

Supplemental materials for

Hao S, Tao G, Pearson W, et al. Treatment of Chlamydia and Gonorrhea in Primary Care and its Patient-Level Variation: An American Family Cohort Study. *Ann Fam Med.* 2025;23(2):136-144.

Supplemental Appendix. The PRIME Registry

The PRIME Registry is a clinical data repository with more than 2,000 primary care clinicians across the U.S. that includes critical electronic medical record data elements. The American Board of Family Medicine (ABFM) established this registry to measure clinical quality as well as develop specific clinical measures for quality reports and dashboards. The registry contains a convenience sample of over 1,000 practices and more than five million patients with a focus on care received by family physicians, general internists, general pediatricians, and advanced clinical practitioners, such as nurse practitioners and physician assistants. All data from the PRIME registry are stored in the American Family Cohort, a database of detailed demographics, diagnosis codes, procedures, laboratory results, medication data including prescriptions, and free-text clinical notes.

Supplemental Table 1: List of all codes to identify chlamydia and gonorrhea infections

Infection	Description	Type of Code	Code Value
Chlamydia	Other specified diseases due to chlamydia	ICD9CM	078.88
	Other specified chlamydial infection		079.88
	Unspecified chlamydial infection		079.98
	Other nongonococcal urethritis, chlamydia trachomatis		099.41
	Other venereal diseases due to Chlamydia trachomatis		099.5
	Other venereal diseases due to chlamydia trachomatis, unspecified site		099.5
	Other venereal diseases due to chlamydia trachomatis, pharynx		099.51
	Other venereal diseases due to chlamydia trachomatis, anus and rectum		099.52
	Other venereal diseases due to chlamydia trachomatis, lower genitourinary sites		099.53
	Other venereal diseases due to chlamydia trachomatis, other genitourinary sites		099.54
	Other venereal diseases due to chlamydia trachomatis, unspecified genitourinary site		099.55
	Other venereal diseases due to chlamydia trachomatis, peritoneum		099.56
	Other venereal diseases due to chlamydia trachomatis, other specified site		099.59
	Other sexually transmitted chlamydial diseases	ICD10CM	A56
	Chlamydial infection of lower genitourinary tract		A56.0
	Chlamydial infection of lower genitourinary tract, unspecified		A56.00
	Chlamydial cystitis and urethritis		A56.01
	Chlamydial vulvovaginitis		A56.02
	Other chlamydial infection of lower genitourinary tract		A56.09
	Chlamydial female pelvic inflammatory disease		A56.11
	Other chlamydial genitourinary infection		A56.19
	Chlamydial infection of genitourinary tract, unspecified		A56.2

	Chlamydial infection of anus and rectum	SNOMED	A56.3
	Chlamydial infection of pharynx		A56.4
	Sexually transmitted chlamydial infection of other sites		A56.8
	Chlamydial infection, unspecified		A74.9
	Chlamydial infection		105629000
	Urethritis due to Chlamydia trachomatis		179101003
	Chlamydial infection of lower genitourinary tract		186729003
	Chlamydial infection of anus and rectum		186731007
	Female chlamydial pelvic inflammatory disease		198176005
	Chlamydial urethritis		236683007
	Chlamydial cervicitis		237084006
	Chlamydial vulvovaginitis		237097008
	Chlamydia trachomatis infection		240589008
	Genitourinary chlamydia infection		312099009
	Chlamydia trachomatis infection of genital structure		428015005
Gonorrhea	Gonococcal infections	ICD9CM	098
	Gonococcal infection (acute) of lower genitourinary tract		098.0
	Gonococcal infection (acute) of upper genitourinary tract, site unspecified		098.10
	Gonococcal cystitis (acute)		098.11
	Gonococcal prostatitis (acute)		098.12
	Gonococcal epididymo-orchitis (acute)		098.13
	Gonococcal cervicitis (acute)		098.15
	Gonococcal endometritis (acute)		098.16
	Gonococcal salpingitis, specified as acute		098.17
	Other gonococcal infection (acute) of upper genitourinary tract		098.19
	Gonococcal infection, chronic, of lower genitourinary tract		098.2
	Gonococcal infection, chronic, of upper genitourinary tract		098.3

