funded with a grant from the U.S. Department of Agriculture (USDA), fundraising, and the Vermont Department of Education, the publication was created by Vermont school cooks. Recipes can be found online at: http://bit.ly/18G1zLj.

Expanding Primary Care Access and Workforce Bill (S. 2229)

Senator Bernie Sanders (I-VT) introduced the Expanding Primary Care Access and Workforce Bill to the U.S. Senate Subcommittee on Primary Health and Aging on April 9. The proposed legislation would expand primary care delivery sites, and support training, scholarships and loan repayment for primary care providers; it increases reimbursements for primary care providers and enhances the primary care expertise in determining physician fees; and it enhances transparency and accountability for Graduate Medical Education funds with a focus on directing federal dollars to meet the primary care needs across the United States. Testimony from a recent related hearing can be viewed at: http://www.help.senate.gov/hearings/hearing/?id=5ab814ee-5056-a032-5231-08baebc7c8cf.

Obesity Medicine Becomes a Board-Certified Specialty

Obesity medicine, which includes expertise in treating overweight and obese patients such as diet and exercise interventions to pharmacotherapy as well as bariatric surgery, is now a board-certified specialty and clinicians can earn their certification from the American Board of Obesity Medicine (ABOM). Thus far, about 850 doctors are certified in the specialty. Clinicians cannot use this as their primary board; they also need to be board-certified in another specialty. The next certification exam occurs in December 2014 and re-certification is required every seven years.

SVMC Tops VT Hospitals in Pay-for-Performance Program

Southern Vermont Medical Center earned the best scores in Vermont for performance in a Centers for Medicaid and Medicare program that ties reimbursement rates to best practices in treating patients. The amount of extra reimbursement the hospital will receive is based on a formula that looks at how well a hospital does compared to its own past performance and performances of hospitals across the country. In the most recent measurement of value-based purchasing, SVMC earned scores for performance in 2013 that gave it the highest return of Vermont hospitals, and received all of the 1.25 percent reimbursement in its value-based purchasing pool plus 0.22 percent for 2013.

Vermont Awards $2.6 Million in State Innovation Model Grants

Vermont awarded $2.6 million in health care innovation grants to eight provider groups in the state, with money from the $45 million State Innovation Model grant from the federal government. The purpose of the grant is to help Vermont reform payment and delivery methods for health care services to bring down costs and improve quality. Recipients in this round of grants include: A Rutland area coalition of health care and long-term providers; health care and social service providers in the Northeast Kingdom; a primary care practice in White River Junction; Burlington Community Health Center, Northern Counties Health Care, and the state's employee assistance program; Vermont Medical Society Education and Research Foundation and Fletcher Allen Health Care Department of Pathology and Laboratory Medicine; Bi-State Primary Care and HealthFirst; and Vermont Program for Quality in Health Care. Information about the grants is available at: www.healthcareinnovation.vermont.gov.

Fewer Psychiatrists Accept Health Insurance

Psychiatrists are significantly less likely than physicians in other specialties to accept health insurance, according to a new study, complicating the push to increase access to mental health care. Published in the journal *JAMA Psychiatry*, the study found that 55 percent of psychiatrists accepted private insurance, compared with 89 percent of other physicians. The study also showed that 55 percent of psychiatrists accept patients covered by Medicare versus 86 percent of other physicians. And 43 percent of psychiatrists accept Medicaid which provides coverage for low income people, while 73 percent of other physicians do. The researchers pointed out that expanding coverage may not solve the problem because the supply of psychiatrists is not increasing as fast as the demand. "As a result," they wrote, "many psychiatrists may have so much demand for their services that they do not need to accept insurance." The study is based on data collected from doctors' offices in surveys by the National Center for Health Statistics, a unit of the federal Centers for Disease Control and Prevention.

UVM Med Students' Community Projects

Third-year UVM College of Medicine students Job Larson, Jeyko Garuz, and Vishal Shah developed menus and cooking videos for patients with hypertension, coronary artery disease, and diabetes during their third year Community Health Improvement Project (CHIP), which are can be found at www.cvahec.org/programs. Available at the same site is the work of Griffin Biedron on Lyme Disease for the 2013 Community Health Improvement Project.

