

# Lessons from a Quality Improvement Project in *Mycoplasma genitalium* testing in clinically indicated conditions

L. Yin, V. Alam, H. Khan, L. Tincknell, E. Wallis, G. Sethi

# Background

- *Mycoplasma genitalium* is an emerging STI, with potential complications including ascending infection
- BASHH Guidelines 2018 recommend testing in certain clinically indicated conditions (CIC)
- Guy's and St Thomas' Trust (GSTT) introduced testing soon after and produced local guidelines
- Prevalence:

General population	1-2%
NGU	10-20%
PID	10-13%

# Aim

To ensure that 100% of the following patients attending the three GSTT SRH clinics were appropriately tested for *M. genitalium* by March 2019:

- All NGU
- PID with confirmed pus cells
- Epididymo-orchitis with confirmed pus cells

# Measuring change

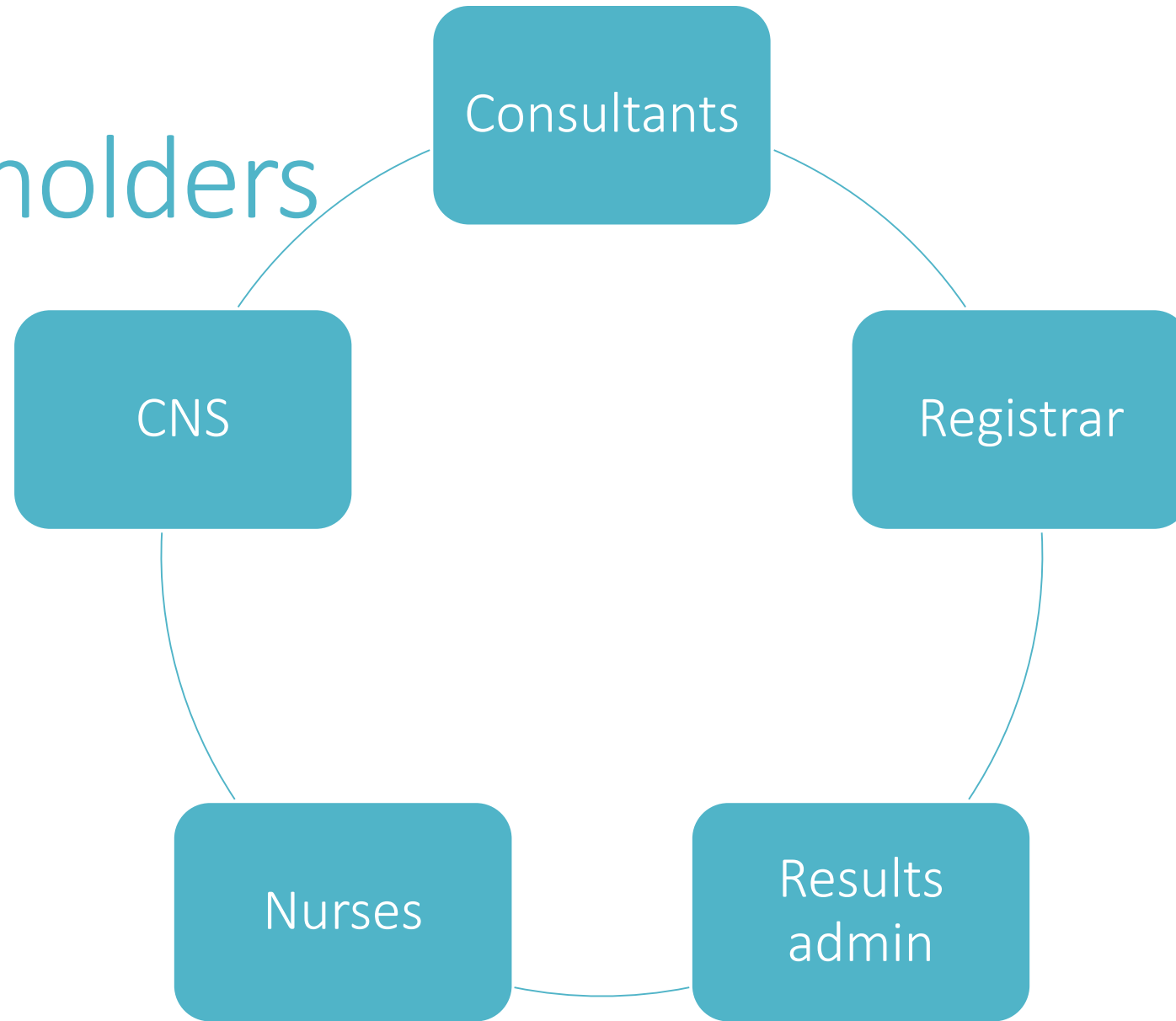
## Outcome measure

- Random sample of 10 patients every week for each clinically indicated condition
- 5 weeks of baseline data
- At least 3 weeks between each change

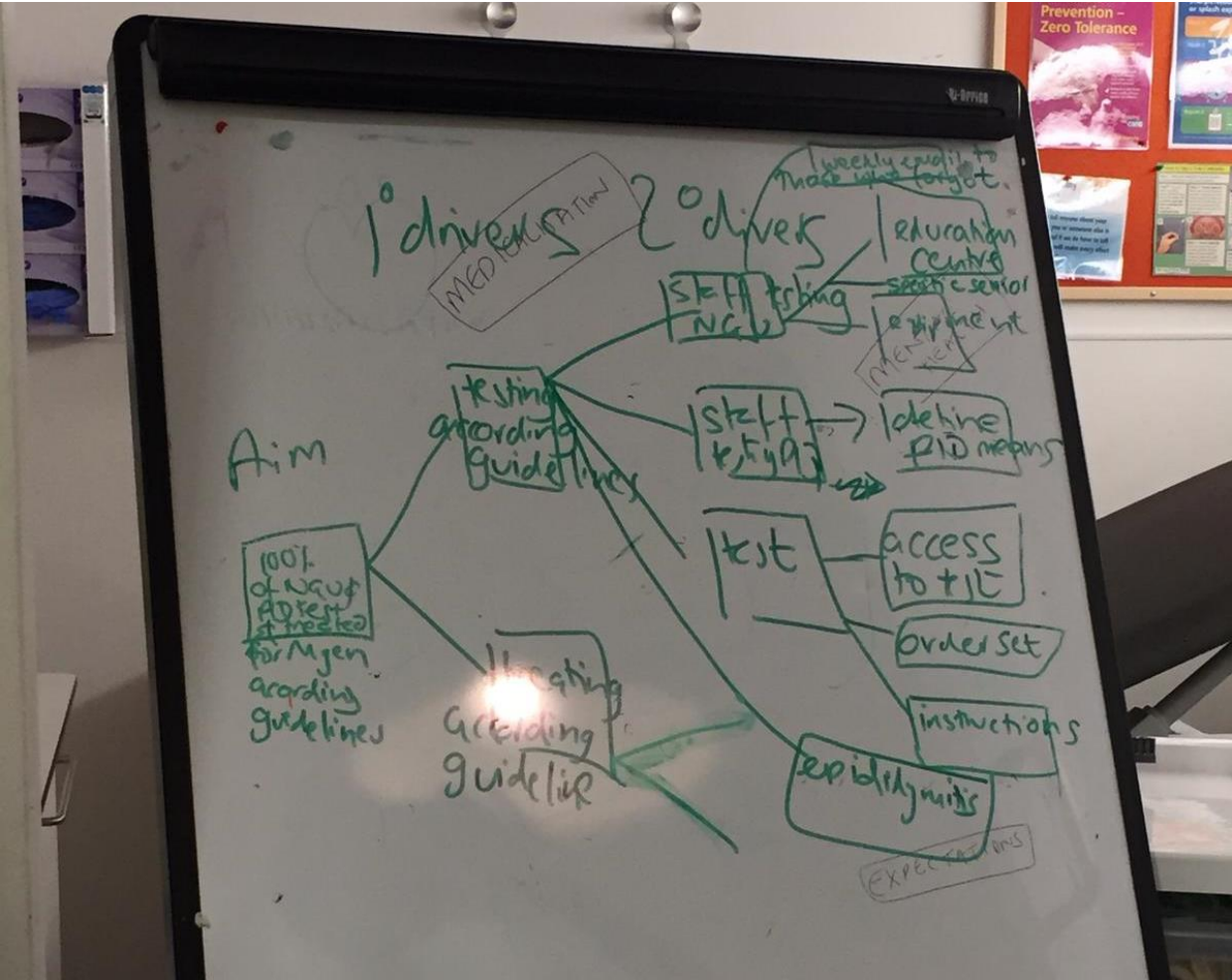
## Balancing measure: inappropriate testing

