



AHEC Pilots MedTrek for Middle Schoolers

During January to April 2017, a ten-week after school program called MedTrek was piloted with 13 Winooski Middle School students in the Student Success Winooski Afterschool Program and 12 UVM student mentors to cultivate interest in health sciences. MedTrek was also piloted with 12 students in grades five and six in the Johnson Elementary School Afterschool Program, with five Johnson State College students serving as mentors.

The program was developed by the Northeastern Vermont Area Health Education Center, Vermont Afterschool, and the UVM Larner College of Medicine AHEC Program. Learning modules included: vital signs and patient care, surgery simulation, neurology, infection control, mental health and wellness, dental hygiene, ambulance and emergency medicine. Guest health professionals, “the experts,” joined the group each week to share their knowledge, introduce tools and



Students review web resources for a unit with Charles MacLean, MD, Associate Dean for Primary Care at the UVM Larner College of Medicine.



Students made neurons, axons and dendrites using chenille stems.

technology that make their work exciting, and inspire young people to consider a career in health care. Hands-on activities and field trips to learn about the medical and dental care systems enhanced the curriculum.

It was an educational experience for both the middle school student “mentees” and the college student “mentors.” One 6th grader responded, “I want this to last longer,” when asked what the guest speaker could help him with. The mentors often expressed their own enthusiasm. “The simulation and pathology lab field trip was amazing! I was just as excited about this trip as

the kids were! The kids asked a lot of good questions, and it was awesome having medical residents there to answer the questions and explain what it’s like to work in medicine and to go through the process of becoming a physician.”

Learning from the pilot, MedTrek’s curriculum will be enhanced for 2018 and implemented at three to four participating Vermont Afterschool sites. ■

From the Editor

I am pleased to report that the U.S. Health Resources and Services Administration (HRSA) has announced its funding for VT AHEC’s FY18 to FY22 grant proposal. HRSA provides core funding to AHEC and also requires 1:1 match funds. VT’s academic medical center and community hospitals are the community partners that enable us to meet this requirement. These pooled resources are shared by the statewide AHEC network and allow us to sustain our health workforce pipeline development, recruitment, and retention activities that are making a difference throughout VT. We thank VT’s hospitals for their continued partnership and support.

This issue of *Primarily Vermont* highlights new collaborations and projects, and includes a book review (*Dreamland* by Sam Quinones) written by 4th-year medical student, K.C. Bolton.

Save the Date: Bridging the Divide 2017 will be held in partnership with the VT Medical Society’s Annual Meeting – November 3-4 at the Woodstock Inn. Meeting details will be shared soon.

Reminder: the 2018 VT Educational Loan Repayment Applications for Primary Care Practitioners, Psychiatrists, Dentists, and Nurses are due September 14, 2017. Visit www.vtahec.org or call 802-656-2658 for information. ■

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

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Vermont Academic Detailing Program for 2017-18

The Vermont Academic Detailing Program's 2017-18 offerings include sessions on: "Management of Opioids—Review of the VT Rules," "Advanced Management of Opioids," "Stroke Prevention in Atrial Fibrillation," "Women's Health – Contraception to Menopause," "Management of Type 2 Diabetes," and "Fluoride Varnish in Primary Care." One credit/contact hour of continuing education is approved for each session (e.g., 1 AMA PRA Category 1 Credit(s)TM.) Patient resources are included as part of this continuing education program. Small group or one-on-one sessions with an academic detailer can be arranged as well as "live" sessions online via user-friendly technologies such as GoToMeeting, Skype, or Zoom.

Contact Laurie McLean in the UVM Office of Primary Care and AHEC at 802-656-2888 or at laurie.mclean@uvm.edu to schedule an Academic Detailing session.

2017-18 Descriptions

**Indicates session is a qualifying CME activity related to the topic of safe and effective prescribing of controlled substances required by the Vermont Board of Medical Practice.*

*Management of Opioids: Review of the Vermont Rules

This session highlights the practical aspects of managing patients prescribed opioids in primary care, with a focus on following the new prescribing rules. This session includes the rules for both prescribing and querying the Vermont Prescription Monitoring System (VPMS). The topic compares the Centers for Disease Control recommendations for managing opioids with the Vermont rules.

*Advanced Management of Opioids

This session focuses on the clinical care of patients prescribed opioids in primary care. This session includes information about how to safely discontinue opioids in primary care. The topic reviews the evidence for non-pharmacologic and pharmacologic alternatives to opioids for conditions common in primary care, such as chronic low back pain.

Stroke Prevention in Atrial Fibrillation

This topic includes reviewing stratification tools for evaluating stroke versus bleeding risks, an overview of the available medications, strategies for optimizing therapy for individual patients, and strategies for safe prescribing.

Women's Health: Contraception to Menopause

This topic reviews the pharmacologic and non-pharmacologic approaches and research evidence for the management of contraception and menopausal symptoms across various age groups. Also discussed are the safety and side effect profiles of commonly used medications to manage contraception and menopausal symptoms.

Management of Type 2 Diabetes

This topic includes a review of strategies for lifestyle changes, new non-insulin medications to treat type 2 diabetes, and an overview of insulin.

Oral Health and Fluoride Varnish in Primary Care Medical Practices

This session offers an evidence-based pediatric (infants, toddlers, and preschool children, ages 6 months to the 6th birthday) oral health review to assist primary care medical practices with integrating the following as a standard of care: assess the oral health of young children; apply fluoride varnish to help prevent tooth decay; educate parents and caregivers about pediatric oral health; and make dental referrals.

Visit www.vtad.org for more information about the Vermont Academic Detailing Program. ■

Medical Management of Caries CE course on October 27

Medical Management of Caries and SDF/SMART will be presented by John Frachella, DDS, on Friday, October 27, 8:30 am-3:30 pm at the North End Studio A, 294 Winooski Avenue in Burlington, Vermont.

This course is offered free of charge. Dental professionals can earn six continuing education (CE) credits approved by the VT Board of Dental Examiners. The program is also open to medical practitioners, public health professionals, and policy-makers.

Dr. Frachella is a pediatric dentist and a national leader in the use of silver diamine fluoride (SDF) and silver-modified atraumatic restorative therapy (SMART) to arrest caries while simultaneously addressing destructive dental cavitation.

Tooth decay (cavities) is one of the most common chronic conditions of childhood in the United States. Each year Vermont spends about \$2 million treating early childhood caries (dental decay in children under age six) in hospital settings under general anesthesia. The training is aimed at reducing the burden of early childhood caries and promoting oral health for people who have difficulty accessing dental care in a traditional dental practice setting, such as people in nursing homes, in recovery, and in hospitals.

