FY2016 REPORT TO THE COMMUNITY (JULY 1, 2015 – JUNE 30, 2016)

PHYSICIAN PLACEMENT: Adding a Pediatrician to Northwestern Vermont

The first time Jennifer Covino, M.D. saw Vermont was when she arrived at the University of Vermont College of Medicine for her admissions interview. She had interviewed at several medical schools in the Northeast, but she really liked



Jennifer Covino with husband Louis and daughter Vivian

the small environment of Vermont.

Dr. Covino grew up in Arlington, MA, and earned degrees in biochemistry and health administration at Suffolk University before she began to work in hospital administration at Massachusetts General

Hospital. "I always enjoyed working in the sciences, so I decided to go to medical school," she remarks. At UVM, she was "impressed by how connected the faculty were with the students," but thought she would return to Boston after med school.

"The significant cost of medical school is incredible and this definitely takes some of the stress off.

Educational Loan Repayment helps me feel like I can take a job in the community and focus on working with patients and their families."

"The more time I spent in Vermont, the more I realized what a special place it is — from the wonderful communities of people willing to go the extra mile for those around them, to outstanding and kind educators within the state, to re-designing the health care system, to a focus on healthy living

and renewable energy, Vermont is the place to be." She says she was fortunate to do her pediatric residency at **UVM Medical** Center, and she met her husband. **Louis Phelps** (a Vermont native), playing volleyball. After residency, daughter Vivian

arrived, and it was time to start her first job as a physician.

AHEC's Physician Placement Program assisted by keeping her informed of current physician openings in Vermont and Dr. Covino began practicing at Northwestern

Medical Center's pediatric practice this fall. She receives Educational Loan Repayment, about which Dr. Covino says, "The significant cost of medical school is incredible and this definitely takes some of the stress off. Educational Loan

Repayment helps me feel like I can take a job in the community and focus on working with patients and their families." Filling a need for a pediatrician in Franklin County, she says "It's fun to be taking care of kids and I've met wonderful families."

Physician Placement Program

The objective of the AHEC Freeman
Physician Placement Program is to recruit
physicians to workforce shortage areas of
Vermont, with an emphasis on rural and
underserved areas. To accomplish this,
the program works with UVM College of
Medicine graduates and UVM Medical Center
medical residents and fellows to match them
to the practices where they are needed.

AHEC placed 18 physicians during the past year, 12 in primary care and 6 in specialty care. Ten physicians were placed in rural counties, and 3 were placed at a Federally Qualified Health Center (rural/underserved). One of the specialty care placements was in psychiatry and one was as a hospitalist.

Currently, there are 141 physician vacancies posted with AHEC. ■

VT AHEC Sponsors New School Nurse Training

The UVM AHEC Program, working with the Vermont Department of Health, sponsored a one-day New School Nurse Training in August at the University of Vermont that attracted 40 new school nurses.

The new school nurses engaged with veteran school nurses to learn how to work on interdisciplinary teams, best practices for working in a school health office, practice using health office tools, learn time management tips and autonomy in a school setting, and they left the conference with contact information for experienced school nurses and important organizations.

Vermont PEP Student Anthony Spinella Pursues Neurology

Anthony Spinella, a UVM junior, Class of 2018, from Chelsea, VT, says he knew he wanted to be a physician from the time he was in his sophomore



Anthony Spinella

year in high school. He learned about the Premedical Enhancement Program (PEP) at a presentation to the Honors College.

Anthony is majoring in neuroscience and minoring in economics ("to prepare for the business side of opening a practice"), in preparation for a career in medicine that he hopes will include attending the UVM Larner College of Medicine.

He needed an experiential component for the PEP application so he turned to an uncle who works in the vascular surgery area at Dartmouth Hitchcock Medical Center, where he shadowed a surgeon and saw the "before and after" aspects of vascular surgery. He entered PEP 1.5 years ago and says, "It's been amazing."