- *M. genitalium* test is not funded for by our commissioners
- No evidence that screening asymptomatic individuals is beneficial

# Stakeholders



# Driver Diagram



Aim: to ensure that 100% of patients are tested according to trust guidelines by March 2019

Staff awareness

Display posters clearly demonstrating the guidelines

Educate staff on the new guidelines

Send weekly reminder emails to those who failed to test in an indicated patient

IT

Ensure clinicians have access to order the test

Change the name of the order on the system

# Plan-Do-Study-Act cycles

PDSA 1 (week 6)

IT access for all  
clinicians

PDSA 2 (week 9)

Educational event &  
posters in clinical areas

PDSA 3 (week 13)

Reminder emails





# GSTT Guide to Mycoplasma genitalium

## 1. Who to test?

Female patients	Male patients
Women with PID <b>WITH</b> confirmed Pus cells on end-cervical microscopy >5 pus cells per hpf (x100 objective)	1) All NSU patients confirmed by microscopy: >5 pus cells per hpf (x100 objective) 2) Epididymo-orchitis <b>WITH</b> confirmed urethral pus on microscopy
Current sexual partners of persons infected with M. genitalium	

## 2. How to test?

2) Enter 'M. Gen PCR' in Clinical Info. box

3) Print TWO sets of stickers to apply to 2 samples collected

1) SELECT "SPECIAL PCR"

Male patients:	Female patients:
2 x First void urine 1) Yellow TMA bottle 2) Universal container	2 x vulvovaginal swabs (clinician/self) 1) HSV PCR 2) Orange TMA
<b>SAMPLES MUST BE SENT IN ADDITION TO CT/GC/TV TESTS</b>	<b>SAMPLES MUST BE SENT IN ADDITION TO CT/GC/TV TESTS</b>

## 3. How to treat and TOC?

**Treatment regimens for uncomplicated infection (NSU) (Known macrolide-sensitive/ resistance status unknown)**

- Doxycycline 100mg BD daily for 7 days followed by azithromycin 1g orally as a single dose then 500mg orally once daily for 2 days

**Treatment regimens for complicated infection (PID/ epididymo-orchitis) or known M.Gen resistance**

- Moxifloxacin 400mg orally once daily for 14 days (prescribe on outpatient prescription)

**Treatment failure or infection during pregnancy** → Refer to complex infection virtual Clinic

**Test of Cure:** All patients to have TOC at 5/52 after start of treatment

RE: xxxx

Dear xxx

We thought that we'd make you aware that you didn't test the above patient for Mycoplasma Genitalium. According to new trust and national guidelines we should be offering testing to all patients presenting with:

- 1) PID with pus cells on microscopy
- 2) NGU
- 3) Epididymitis with pus cells on microscopy

We appreciate this is change of routine and we hope as a department we can adapt. As part of the M. Gen QIP we are aiming to test 100% of eligible patients for M. Gen by March 2019 and we are currently sampling a selection of patients each week and sending reminder emails to clinicians that did not test according to guidelines in the hope to promote change and improve testing. As a reminder, we have attached a poster detailing how and when to test for M. Gen.

Please note, there is no further action to be taken, this is just a reminder that in future when seeing patients with the above conditions please offer M.Gen testing. If you have any questions please do get in contact me.

