lary in liver surgical bleeding. Caution must be taken in interpreting results given some patient differences. A head-to-head trial comparison may be necessary to confirm differences between products.

**PMD40**

**EFFECT OF HYDROPHILIC COATING ISOANTIC TO URINE ON INFECTIONS AND COMPLICATIONS AMONG USERS OF INTERMITTENT UROINARY CATHETERS**

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**OBJECTIVES:** Infections and urethral trauma are common complications among patients using intermittent urinary catheters. The objective of this study was to investigate the effect on complications of switching to a catheter with hydrophilic coating isoantic to urine. **METHODS:** A questionnaire was sent to 694 indwelling catheters performing daily intermittent urinary catheterization in Europe and the USA. The participants were asked to report infections and complications, as well as current catheter type if applicable. Only patients reporting to currently using a catheter type with hydrophilic coating isoantic to urine were included in the study. The patients who had previously switched catheters were asked to estimate their current infections, complications and problems as much less, same, or much more compared to before the switch. Wilcoxon signed rank tests were carried out to detect changes in level of consequences after switching.

Analyses were performed separately for patients who switched but stayed on catheters with hydrophilic coating isoantic to urine and patients who switched from another catheter type. **RESULTS:** The initial response rate was 57% (n=391) of which 74% (n=288) were using catheters with hydrophilic coating isoantic to urine. 129 patients reported to have switched catheters, 41 (32%) stayed on the same catheter type, and 24 (19%) switched to another catheter type. Among those patients who switched from another catheter type to a catheter with hydrophilic coating isoantic to urine, an average of 15% reported more and 5% reported less infections compared to pre-switching (p=0.042), UTIs (p=0.045), complications (p=0.062) and general problems (p=0.001). The corresponding numbers for the patients who stayed on catheters with hydrophilic coating isoantic to urine were not statistically different.

**CONCLUSIONS:** This study indicated patients performing daily intermittent catheterization can benefit from switching to a catheter with hydrophilic coating isoantic to urine.

**PMD81**

**IS THERE UTILITY IN CLINICAL UTILITY MODELING FOR DIAGNOSTIC TECHNOLOGIES?**

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**OBJECTIVES:** Demonstrating clinical utility is a challenge for diagnostic companies; MolDX denied 40% of CMS applications due to insufficient clinical utility data. Trials to prove clinical utility can be expensive and lengthy. Modeling can be an inexpensive method in establishing clinical utility for a novel diagnostic. The objective of this study was to determine the utility of and identify requirements and hurdles for developing clinical utility models. **METHODS:** We conducted a qualitative review of 15 clinical utility models for novel diagnostics across diverse therapeutic areas and encompassing screening, diagnostic, and monitoring tests. Models were assessed based on data requirements, validity of outcomes, and ability to secure reimbursement. **RESULTS:** Clinical utility depends on: (1) test performance (relative to standard of care), (2) physician practice change (confidence in test results), (3) patient compliance/behavioral change, (4) availability and proven benefits of alternative/adjunctive treatments, (5) and (6) costs/benefits of adopting a new test. For clinical utility critical is most effective in areas where clear treatment protocols exist and evidence supporting the efficacy of an alternative treatment is robust. Evidence supporting physician practice change and patient compliance are frequently unknown, but may be inferred by looking at existing practice patterns or EMR data. Modeling for clinical utility is most challenging when treatment guidelines are broad and outcomes evidence is evidence supporting the efficacy of an alternative treatment is robust. Evidence supportive to standard of care. **CONCLUSIONS:** The objective of this study was to determine if within the sodium–glucose cotransporter 2 (SGLT2) inhibitors class, any individual drug increased or decreased risk of urinary tract infection (UTI). **METHODS:** Data base search was conducted using Medline, PubMed, and Google Scholar. Study included trials of FDA approved SGLT2 inhibitors canagliflozin, dapagliflozin and empagliflozin. For each trial, primary or any secondary outcome was compared in a randomized controlled trials which included patients with diabetes were included. Any trials with any special groups of patients, for example, patients with cardiovascular disease were excluded. A meta-analysis of randomized trials, case reports, editorials, letters to the editors, and studies with no comparison group were excluded. Trials which did not report UTI as a side effect were excluded. A meta-analysis was conducted and data was pooled using odds ratio and 95% confidence intervals. All analysis was performed using SAS version 9.4. **RESULTS:** When the three drugs were compared, there was no significant difference in odds of developing a UTI. Sensitivity analyses were performed by excluding, in turn, the contribution of each study to the meta-analysis data. There was no significant difference in the results. **CONCLUSIONS:** Although the study reinforced the finding that urinary tract infection is one of the major adverse events caused by this class of antidiabetic drugs, this meta-analysis suggested that there was no significant difference in risk of UTIs among the three SGLT2 inhibitors in the market.