	Chronic gonococcal infection of upper genitourinary tract, site unspecified	098.30
	Gonococcal cystitis, chronic	098.31
	Gonococcal prostatitis, chronic	098.32
	Gonococcal epididymo-orchitis, chronic	098.33
	Gonococcal seminal vesiculitis, chronic	098.34
	Gonococcal cervicitis, chronic	098.35
	Gonococcal endometritis, chronic	098.36
	Gonococcal salpingitis (chronic)	098.37
	Other chronic gonococcal infection of upper genitourinary tract	098.39
	Other gonococcal infection of eye	098.49
	Gonococcal infection of pharynx	098.6
	Gonococcal infection of anus and rectum	098.7
	Other gonococcal heart disease	098.85
	Gonococcal peritonitis	098.86
	Gonococcal infection of other specified sites	098.89
	Gonococcal infection	A54
	Gonococcal infection of lower genitourinary tract without periurethral or accessory gland abscess	A54.0
	Gonococcal infection of lower genitourinary tract, unspecified	A54.00
	Gonococcal cystitis and urethritis, unspecified	A54.01
	Gonococcal vulvovaginitis, unspecified	A54.02
	Gonococcal cervicitis, unspecified	A54.03
	Other gonococcal infection of lower genitourinary tract	A54.09
	Gonococcal infection of lower genitourinary tract with periurethral and accessory gland abscess	A54.1
	Gonococcal pelviperitonitis and other gonococcal genitourinary infection	A54.2
	Gonococcal infection of kidney and ureter	A54.21

ICD10CM

Gonococcal prostatitis	A54.22
Gonococcal infection of other male genital organs	A54.23
Gonococcal female pelvic inflammatory disease	A54.24
Other gonococcal genitourinary infections	A54.29
Gonococcal infection of eye, unspecified	A54.30
Gonococcal conjunctivitis	A54.31
Other gonococcal eye infection	A54.39
Gonococcal pharyngitis	A54.5
Gonococcal infection of anus and rectum	A54.6
Gonococcal heart infection	A54.83
Gonococcal peritonitis	A54.85
Gonococcal sepsis	A54.86
Gonococcal infection, unspecified	A54.9
Gonorrhea	15628003
Gonorrhea of upper genitourinary tract	16217981000119107
Acute gonorrhea of genitourinary tract	17305005
Gonococcal anal infection	186931002
Gonococcal urethritis	236682002
Gonococcal cervicitis	237083000
Gonococcal female pelvic infection	240581006
Gonorrhea of rectum	42746002
Gonococcal infection of joint	44743006
Acute gonorrhea of lower genitourinary tract	54825009
Gonorrhea of pharynx	74372003

SNOMED

Supplemental Table 2: List of all codes to identify confirmed positive tests.