People in the News

Lewis R. First, MD, Professor and Chair of Pediatrics at the University of Vermont College of Medicine and Chief of Pediatrics at Vermont Children's Hospital at Fletcher Allen Health Care, will receive the Federation of Pediatric Organizations' (FOPO) Joseph W. St. Geme, Jr. Leadership Award this spring at the Pediatric Academic Societies meeting in Vancouver, Canada. FOPO, a coalition of the nation's seven major pediatric organizations, recognizes one physician per year for broad and sustained contributions to pediatrics that have had or will have a major impact on child health. The award recognizes those who have "created a future."

A recipient of many awards during his career, Dr. First will be recognized as an educator and clinician, national leader for educational policy and professional certification, as editor-in-chief of the journal

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Pediatrics, and co-editor of a top-selling textbook, the 22nd edition of *Rudolph's Textbook of Pediatrics*.

Mary L. Botter, PhD, RN is the new Chair of Nursing at Southern Vermont College. Formerly the Executive Director of the Vermont Board of Nursing, she was also a faculty member and Associate Dean at the College of Nursing and Health Sciences at the University of Vermont. Most recently, she was the Associate Dean of the College of Nursing and Associate Professor of Nursing at Nova Southeastern University in Fort Lauderdale, FL.

Maja Zimmermann, MD, director of the Porter Practice Management office at Porter Medical Center, has established a Saturday clinic for patients of five general practices in Addison County that do not have Saturday office hours. The clinic allows patients to avoid having to wait until Monday to be seen for such ailments as pneumonia, urinary tract infections, ear infections, minor injuries and follow-up care for wounds. The clinic is not for patients seeking care for chronic medical conditions or basic check-ups. It is open from 8 a.m. to 12:30 p.m., and patients must call ahead that day.

Karyn Patno, MD, is the first pediatrician in Vermont to become a board certified pediatrician in child abuse through the American Academy of Pediatrics. The achievement culminates five years of work. Dr. Patno, of St. Johnsbury Pediatrics, started the ChildSafe Program in Vermont in 2008 after completing six months of fellowship training in Providence, RI. She began to provide child abuse evaluations referred by other physicians, the Vermont Department for Children and Families and law enforcement personnel. The ChildSafe Clinic is also available in Burlington through a contract with Fletcher Allen Health Care.

Lawrence Miller, former Vermont Commerce Secretary, has been appointed by Governor Peter Shumlin as "senior advisor to the Governor and Chief of Health Care Reform." "I am convinced that the single biggest thing we can do for the long term benefit of Vermont's economy is providing all Vermonters coverage, getting a handle on the costs of health care, and breaking the link between employment status and health care," said Miller.

Miller has been the founder and CEO of Otter Creek Brewing, CEO of Danforth Pewter, Director of the National Bank of Middlebury, and an independent business advisor. He has served as a member of the Vermont Economic Progress Council, the Clean Energy Development Fund, and several non-profit boards, before joining the Governor's Administration.

Management of Type 2 Diabetes: Academic Detailing Topic for 2014

The Vermont Academic Detailing Program topic for 2014 is "Management of Type 2 Diabetes" which will be added to the current menu of educational sessions: "Management of Migraines," "Atypical Antipsychotics in Primary Care," "Management of Non-specific, Chronic Low Back Pain," "Management of ADHD," and "Practical Approaches to Discontinuing Medications."

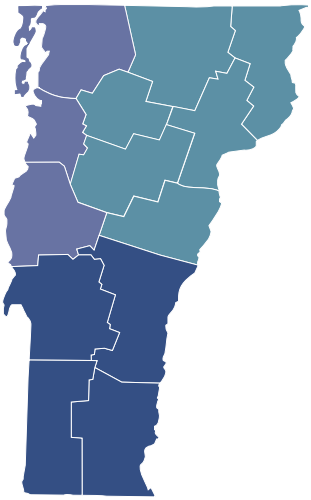
The new topic includes reviewing strategies for lifestyle changes, new non-insulin medications to treat type 2 diabetes, and an overview of insulin. As always, patient resources will be included.

Small group or one-on-one sessions with an academic detailer are available for any of these topics, as well as "live" sessions online. Please contact the Vermont Academic Detailing Program Coordinator, Laurie McLean, at 802-656-2888, to schedule a session during July 1-June 2015.

