METHODS:

This study assessed changing the primary screening test from LBC to HPV testing, in both an unvaccinated and a vaccinated (against HPV 16/18) cohort. It considered extending the screening interval (to 5-yearly for all), the upper age limit (from 60 to 65 years) and different test sequences (four possible tests were included: HPV, LBC, partial genotyping for HPV16 or HPV 18 and the molecular biomarker $p16^{INK4a}$/Ki67). A Markov-model for HPV-infection and cervical cancer was developed based on a German cervical screening model (1). The perspective of the healthcare system was adopted and a 5 percent discount rate used.

RESULTS:

Strategies using HPV as the primary screening test are more effective than LBC-based strategies. The optimal strategy, at a willingness-to-pay threshold of EUR45,000 per quality-adjusted life year (QALY), for the unvaccinated cohort was HPV-based primary screening with a LBC triage test, at five-yearly intervals from age 25 to 60 years. This strategy is cost saving compared with current practice and cost effective when compared to no screening, with an Incremental cost-effectiveness ratio (ICER) of EUR18,164 per QALY. The optimal strategy for the vaccinated cohort was also HPV primary screening with a LBC triage test, at five-yearly intervals from age 25 to 60 years. While more effective and cost saving compared with current practice, it would not be considered cost effective compared with no screening (ICER of EUR58,745/QALY).

CONCLUSIONS:

Based on our analyses, HPV-based cervical screening is more effective and cost saving compared with LBC-based screening for both vaccinated and unvaccinated cohorts in an Irish setting.

REFERENCE:

1. Sroczynski G, Schnell-Inderst P, Muhlberger N, et al. Cost-effectiveness of primary HPV screening for cervical cancer in Germany - A decision analysis. *Eur J Cancer*. 2011;47:1633-46.

OP68 An Evidence-Based Clinical Pathways Program Reduces Low-Value Care

AUTHORS:

Nikhil Mull, Brian Leas, Matthew Mitchell (mdmitchell@uphs.upenn.edu), Julia Lavenberg, Neha Patel, Austin Williams, Craig Umscheid

INTRODUCTION:

Misdiagnosis of asymptomatic bacteriuria as catheter-associated urinary tract infection (CAUTI) leads to unnecessary tests and other low-value care. We used this topic as the prototype to develop a clinical pathways program to promote evidence-based decision making in a multi-hospital system.

METHODS:

We convened a task force including hospital and critical care physicians, nurses, laboratory staff, and informatics specialists. Our Health Technology Asessment (HTA) center completed a rapid systematic review on guidelines and algorithms for diagnosing CAUTI. Additional rapid reviews were completed as necessary to address specific follow-up questions. A draft pathway based on the guidelines was developed, and then the task force edited it in an iterative process.

We used the Dorsata platform (Dorsata Inc., Washington, DC) to create, distribute and maintain the pathway. Dorsata has both desktop and mobile interfaces that guide clinicians through decision algorithms. Individual pathways include links to references and a portal for direct user feedback. Pathway owners have access to a real-time pathway utilization dashboard.

A standardized order set with the pathway was added to our electronic health record system. We also held educational meetings for residents and provided "huddle sheets" to nurse educators at each hospital. Posters and computer screen savers were also used to raise awareness of the new pathway.

https://doi.org/10.1017/S0266462317001490 Published online by Cambridge University Press

RESULTS:

We now have a total of 111 pathways on Dorsata, developed following the same model as the CAUTI evaluation pathway. Some topics, like breast cancer, have as many as sixteen pathways, addressing different clinical questions like first- and second-line therapy. Over 600 individuals have registered for the mobile app, including attending and resident physicians, nurses, and medical students. The pathway site had 1,619 views in December 2016, the most recent month for which complete records are available. The pathways are proving to have an effect on clinical decision making. For example, the annualized number of unnecessary urine cultures avoided as a result of the pathway is 4,474; resulting in estimated direct cost savings of USD67,110.

CONCLUSIONS:

Using pathways to present HTA information at the point of care is feasible and can improve the value of care.

OP69 Hospital-based Health Technology Assessment Is Applicable To Investment Decision-Making Process

AUTHORS:

Tuija Ikonen (tuija.ikonen@tyks.fi), Heli Lähteenmäki

INTRODUCTION:

Hospital mangers need information for decision making (1). Hospital-based health technology assessment (HTA) methods were tested out to support the budget planning of investments for a new building to be constructed for diagnostic and teaching units at a publicly funded tertiary care university hospital. The hospital board nominated an ad hoc working group to reassess all investment proposals for devices, equipment and furniture for the diagnostic or teaching units that intended to move into the new building. The need for assessment was obliged when the submitted proposals of the units exceeded two-fold the initially allocated investment budget.

METHODS:

Depending on the level of expenditure, all proposals were assessed by one of the following processes: (i) Proposals over EUR250,000 were evaluated by three to five person expert groups using multi-domain assessment adapting Hospital-based HTA-principles; (ii) Proposals between EUR50,000 and EUR250,000 were returned to the units for miniHTA-assessments by clinicians who submitted the initial proposals and (iii) All proposals below EUR50,000 were prioritized by the units to cut the expenditure by at least 25 percent, with a special emphasis on synergistic use of devices and equipment among the units.

RESULTS:

The expert groups suggested significant reductions to the proposals, including the withdrawal of a Magnetic Resonance Imaging (MRI)-unit considered to be suboptimally located. Furthermore, the need for a new scanner was declined by promoting adherence to evidence-based diagnostic guidelines and more efficient utilization of existing scanners. Self-assessed MiniHTAs revealed proposals that were unnecessary or the specifications for devices needed re-adjustments. Prioritization revealed excess numbers of devices, for instance the number of cold storage appliances could be reduced. Altogether, the investment proposals were cut by over EUR3.8 million to reach the initial budgetary allocation.

CONCLUSIONS:

Innovative and flexible usage of hospital-based HTA methodology can be applied to budget planning and evaluation of investment proposals to support decision making. Based on encouraging results, hospital-based HTA was accepted to become a part of hospital strategy as a tool for the annual investment planning.

REFERENCE:

1. Kidholm K, Olholm AM, Birk-Olsen M, et al. Hospital managers' need for information in decision-making - An

https://doi.org/10.1017/S0266462317001490 Published online by Cambridge University Press