

# Program Evaluation in Women's Health Integration for Podiatric Residents



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## Introduction

As the podiatric profession strives for professional and financial parity with allopathic and osteopathic colleagues, podiatric medical education has been transformed at both undergraduate and graduate levels to more closely align in important ways. The purpose of this program evaluation is to share the benefits of including a women's health rotation into the required graduate medical training curriculum, share the initial experience of the first resident cohort receiving this training, and provide ideas to other programs that may be interested in providing similar program implementation for their residents.

## Background

Podiatric medical education has significantly changed over the past 20 years. Leaders in the profession began by altering and standardizing the curriculum at the nine podiatric colleges with the goal of providing a well-rounded medical education that more closely resembles the education received by our allopathic and osteopathic colleagues. Podiatric education became standardized with a required four years of podiatric medical school and three years of podiatric medical and surgical residency training. The curriculum has been developed so that podiatric medical students spend the first two years of their education taking the same basic science courses provided by allopathic and osteopathic schools. Many of the podiatry schools with allopathic or osteopathic programs have integrated the first and second year curriculum for podiatric, allopathic and osteopathic students.

In 2011, a joint task force which comprised the California Podiatric Medical Association, the California Medical Association, and the California Orthopaedic Association reviewed the curricula at the two California based podiatric medical schools to identify any deficiencies compared to allopathic and osteopathic medical education. The task force identified that the only thing lacking in podiatric medical training was the inclusion of women's health (gynecology) and psychiatry rotations.<sup>1</sup>

Since the task force presented their findings subsequently, one of the two California podiatric medical schools adjusted by including women's health and psychiatry to their third year rotations; however, these rotations are not yet available at all sites and are not available to all students. Other colleges have not yet included these rotations in their curricula, which leaves graduating podiatrists unevenly educated about women's health and behavioral health. Residency may serve as an opportunity to achieve completion of these materials.

The Highlands-Presbyterian/St. Luke's Residency program, in Denver, CO, is one of the first podiatric residency programs to include women's health and psychiatry rotations, with the goal of creating well-rounded, podiatric physicians and surgeons. The addition of these rotations fulfills the gaps in training noted by the 2011 joint task force, and provides podiatric residents with comprehensive training which more closely aligns with their allopathic and osteopathic colleagues.



"Improvements in patient outcomes and the quality and efficiency of healthcare delivery have become priorities in the health care system in recent years. As health care becomes ever more complex, clinicians have an important role to play in identifying opportunities and making changes to benefit both individual patients and to improve clinical systems. Learning quality improvement methods and skills during training both helps to prepare the clinician to practice in an environment with these demands but also allows them to gain clinically relevant experience during a formative period of their work lives. Learning QI methodology in Women's Health can easily translate to QI in Podiatry."  
-Elisabeth Ihler, MD

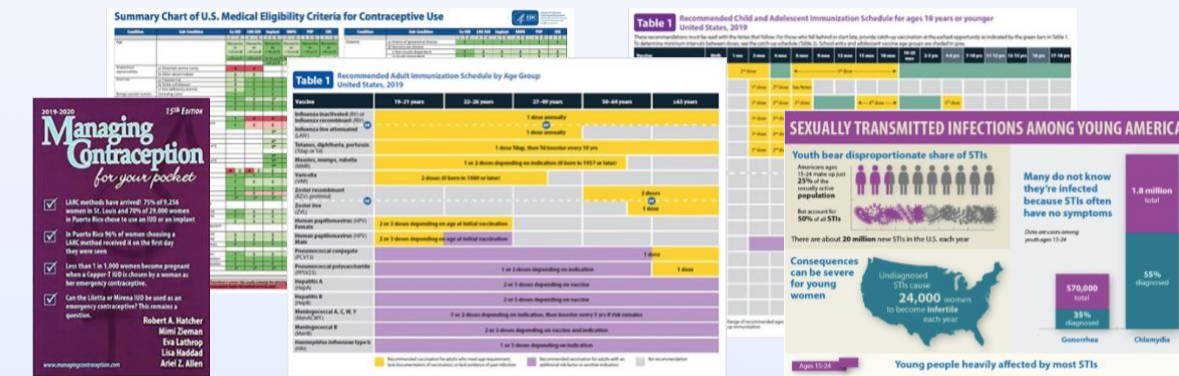


Figure 1. Dr. Stamm's Women's Health Tool Kit was designed to provide the essential women's reproductive health resources for primary care residents: a pocket-sized copy of the current Managing Contraception, a copy of the current ASCCP Pap Smear Algorithm booklet, a wet smear analysis chart, a guide to documenting the well woman exam, a copy of the updated CDC Sexually Transmitted Diseases Treatment Guidelines, a laminated copy of the updated CDC Recommended Adult Immunization Schedule, and an updated Summary Chart of the U. S. Medical Eligibility Criteria for Contraceptive Use, and the Women's Preventive Services Initiative Summary Tables and Well Woman Chart are the highlights.

## Methods

The goal of the women's health rotation was not to create gynecology residents, but to complement a primarily surgical residency and provide podiatric residents with the means necessary for confidently identifying women's health problems and knowing where to look for treatment guidelines and referrals. The rotation consisted of three primary goals for podiatric residents: 1) Offer a women's health clinical experience, 2) Exposure to a Quality Improvement project, and 3) Exposure to and utilization of a women's health resource "tool kit".