Ask him about the physicians he has shadowed in internal medicine and surgery and he speaks enthusiastically and in detail about what he has learned in those experiences, as well as the Grand Rounds he attends in neuroscience and neurology.

"One thing that is important for people going through medical school is to learn about patient interactions, and communicating with patients about end-of-life care," Anthony notes. Shadowing Amy Teleron, MD who is a hospitalist at the UVM Medical Center, he said listening to her end-of-life palliative care discussions with patients and learning how to frame a conversation was beneficial. "That is something you can

only get in person which you usually have late in medical school, so it was good to see that ahead of time."

His shadow experience with Peter Cataldo, MD, General and Colon and Rectal Surgeon at UVM Medical Center, Anthony comments "I got a good sense of how surgeries are carried out: a feel for what instruments to use when, keeping a clean work space, anesthesia administration, who has what jobs, and consultations with patients. Both doctors are really good at communications."

Anthony admits he is leaning toward the neurology field. Grateful for the experiences he has had in PEP, he recommends it to anyone who can qualify and has an interest in medicine, something he imparted to students when he worked Orientation for the Class of 2020. In PEP, he says, "You definitely get the most direct experience; you're right there in the thick of it."

PEP Student Sonia Zaccheo Values Adaptability

Sonia
Zaccheo grew
up in New
York City but
arrived at UVM
via Indonesia
where her
parents were
living. Before
she applied
to UVM, she
already knew



Sonia Zaccheo

about the Premedical Enhancement Program (PEP), having discovered it while researching what UVM had to offer.

"I was excited to go to a university with a medical college and a hospital on one campus," Sonia states. She adds, "I don't think I realized quite how cold it could get in Vermont, but it is a really good place to study and focus and have fun."

Sonia took many chemistry and biology courses in high school, and at the end of her freshman year at UVM, she applied to PEP and the Honors College and was accepted into both.

In PEP, she has shadowed Molly Barry, MD, at the Vermont Cancer Center (VCC) and Alissa Thomas, MD, a neurologist in oncology at the VCC and on Baird 4 of the UVM Medical Center. She has a Medical Student Mentor about whom she says, "It has been great to get wise words from a med student and learn more about the process from a practical perspective." She has attended Grand Rounds and reveals the Pediatric Grand Rounds on caring for transgender patients was fascinating.

"I think that being placed with two female doctors has been a positive experience for me; it's the first time I've felt that 'I want to be that in ten years'," Sonia remarks. She learned about medical care that "it's really so much about people: interaction with patients, families, everyone else in the office."

Sonia is also a tutor in the Tutoring Center at Living and Learning, and is currently vice-president of the Asian American Student Union, an organization that has helped her, as a person of Filipino, Italian and Swedish ancestry, to integrate the different parts of her — "one of the ways I've grown since coming to Vermont," she notes.

"One of the greatest attributes is adaptability: these different parts of me help me adapt to different situations and relate to different people and I think that will help me in the medical field," she concludes.

About PEP

The Pre-medical Enhancement Program (PEP) prepares students for medical school admission. The PEP is highly selective and rigorous; students must maintain a minimum cumulative Grade Point Average (GPA) of 3.5.

To learn more about PEP, visit: http://www.med.uvm.edu/ahec/ healthcareers/undergraduate.

VT AHEC Workforce Pipeline: Rebecca Adams, RN

Rebecca ("Becca") Adams has been intent on a career in health care for a long time: perhaps because she learned to say "pediatrician" at the age of five, or because she adored her nurse at Mt. Ascutney Hospital when she had to have her tonsils and adenoids removed at age 10. But she credits Vermont AHEC with providing experiences in her school years that led to her becoming a nurse at Springfield Hospital Emergency Department (ED) today.

Born in Springfield Hospital, where she now works with Barbara Dalton, MD, who delivered her, Adams attended high school at Burr & Burton Academy in Manchester, where she focused on math and science courses. A guidance counselor told her about MedQuest, which Adams attended in Bennington where she job shadowed the Bennington Rescue Squad. She took a First Responder course, and became a member of the Londonderry Rescue Squad and the Fire Department.