Condition	Type of Code	Code Description	Code Value
Gonorrhea	LOINC	Neisseria gonorrhoeae DNA [Presence] in Urine by NAA with probe detection	21416-3
		Neisseria gonorrhoeae DNA [Presence] in Specimen by NAA with probe detection	24111-7
		Neisseria gonorrhoeae rRNA [Presence] in Specimen by NAA with probe detection	43305-2
		Neisseria gonorrhoeae DNA [Presence] in Specimen by Probe with signal amplification	43403-5
		Chlamydia trachomatis+Neisseria gonorrhoeae DNA [Presence] in Specimen by Probe with signal amplification	43406-8
		Neisseria gonorrhoeae DNA [Presence] in Genital specimen by NAA with probe detection	47387-6
		Neisseria gonorrhoeae rRNA [Presence] in Specimen by Probe	5028-6
		Neisseria gonorrhoeae rRNA [Presence] in Nasopharynx by NAA with probe detection	57289-1
		Neisseria gonorrhoeae rRNA [Presence] in Urine by NAA with probe detection	60256-5
		Neisseria gonorrhoeae Ag [Presence] in Urethra	6490-7
	SNOMED	Neisseria gonorrhoeae nucleic acid detection	398381009
		Neisseria gonorrhoeae nucleic acid detection assay	907521000000109
Chlamydia	LOINC	Chlamydia trachomatis DNA [Presence] in Urine by NAA with probe detection	6357-8
		Chlamydia trachomatis DNA [Presence] in Vaginal fluid by NAA with probe detection	45084-1
		Chlamydia trachomatis+Neisseria gonorrhoeae rRNA [Presence] in Specimen by Probe	45076-7
		Chlamydia trachomatis DNA [Presence] in Specimen by NAA with probe detection	21613-5
		Chlamydia trachomatis rRNA [Presence] in Specimen by NAA with probe detection	43304-5
		Chlamydia trachomatis [Presence] in Cervix by Organism specific culture	14463-4
		Chlamydia trachomatis rRNA [Presence] in Vaginal fluid by NAA with probe detection	53926-2
		Chlamydia trachomatis DNA [Presence] in Specimen by Probe with signal amplification	43404-3
		Chlamydia trachomatis rRNA [Presence] in Cervix by NAA with probe detection	50387-0
		Chlamydia trachomatis rRNA [Presence] in Genital specimen by Probe	16600-9

	Chlamydia trachomatis+Neisseria gonorrhoeae DNA [Presence] in Specimen by Probe with signal amplification	43406-8
	Chlamydia trachomatis DNA [Presence] in Cervix by NAA with probe detection	21190-4
	Chlamydia trachomatis rRNA [Presence] in Urine by NAA with probe detection	42931-6
SNOMED	Chlamydia trachomatis nucleic acid assay	398452009
	Chlamydia trachomatis detection by nucleic acid amplification test	817771000000106
Other (AFC-specific codes)	Chlamydia, DNA Prb w/Rflx	Chlamydia, DNA Prb w/Rflx
	CHLAMYDIA TRACHOMATIS DNA, SDA	CHLAMYDIA TRACHOMATIS DNA, SDA

Supplemental Table 3: List of all medications for chlamydia and gonorrhea to classify medication classes and detailed descriptions.

Infection	Detailed Description	Medication Class
Chlamydia	{4 (amoxicillin 500 MG Oral Capsule [Trimox]) / 2 (clarithromycin 500 MG Oral Tablet [Biaxin]) / 2 (lansoprazole 30 MG Delayed Release Oral Capsule [Prevacid]) } Pack [Prevpac]	amoxicillin
	{4 (amoxicillin 500 MG Oral Capsule) / 2 (clarithromycin 500 MG Oral Tablet) / 2 (lansoprazole 30 MG Delayed Release Oral Capsule) } Pack	
	{4 (amoxicillin 500 MG Oral Capsule) / 2 (clarithromycin 500 MG Oral Tablet) / 2 (omeprazole 20 MG Delayed Release Oral Capsule) } Pack	
	{4 (amoxicillin 500 MG Oral Capsule) / 2 (clarithromycin 500 MG Oral Tablet) / 2 (omeprazole 20 MG Delayed Release Oral Capsule) } Pack [Omeclamox]	
	12 HR amoxicillin 1000 MG / clavulanate 62.5 MG Extended Release Oral Tablet	
	12 HR amoxicillin 1000 MG / clavulanate 62.5 MG Extended Release Oral Tablet [Augmentin]	
	amoxicillin	
	amoxicillin 1000 MG / clavulanate 62.5 MG Extended Release Oral Tablet	
	amoxicillin 120 MG/ML / clavulanate 8.58 MG/ML Oral Suspension	
	amoxicillin 120 MG/ML / clavulanate 8.58 MG/ML Oral Suspension [Augmentin]	