For more information about the training, contact Kristina Kiarsis (kristina.kiarsis@vermont.gov or 802-865-7747) at the Vermont Department of Health Office of Oral Health. ■

PRIMARILY VERMONT

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

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Medications and Breastfeeding

BY TRICIA CASSI, BSS, IBCLC, AND DIANE DRESSLER, BS, IBCLC, VERMONT DEPARTMENT OF HEALTH – WIC PROGRAM

Outdated breastfeeding information is still used in recommendations to mothers from health care providers which presents huge barriers to breastfeeding mothers and babies that make it hard for them to be successful, and unnecessarily spell the end of breastfeeding for some.

One such circumstance is when a health professional prescribes a medication that is believed to be incompatible with breastfeeding. A review of the package insert won't give the clinician the knowledge to make a clear decision about advising a mother to stop breastfeeding.

Mothers need accurate information to make an informed decision. Clinicians should thoroughly review the research on drugs and weigh the benefits of continuing to breastfeed while taking the medication versus the risk of using formula while using a medication that is contraindicated for breastfeeding. Some babies do not resume feeding at the breast once bottles are offered and they are prevented from breastfeeding.



Why is it important to maintain breastfeeding if a mom needs medication?

The American Academy of Pediatrics (AAP) promotes breastfeeding and human milk as the normative standard for infant feeding and nutrition, stating, "Given the documented short-and-long-term medical and neurodevelopmental advantages of breastfeeding, infant nutrition should be considered a public health issue and not only a lifestyle choice."¹

Your patients choose to breastfeed their babies for many good and well-informed reasons. The 2012 AAP policy statement on Breastfeeding and the Use of Human Milk reports that breastfeeding reduces the infant's risk of asthma, atopic dermatitis, otitis media, respiratory infections, RSV, NEC, childhood leukemia, and diabetes (types 1 and 2). Breastfeeding mothers have a reduced risk of breast cancer, premenopausal ovarian cancer, hypertension, and type 2 diabetes.²

Current recommendations specify exclusive breastfeeding for six months and continued breastfeeding after the introduction of solid foods at six months. Introducing formula to a breastfed baby changes the infant's gut flora and increases risk of disease, including atopic disease and diabetes, and should be avoided.³

1 American Academy of Pediatrics, Section on Breastfeeding. Breastfeeding and the Use of Human Milk. Pediatrics Mar 2012; 129 (3) e827-e841

2 Ibid

3 Walker, M. Supplementation of the Breastfed Baby: "Just One Bottle Won't Hurt" – or Will It? (2014) <http://massbreastfeeding.org/wp-content/uploads/2013/05/Just-One-Bottle-2014.pdf>

Mothers have a right to choose breastfeeding over formula feeding. Health care professionals can support a mother's decision to breastfeed by finding solutions that work and by referring the mother to a Board Certified Lactation Consultant (IBCLC) who can help a mother preserve her milk supply and maintain exclusive breastfeeding.

What medications are safe?

All medications transfer into human milk, but most not at levels that are dangerous to a breastfed baby.

Drugs may transfer into human milk if they:⁴

- Attain high concentrations in maternal plasma
- Are low in molecular weight (<800)
- Are low in protein binding
- Pass into the brain easily

According to Hale, bioavailability of the medication is another important factor. The infant's gut may destroy the drug, the drug may not be readily absorbed through the gut wall, or the drug may be rapidly picked up by the liver and either stored or metabolized, often not reaching the mother's plasma.

Most medications are compatible with breastfeeding. Only rarely do mothers need to abstain from breastfeeding.

Where can I find information about medications and their effect on pregnancy and lactation?

A wealth of fully-referenced information from the scientific literature is now available. Some links:

LactMed – toxnet.nlm.nih.gov/newtoxnet/lactmed.htm. U.S. National Library of Medicine's database contains information on drugs and other chemicals to which breastfeeding mothers may be exposed. Updated monthly and peer-reviewed. A free app is available for iPhone and Android.

Infant Risk Center – www.infantrisk.com. Texas Tech University Health Sciences Center; founded in 2011 by researcher Thomas Hale, PhD, RPh. Dedicated to promoting research, education and public service pertaining to medication safety for pregnant and breastfeeding mothers.

Medications and Mothers' Milk Online – www.medsmilk.com. Online version of the print book, *Medications and Mothers' Milk* by Thomas Hale. It is updated regularly, printable, requires a subscription.

MotherToBaby – www.mothersmilk.com. Organization of Teratology Information Specialists dedicated to providing evidence-based information to mothers, health care professionals, and the general public about medications and other exposures during pregnancy and while breastfeeding.

Nice Breastfeeding – www.nicebreastfeeding.com. Provides counseling tips for pharmacists. Health professionals may contact Dr. Frank Nice, RPh, DPA, CPHP for consultation advice at no cost through the website.

4 Hale, Thomas W. *Medications and Mothers' Milk*, 16th edition. Amarillo, TX: Hale Publishing LP; 2014. Preface.

Medications and Breastfeeding

(continued from page 3)

How can I support a breastfeeding mom who has to temporarily wean to take a prescribed medication that I know is contraindicated?

Develop a care plan that considers your patient’s desire to continue breastfeeding. Find a medication that is compatible with breastfeeding whenever possible.

If “pump and dump” is required for non-compatible meds, refer mother to expert breastfeeding help (IBCLC preferred) for information and support regarding:

- Expressing and saving milk prior to taking medication,
- Expressing enough to have a minimum supply of milk that will last 2-4 weeks after the cessation of the medication,
- Feeding baby expressed milk with paced-bottle feeding technique, and
- Guidance for getting the baby back to breast after medication use. ■

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American Academy of Pediatrics, Section on Breastfeeding. Breastfeeding and the Use of Human Milk. *Pediatrics* Mar 2012; 129 (3) e827-e841

Bartick M et al. (2010). The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. *Pediatrics*, 2010; 125(5): e1048-e1056.

Hale, Thomas W. *Medications and Mothers’ Milk*, 16th edition. Amarillo, TX: Hale Publishing LP; 2014. Preface.

Walker, M. Supplementation of the Breastfed Baby: “Just One Bottle Won’t Hurt” – or Will It? (2014) <http://massbreastfeeding.org/wp-content/uploads/2013/05/Just-One-Bottle-2014.pdf>

AHEC Partners on Two Federal Grants to Increase Health Workforce Diversity; and to Improve Rural Health

The Vermont AHEC Network, in partnership with collaborators in New Hampshire and Maine, has been awarded two, separate federal grants designed to increase health workforce diversity and to respond to unmet rural health care system needs.