While attending Norwich University to earn her bachelor of science in nursing degree, Adams was chosen for the Southern Vermont AHEC College Student Internship Program (C-SHIP), and spent the summer working in the Springfield Emergency Department. By December of her senior year, Springfield offered her a full-time job upon graduation in 2014. "I like the variety and different challenges of the ED, the teamwork and fast-moving pace," she says of the department.

Since working as a nurse, Adams has worked on the MedQuest team for a week at the Vermont Academy. "It was nice sharing my real experience with the students, from both the EMT side and as an emergency nurse," she remarks. She is currently applying to attend Rivier College in Nashua for her nurse practitioner license; Adams says being in the ED has shown her the need for primary care providers.

When she isn't working in the ED, she works as a substitute school nurse in Springfield schools, and serves as an EMT at Springfield Fire Department. Adams enjoys hiking, walking, and building a house in Weathersfield with her boyfriend.



Rebecca Adams, RN

About her Vermont AHEC experience,
Adams says, "AHEC opened up many doors
for me: I got into emergency medicine via
MedQuest, and my C-Ship experience led to
my first job." Rebecca Adams is a Vermont
nurse and EMT, and serves her community
as an AHEC MedQuest mentor working to
inspire the next generation of nurses.

Health Professions Student Projects 2016

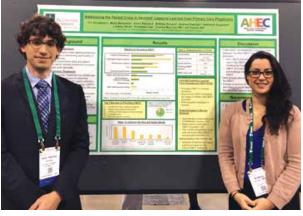
The University of Vermont Office of Primary Care (OPC) and AHEC Program sponsor medical and health professions students in community-based projects, often on an interdisciplinary team, to apply their classroom learning to the field, connect with communities in Vermont, examine a pressing community issue and learn about research and practicing primary care.

In 2016, Northeastern Vermont AHEC (NEVAHEC) sponsored a UVM medical student and a masters of social work student who studied "Evaluating Systems of Care for Adolescents Impacted by Substance Use in Lamoille County." Working with the Vermont Department of Health Division of Alcohol and Drug Abuse Programs and NEVAHEC, the students conducted focus groups, gathered suggestions and developed a set of recommendations to address concerns of young people, who identified peer pressure to use drugs as a strong factor in the problem.

The UVM OPC and AHEC, working with the UVM Medical Center, sponsored a project on "Opioids at Hospital Post Operation Discharge Project," carried out by two UVM medical students and a pharmacy student from the Albany College of Pharmacy. Their work focused on determining the optimal amount of pain medication to be prescribed following common operations, and has been used to

inform policies and additional research.

In addition, OPC/AHEC worked with eight UVM Larner College of Medicine students in the Class of 2018 on a public health project titled "Addressing the Opioid Crisis in Vermont: Lessons Learned from Primary Care Physicians," which examined the barriers to primary care physicians providing office-based opioid treatment. Two of those



Adam Petchers and Brittany Rocque presented their public health research project on "Addressing the Opioid Crisis in Vermont: Lessons Learned from Primary Care Physicians," at the American Public Health Association's annual meeting in Denver this fall.

students presented their findings this fall at the American Public Health Association's annual meeting in Denver, CO.

Office of Primary Care and Vermont

VERMONT AHEC HEALTH CARE V

Education & Ca

Grade 9-12 Students

Early pipeline programs reached 3,997 students of which 1,353 were identified as disadvantaged or minority students.

- Classroom presentations to 229 students
- Reached 2,266 students at career fairs
- 138 students attended the Sophomore Summit
- 118 students attended MedQuest camps

Undergraduate Pre-Health Students

- 22 students were mentored and participated in job shadowing in the Pre-Medical Enhancement Program (PEP).
- 12 MedQuest alums in healthrelated college programs completed paid internships as part of the College Student Internship Program (C-SHIP) in southern Vermont.
- Co-sponsored U.S. Army Clinic on Suturing for 69 undergraduate students interested in health careers.