amoxicillin 125 MG Chewable Tablet
amoxicillin 125 MG Chewable Tablet [Amoxil]
amoxicillin 200 MG / clavulanate 28.5 MG Chewable Tablet
amoxicillin 200 MG / clavulanate 28.5 MG Chewable Tablet [Augmentin]
amoxicillin 25 MG/ML / clavulanate 6.25 MG/ML Oral Suspension
amoxicillin 25 MG/ML / clavulanate 6.25 MG/ML Oral Suspension [Augmentin]
amoxicillin 25 MG/ML Oral Suspension
amoxicillin 25 MG/ML Oral Suspension [Amoxicot]
amoxicillin 25 MG/ML Oral Suspension [Amoxil]
amoxicillin 25 MG/ML Oral Suspension [Trimox]
amoxicillin 25 MG/ML Oral Suspension [Wymox]
amoxicillin 250 MG [Galenamox TP]
amoxicillin 250 MG / clavulanate 125 MG Oral Tablet
amoxicillin 250 MG / clavulanate 125 MG Oral Tablet [Augmentin]
amoxicillin 250 MG / clavulanate 62.5 MG Chewable Tablet [Augmentin]
amoxicillin 250 MG / omeprazole 10 MG / rifabutin 12.5 MG Delayed Release Oral Capsule
amoxicillin 250 MG / omeprazole 10 MG / rifabutin 12.5 MG Delayed Release Oral Capsule [Talicia]
amoxicillin 250 MG Chewable Tablet
amoxicillin 250 MG Chewable Tablet [Amoxil]
amoxicillin 250 MG Oral Capsule

amoxicillin 250 MG Oral Capsule [Amoxicot]
amoxicillin 250 MG Oral Capsule [Amoxil]
amoxicillin 250 MG Oral Capsule [Biomox]
amoxicillin 250 MG Oral Capsule [Senox]
amoxicillin 250 MG Oral Capsule [Trimox]
amoxicillin 250 MG Oral Capsule [Wymox]
amoxicillin 40 MG/ML / clavulanate 5.7 MG/ML Oral Suspension
amoxicillin 40 MG/ML / clavulanate 5.7 MG/ML Oral Suspension [Augmentin]
amoxicillin 40 MG/ML Oral Suspension
amoxicillin 40 MG/ML Oral Suspension [Amoxil]
amoxicillin 400 MG / clavulanate 57 MG Chewable Tablet
amoxicillin 400 MG / clavulanate 57 MG Chewable Tablet [Augmentin]
amoxicillin 400 MG Chewable Tablet
amoxicillin 400 MG Chewable Tablet [Amoxil]
amoxicillin 50 MG/ML / clavulanate 12.5 MG/ML Oral Suspension
amoxicillin 50 MG/ML / clavulanate 12.5 MG/ML Oral Suspension [Augmentin]
amoxicillin 50 MG/ML / clavulanate 12.5 MG/ML Oral Suspension [Clavamox]
amoxicillin 50 MG/ML Oral Suspension
amoxicillin 50 MG/ML Oral Suspension [Amoxicot]
amoxicillin 50 MG/ML Oral Suspension [Amoxil]
amoxicillin 50 MG/ML Oral Suspension [Biomox]
amoxicillin 50 MG/ML Oral Suspension [Trimox]
amoxicillin 50 MG/ML Oral Suspension [Wymox]