The two week rotation consisted of a women's health clinic where residents were exposed to various pathology and common gynecologic women's health issues. Each resident was provided a syllabus with key articles pertaining to women's health and foot and ankle related pathology. Each resident was given a quality improvement (QI) project to work on during the rotation involving reviewing patient charts for delinquencies in paps and mammograms. Each resident was also provided a resource "tool kit" at the beginning of the rotation, which provided residents with the necessary materials to identify, diagnose and treat various patients in the women's health clinic (Figure 1).

Quality improvement (QI) projects have become a staple in graduate medical education and are commonly given to medical students and residents during their rotations in various specialties. These projects are beneficial for the student/ resident by allowing them to identify operational deficiencies, find a solution, and work to correct and improve those processes. Continuous improvement in medicine is a vital piece in providing the best care for patients and resident training in quality, patient safety, and management is generally recognized as an essential part of graduate medical education.<sup>2</sup> These projects allow students/ residents to improve efficiency, contribute to the betterment of the hospital or clinic, and provides a sense of fulfillment upon completion. QI projects also provide the student/resident with a sense of belonging during their short rotation as their contributions help to improve operations and scholarly output in the hospital or clinic.<sup>2</sup>

Many podiatric medical schools have yet to add both women's health and psychiatry rotations to their curriculum in order to more closely align with allopathic and osteopathic training, leaving many podiatric medical students without access to this training. The Highlands-Presbyterian/ St. Luke's Podiatric Medicine & Surgery residency program, in Denver, CO, is one of the first podiatric residency programs in the nation to add a women's health and psychiatry rotations to their curriculum. The first cohort of three second year residents (N=3) were evaluated in a survey-based design shortly after the completion of the two week women's health rotation. A multi question survey utilizing a 10-point Likert scale for each question was administered, with 0=Highly Disagree, 5=Neutral, and 10=Highly Agree. All of the surveys were evaluated and median scores were calculated for each question.

## Results

The surveys were collected from the first cohort of three residents to undergo the women's health rotation and median scores for each question were calculated. The women's health resource tool kit was generally found to be helpful, as was the syllabus, with median scores of 10/10 and 10/10, respectively. Investigators found QI project participation to have been generally rated high with a median score of 9/10. The overall helpfulness of the rotation varied with a median score of 9/10 as well. Perception of future applicability of the rotation varied from 2 to 10 with median score of 8/10. Prescription awareness for pregnant women varied from 4 to 10 with the median score being 8/10. Increasing awareness of women with osteoporosis and it's effects on foot and ankle surgery varied from 3 to 10 with a median score of 9/10.

The first resident cohort to rotate through the Women's Health service rotation found it to be an overall beneficial adjunct to their podiatric residency training. The first resident cohort was primarily exposed to the gynecologic side of women's health. Feedback from them indicates an interest in the obstetric side of women's health and a need for materials referencing safe medications to prescribe during pregnancy.

## Discussion/ Conclusion

With the goal of developing well-rounded podiatric physicians, capable of identifying pathologies above the ankle and feeling comfortable with their ability to make the appropriate referral, podiatric colleges and residency programs have begun to implement both women's health and psychiatry rotations into their curriculum.

There are several benefits of the women's health rotation for podiatric residents. The primary benefit is the ability to recognize several women's health related pathologies and know when to appropriately refer them to a women's health specialist. The "tool kit" provided for residents was essential to their experience and provided them with the ability to confidently know where to look for the appropriate guidelines and recommendations in women's health. Systemic problems that present in the foot and ankle such as the metastatic potential of breast and cervical cancer, and malignant melanoma were highlighted during the rotation as well as a focus on potential drug interactions of commonly prescribed drugs for women. Residents learned the magnitude of the increased risk of deep vein thrombosis in patients taking oral contraceptives and were encouraged to monitor patients for possible symptoms. The addition of focused women's health training for podiatric residents should lead to an increase in knowledge; therefore, increasing confidence in identifying malicious pathology, resulting in increased patient outcomes.

Since this rotation was developed in a multidisciplinary GME setting, tools and strategies used for other GME residents were adapted. Further evaluation is needed to assure that the adaptation is adequate for future podiatric residents.

Our program evaluation showed the Women's Health rotation to be a beneficial addition to the current podiatric residency rotation requirements. We feel that other programs can use our experience as a helpful tool for implementing this rotation themselves. We found that past exposure to women's health may make this rotation easier for some. The rotation may serve as a leveling experience for residents without such past experience, so it would seem unrealistic that everyone would rate the experience highly. Still, a majority of the first cohort gained an appreciation for key aspects of women's health, and found the rotation to be a beneficial adjunct to their residency training, less so for those versed in women's health due to undergraduate and/or podiatric medical school curriculum.

## References

- 1) California's Physicians, Orthopaedic Surgeons and Podiatrists Reach Historic Agreement on New Task Force. Press Release. June, 2011. Sacramento, CA. www.acfas.org > CPMA-CMA-COA-Joint-News-Release
- 2) Krasowski, Matthew D et al., Using Focused Laboratory Management and Quality Improvement Projects to Enhance Resident Training and Foster Scholarship. Acad Pathol. 2017.