GRADE 9-12 STUDENTS

OBJECTIVES

- Improve access to high quality educational experiences that relate to health care workforce needs.
- Increase students' readiness to pursue health care careers.

ACTIVITIES

- Explore a variety of careers in health care
- Understand a range of postsecondary options
- Academically prepare for college or career
 - Build professional skills

UNDERGRADUATE PRE-HEALTH STUDENTS

OBJECTIVES

- Improve access to high quality educational experiences that relate to health care workforce needs.
- Increase likelihood that students will pursue additional health professions training or enter the Vermont health care workforce.

ACTIVITIES

- Explore settings, populations, systems and issues that influence a choice of health care career
- Build pre-clinical skills
- Engage with communities through service learning
- Develop networks of peers and professionals

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ACTIVIT

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Proven college preparation programs in partnership with VSAC

ESTABLISHED, WITH NEW INNOVATIONS

Focusing on students who have identified an interest in a health care career, the Vermont AHEC is testing approaches to expand competency-based education programs, including use of an online learning platform that links to students' Personalized Learning Plans.

Proactive counseling in career and graduate education

IN DEVELOPMENT

The statewide Vermont AHEC is assessing interest among UVM and VSC undergraduate pre-health students to expand existing programs that connect students to mentors in Vermont communities.

AREA HEALTH EDUCATION CENTERS www.uvm.edu/medicine/al

Continuous cycle of complementary programs that evolve based on data and evaluation

AHEC Network 2015-2016 Highlights

VORKFORCE DEVELOPMENT

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EALTH PROFESSIONS JDENTS

CTIVES

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for project-based ical education in erved areas of Vermont

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HEALTH PROFESSIONALS

OBJECTIVES

- Improve quality in the health care system.
- Increase retention of the current health care workforce.

ACTIVITIES

- Accredited continuing professional education programs
- Retention incentives
- Collegial networking

esident, job-seeker and ecruitment incentives

All models informed by ongoing workforce measurement and trends analysis

ESTABLISHED

he statewide Vermont AHEC as successful, well-established rograms that connect health offessions students with rural communities & underserved epulations through place-based mmunity and clinical education.

ESTABLISHED

Vermont AHEC provides students and health professionals with continuing education, quality improvement and networking programs.

nec | www.cvahec.org | www.nevahec.org | www.svahec.org

Health Professions Students

- Worked with 82 UVM College of Medicine family medicine students and served as a resource for their required community projects.
- 23 students benefitted from AHEC housing during clinical rotations or summer projects.
- 305 health professions students attended six Spotlight on Primary Care series sessions for medical students.
- 343 health professions students and medical residents networked with 17 hospitals and 22 other health-related organizations at Vermont Recruitment Day 2015.
- Co-sponsored Cultural Awareness Day for 229 medical and nursing students.
- Mentored 24 medical and health sciences students in summer and public health projects.

Health Professionals

- 35 continuing education topics were offered to 2,966 participants.
- 171 Vermont preceptors of medical students were awarded continuing education funds through the Community Preceptor Recognition Program.
- Processed 173 applications to the Vermont Educational Loan Repayment Programs.

Vermont High Schoolers Engage in MedQuest

There were 118 Vermont high school students who participated in the MedQuest and Advanced MedQuest summer experiences at college campuses around the state.

In addition to hands-on and job shadowing activities in health care, participants experience living on a college campus, and learn what subjects to take in high school to prepare for a health career major in college. Campuses that hosted 2016 MedQuest camps include Southern Vermont College, Vermont Academy, University of Vermont, and Johnson State College.

Other locations where shadowing and additional activities took place for the Champlain Valley AHEC MedQuest camps include: Richmond Rescue, Northwestern Medical Center, Counseling Services of Addison County, and Community Health Centers of Burlington, Spectrum Youth and Family Services; for Northern Vermont AHEC's MedQuest, additional sites were Northeastern Vermont Regional Hospital, North Country Hospital, Central Vermont Medical Center, and Copley Hospital.