Northern New England Health Workforce Diversity Partnership

The *Northern New England Health Workforce Diversity Program* aims to increase the diversity of health professionals, health researchers, and health scientists through programs at the high school and undergraduate levels that focus on racial and ethnic health disparities and health equity. Mentoring is a key component of the planned curriculum for a new health sciences enrichment program. The project seeks to support academic achievement for low income students, English language learners (ELL), and students of color to increase the number of health professionals from underrepresented backgrounds. This initiative is funded by the U.S. Office of Minority Health.

The *Northern New England Health Workforce Diversity Partnership* is comprised of the AHEC Networks of Maine, New Hampshire, and Vermont; the Northern Vermont AHEC is the lead. Together, the Partnership has over 60 years’ experience delivering health careers pipeline programs in northern New England.

Northern New England Extension for Community Healthcare Outcomes-Community Assessment and Resources (NNE ECHO-CARES)

The *Northern New England Extension for Community Healthcare Outcomes – Community Assessment and Resources* grant through the U.S. Health Resources and Services Administration (HRSA) will replicate the Extension for Community Healthcare Outcomes (ECHO) model developed in New Mexico. Under the grant, ECHO sessions will be offered to rural primary care physicians on a range of complex conditions. It is hoped that adoption of the ECHO model will result in expanding access to care to rural residents in the tristate region.

The project’s core collaborators are the quality improvement organizations in each of the three Northern New England states: Maine Quality Counts, Citizens Health Initiative at UNH, and the Vermont Program for Quality Health Care (VPQHC); the Northeast Telehealth Resource Center (NETRC); and the Area Health Education Centers (AHECs) in ME, NH, and VT. Maine Quality Counts is the project lead and there are numerous other partnering organizations planned in each state. ■

**SAVE
THE
DATE**

The Vermont Area Health Education Centers (AHEC) Network
presents the

**VERMONT GERIATRICS
CONFERENCE**

April 11, 2018
Hampton Inn, Colchester, VT



Ask Dr. Amidon: Cannabis and Youth

By DAVID C. RETTEW, MD, ASSOCIATE PROFESSOR OF PSYCHIATRY AND PEDIATRICS DIRECTOR, CHILD & ADOLESCENT PSYCHIATRY FELLOWSHIP DIRECTOR, PEDIATRIC PSYCHIATRY CLINIC UNIVERSITY OF VERMONT LARNER COLLEGE OF MEDICINE



How does Vermont compare with other states with regard to youth cannabis use?

National surveys indicate that Vermont has the second highest rate of teen cannabis use, behind Colorado. According to the 2015 Vermont Youth Risk Behavior Survey, 22% of Vermont high school students report having used marijuana at least once in the past 30 days. This rate has remained relatively constant over the past decade, while tobacco and alcohol use has dropped during the same interval.

Every other year, since 1993, the Health Department and the Agency of Education sponsor the Vermont Youth Risk Behavior Survey (YRBS). The YRBS was developed by the Centers for Disease Control and Prevention in 1990 to monitor priority health risk behaviors that contribute to the leading causes of death, disease, injury and social problems among youth. Visit www.healthvermont.gov for the most current report (2015) and statistics about marijuana use and other health factors.

What are the effects of cannabis on the developing brain?

A number of neuroimaging studies support the hypothesis that cannabis use, particularly among youth, is associated with aberrant brain growth and functioning in many regions of the brain involved in emotional regulation, memory, and executive functioning. Disturbed microstructural organization in the corpus callosum has also been linked to heavy cannabis use. A recent study in the journal *Nature* found that cannabis-associated memory loss may be related to inactivation of the mitochondria within the hippocampus.

What are the known risks associated with cannabis use in youth?

Some of the medical problems associated with cannabis use include an approximate doubling of the risk of a psychotic illness such as schizophrenia and an increased risk of cannabis dependence compared to adult users. Good evidence now also links regular cannabis use with decreased memory, attention, and executive functioning skills that may not fully recover when individuals stop using cannabis. Negative effects on the fetus have also been documented among pregnant users.

With cannabis now an approved indication for post-traumatic stress disorder (PTSD), what do we know about its potential benefit as a treatment?

Medical marijuana will only now be an option for adults with PTSD, not for youth. Unfortunately, the approval of medical marijuana for PTSD occurred in the absence of any systematic scientific evidence. In fact, the medical literature generally finds evidence that cannabis tends to make PTSD symptoms worse, not better. A large observational study of veterans showed that cannabis use was associated with higher levels of aggression, substance abuse, and PTSD symptoms.

Is cannabis a gateway drug?

Many youth describe a path on which cannabis use precedes more intensive substance use. While some of this association may be related to an underlying genetic risk, studies in both animals and human twins do suggest that cannabis use itself increases the risk of further substance use. Sadly, after a very successful public health campaign to reduce nicotine use in adolescents, there is now an evidence of a “reverse gateway” in which early cannabis use leads some youth to begin smoking cigarettes.

What resources are available for health professionals and educators to use with students and families?

Two good sources for science-based information about cannabis use in youth are the following:

- National Institute for Drug Abuse: www.drugabuse.gov
- Partnership for Drug-Free Kids: www.drugfree.org ■

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.



The Uneven Decline in U.S. Cigarette Smoking

The latest figures (2015, Centers for Disease Control) indicate a 15.1% smoking rate in the United States, reflecting the biggest one year drop in 20 years, but among those with a high school diploma the smoking rate is 40%. America's lower socioeconomic class smokes more and dies more from cigarettes.¹