The UVM-based prescriber education and support program delivers approximately 100 sessions around the state each year.

AHEC News From Around the State

For news from Vermont's three regional Area Health Education Centers, check out their community-based web sites:



Champlain Valley
AHEC: St. Albans
www.cvahec.org
(802) 527-1474

Northeastern Vermont
AHEC: St. Johnsbury
www.nevahec.org
(802) 748-2506

Southern Vermont
AHEC: Springfield
www.svahec.org
(802) 885-2126

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HEALTH CARE careers
www.VTHealthCareers.org

Vector-borne Diseases in Vermont

By Erica Berl, DVM, MPH, Health Surveillance Epidemiologist, Vermont Department of Health

Tick-borne Diseases

Lyme disease is caused by infection with the bacteria, *Borrelia burgdorferi*. *B. burgdorferi* is transmitted to people from the bite of an infected deer tick. The deer tick, *Ixodes scapularis*, also known as the black-legged tick, is the most frequently found tick in Vermont. As the number of deer ticks has increased, so has the number of reported cases of Lyme disease. It is important to keep in mind that the deer tick can also transmit the pathogens *Anaplasma phagocytophilum*, *Babesia microti* and Powassan virus type 2, although illness due to these organisms is much less common.

Lyme disease has become very common in Vermont. In 2013, almost 900 reports of illness were received by the Vermont Department of Health (VDH), which is the most ever reported. Most of the reports have been in residents of the four most southern Vermont counties, but illness has been reported from all counties.

Most Lyme disease occurs in the spring and summer when the immature ticks (nymphs) are active. Nymphs are small and may go unnoticed. Removing ticks promptly can prevent illness, and ticks removed in less than 36 hours are unlikely to transmit Lyme disease.

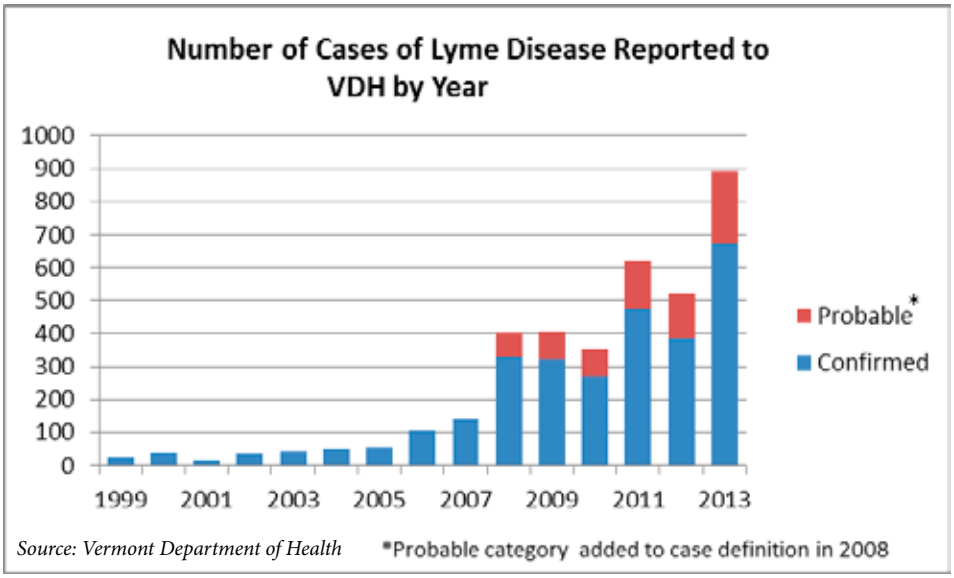
The diagnosis of Lyme disease is based on signs and symptoms with supportive lab results. Many patients do not recall being bitten by a tick so a history of a tick bite is not necessary for diagnosis. An erythema migrans (EM) rash in a person who has recently been in tick habitat in an endemic area is pathognomonic for Lyme disease, and laboratory testing is not necessary to confirm the diagnosis. Most of Vermont is considered endemic.