Southern Vermont MedQuest West workshops and job shadowing sites included: Southwestern Vermont Medical Center, West Mountain Animal Hospital, Rutland Regional Medical Center, Riverside Veterinary Clinic, Regional Ambulance Service, Family Dental Associates, Bennington Rescue Squad, Prevent Child Abuse VT, Vermont Student Assistance Corporation (VSAC), and Southern Vermont College Nursing Department. For MedQuest East, sites included: Springfield Hospital, Brattleboro Memorial Hospital, White River Junction VA Hospital, Hartford Fire/Rescue, Brookside Nursing Home, Mt. Ascutney Hospital, Grace Cottage Hospital, West River Family Dental, West River Valley Vet Rescue, Inc., Putney Family Medicine, Professional Dental Care-Dr. Jerry Theberge, Ludlow Family Medicine, Ludlow Ambulance Service, Chester Family Medicine, Rockingham



Students in Advanced MedQuest learned casting as part of their program. Assisting them were: Ramya Ghantasala, left, a second year med student at UVM and Nik Moring, far right, a first year med student at UVM.

"MedQuest was a great experience where I learned about many career options that I did not even know existed."

Medical Group, Springfield Animal Hospital, Vermont Technical College Nursing Program – Brattleboro Campus, and VSAC.

For the Advanced MedQuest week, sites were the University of Vermont Larner Medical Center, University of Vermont faculty and staff, and VCA Brown Animal Hospital.



Quotes from participants tell the story of MedQuest success:

"It was a wonderful and eyeopening adventure that allowed me to see and experience many of the options that health care has to offer me for my future — it inspired and informed me greatly."

"MedQuest supplies the diving board that allows you to leap into a pool of opportunities."

"MedQuest was a great experience where I learned about many career options that I didn't even know existed."

"MedQuest was a great experience to find out what career paths appealed to me and

how to succeed in health care."

In response to, what was the most important thing you learned this week?: "Never to be afraid to ask questions"; "Taking care of myself"; "It's important to be open to more career paths than the one you thought you would always do"; "How to interview a patient"; "Confidentiality & Professionalism."



Above: Niamh Johnston-McWilliams, a St. Johnsbury Academy student, learns to suture.

Left: CVAHEC MedQuest student works in the dental simulation lab.

HEALTH CARE

www.vthealthcareers.org

Highlights of October's Health Career Awareness Month

During the month of October Health Careers Awareness Month took place around the state with a goal of exposing youth and teens to the variety and rewards of health careers.

Sixty-four Vergennes seventh graders visited the Larner College of Medicine at the University of Vermont in late September

to pick up their assignment for October. The middleschoolers are working on descriptions of what it's like to be an adolescent to present to second-year medical students at UVM in November. The unit is part of the Larner College of Medicine's Generations course. During their initial visit, the seventh graders received a brief tour of UVM, asked a panel of health professions students how they became interested in health careers, and learned what the Vermont Area Health **Education Centers (AHEC)** Program can do to help them explore health careers.

making home visits. Another "A Day in the Life" session was conducted for 14 Franklin County high school students on October 18 at Northwestern Medical Center in St. Albans. Students received confidentiality and infection control training, a three-hour job shadow experience and a presentation by a UVM student services staff member.

These activities, along with press releases, Facebook posts, and reminders about the **vthealthcareers.org** web site, help to focus students and educators on the array of health careers available, and what students need to study to prepare for those careers.

Leia Ashikawa, an Arlington Memorial High School senior, practices an ear exam during Southern Vermont AHEC's Advanced MedQuest.

The regional AHECs

collaborated to lead a three-session workshop on health careers (attended by 50 students) at the annual Women Can Do! Conference on October 13 at Vermont Technical College. Participants expressed surprise about the large number of different careers in health care.