amoxicillin 500 MG / clavulanate 125 MG Oral Tablet	
amoxicillin 500 MG / clavulanate 125 MG Oral Tablet [Augmentin]	
amoxicillin 500 MG Oral Capsule	
amoxicillin 500 MG Oral Capsule [Amoxicot]	
amoxicillin 500 MG Oral Capsule [Amoxil]	
amoxicillin 500 MG Oral Capsule [Biomox]	
amoxicillin 500 MG Oral Capsule [Moxilin]	
amoxicillin 500 MG Oral Capsule [Trimox]	
amoxicillin 500 MG Oral Capsule [Wymox]	
amoxicillin 500 MG Oral Tablet	
amoxicillin 500 MG Oral Tablet [Amoxil]	
amoxicillin 775 MG Extended Release Oral Tablet	
amoxicillin 775 MG Extended Release Oral Tablet [Moxatag]	
amoxicillin 80 MG/ML / clavulanate 11.4 MG/ML Oral Suspension	
amoxicillin 80 MG/ML / clavulanate 11.4 MG/ML Oral Suspension [Augmentin]	
amoxicillin 80 MG/ML Oral Suspension	
amoxicillin 80 MG/ML Oral Suspension [Amoxil]	
amoxicillin 875 MG / clavulanate 125 MG Oral Tablet	
amoxicillin 875 MG / clavulanate 125 MG Oral Tablet [Augmentin]	
amoxicillin 875 MG Oral Tablet	
amoxicillin 875 MG Oral Tablet [Amoxil]	
{3 (azithromycin 250 MG Oral Tablet [Zithromax] } Pack [Z-Pak Sample]	azithromycin

{3 (azithromycin 250 MG Oral Tablet) } Pack
{3 (azithromycin 500 MG Oral Tablet [Zithromax]) } Pack [TRI-PAK]
{3 (azithromycin 500 MG Oral Tablet) } Pack
{6 (azithromycin 250 MG Oral Tablet [Zithromax]) } Pack [Z-PAK]
{6 (azithromycin 250 MG Oral Tablet) } Pack
azithromycin
azithromycin 10 MG/ML Ophthalmic Solution
azithromycin 10 MG/ML Ophthalmic Solution [AzaSite]
azithromycin 1000 MG Powder for Oral Suspension
azithromycin 1000 MG Powder for Oral Suspension [Zithromax]
azithromycin 20 MG/ML Oral Suspension
azithromycin 20 MG/ML Oral Suspension [Zithromax]
azithromycin 250 MG Oral Capsule
azithromycin 250 MG Oral Capsule [Zithromax]
azithromycin 250 MG Oral Tablet
azithromycin 250 MG Oral Tablet [Zithromax]
azithromycin 250 MG Oral Tablet [ZPAK]
azithromycin 33.3 MG/ML Extended Release Suspension
azithromycin 33.3 MG/ML Extended Release Suspension [Zmax]
azithromycin 40 MG/ML Oral Suspension
azithromycin 40 MG/ML Oral Suspension [Zithromax]
Azithromycin 500 MG Injectable Solution

azithromycin 500 MG Injection	
azithromycin 500 MG Injection [Zithromax]	
azithromycin 500 MG Oral Tablet	
azithromycin 500 MG Oral Tablet [Zithromax]	
azithromycin 600 MG Oral Tablet	
azithromycin 600 MG Oral Tablet [Zithromax]	
{1 (133 ML) (benzoyl peroxide 44 MG/ML Medicated Liquid Soap) / 30 (doxycycline monohydrate 100 MG Oral Tablet) } Pack	
{150 (doxycycline monohydrate 100 MG Oral Tablet [Avidoxy]) / 1 (118 ML) (salicylic acid 20 MG/ML Medicated Liquid Soap) } Pack [Avidoxy Pack]	
{30 (doxycycline monohydrate 150 MG Oral Tablet [Adoxa]) } Pack [Adoxa Pak 1/150]	
{31 (doxycycline monohydrate 100 MG Oral Tablet [Adoxa]) } Pack [Adoxa Pak 1/100]	
{31 (doxycycline monohydrate 100 MG Oral Tablet) } Pack	
{42 (doxycycline hyclate 100 MG Oral Tablet) } Pack [LymePak]	
{60 (doxycycline monohydrate 100 MG Oral Tablet [Adoxa]) } Pack [Adoxa Pak 2/100]	
{60 (doxycycline monohydrate 100 MG Oral Tablet) } Pack	
doxycycline	
doxycycline anhydrous 40 MG Delayed Release Oral Capsule	
doxycycline anhydrous 40 MG Delayed Release Oral Capsule [Oracea]	
doxycycline calcium 10 MG/ML Oral Suspension	

