Women's Health and Urinary Tract Infection (UTI)

The scandal of ignored guidelines

Unreliable diagnoses / Unnecessary antibiotics for millions of women / Costly repeat tests

Simple medical innovation designed by a doctor points to retest and efficiency savings of up to £160m*

Reduced unnecessary antibiotic prescribing especially for women Reduced risk of Sepsis Reduced unplanned hospital admissions

Recent pledges by policy makers to support prevention over cure have encouraged Forte Medical to relaunch Peezy Midstream into the UK health sector next year, benefitting patients across the UK, where it is manufactured. The difficulties experienced around NHS innovation adoption are covered in this recent Imperial College Report featuring the Forte Medical case study.

No protocol for UTI or prenatal screening urine collection leads to undiagnosed UTI, unnecessary prescribing, lack of hygiene and more. Is this a #metoo moment for women with UTI? Would the problem have been addressed if UTI was a predominantly male issue?

Despite urine being rich with information and a diagnostic counterpart to blood, there is **no protocol for its collection**, leaving women suffering unduly from delayed diagnoses, repeat testing and antibiotics they may not need; 30%-60% of UTI episodes are **treated with antibiotics without microbiology culture** to confirm the infection, fuelling the growing problem of antimicrobial reistance (AMR). Peezy Midstream can represent this much needed protocol as it helps patients deliver clean-catch urine automatically (<u>animation here</u>).

Designed by NHS GP Dr Vincent Forte, Peezy Midstream improves accuracy of specimen collection for routine screening of Urinary Tract Infection (UTI). The technology also points to cost savings due to significantly reduced retesting as well as clinical benefits to the millions of women who suffer from UTI every year. Midstream urine (also known as clean-catch) is recommended in all guidelines, which are rarely met and less often mentioned to patients when asked for a urine sample. The device is helpful for pregnant women who cannot always see a collection tube and for the elderly and less able, as it is easy for a carer to assist with hygiene and dignity for both parties to achieve the right diagnosis first-time.

Dr Vincent Forte says: It's a strange situation that in this high-tech age with all this smart technology, that something as basic as collecting an accurate midstream urine sample has been completely ignored. Urine's not glamorous, it's not like blood, people respect the need for accurate blood tests and there's an awful lot of tech around that but urine? Well, it doesn't matter if you pee into a jam-jar does it? It doesn't matter if you decant from a jug ... it doesn't matter if there are several changes of hands and containers between the patient and the laboratory, does it? It really does matter! We have a device that takes a midstream sample first time into a tube that goes straight into the diagnostic machine in the lab. No decanting. Peezy Midstream will also make new, digital diagnostic tech as accurate as possible. How fantastic is that?

Michael Farrar, leading independent healthcare consultant says: If you start with the wrong sample, digitising the way in which you achieve the result is not really going to help get rid of the £450m or so unwarranted cost. So really, you have to look at the clinical practice to guarantee the diagnostic capability

It's also about allowing the clinician and practitioner to be aware of the problems that Peezy Midstream is trying to resolve. Depending on the bit of flow provided for the test, you're going to get a different result. The key thing is that most clinicians order a test and they assume that when it comes back it is an accurate diagnosis. Whoever requests the test needs to be clear that it is needed from a midstream sample because **otherwise there's a risk they are not going to get the accurate diagnosis**. If they've no awareness, then they are going to carry on doing what they've always done. You probably need bodies like the Royal Colleges to be saying to their members, really our clinical practice isn't as good or clinical sound or safe as it should be and we now need to switch the way we deliver care and deliver quality in practice"

Mr Ased Ali, Consultant Urological Surgeon says: I think this device is fantastic in that it makes things so much easier to collect a urine sample and that goes for men and women but especially for women where traditionally it is difficult to collect a clean uncontaminated sample. Often in clinic you'll give basic instructions but with the Peezy it is so much more straightforward. It feels like a much more sophisticated way to collect what is actually a very common sample. In addition, when you use a device like this it is much less likely that you have to repeat the sample and offers much less uncertainty - did I take it properly? Is the reason I didn't get a proper result because I did it wrong? All of those elements are reduced by using this device, which means less visits to the GP, less samples having to be taken and generally a more dignified experience for the patient.

Giovanna Forte, CEO of Forte Medical says: With the current funding crisis around healthcare in the UK, the cost benefits that scaled Peezy Midstream adoption could deliver, may help to ameliorate many financial challenges from staff training, to clinician pay and dilapidated buildings. Additionally, one wonders why, when the NHS has spent millions on Clean Your Hands Campaigns they still expect women to soil their own hands in order to provide a urine sample from which they may not be diagnosed?

Many patients have reported a preference to use Peezy Midstream. Janet Coles, 80, says: "I used the Peezy to test how easy it was as I was going for a cystoscopy and had to take a sample. It was really simple to use - much easier than the usual faffing about getting a sample. I had to go to A&E and watched in the waiting area as an elderly lady was handed a tiny little cup and a sample tube - I wondered how she would cope."

* Full details on savings, clinical benefits, stats, data and sources are in the attached Media Briefing.

NOTES

- Awards won by the first Peezy Midstream prototype include:
 - Medical Futures Innovation Award
 - NHS East of England Health and Social Care Innovation Award
 - Design Week Best Industrial Product and Design Week Best of Show (runners up were the Apple MacBook Air and Microsoft!).
- Peezy Midstream is made in the UK by Boddingtons Plastics

Other advocates happy to speak with journalists:

<u>Neil Spooner</u>, Chair of the <u>Patient Centric Sampling Interest Group</u> a professional Not-for-Profit organisation created to put the patient at the centre of biological sample collection leading to transformed healthcare.

<u>Professor Alan Wolfe.</u> Professor of Microbiology with special interest in the urinary microbiome at the Loyola Chicago Stritch School of Medicine. Alan is currently using Peezy Midstream for patient specimen collection within a US-wide study on the urinary microbiome, in collaboration with global patient advocacy organisation <u>Live UTI Free</u>.

Biographies

<u>Dr Vincent Forte</u>, BA (Cantab), MBBS (Lond), MRCGP, MSc, DA is retired from the NHS due to a stroke in 2015. He was a GP for over 20 years, a Forensic Physician and is co-author of Primary Care Reference Book <u>Symptom Sorter</u>. Vincent cannot take interviews, but is happy to correspond by email: please contact his sister in the first instance.

Giovanna Forte has led commercialisation of Peezy Midstream since company inception. Ten years of R&D led to the final design release in 2015. After several years of work to generate adoption in the NHS - especially within prenatal screening where excellent results have been seen. The struggle was compounded in 2020 when Covid stopped all point of care testing and sales. The company had to take the tough decision to withdraw from its own market. Peezy Midstream now sells in the USA under a Medicaid HCPCS code, which rewards physicians for adopting preventative practice.