Southern Vermont AHEC hosted a workshop on health careers for 60 high school sophomores in Rutland County at the annual Sophomore Summit on October 6. AHEC supported a second workshop on sports medicine, which highlighted careers in physical therapy and athletic training. The event, sponsored by the Rutland County Workforce Investment Board, attracted 500 students to the Castleton State University site.

Northeastern Vermont AHEC (NEVAHEC) brought thirteen 2016 MedQuest alumni to the UVM Larner College of Medicine to experience activities in the Clinical Simulation Laboratory and Pathology Lab. NEVAHAC also participated in a college and career fair at North Country Union High School and an internship and career fair at Johnson State College. Brianna Doty, a MedQuest alumna from Lyndonville gave a presentation about her MedQuest experience to the Lyndonville Rotary Club.

Champlain Valley AHEC offered "A Day in the Life" experiences to Chittenden County high school students at the VNA of Chittenden and Grand Isle Counties on October 25 to learn what it is like to work at an adult day care program, a hospice house or as a traveling practitioner

Vermont Academic Detailing Program

There were 126 Academic Detailing sessions delivered in 2015-16, to prescribers in 12 of 14 Vermont counties, on six different topics. The majority of sessions were delivered to primary care practices throughout the state.

Academic Detailing sessions present an objective overview of what evidence from studies shows about various drugs, and non-drug therapies used to treat a medical condition. An academic detailer will visit a primary care office anywhere in Vermont to present the latest evidence-based prescriber support and education for managing common but challenging primary care conditions. Participants earn one Continuing Medical Education (CME) credit per session. This program is funded through a Vermont Department of Health grant; there is no pharmaceutical company sponsorship associated with the program.

Topics for the current year include:

- Women's Health: Contraception to Menopause
- Oral Health and Fluoride Varnish in Medical Practices
- Management of Type 2 Diabetes
- Stroke Prevention in Atrial Fibrillation

Vermont Educational Loan Repayment

The University of Vermont and AHEC Program administered the Vermont Educational Loan Repayment Programs for physicians, advanced practice registered nurses, physician assistants, dentists, registered nurses, and licensed practical nurses. All recipients enter into a contractual service obligation and are required to serve Medicaid patients.

In the FY16 cycle, there were 173 applications (31 recruitment and 142 retention). Of 19 dental applications, 16 received awards; of 56 nursing applications, 23 received awards; and of 98 primary care practitioner applications, 51 received awards. Additionally, 18 primary care practitioners

and seven dentists received awards as part of Year 2 auto renewal for their two-year service contract.

Awards totaled \$2,003,588 of pooled federal, state, employer/community, and private funds.

The average (mean) educational debt of applicants was \$137,575 for primary care practitioners; \$269,359 for dentists; and \$37,065 for nurses. Educational debt ranged from \$1,907 to \$575,312 and the total debt of all applicants combined was \$16,279,195. From the FY15 to FY16 cycle, the average debt of all applicants increased by \$17,653 (from \$96,989 to \$114,642). ■

"Due to increasing educational debt, the need for educational loan repayment assistance becomes more evident every year. Educational loan repayment plays an important role in recruiting and retaining the health care professionals

Vermont needs most."

-Elizabeth Cote, director of the UVM Office of Primary Care and AHEC Program

The University of Vermont Office of Primary Care and Area Health Education Centers Program gratefully acknowledges its supporters:



- Brattleboro Memorial Hospital
- Central Vermont Medical Center
- Copley Hospital
- Delta Dental of Northern New England
- DentaQuest Foundation
- U.S. Department of Health and Human Services: Health Resources and Services Administration (HRSA) Bureau of Health Workforce
- Gifford Medical Center

- Grace Cottage Hospital
- Mt. Ascutney Hospital and Health Center
- North Country Hospital
- Northeastern Vermont Regional Hospital
- Porter Medical Center
- Rutland Regional Medical Center
- Southwestern Vermont Medical Center

- State of Vermont and Vermont Department of Health
- United States Army
- University of Vermont Larner College of Medicine
- University of Vermont Medical Center
- Vermont's Congressional Delegation
- Vermont State Legislature