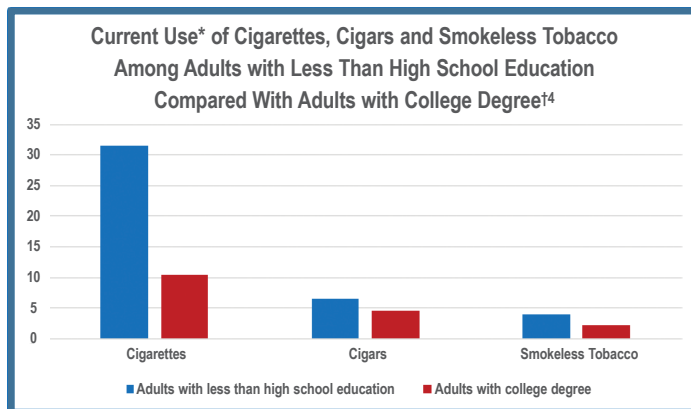
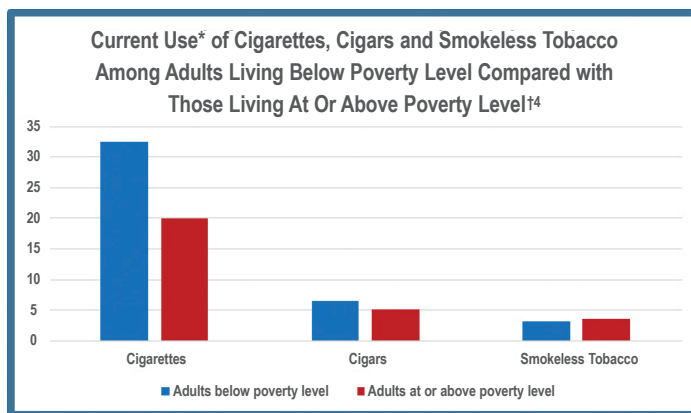
Initially a habit of the rich, enhanced by Hollywood glamour in the early 20th century, smoking among individuals in the nation's highest income families declined precipitously (62%) in the 35 years following the 1964 surgeon general's report on the ill effects of smoking. Among those in families with the lowest income during those 35 years, the rate decreased by only 9%.¹

The most effective tools for reducing the smoking rate are shown to be raising the price of cigarettes, smoke-free laws, and graphic advertisements.² Tobacco companies invest considerable resources "to lobby against smoking restrictions and taxes, especially in poorer, often rural, and Southern states where smoking remains highest."¹

Despite the progress, smoking is still the leading cause of preventable illness in the U.S.; the CDC attributes 480,000 deaths each year to smoking. Smoking cessation advocates point to the rise of e-cigarette use, especially among the young, as well as decreasing funding for anti-smoking efforts as challenges.

At the University of Vermont's Center on Behavior and Health, clinical trials are pointing the way to a more effective incentive: financial incentives.³ Noting that smoking remains prevalent and is even increasing among certain vulnerable populations such as economically disadvantaged groups, those with substance abuse or mental illness, certain ethnic and racial minorities, and gender and sexual minorities, the investigators offered financial incentives to pregnant women who stopped smoking, verified by urine testing. The study found that those who received incentives, on average, were more successful at quitting than the control group that did not receive incentives. The pregnant woman who successfully quit smoking had a mean birth weight about 200 grams greater, mean gestational age at delivery was nearly a week greater, they breastfed longer and were less likely to experience postpartum depressive symptoms. The researchers note that financial incentives were more successful than other types of incentives and have widespread potential for encouraging other kinds of healthy behavior. ■

1 Wan, W. America's New Tobacco Crisis: The Rich Stopped Smoking, The Poor Didn't. *Washington Post*. June 13, 2017. www.washingtonpost.com. Accessed July 6, 2017.
 2 Kenworthy, J. US Smoking Rate Sees Faster Decline. *The Christian Science Monitor*. June 13, 2016 www.csmonitor.com. Accessed June 30, 2017.
 3 Higgins, Davis and Kurti. Financial Incentives for Reducing Smoking and Promoting Other Health-Related Behavior Change in Vulnerable Populations. March 2017. journals.sagepub.com/doi/full/10.1177/2372732216683518. Accessed July 13, 2017.



CDC, from National Survey on Drug Use and Health 2012

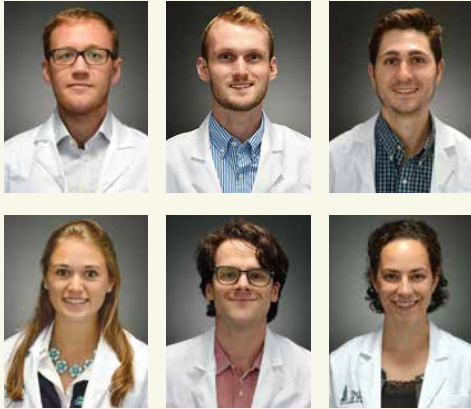
TOBACCO FACTS

- In 2015, 24.7% of Vermont high school youth reported currently using any tobacco product, including e-cigarettes. Among that same group, 10.8% said they currently smoke cigarettes.
- Among Vermont adults, 16% smoked cigarettes in 2015; 1,000 adults die from smoking-related illnesses each year; \$348 million was spent on health care costs due to smoking in 2009.
- The Vermont telephone-based coaching program (1-800-QUIT-NOW) provides free counseling and medication to those who qualify.
- Incoming calls to the Vermont state quitline increased by an average 33% during the 2016 Tips™ from Former Smokers campaign sponsored by the Centers for Disease Control and Prevention (CDC). The campaign generated 1,858 calls to the quitline from January 25 to June 12, 2016.
- Tobacco prevention and control activities are a public health "best buy." For every dollar spent on tobacco prevention, states can reduce tobacco-related health care expenditures and hospitalizations by up to \$55.
- Between 2013 and 2015, there was a 55% increase in quitline registrations among Vermont's Medicaid population.

(cdc.gov/tobacco: Extinguishing the Tobacco Epidemic in Vermont)

PEOPLE IN THE NEWS

Freeman Foundation Legacy Scholarship Recipients Chosen



Freeman Foundation Legacy Scholarships of \$6,000 each for tuition costs have been awarded to six members of the UVM Larner College of Medicine Class of 2019. They are: **Drew Corse, Wyll Everett, Andrew**

Gallagher, Margaret Johnston, Brendon Kinsley, and Callie Linehan. The program was started in 2010 to honor the Freeman family and Foundation for their long history of support for UVM Larner College of Medicine students. Recipients sign a letter of intent to practice medicine in Vermont following completion of their medical training.

Noonan Appointed President and COO for CVMC

Anna Noonan, BSN, MS, RN, a Barre native, is the new president and chief operating officer for Central Vermont Medical Center (CVMC), one of the six hospitals in the Vermont Health Network. Ms. Noonan is a registered nurse with 35 years of health care experience, including the last six years as Vice President of the Jeffords Institute for Quality and Operational Effectiveness at the UVM Medical Center.

UVM Alums Choose Dr. First for Faculty Award

Lewis First, MD, professor and chair of the Department of Pediatrics at the UVM Larner College of Medicine, received the George V. Kidder Outstanding Faculty Award from the UVM Alumni Association this spring. The Kidder Award recognizes one full-time UVM faculty member for excellence in teaching and extraordinary contributions to the enrichment of campus life. It is named for Dr. George V. Kidder, UVM Class of 1922 and former dean of the College of Arts and Sciences at UVM.