doxycycline

doxycycline calcium 10 MG/ML Oral Suspension [Vibramycin]
doxycycline hyclate 100 MG Delayed Release Oral Capsule
doxycycline hyclate 100 MG Delayed Release Oral Tablet
doxycycline hyclate 100 MG Delayed Release Oral Tablet [Doryx]
doxycycline hyclate 100 MG Injection
doxycycline hyclate 100 MG Injection [Doxy]
doxycycline hyclate 100 MG Oral Capsule
doxycycline hyclate 100 MG Oral Capsule [Morgidox]
doxycycline hyclate 100 MG Oral Capsule [Vibramycin]
doxycycline hyclate 100 MG Oral Tablet
doxycycline hyclate 100 MG Oral Tablet [Doxy Lemmon]
doxycycline hyclate 100 MG Oral Tablet [Vibra- Tabs]
doxycycline hyclate 120 MG Delayed Release Oral Tablet
doxycycline hyclate 120 MG Delayed Release Oral Tablet [Doryx]
doxycycline hyclate 150 MG Delayed Release Oral Tablet
doxycycline hyclate 150 MG Delayed Release Oral Tablet [Doryx]
doxycycline hyclate 150 MG Oral Tablet
doxycycline hyclate 150 MG Oral Tablet [Acticlate]

doxycycline hyclate 20 MG Oral Capsule
doxycycline hyclate 20 MG Oral Capsule [Oraxyl]
doxycycline hyclate 20 MG Oral Tablet
doxycycline hyclate 20 MG Oral Tablet [Alodox]
doxycycline hyclate 20 MG Oral Tablet [Periostat]
doxycycline hyclate 200 MG Delayed Release Oral Tablet
doxycycline hyclate 200 MG Delayed Release Oral Tablet [Doryx]
doxycycline hyclate 50 MG Delayed Release Oral Tablet
doxycycline hyclate 50 MG Delayed Release Oral Tablet [Doryx]
doxycycline hyclate 50 MG Oral Capsule
doxycycline hyclate 50 MG Oral Capsule [Morgidox]
doxycycline hyclate 50 MG Oral Capsule [Vibramycin]
doxycycline hyclate 50 MG Oral Tablet
doxycycline hyclate 50 MG Oral Tablet [Targadox]
doxycycline hyclate 75 MG Delayed Release Oral Tablet
doxycycline hyclate 75 MG Delayed Release Oral Tablet [Doryx]
doxycycline hyclate 75 MG Oral Tablet
doxycycline hyclate 75 MG Oral Tablet [Acticlate]
doxycycline hyclate 80 MG Delayed Release Oral Tablet
doxycycline monohydrate 100 MG Oral Capsule

doxycycline monohydrate 100 MG Oral Capsule [Mondoxyne]
doxycycline monohydrate 100 MG Oral Capsule [Monodox]
doxycycline monohydrate 100 MG Oral Tablet
doxycycline monohydrate 100 MG Oral Tablet [Adoxa]
doxycycline monohydrate 100 MG Oral Tablet [Avidoxy]
doxycycline monohydrate 150 MG Oral Capsule
doxycycline monohydrate 150 MG Oral Capsule [Adoxa]
doxycycline monohydrate 150 MG Oral Tablet
doxycycline monohydrate 5 MG/ML Oral Suspension
doxycycline monohydrate 5 MG/ML Oral Suspension [Vibramycin]
doxycycline monohydrate 50 MG Oral Capsule
doxycycline monohydrate 50 MG Oral Capsule [Mondoxyne]
doxycycline monohydrate 50 MG Oral Capsule [Monodox]
doxycycline monohydrate 50 MG Oral Tablet
doxycycline monohydrate 50 MG Oral Tablet [Adoxa]
doxycycline monohydrate 75 MG Oral Capsule
doxycycline monohydrate 75 MG Oral Capsule [Mondoxyne]
doxycycline monohydrate 75 MG Oral Capsule [Monodox]

