Introduction:
Diabetes is a well established risk factor for erectile dysfunction (ED). NICE guidelines recommend that men with diabetes mellitus (DM) should be reviewed annually regarding symptoms of ED in view of possible phosphodiesterase-5 (PDE-5) inhibitor treatment[1].

Previous studies have shown that 70% of men with ED have concurrent lower urinary tract symptoms (LUTS)[2]. An RCT has shown that monotherapy with a PDE-5 inhibitor (tadalafil) improved LUTS in men with benign prostatic hyperplasia with similar efficacy to tamsulosin, as well as improving erectile function scores[3].

It has been suggested that there may be some common pathophysiology which may account for the improvement in LUTS seen in men with ED and benign prostatic hyperplasia treated with PDE-5 inhibitors[4].

Aims:
Our objectives were to assess the prevalence of ED and concomitant LUTS in a diabetic cohort and assess whether their symptoms were being managed according to current guidelines.

Methods:
Male patients attending a diabetic outpatient clinic in SWBH, Birmingham were asked questions regarding their erectile function, via the International Index of Erectile Function (IIEF) tool and urinary storage and voiding problems using the International Prostate Symptom Score (IPSS).

On the IPSS, patients’ scores were categorised into mild, moderate or severe LUTS. On the IIEF tool, a score of 0 indicated they had no opportunity for sexual activity, otherwise an overall score of <25 is suggestive of some erectile dysfunction.

Results:
Overall 60 men consented to answering the questions. The mean age of men who answered was 64 years. 53% (n=32) suffered with moderate or severe LUT symptoms. The most commonly reported symptoms were urgency, frequency and weak stream (see Figure 1). 75% (n=45) had at least one episode of nocturia.

9 men said they had no opportunity for sexual activity, hence these were excluded from the subsequent analysis. Of those that did have a partner (n=51), 78% (n=40) reported symptoms of ED (IIEF score <25).

One third of patients reported they had very low confidence that they could get and keep and erection (see Figure 2). Only 6 of the patients questioned had been prescribed phosphodiesterase-5 inhibitors by their doctor, namely sildenafil (n=4) and tadalafil (n=2). Hence 70% (n=36) had symptoms of ED and aren’t on medication for this.

Of patients suffering from ED, 58% (n=23) also had moderate/severe LUTS, in comparison to 27% (n=3) in those with normal erections (see Figure 3).

Discussion:
This cohort of patients, who’s diabetes is managed in secondary care, are likely to be at a high risk of microvascular complications of DM. Of sexually active men, 78% reported symptoms of erectile dysfunction of which 58% reported concomitant lower urinary tract symptoms.

Despite this, only 6 of the patients that were questioned had been given a PDE-5 inhibitor by their doctor. There is some evidence to show that PDE-inhibitor treatment in men with known BPH improves their LUTS as well as the giving the expected improvement in erectile dysfunction[4].

Considering the evidence that phosphodiesterase-5 inhibitors may improve both urinary symptoms and ED; would these diabetic patients benefit from consideration of PDE-5 inhibitor therapy?

Recommendations:
- Diabetic patients reviewed in secondary care should be screened annually for symptoms of erectile dysfunction as per NICE guidelines.
- Would patients with ED and LUTS benefit from consideration of PDE-5 inhibitor therapy?

References
4. Oekla M et al. Monotherapy with tadalafil or tamsulosin similarly improved lower urinary tract symptoms suggestive of benign prostatic hyperplasia. Uropean Urology. 2012; 61; 917-925