Primary Care Practices Recognized for High Immunization Rates

Nine primary care practices have been recognized by the Vermont Department of Health for their high percentage of infants, children, and teens immunized against vaccine-preventable diseases. The nine practices and their teams are recognized for meeting the *HealthyPeople 2020* goals for childhood immunizations; last year, five practices in Vermont met the criteria. Those recognized this year are: Rebecca

Collman, MD (Burlington); Essex Pediatrics, PC (Essex Junction); Gifford Pediatrics (White River Junction); Green Mountain Pediatrics, PC (Bennington); Hagan, Rinehart & Connolly Pediatricians (Burlington); Richmond Pediatric and Adolescent Medicine (Richmond); Springfield Health Center Family Medicine (Springfield); UVMHN CVMC Pediatric Primary Care (Barre); and UVM Medical Center Pediatric Primary Care (Williston). Information about recommended vaccinations is available at: www.healthvermont.gov/scorecard-infectious-disease.

VMS Names Jessa Barnard Executive Vice President



The Vermont Medical Society has named **Jessa Barnard, Esq.**, as its next executive vice president. She will assume leadership of the organization December 1, following the retirement of **Paul Harrington** who led the society for 15 years. Ms. Barnard is a member of the Statewide AHEC Advisory Committee and the Vermont Academic Detailing Advisory Group.

Bi-State Primary Care Association Names New Vermont Director

Georgia Maheras, Esq., is the new Vermont Director of Public Policy at Bi-State Primary Care Association, succeeding **Sharon Winn**. Ms. Maheras was Vermont's State Innovation Models (SIM) Project Director and Deputy Director for Health Care Reform since 2013, and she was the first Executive Director of the Green Mountain Care Board.

VERMONT

Resources for VT Medicaid Providers

- Provider Enrollment Applications: www.vtmedicaid.com/#!/provEnrollAppPackets
- Provider Manuals: www.vtmedicaid.com/#!/manuals
- Provider Resources: www.vtmedicaid.com/#!/resources
- Medicaid Banners: www.vtmedicaid.com/#!/bannerMain.

VDH Health Care Workforce Reports Available

Health care workforce reports for Vermont are available for: 2017 – physician assistants; 2016 – psychologists, clinical social workers, naturopathic physicians; 2015 – dental hygienists, dental assistants, pharmacists and pharmacy technicians; 2014 - licensed nursing assistants; 2014 and 2016 – marriage and family therapists; 2015 and 2017 – mental health counselors; and 2015 – licensed alcohol and drug abuse counselors. The reports for each profession are located at: www.healthvermont.gov/health-statistics-vital-records/health-care-systems-reporting/health-care-workforce.

VT Physicians Prescribe Outdoor Exercise

Vermont physicians are prescribing outdoor exercise this summer with free passes to the Vermont State Parks to promote healthy, active lifestyles. The Vermont Governor's Council on Physical Fitness and Sports, and the Vermont Department of Forests, Parks, and Recreation provided physicians with free passes to the state parks, guided by the principles of Exercise is Medicine (EIM). EIM is a global health initiative focused on encouraging health care providers to include physical activity when designing treatment plans for patients. EIM is committed to the belief that physical activity is integral in the prevention, treatment, and management of diseases and should be regularly assessed and "treated" as part of all health care. Further information about EIM is at: www.exerciseismedicine.org.



CARA KESTER

UVM Health Network Recruiting More Psychiatrists

The University of Vermont Health Network is expanding the number of psychiatrists on staff and doubling the number of child psychiatrists the academic medical center trains each year, from four to eight. The UVM Medical Center will create an Adirondack Division in its Department of Psychiatry so the psychiatrists at the Champlain Valley Physicians Hospital in Plattsburgh will be linked to the academic medical center. These efforts are designed to address an ongoing shortage of psychiatrists, which is a national trend.

Dental Specialty and Other VT Medicaid Information Updates Requested

Dental providers enrolled with Vermont Medicaid are encouraged to verify their specialty information on the Medicaid Provider Lookup page (www.vtmedicaid.com/#/providerLookup). Verifying that your information is accurate and up-to-date on a regular basis is recommended to ensure the most reliable information regarding general dentistry and specialty service locations for Medicaid patients. If you find that information associated with you or your practice needs to be updated, use the General Dentist and Dental Specialty Form, located at www.vtmedicaid.com/#/provEnrollDataMaint. If you have questions about this process, contact Clark Eaton, Vermont Provider Relations Specialist, at 802-879-5647.

Providers' Guide for Preventing Type 2 Diabetes

"Preventing Type 2 Diabetes," developed by the Vermont Department of Health, the Vermont Blueprint for Health, and the Greater Burlington YMCA, is a new toolkit to assist primary care practitioners.

It is likely that one-third of patients over 18, and half of those over 65, have prediabetes. The guide helps primary care office staff link patients with free, evidence-based diabetes prevention programs. It also provides guidance that helps practices to screen and identify patients for prediabetes programs; code office visits for reimbursement; refer patients to the YMCA's Diabetes Prevention Program; and obtain feedback about patients' progress in the program. The toolkit is available at www.healthvermont.gov, and patient resources are posted at www.myhealthyvt.org.

VT Public Health Dental Hygienists' Outreach

Last year, five (four half-time and one full-time position) public health dental hygienists served over 3,179 individuals in their local health offices which represents 37 percent of Women Infants and Children (WIC) participants. They applied fluoride varnish at 468 WIC appointments (mostly to children), and had appointments with 149 non-WIC individuals, mostly adults. The Public Health Dental Hygienist Program is relatively new at the Vermont Department of Health, and has a goal of expanding to new locations in the state. See the full report at www.healthvermont.gov/sites/default/files/documents/pdf/HPDP_PHDH%202016%20process%20measures.pdf.



VT Legislature Expands Telemedicine Potential

Act 64 (S.50), an act relating to insurance coverage for telemedicine services delivered in or outside a health care facility, was signed and enacted on June 7, 2017. The new law expands the use of telemedicine and mandates that all insurers reimburse for such services. The broad language of the bill which authorizes a qualified provider to offer telemedicine services also provides flexibility for future types of telemedicine practices. Detailed language that requires a healthcare provider receive a patient's informed consent before using telemedicine, except in case of medical emergency, is also part of Act 64. Visit legislature.vermont.gov for details.