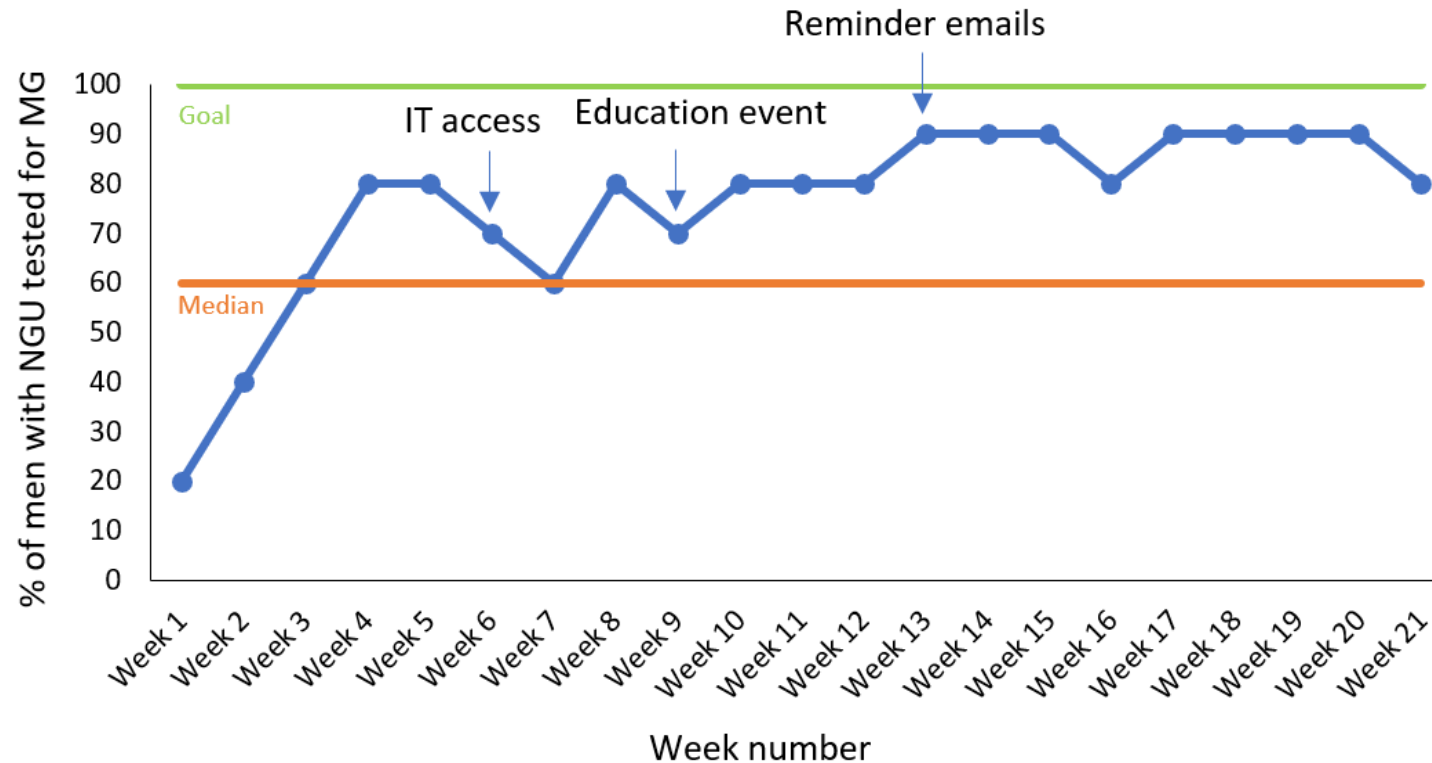
Thank you for taking the time to read this email.  
Happy M.Gen Testing!