doxycycline monohydrate 75 MG Oral Capsule [Okebo]	
doxycycline monohydrate 75 MG Oral Tablet	
benzoyl peroxide 0.05 MG/MG / erythromycin 0.03 MG/MG Topical Gel	
benzoyl peroxide 0.05 MG/MG / erythromycin 0.03 MG/MG Topical Gel [Aktipak]	
benzoyl peroxide 0.05 MG/MG / erythromycin 0.03 MG/MG Topical Gel [Benzamycin]	
erythromycin	
erythromycin 0.005 MG/MG Ophthalmic Ointment	
erythromycin 0.005 MG/MG Ophthalmic Ointment [Eyemycin]	
erythromycin 0.005 MG/MG Ophthalmic Ointment [Ilotycin]	
erythromycin 0.005 MG/MG Ophthalmic Ointment [Romycin]	
erythromycin 0.02 MG/MG Topical Gel	
erythromycin 0.02 MG/MG Topical Gel [A/T/S]	
erythromycin 0.02 MG/MG Topical Gel [Dermamycin Erythromycin]	
erythromycin 0.02 MG/MG Topical Gel [Emgel]	
erythromycin 0.02 MG/MG Topical Gel [Erygel]	
erythromycin 0.02 MG/MG Topical Ointment [Aknemycin]	
erythromycin 20 MG/ML Medicated Pad	
erythromycin 20 MG/ML Medicated Pad [Emcin Clear]	
erythromycin 20 MG/ML Medicated Pad [Ery]	

erythromycin 20 MG/ML Medicated Pad [Erycette]
erythromycin 20 MG/ML Medicated Pad [T-Stat]
erythromycin 20 MG/ML Topical Solution
erythromycin 20 MG/ML Topical Solution [A/T/S]
erythromycin 20 MG/ML Topical Solution [AkneMycin]
erythromycin 20 MG/ML Topical Solution [Del-Mycin]
erythromycin 20 MG/ML Topical Solution [E-Solve 2]
erythromycin 20 MG/ML Topical Solution [Ery-Sol]
erythromycin 20 MG/ML Topical Solution [Eryderm]
erythromycin 20 MG/ML Topical Solution [Erymax]
erythromycin 20 MG/ML Topical Solution [Erythra-Derm]
erythromycin 20 MG/ML Topical Solution [Romycin]
erythromycin 20 MG/ML Topical Solution [T-Stat]
erythromycin 20 MG/ML Topical Solution [Theramycin]
erythromycin 250 MG Delayed Release Oral Capsule
erythromycin 250 MG Delayed Release Oral Capsule [Eryc]
erythromycin 250 MG Delayed Release Oral Tablet

erythromycin 250 MG Delayed Release Oral Tablet [E-Mycin]
erythromycin 250 MG Delayed Release Oral Tablet [Ery-Tab]
erythromycin 250 MG Delayed Release Oral Tablet [Robimycin]
erythromycin 250 MG Oral Tablet
erythromycin 333 MG Delayed Release Oral Tablet
erythromycin 333 MG Delayed Release Oral Tablet [E-Mycin]
erythromycin 333 MG Delayed Release Oral Tablet [Ery-Tab]
erythromycin 333 MG Delayed Release Oral Tablet [PCE]
erythromycin 500 MG Delayed Release Oral Tablet
erythromycin 500 MG Delayed Release Oral Tablet [Ery-Tab]
Erythromycin 500 MG Injectable Solution
erythromycin 500 MG Oral Tablet
erythromycin 500 MG Oral Tablet [Erythrolar]
erythromycin 500 MG Oral Tablet [Erythroped A]
erythromycin ethylsuccinate 40 MG/ML / sulfisoxazole 120 MG/ML Oral Suspension
erythromycin ethylsuccinate 40 MG/ML Oral Suspension
erythromycin ethylsuccinate 40 MG/ML Oral Suspension [E.E.S.]
erythromycin ethylsuccinate 40 MG/ML Oral Suspension [EryPed]
erythromycin ethylsuccinate 400 MG Oral Tablet