VT Workforce Demand Report Released

Projections of current and future demand for health workers between 2015 and 2030 are detailed in the just-released Vermont Health Care Innovation Project Health Care Workforce Work Group report. The group commissioned IHS Markit to develop the projections which indicate Vermont will experience a slight decline in population offset by growth in demand for health care services because of a 50% increase in the 65+ population. Large demand increases are projected for specialties that serve older populations, such as internal medicine/adult primary care, family medicine, geriatrics, hematology/oncology, and urology. The

highest percentage of growth is anticipated to be in direct care services professions such as nurse aides (47%) and home health aides (41%). The full report can be seen at: www.healthcareinnovation.vermont.gov/content/vermont-health-care-demand-modeling-final-report-6-16-17.

New VT Mothers and Oral Health Care

There has not been a significant change in the rate of dental visits among Vermont women who gave birth between 2012 and 2014, according to the Pregnancy Risk Assessment Monitoring System (PRAMS), a survey of women who recently gave birth that asks about their experiences and behaviors before, during, and shortly after their pregnancy. Overall, the survey results indicate there were significant disparities in dental visits by education, income, and age. In the survey, 26% of respondents said they could not afford to go to the dentist or a dental clinic, but since the Medicaid dental benefits cap was removed for pregnant women, fewer Medicaid-enrolled Vermonters reported they could not afford to go to the dentist or dental clinic during pregnancy. More information about the Vermont PRAMS report is available at www.healthvermont.gov/PRAMS

Two New VT Opioid Treatment Centers

Opiate addiction treatment centers opened recently in St. Albans and in Vergennes. Valley Vista fast-tracked its opening in Vergennes after the Maple Leaf Treatment Center closed in Underhill. It is open to women over the age of 18. Added to new treatment beds in Rutland's Recovery House Network, the Valley Vista opening brings the state to the residential treatment capacity it had before Maple Leaf closed.



The St. Albans facility is temporarily housed at Northwest Regional Medical Center until its permanent location on Main Street is ready this fall. It is part of the Care Alliance for Opioid Addiction. Once the permanent location opens, it will be able to treat nearly 700 patients who would otherwise need to travel to Chittenden County or Newport for treatment.

VT Prescription Monitoring System Enhancements

The Vermont Prescription Monitoring System (VPMS) began using a new software platform called AWARx, on June 15. Though new to Vermont, the program is used by many other states and offers improved functionality and clinical tools.

For VPMS technical support, including help with system access, uploading issues, or forgotten passwords: Tel: 1-888-461-8628, Email: VTPMS@appriss.com

For VPMS programmatic support or general inquiries: Vermont Prescription Monitoring System, Vermont Department of Health, Tel: 802-652-4147, Email: AHSVDHVPMS@vermont.gov. www.healthvermont.gov/alcohol-drugs/professionals/vermont-prescription-monitoring-system-vpms

NATIONAL

Opioid-Related Inpatient Stays and Emergency Department Visits

A Statistical Brief published by the Healthcare Cost and Utilization Project, sponsored by the Agency for Healthcare Research and Quality (AHRQ), shows that between 2005 and 2014, the national rate of opioid-related inpatient stays increased 64.1 percent and the national rate of opioid-related emergency department (ED) visits increased 99.4 percent. The complete Brief is available at: www.hcup-us.ahrq.gov/reports/statbriefs/sb219-Opioid-Hospital-Stays-ED-Visits-by-State.pdf.

U.S. Hepatitis C Cases Soar Due to Drug Use

Spurred by an increase in the use of heroin and other injection drugs, new cases of hepatitis C rose nearly 300 percent between 2010 and 2015, according to the Centers for Disease Control and Prevention (CDC). The opioid addiction epidemic is creating tens of thousands of new cases of hepatitis C, with unclean needles the leading cause of infections.

First Year Medical Residents Can Work 24 Consecutive Hours

The Accreditation Council for Graduate Medical Education has lifted the 16 consecutive hours of patient care cap for first year residents and replaced it with a 24 hour cap, as of July 1. The group said the move will enhance patient safety because there will be fewer handoffs from doctor to doctor. It also said the longer shifts will improve physicians' training by allowing them to follow their patients for more extended periods, especially in the critical hours after admission. Residents are still not allowed to work more than an average of 80 hours per week or work overnight in the hospital more than one night in three.

New Dental Code for Diabetes Testing

A new dental procedure code will go into effect in January 2018 when dentists will be able to bill for: D0411 – Guide to Point of Care Diabetes Testing and Reporting. This chairside screening procedure aids, along with appropriate referral, in the diagnosis of pre-diabetes and diabetes. This procedure, also known as finger-prick random capillary HbA1c glucose testing, is relevant to dentists as diabetes is a risk factor related to periodontal disease.

Codes relating to teledentistry (D9995 and D9996), and D1354 — Guide to Interim Caries Arresting Medicament Application (aka Silver Diamine Fluoride) are also detailed at: www.ada.org/en/publications/ada-news/2017-archive/july/cdt-coding-guides-educate-dentists-on-new-revised-codes.

Book Review: “Dreamland,” the Opioid Epidemic 101

By KENYON C. BOLTON, M.A.

K.C. Bolton is a 4th-year medical student at the Larner College of Medicine at UVM. Originally from Atlanta, GA, he moved to Vermont in 2011. Prior to medical school, he served in the U.S. Coast Guard, completed a B.A. and M.A. in Geography at McGill University, and worked in breast cancer epidemiology at the Office of Health Promotion Research at UVM. He looks forward to applying to Internal Medicine residency programs this Fall.

Book Review: “Dreamland,” the Opioid Epidemic 101
Originally published May 10th, 2017 in the online magazine for medical students, in-Training.org.

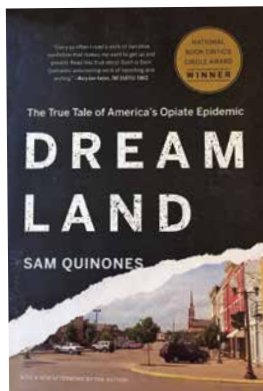


Every medical library should have a table of recommended books. After a day of study, I often linger by the one at my school, wishing that I had more time for a good read. I recently picked up a recommendation and didn't let go. The author's name was familiar and the praise for the book was compelling, but most of all it was the subtitle that drew me in: *The True Tale of America's Opiate Epidemic*.