For patients without an EM rash, serology is the recommended diagnostic test. A screening IFA or ELISA antibody test should be done initially. Positive or equivocal results should be confirmed by Western blot for IgM and IgG. Skipping the screening test is not recommended and can lead to false positive results. Used properly, this testing scheme is both sensitive and specific. However, keep in mind that serology can be negative during the first four weeks after infection, and it may be appropriate to retest a patient if Lyme disease is strongly suspected. Most people with Lyme disease will seroconvert within four weeks and IgG will be detectable by Western blot. There is no test of cure for Lyme disease. Antibodies can persist for months and even years in successfully treated patients, therefore post-treatment testing is not recommended.

Treatment depends on the symptoms and stage of Lyme disease. Early Lyme disease can be treated for 10 to 21 days of oral antibiotics. Doxycycline is the preferred drug, but amoxicillin or cefuroxime axetil can also be used. Disseminated disease may require up to four weeks of treatment and may require IV antibiotics. Patients treated early will usually recover completely. Longer courses of antibiotics have not been proven to be effective and are not recommended. For detailed information about treatment see the Infectious Disease Society of America (IDSA) Guidelines at http://www.journals.uchicago.edu/doi/full/10.1086/508667.

VERMONT DEPARTMENT OF HEALTH

Approximately 10 to 20 percent of patients appropriately treated for Lyme disease will have ongoing symptoms of fatigue, pain, or joint and muscle aches. These can last for more than six months. Although often called chronic Lyme disease, there is no evidence of a chronic infection. This condition is more accurately called Post-treatment Lyme Disease Syndrome (PTLDS). The exact cause of PTLDS is not yet known, but it's likely that symptoms are the result of residual damage to tissues and the immune system that occurred during the infection. There is no evidence that antibiotics improve outcomes of people with this condition.



Mosquito-borne diseases

In recent history, mosquito-borne diseases had been virtually unknown in Vermont until West Nile virus (WNV) appeared in the state in 2000. Since then, eleven cases from seven different counties have been reported, with seven cases occurring in the past three years.

In September 2012, the first two human cases of Eastern equine

(continued on page 10)

(**Diseases** *continued from page 8*)

encephalitis (EEE) were confirmed in Vermont. Both were adults from Rutland County. In 2013, two horses in Franklin County were diagnosed with EEE, which means that residents in other parts of Vermont may also be at risk of infection. EEE will likely continue to be a rare disease in Vermont, but the severity of the illness makes this an important disease to monitor.

EEE is a viral infection that causes either a self-limiting febrile illness or encephalitis. The type of illness and symptoms depends on the age of the person and other host factors. If no central nervous system involvement occurs, recovery can be complete. However, approximately one-third of encephalitic cases are fatal, and patients who survive are often left with disabling and progressive mental and physical conditions.

About 80% of WNV infections are subclinical. Most of the remaining 20% of infections result in West Nile fever which is characterized by non-specific symptoms such as fever, headache and fatigue. Some people develop a skin rash on the trunk, swollen lymph nodes or eye pain. Recovery is usually complete.

In about 1% of WNV infections, neuroinvasive disease develops, and clinical syndromes ranging from febrile headache to aseptic meningitis to encephalitis may occur. This is most common in older patients. A few patients develop flaccid paralysis. Recovery can be slow and neurologic deficits may become permanent. About 10% of neuroinvasive cases are fatal.

Treatment for both diseases is symptomatic.

Serologic testing is recommended to diagnose WNV and EEE infections. A PCR on a CSF sample can also be diagnostic when testing is done early in the course of illness. Most acutely ill patients will test positive for virus-specific IgM antibody in serum or cerebrospinal fluid (CSF). However, samples taken early in the course of illness, within the first 8 days, may be negative, and a convalescent sample may be necessary for accurate diagnosis. The detection of only IgG antibody is not suggestive of an acute infection. This is especially relevant for WNV because asymptomatic infections are much more common than illness.

For more information, visit http://healthvermont.gov.

Web Site Resources

U.S. Health Workforce Chartbook Available

The Health Resources Services Administration (HRSA) National Center for Health Workforce Analysis recently released The U.S. Health Workforce Chartbook which presents data on 35 U.S. health occupations. It is available at: **www.bhpr.hrsa.gov/healthworkforce/index.html**.

Tools for Coordination of Care

A toolkit to help primary care physicians optimize coordination of care with subspecialists and prepare patients for the referral has been developed by the American College of Physicians and is available at: **www.acponline.org/pressroom**.