King Regards,  
M. Gen QIP Testing Team



# Results-NGU

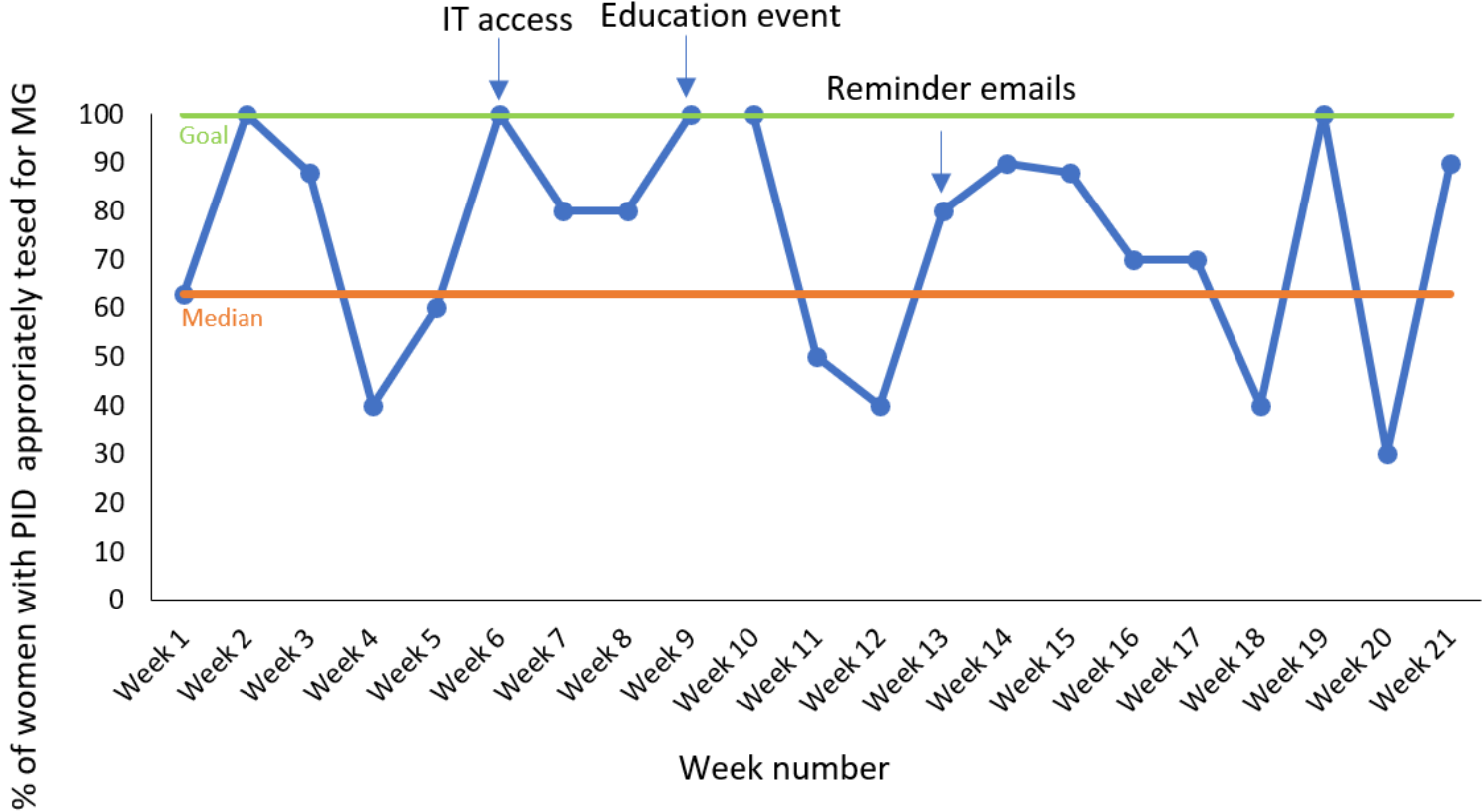
Percentage of men with NGU tested for MG  
(September 2018-January 2019)



NGU: Median testing rates increased from 60% at baseline to 90% by the end of January 2019

# Results-PID

### Percentage of women with PID appropriately tested for MG (September 2018-January 2019)



# Results

- Inappropriate testing rates:

Week number	Inappropriate testing rates
8	13% (10/75)
10	7% (4/57)
13	15% (7/45)
21	8% (5/62)

# Discussion and reflections

- Low numbers of eligible PID (8/week) and epididymo-orchitis (2/week)
- Practicalities of testing in PID
  
- Key lesson: importance of departmental engagement from outset
  - Identify barriers and solutions, create shared driver diagram
  - Increase awareness of guidelines
  - Foster an environment of change

Thank you