Dreamland,¹ by Sam Quinones, offered to bolster our relatively scant classroom focus on pain management and opioid addiction. The teaching of these topics has been described as “limited, variable, and often fragmentary” across U.S. medical schools.² Nevertheless, the topic of opioid addiction has come up repeatedly in the past year. The first baby I helped deliver during my OB/GYN rotation was born opioid-dependent and immediately taken into Department of Children & Families (DCF) custody. I've seen what a vicious withdrawal looks like during Inpatient Medicine, and I've observed buprenorphine treatment encounters in Vermont's Hub & Spoke program. As students, we're entering practice just as this epidemic is surging into the public sphere. Yet many of us have little understanding of its beginnings and how our profession has been implicated. In the telling of this history, Quinones weaves together one of the most cautionary tales for the practice of medicine in recent history.

In raw language that draws from the heroin economy, pill mills, drug diversion and family tragedy, Quinones channels the anger and despair that has brewed across the country for decades. The book pulls together two nationwide stories that collide in the small city of Portsmouth, Ohio. Framed by the downward economic trajectory of rust-belt America, Quinones tracks the influx of heroin harvested from a small region in Mexico and the simultaneous rise of prescription opioids. As innovative dealers worked eastward to find new markets for uncut heroin in the early 1990s, opioid prescribing for chronic pain was garnering influence in medical conferences, pharmaceutical companies and doctors' offices.

Through numerous interviews, Quinones details the revolutionary origins of pain management, a discipline that arose to rectify medicine's previously callous approach to patient



suffering. In 1960, the country's first chronic pain clinic opened at the University of Washington and focused on multidisciplinary approaches that addressed many aspects of a patient's life. In the 1980s, the World Health Organization developed guidelines for treating intractable cancer pain. However, this humane trend took an ill-fated turn when opioids gained momentum as a stand-alone treatment for chronic pain, notably with Purdue's introduction of OxyContin in 1996. With the support of influential physicians,³ Purdue capitalized on the legitimate 'pain revolution,' as the movement

was called, and aggressively marketed OxyContin as a minimally addictive drug. Quinones reports:

Purdue had its salespeople dig in on doctors who its data showed were already heavy opiate prescribers. To expand the numbers of prescribers, sales reps also visited nurses, pharmacists, hospices, hospitals, and nursing homes. The physician call list used by Purdue sales reps began at thirty-three thousand, then rose to more than seventy thousand doctors nationwide. Purdue's sales force tripled to more than a thousand as OxyContin gained momentum (p. 133).

As opioid prescribing soared, overdose deaths followed. In 2007, Purdue paid \$634.5 million in federal fines for misrepresenting OxyContin's potential for misuse and addiction, one of the largest penalties levied on a drug company at the time. Since then, prescription opioid overdose death rates continue to rise, and heroin overdose deaths have climbed 4-fold since 2010 as the drug has become an easier and cheaper alternative.^{4,5}

How did physicians, the vast majority of whom were trying to do the right thing for their patients, become accessories to this scourge? Herein lies one of the most cautionary lessons of *Dreamland* for me: the impact of misrepresented scientific evidence. The widespread acceptance of opioids as a minimally addictive treatment for chronic pain was based on a handful of small studies.⁶ These publications carried outsized influence as the pain revolution became married to the fortunes of the prescription opioid industry.⁷ One notable example was a 1980 letter-to-the-editor in *The New England Journal of Medicine* entitled “Addiction Rare in Patients Treated With Narcotics.”⁸ In an unforgettable chapter, Quinones documents how the one-paragraph letter's reputation grew into a “landmark study” showing that “less than 1 percent” of patients treated with narcotics become addicted (p. 107). In a time before a PubMed search could quickly verify the contents of a reference list, this meager letter was cited over and over in conferences and seminars nationwide. Along with other overstated studies, it contributed to a groundswell of liberalized opioid prescribing and the once widely-held tenet that pain protects against addiction, a theory that I've still heard referenced despite up-to-date evidence to the contrary.⁴

The momentum of this multi-decade 'pain revolution'

in medicine has since been redirected toward mitigating its unanticipated impact while still providing important care for patients with chronic pain.⁴ And yet, upon graduation, we'll encounter the continuing epidemic head-on. If we're to have a clear understanding of what our patients face, it is incumbent upon us to reckon with our profession's role in this history and to heed its lessons. To this end, *Dreamland* provides an indispensable perspective. ■

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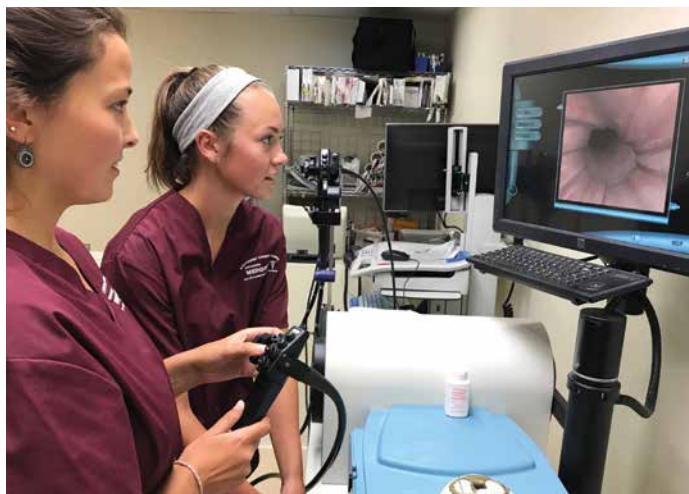
MedQuest 2017



Timothy Kittler, from Otter Valley Union High School, learned the technique of suturing in a Southern Vermont AHEC MedQuest at Southern Vermont College.



Justin Thurber and classmate Molly Hood, both Spaulding Union High School students, teamed up in sheep heart dissection lab at Johnson State College during a Northeastern Vermont AHEC MedQuest experience.



Sarah Scarlett and Hannah Harlow, both from Bellows Falls, practice colonoscopy with tech trainers in the UVM Simulation Lab during Advanced MedQuest.



Students toured the Clinical Simulation Lab at Vermont Technical College and found the heartbeat on a high tech mannequin in a Champlain Valley AHEC MedQuest.



