testing on quality of life (QOL) is not well documented. The objective of this study was to evaluate the impact of both diagnostic procedures, to fill the knowledge gap and inform healthcare professionals and decision makers.

Methods. This was a cross-sectional study conducted between August 2017 and January 2019 at a university hospital. One hundred and twenty-four and forty-two women were referred for colposcopy and HPV testing, respectively. QOL was assessed using the World Health Organization Quality of Life-BREF (WHOQOL-BREF) and the 5-level EuroQol questionnaire (EQ-5D-5L). Socio-demographic details were collected. The WHOQOL-BREF and EQ-5D-5L scores were compared between colposcopy and HPV testing using independent t-test or Mann-Whitney test, depending on data distribution.

Results. The EQ-5D-5L score and four domains (mobility, self-care, usual activity, anxiety/depression) of EQ-5D-5L responses of the colposcopy and HPV testing groups were not significantly different ($p > 0.05$). However, the pain/discomfort domain of EQ-5D-5L in the colposcopy group was significantly higher than the HPV testing group ($p = 0.032$). The overall QOL and four domains (physical, psychological, social relationships, and environmental) of WHOQOL-BREF were not significantly different ($p > 0.05$).

Conclusions. The QOL scores between the colposcopy and HPV testing groups were similar. HPV testing is more expensive and is not included in all health benefit packages, thus most ASC-US patients are referred to colposcopy according to reimbursement. Some women in the colposcopy group judged their social and working impact worse from the pain. Nevertheless, HPV testing would be alternative option in terms of less pain. The findings from this study may assist in promoting QOL in this group of women.

PP309 Accuracy Of Automated Wrist Blood Pressure Monitors: Systematic Review

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Introduction. The use of automated blood pressure monitors is recommended by current guidelines; however, the accuracy of the device must be validated according to standardized protocols. Wrist blood pressure monitors have been undergoing technical improvements; nonetheless, their reliability is not unanimously recognized. No systematic review to date has analyzed the accuracy of wrist blood pressure monitors according to standardized protocols. This study aims to summarize the evidence on the accuracy of wrist blood pressure monitors in adults.

Methods. Three databases (PubMed, Scopus and SciELO) were searched on 9 September 2019. The PICO (Patient, Intervention, Comparison and Outcome) strategy was used to outline the research question: Do automated wrist blood pressure monitors have accuracy equivalent to mercury sphygmomanometers in adults? Validation studies of wrist blood pressure monitors were included. Two reviewers independently screened abstracts and full texts. Summary data was extracted for each device, including mean difference of systolic blood pressure (SBP) and diastolic blood pressure (DBP) between the monitor and the mercury sphygmomanometer.

Results. The review identified twenty-nine validation studies. Most of them were developed in China (44.82%), followed by Italy (20.68%). The most commonly used validation protocol was from the British Society of Hypertension. The mean difference between the devices and the mercury sphygmomanometers was 0.47 (±5.75) mmHg for SBP and 0.17 (±4.75) mmHg for DBP. The percentage of wrist blood pressure monitors that passed validation protocols was 93.1.

Conclusions. Most automated wrist blood pressure monitors showed accuracy equivalent to the reference standard for blood pressure measurement, with mean differences less than 0.5 mmHg for SBP and 0.2 for DBP. This evidence supports the recommendation to adopt this technology for the measurement of blood pressure in adults. However, wrist blood pressure monitors have patient positioning specificities, which, if not followed, may lead to measurement errors. Therefore, the adoption of these monitors should consider not only their accuracy, but also aspects of patient use and preferences.

PP313 Patient Preference For Blood Pressure Measurement: Sphygmomanometers Or Automatic Monitors?

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Introduction. The development of more accurate algorithms has encouraged the replacement of sphygmomanometers with automatic blood pressure (BP) monitors in adults. From the perspective of health professionals, these technologies are advantageous for their practicality and are less susceptible to observer errors, and many devices validated by standardized protocols are available for both clinical and home use. However, adherence to these technologies also depends on patient acceptance. No studies to date have examined patient preference for BP measurement in the Brazilian population, although Brazil has undertaken initiatives to replace auscultatory measurement with oscillometric measurement. This study aims to analyze patient preferences between sphygmomanometers and automatic monitors for BP measurement.

Methods. An analytic study was conducted with 93 subjects in a Brazilian outpatient care facility. A random sampling method was used to select participants. After obtaining informed consent, all subjects had their BP measured using a sphygmomanometer and then an automatic monitor for clinical use, both in a quiet room after 10 minutes rest. A structured interview on discomfort and preferences was then conducted. An unpaired t-test and a chi-square test were used.

