



Pairing Medical Student Education and Pap Smears at the Eastern Virginia Medical School HOPES Free Clinic

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Abstract

Invasive cervical cancer represents nearly 10% of all cancers in women. Papanicolaou testing (Pap smear) programs in many low income groups have performed poorly in reducing the burden of cervical cancer due to lack of access to healthcare. Student-run free clinics have the unique ability to shape future physicians while providing important services to those in need. The Eastern Virginia Medical School Health Outreach Partnership of EVMS Students Free Clinic (EVMS H.O.P.E.S. Clinic) capitalizes on this pairing by providing Pap smears to uninsured women in the Hampton Roads, Virginia area while teaching students valuable clinical skills. From July 1, 2014 through December 31, 2014, 152 patients were seen at the EVMS H.O.P.E.S. Women's Health Clinic, and 33 Pap smears were performed. A mean of 58 student volunteers per month attended the EVMS H.O.P.E.S. Women's Health Clinic over the date range evaluated (range 31-74 volunteers/month) with volunteers representing the medical degree program as well as the master of physician assistant program. By providing Pap smears to underserved women in Hampton Roads, the H.O.P.E.S. clinic is lessening the health care access disparity between low and high-income women while successfully pairing student education and patient care. This structure can be a model for any student-run free clinic looking to expand their student opportunities and patient services.

Invasive cervical cancer is a staggering burden on world health representing nearly 10% of all cancers in women with an estimated 371,000 new cases diagnosed worldwide each year.¹ Not surprisingly, studies indicate that the risk of invasive cervical cancer is 2-10 times greater among women who have not been screened or have been screened infrequently.^{1,2}

Cervical cancer is the most widely screened cancer in the world across all income levels. Cervical cytology screening programs offering Papanicolaou testing (Pap smears) every three to four years have reduced cervical cancer incidence and mortality by up to 80% in the past five decades.³ Contrary to the success

seen in high income groups, Pap smear programs in many low income groups have had less impact on cervical cancer burden.⁴ The lack of program benefit is thought to be due to inadequate organization, low follow-up rates, and lack of access, with lack of access being the most significant factor.^{5,6}

Many programs and organizations attempt to bridge this access gap and provide underserved and at-risk women with affordable Pap smears. A unique source of aid comes in the form of the student-run free clinics. Pairing medical education with community-based medicine gives student-run free clinics the opportunity to train future physicians

while simultaneously providing important services to patients in need. The Eastern Virginia Medical School H.O.P.E.S. Student-run Free Clinic (EVMS H.O.P.E.S. Clinic) provides Pap smears to uninsured women in the Hampton Roads, Virginia area while teaching students valuable clinical skills.

Between July 1, 2014 through December 31, 2014, 152 patients were seen at the EVMS H.O.P.E.S. Women’s Health Clinic, a subsection of the EVMS H.O.P.E.S. Student-Run Free Clinic, following the format outlined in Figure 1, and 33 patients received Pap smears. The clinic reported a monthly mean of 58 student volunteers from both the medical degree program and the master of physician assistant program (range 31-74 volunteers/month).

Students benefit from the format at the EVMS H.O.P.E.S. Clinic because they are able to see patients on their own and gain experience presenting to an attending physician. During the attending physician exam, students have the opportunity to perform supervised pelvic exams and Pap smears.

The large number of patients seen during the six-month period and the high number of Pap smears provided free of charge suggest the impact of the model for the H.O.P.E.S. clinic. Without the clinic, patients may otherwise have been unable to access healthcare resources.

The impact of the clinic reaches beyond patient encounters and providing Pap smears for the Hampton

Roads underserved population. A mean of 58 student volunteers per month, including both medical degree students and master of physician assistant students, shows extensive student involvement while providing an opportunity for interdisciplinary education. The clinic allows students to gain experience obtaining a history and physical as well as performing supervised pelvic exams and Pap smears. With a documented shortage of medical residency positions, there is increased pressure for students to supplement their academic resume.⁷ The EVMS H.O.P.E.S. Women’s Health Clinic fills this role by providing students with hands on experience as well as clinical volunteer hours.

The organization of the student-run free clinic also offers leadership opportunities to medical students. Two students per year act as “women’s health coordinators” for the clinic, and they coordinate all of the activities for the clinic that year. This model promotes interdisciplinary learning and affords students a chance to experience the logistics and politics involved in healthcare administration.

Additionally, volunteering at the H.O.P.E.S. clinic prepares students for clinical assignments in the medical curriculum. Real patient encounters at H.O.P.E.S. allow students to feel prepared prior to their time on the wards. This confidence may improve clerkship grades and the overall medical school experience. Increased experience may potentially better prepare students for the United States Medical Licensing Exam Clinical Skills component (Step 2 CS).

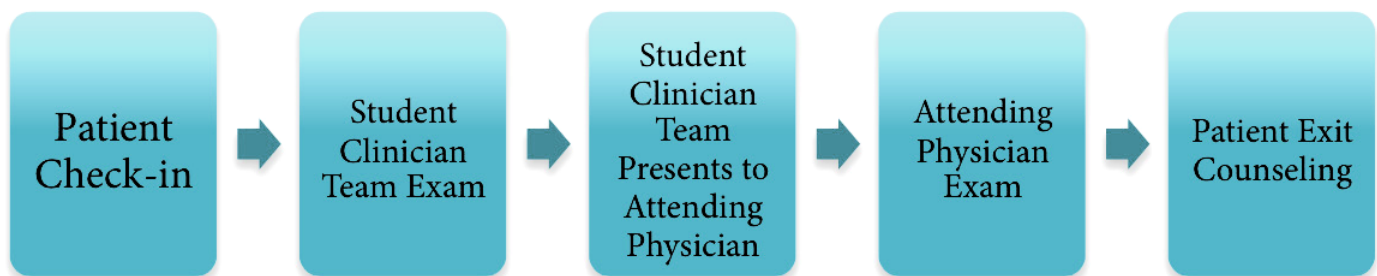


Figure 1. Flowchart representing a typical patient visit to EVMS H.O.P.E.S. Women’s Health Clinic.

In conclusion, the EVMS H.O.P.E.S. Women's Health Clinic provides Pap smears to underserved women in Hampton Roads, lessening the healthcare access disparity between low and high-income women. The successful pairing of student education and patient care makes the EVMS H.O.P.E.S. Women's Health Clinic model applicable to other student-run free clinics looking to expand their student opportunities and patient services.

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