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Calendar

SEPTEMBER

- 14-15 *Transforming Primary Care and Behavioral Health**
The Essex, Essex, VT
- 27 *Vermont AHEC's Health Care Workforce Recruitment
and Networking Day.* Hoehl Gallery & Courtyard,
UVM Larner College of Medicine, Burlington, VT
Call: 802-656-2179
- 27-29 *Primary Care Sports Medicine**. DoubleTree Hotel,
Burlington, VT

OCTOBER

- 6 *Women's Health and Cancer Conference**.
Stoweflake Conference Center, Stowe, VT
- 20 *Neurology for the Non-Neurologist**.
Stoweflake Conference Center, Stowe, VT

OCTOBER

- 27 *Medical Management of Caries.*
North End Studio A, Burlington, VT.
Contact: kristina.kiarsis@vermont.gov or
802-865-7747

NOVEMBER

- 3-4 *Vermont Medical Society Annual Meeting.*
Woodstock Inn, Woodstock, VT.
Call: 802-223-7898

**For more information call: UVM Larner College of Medicine
Continuing Medical Education and Interprofessional Education at
802-656-2292 or go online to <http://cme.uvm.edu>.*

Managing Opioids Safely and within Vermont Rules

SUMMARY FOR PRIMARY CARE PROVIDERS

Recommend Non-Opioid and Non-Pharmacological Treatment

- Nonsteroidal anti-inflammatory drugs (NSAIDs) and/or acetaminophen
- Acupuncture
- Chiropractic
- Physical therapy

Only prescribe opioids if expected benefits for both pain and function are anticipated to outweigh risks to the patient. If opioids are used, combine with non-opioid alternatives.

Query the Vermont Prescription Monitoring System (VPMS)*

First-time Prescriptions:

- Prior to writing a first opioid prescription for 10+ pills (e.g. opioids, tramadol)
- Prior to writing a first prescription for a benzodiazepine, buprenorphine, or methadone
- Prior to starting a patient on a chronic opioid (90+ days) for non-palliative therapy

Re-evaluation: At least annually (at least twice annually for buprenorphine)

- Centers for Disease Control (CDC) recommendation: every prescription, or at least every 90 days

Replacement: Prior to writing a replacement (e.g. lost, stolen) of any scheduled II-IV controlled substance

Provide Patient Education and Obtain Informed Consent

- Discussion of risks, including side effects, risks of dependence and overdose, alternative treatments, appropriate tapering and safe storage and disposal
- Provide patient with the Vermont Department of Health (VDH) Patient Education handout
- Obtain signed informed consent, even for acute prescriptions
- VDH education resources:
www.healthvermont.gov/alcohol-drugs/professionals/resources-patients-and-providers
- CDC education resources: www.cdc.gov/drugoverdose
- CDC: Establish realistic treatment goals for pain and function and establish patient and clinician responsibilities for managing therapy, including when to discontinue therapy

Prescribe Nasal Naloxone when Indicated

- High Dose: 90+ Morphine Milligram Equivalent (MME) per day
- Concomitant benzodiazepine: Patients prescribed both an opioid and a benzodiazepine
 - CDC recommends avoiding co-prescribing of opioids and benzodiazepines
- CDC: History of overdose, history of substance use disorder, 50+ MME per day prescriptions

Arrange for Evidence-based Treatment for Patients with Opioid Use Disorder

- CDC: Offer evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder

Complete Continuing Education Requirements

- Complete at least two hours of continuing education for each licensing period on the topic of Controlled Substances. Visit vtad.org, vtmd.org/cme-courses, or check with your professional society for available courses

Prescribe the Lowest Effective Dose of Immediate-release Opioids



- For acute pain, prescribe 0-5 days of therapy. *See table below*
- Include the maximum daily dose or a “not to exceed” equivalent on the prescription
- CDC: Prescribe immediate-release formulations when initiating opioids for chronic pain

Evaluate Patients Regularly Using Best Practices



- Reevaluate patients (and document) at least every 90 days (both VT Rules and CDC)
- CDC: If benefits do not outweigh harms, taper opioids
- CDC: Use urine drug screening prior to initiating opioids. Rescreen at least annually
- Calculate MME. Consider 50-89 daily MME a “yellow light” and 90+ MME a “red light”
- Use evidence-based tools to reevaluate adherence to the pain management therapy plan, functional goals (e.g. RAPID3), and potential for abuse and diversion (e.g. 5As, SOAPP, COMM)

Document, Document, Document



- Medical evaluation, including physical and functional exams and assessment of comorbidities
- Diagnosis which support the use of opioids for chronic pain and whether to continue opioids
- Individual benefits and risks, using evidence-based tools (e.g. RAPID3, 5As, SOAPP, COMM)
- Non-opioid and non-pharmacological treatments tried and trial use of the opioid
- VPMS query
- VDH Patient Education handout provided
- That the prescriber has asked the patient if he or she is currently, or has recently been, dispensed methadone or buprenorphine or prescribed and taken any other controlled substance
- Patient discussion about the risk of overdose, including any precautions the patient should take
- *Signed Controlled Substance Treatment Agreement and Informed Consent*: update at least annually
- Acknowledgement that a violation of the agreement will result in a re-evaluation of the therapy plan

Opioid Prescription Limits for Acute Pain (Prescribe Immediate-Release Formulations)

PEDIATRICS
Consider discussing the benefits and risks of prescribing an opioid to a pediatric patient with a colleague or specialist. Use extreme caution. Calculate dose for patient’s age and body weight. Consider the indication, pain severity, and alternative therapies. Limit prescriptions to 3 days or less with an average MME of 24 or less. Do not write additional prescriptions without evaluating the patient.

ADULTS	Average Daily	Total RX
MINOR PAIN Examples: Sprains, headaches, dental pain	No opioids	No opioids
MODERATE PAIN Examples: Non-compounded bone fractures, soft tissue surgery, most outpatient laparoscopic surgery		
Hydrocodone 5mg	MME: 24 / 0-4 tablets	0-5 days / 0-20 tablets
Oxycodone 5mg	MME: 24 / 0-3 tablets	0-5 days / 0-15 tablets
SEVERE PAIN Examples: Non-laparoscopic surgery, joint replacement, compound fractures		
Hydrocodone 5mg	MME: 32 / 0-6 tablets	0-5 days / 0-30 tablets
Oxycodone 5mg	MME: 32 / 0-4 tablets	0-5 days / 0-20 tablets

Extreme pain (beyond severe) in adults is limited to a 7 day max with a 350 MME max. This should be rare in primary care. Prescribing outside of this table (i.e. exceptions) must be clearly documented. For the complete rules, visit the Rule Governing the Prescribing of Opioids for Pain (7/1/17) found at www.healthvermont.gov. CDC Guidelines: Dowell D, et al. CDC Guideline for Prescribing Opioids for Chronic Pain--United States, 2016. JAMA. 2016 Apr 19;315(15):1624-45. PMID: 26977696