Results. The mean age was 39.11 (±14.22) years. Minor discomfort was identified when an automatic monitor was used (2.34 versus 2.52). Confidence was higher with the sphygmomanometers (73.11%), and 60.21 percent preferred this technology. There was no association between gender and preferences ($p =$

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0.88), but an association with age was identified. The average age of subjects who preferred sphygmomanometers was higher compared to those who preferred automatic monitors ($p < 0.05$).

Conclusions. This study revealed that, although BP measurement using automatic monitors is less uncomfortable, patients rely more on sphygmomanometers. Results show that preference is related to age, as younger people tend to prefer automatic monitors. The findings of this study indicate the need to widely disseminate information regarding the accuracy of automatic monitors among patients, especially older ones, in order to make them part of the decision-making process for replacing sphygmomanometers with automatic monitors.

PP316 Efficacy And Usability Of eHealth Technologies In Stroke Survivors For Improvement Of Self-Management: Clinical Trial

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Introduction. Stroke is a leading cause of severe and long-term disability in developed countries. Around 15 million people suffer a stroke each year, most due to modifiable risk factors. Several reviews have shown that interventions mediating eHealth technologies can reduce the risk of suffering a stroke episode, improving the control of risk factors; nevertheless, all of them conclude that new and well-designed studies are needed.

Methods. We performed a prospective, randomized, parallel group and open, pilot trial. The study was carried out based on an initial sample of forty-three patients between 18 and 80 years old who have had an ischemic stroke. The control group got conventional treatment and the intervention group got conventional treatment and the assistance of STARR (the Decision SupporT and self-mAnagement system for stRoke survivoRs), as well as commercial wearables. The principal variable of the study was to evaluate the usability of the decision support system.

Results. At month nine, the average score on the System Usability Scale in the intervention group was 64.7 and in month 12, 67.4, exceeding in both cases the margin of acceptability (50) and in the limit of "good" (68). When we analyzed clinical factors (systolic/diastolic blood pressure) as well as the analytical parameters related to prevention of reinfarction, we observed that the intervention group had good control of blood pressure and better analytical parameters, compared to the control group.

Conclusions. Technological support allowed participants to feel comfortable using the devices as well as resolving technical incidences by themselves after a training period. The self-management platform can be efficient in stroke survivors' management of their disease condition, improving analytical and clinical parameters, which eventually can influence a decrease in associated comorbidities and, therefore, improvement of the disease. However, it should be noted that this type of platform is not useful for every patient profile, and studies in this regard should be expanded.

PP326 Health Economic Value Of The Midline Catheter Versus Peripherally Inserted Central Catheter In Korean Inpatient Setting

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Introduction. It is estimated that over 90 percent of hospitalized patients will receive some form of vascular access device (VAD) for their treatment. Currently, patients requiring medium-term catheterization often have peripherally inserted central catheters (PICCs) placed, which are expensive, time consuming and usually for long-term catheterization. Midline catheters (MCs) are VADs placed in deep peripheral veins, with a dwell time of up to 29 days. The study aimed to evaluate if using MCs over PICCs has any clinical and economic benefits.

Methods. A cost-calculator was developed in Microsoft Excel 2013 to demonstrate the clinical and economic differences of using MCs over PICCs in an inpatient setting in Korea. A literature review was conducted and included eighteen studies that showed MCs have positive clinical, patient, economic, and institutional outcomes. The model captured clinical outcomes such as usage duration, complications, and costs. The time horizon was one year, and various model inputs were derived from the literature review.

Results. For an annual catheter utilization of MCs over PICCs, the total cost-saving was USD 3,764,994. Total treatment costs for MCs were USD 7,230,825 and for PICCs were USD 8,987,922. The total treatment costs included device cost, complication cost and labor cost related to using both MCs and PICCs. For MCs versus PICCs, device costs were USD 6,554,317 versus USD 6,563,356, complication costs were USD 106,749 versus USD 982,417, and labor costs were USD 569,759 versus USD 1,442,149.

Conclusions. In both the base and sensitivity analyses, results showed that MCs can be an impressive cost-saving option among patients with unnecessary PICC use in Korea. Among patients who require medium-term catheterization and use PICCs even when not targeted for central line insertion, MCs are a more cost-effective option, and MCs will benefit these patients with lesser complication rates. MCs are a suitable alternative with clinical and economic benefits that could lead to lower burden on patients and healthcare systems.

PP329 An Australian Cost-Effectiveness Analysis Of The Eluvia™ Drug-Eluting Stent For Treatment Of Symptomatic Lower-Limb Peripheral Artery Disease

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