Vermont Plan for SIM Grant

The four year federal State Innovation Model (SIM) grant will fund activities inside and outside of state government over the next four years to expand and integrate innovative health care provider payment and health information technology that supports more effective and efficient care delivery. Called the Vermont Health Care Innovation Project (VHCIP), the newly-released plan for this grant can be found at: **www.healthcareinnovation.vermont.gov**.

Vermont Oral Health Plan 2014

The Vermont Oral Health Plan 2014, developed by the Vermont Department of Health Office of Oral Health, has been released at: **www.healthvermont.gov/family/dental/documents/oral_health_plan.pdf**.

New Guidance for Concussion/Mild TBI

The Defense and Veterans Brain Injury Center have released a resource on "Progressive Return to Activity Following Acute Concussion/Mild Traumatic Brain Injury: Guidance for the Primary Care Manager and the Rehabilitation Provider in Deployed and Non-deployed Settings" which is available at **www.dvbic.dcoe.mil**.

Rural Mental Health and Substance Abuse Toolkit

Designed to help rural communities develop and implement programs that meet their behavioral health needs based on proven approaches and strategies. The toolkit was developed in collaboration with the University of Minnesota Rural Health Research Center and the NORC Walsh Center for Rural Health Analysis. Available at: **www.raconline.org/communityhealth**.

ASPIN Network: Community Health Worker Program

Describes a network established to address behavioral health integration, including the use of community health workers (CHWs), to better meet the behavioral health and primary care needs of rural, underserved counties in Indiana. Access it at: **www.raconline.org/success**.

Life Stages of Oral Health

Video and related oral health information by age group is available at: **www.nedelta.com/Oral-Health-and-Wellness/Life-Stages-of-Oral-Health**, courtesy of Northeast Delta Dental.

Medicare Services, Payment Data for 2012 Available

The U.S. Department of Health and Human Services released, for the first time, services and procedures provided to Medicare beneficiaries in 2012 by physicians and other health care professionals, including submitted charges and bills. Data can be seen at: **http://www.cms.gov/Research-Statistics-Data-and- Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/Physician-and-Other- Supplier.html**.

PLEASE POST

Electronic Health Record Communication Skills

Remember RESPECTS©

R	**Review the EHR prior to entering the room**	Briefly review chief complaint, vital signs, problem list and recent visits if possible.
E	**Entrance**	Greet patient, introduce self and build rapport before introducing the EHR.
S	**Say everything that you are doing**	Verbalize all actions performed when using the EHR.
P	**Position of the computer**	Position the computer so the patient is able to see the screen when necessary by putting the computer in the patient-provider-EHR triad.
E	**Engagement position**	Be in the engagement position during critical conversation with the patient: • Eye contact • Body fully aligned • Proper body movement • Non-distracted environment
C	**Computer confidence**	Value the computer, speak positively about the EHR.
T	**Teach**	Teach the patient through use of the EHR.
S	**Summarize and Sign out**	Verbally and simultaneously provide a written summary for the patient. Sign out of the computer at the end of the visit.

This tool was developed under a Frymoyer Scholar Grant at the University of Vermont College of Medicine.
This poster is reprinted in the spring 2014 "Primarily Vermont" newsletter for posting in patient exam rooms or near EHR workstations.

Calendar

MAY

30 *Child Psychiatry in Primary Care**, Doubletree Hotel, Burlington, VT

JUNE

3 *Digestive Detail: The Role of the Gut Microbiota in Health and Disease – Community Medical School*, Carpenter Auditorium, UVM Medical School. Contact: 802-847-2886

10-13 *Family Medicine Review Course**, Sheraton Hotel, S. Burlington, VT

JUNE

12-15 *Vermont Summer Pediatrics Institute**, The Equinox, Manchester, VT

JULY

1 *Hitting a Nerve: The Triggers of Sciatica – Community Medical School*, Carpenter Auditorium, UVM Medical School. Contact: 802-847-2886

SEPTEMBER

24 *Vermont Recruitment Day*, Hoehl Gallery & Courtyard, Given Building, UVM. Contact: 802-656-2179

SEPTEMBER

26 *Jeffords Quality Conference**, Sheraton Hotel, South Burlington, VT

**For more information call: UVM College of Medicine Continuing Medical Education at (802) 656-2292, or go online to http://cme.uvm.edu.*

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