and HPV-related diseases, and suggest that there is a need to increase coverage and a low level of knowledge regarding HPV infections among young adults. Preliminary results of the study show a low HPV vaccine coverage among a sample of young adults.

**Conclusions**

The role of human papillomavirus (HPV) has been established as a causative agent in the development of cervical cancer and other diseases such as genital warts in both sexes. Vaccination has been recognized as an effective primary intervention to prevent cervical, vaginal, and anal cancers, as well as other anogenital cancers, oropharyngeal cancer, genital warts in both sexes. The primary focus of this study was the level of knowledge, attitudes, and behaviors about prevention of HPV infection and investigation of effective primary intervention to prevent cervical, vaginal, and anal cancer.

**Knowledge, attitudes, and behaviors about HPV infection**

A survey completed by all participants of both sexes aged 18-30, who have had sexual intercourse before age 16 and have had more than 2-3 sexual partners in their lifetime, with also 32% of sexually active responders not using condoms in the last three months. Among these, 26% knew that cervical cancer is a disease caused by HPV and 14% knew that HPV infection is related to other cancers. However, 20% of the participants engaged in unprotected sex with their last sexual partners. In addition, 96% at least one dose of HPV vaccine had been received by the participants, of which 29% had an adequate knowledge of the vaccine. Only 29% had an adequate knowledge of the vaccine.

**Methods**

A survey was conducted that included questions about knowledge, attitudes, and behaviors about HPV infection, with specific lacks in education.

**Results**

Results showed constant levels of knowledge on sexual health topics in the years. Self-confidence in preventing measures is increased among young adults. Among the participants, 75% believe that HPV vaccination is important. This survey could be a starting point for the implementation of more focused educational interventions.
5.F. Workshop: Empowering cost accounting for strategic health system decision-making: Patient Encounter Costing

Chair: Philip Anderson, United States
Organised by: Region Halland - Brigham and Women's Hospital
Collaboration
Contact: jonathan.slutzman@mgh.harvard.edu

Policymakers usually do not have access to reliable data on the costs of providing healthcare on a patient encounter level. Most existing costing systems use rough averages based on aggregated total costs, limiting their usefulness in strategic decision-making. These methods, which will be reviewed, reasonably characterize the system from the point of view of health facilities, but not from a patient perspective. Many healthcare costing systems (such as RVU or ratio of costs:charges) do not use the actual incurred costs of delivering care on a patient encounter level. Even systems that assign actual costs to patient visits (e.g. KPP in Sweden) are usually done on only an average basis, and often exclude outpatient, primary, and prehospital care. Further, none of these methods measure the costs of unused capacity. Without accurate patient-level costs of care, it is very difficult to assess the cost-effectiveness of any policy or care delivery changes.

To address this issue, we developed a new healthcare cost accounting method, called Patient Encounter Costing (PEC), and implemented it in Region Halland, Sweden. This workshop describes its development and applicability to other health systems throughout Europe.

The workshop will start by reviewing existing health system cost accounting systems, outlining their pros and cons (presentation 1). We will show that while existing methods are technically simple to implement, they have significant limitations. This presentation will present a new accounting system, PEC, a modified form of time-driven activity based costing (TDABC). We will then present the data and information technology needs to support this change, showing that this new method can be implemented with existing data at the health system level (presentation 2). Following this, we will show how two accounting systems, one demand-oriented and one supply-oriented, can work together to enable effective management of health system budgeting and care delivery (presentation 3). Finally, the power of these methods will be demonstrated with a presentation on describing health system costs by condition and care venue, enabling a data-driven approach to developing care delivery interventions (presentation 4).

Participants will leave the session with an appreciation of the importance of cost accounting in health system assessment and policy development, including the pros and cons of various methods. Through questioning and discussion, participants will be able to address their specific concerns in implementing such a new accounting system. Given the flexibility of PEC, health systems throughout Europe can use it to help strengthen the care they provide.

Key messages:

- Patient Encounter Costing enables the assignment of actual costs to specific patient visits, which provides needed data to answer strategic healthcare system questions.
- Using demand- and supply-side accounting methods together strengthens health system planning better than either system alone.