erythromycin ethylsuccinate 400 MG Oral Tablet [E.E.S.]	
erythromycin ethylsuccinate 80 MG/ML Oral Suspension	
erythromycin ethylsuccinate 80 MG/ML Oral Suspension [EryPed]	
erythromycin stearate 250 MG Oral Tablet	
erythromycin stearate 250 MG Oral Tablet [Erythrocin Stearate]	
{10 (levofloxacin 750 MG Oral Tablet) } Pack	
{5 (levofloxacin 750 MG Oral Tablet [Levaquin]) } Pack [Levaquin Leva Pack]	
{5 (levofloxacin 750 MG Oral Tablet) } Pack	
100 ML levofloxacin 5 MG/ML Injection	
100 ML levofloxacin 5 MG/ML Injection [Levaquin]	
150 ML levofloxacin 5 MG/ML Injection	
150 ML levofloxacin 5 MG/ML Injection [Levaquin]	
20 ML levofloxacin 25 MG/ML Injection	
30 ML levofloxacin 25 MG/ML Injection	
50 ML levofloxacin 5 MG/ML Injection	
50 ML levofloxacin 5 MG/ML Injection [Levaquin]	
levofloxacin	
levofloxacin 15 MG/ML Ophthalmic Solution	
levofloxacin 25 MG/ML Injection	
levofloxacin 25 MG/ML Oral Solution	
levofloxacin 25 MG/ML Oral Solution [Levaquin]	
levofloxacin 250 MG Injectable Solution	
levofloxacin 250 MG Oral Tablet	

levofloxacin

	levofloxacin 250 MG Oral Tablet [Levaquin]	
	levofloxacin 5 MG/ML Ophthalmic Solution	
	levofloxacin 5 MG/ML Ophthalmic Solution [Quixin]	
	levofloxacin 500 MG Oral Tablet	
	levofloxacin 500 MG Oral Tablet [Levaquin]	
	levofloxacin 750 MG Oral Tablet	
	levofloxacin 750 MG Oral Tablet [Levaquin]	
Gonorrhea	cefixime	cefixime
	cefixime 100 MG Chewable Tablet	
	cefixime 100 MG Chewable Tablet [Suprax]	
	cefixime 100 MG/ML Oral Suspension	
	cefixime 100 MG/ML Oral Suspension [Suprax]	
	cefixime 20 MG/ML Oral Suspension	
	cefixime 20 MG/ML Oral Suspension [Suprax]	
	cefixime 200 MG Chewable Tablet	
	cefixime 200 MG Chewable Tablet [Suprax]	
	cefixime 40 MG/ML Oral Suspension	
	cefixime 40 MG/ML Oral Suspension [Suprax]	
	cefixime 400 MG Oral Capsule	
	cefixime 400 MG Oral Capsule [Suprax]	
	cefixime 400 MG Oral Tablet	
	cefixime 400 MG Oral Tablet [Suprax]	
	cefotaxime	cefotaxime
	Cefotaxime 1000 MG Injectable Solution	
	cefotaxime 1000 MG Injection	
	cefotaxime 500 MG Injection	
	Cefoxitin 1000 MG Injectable Suspension	cefoxitin
	cefoxitin 1000 MG Injection	
	cefoxitin 2000 MG Injection	
	10 ML gentamicin 10 MG/ML Injection	gentamicin

100 ML gentamicin 0.8 MG/ML Injection
100 ML gentamicin 1 MG/ML Injection
100 ML gentamicin 1.2 MG/ML Injection
2 ML gentamicin 10 MG/ML Injection
2 ML gentamicin 40 MG/ML Injection
50 ML gentamicin 2 MG/ML Injection
gentamicin
gentamicin 0.001 MG/MG Topical Ointment
gentamicin 0.001 MG/MG Topical Ointment [G-Myticin]
gentamicin 0.001 MG/MG Topical Ointment [Garamycin]
gentamicin 0.003 MG/MG / prednisolone acetate 0.006 MG/MG Ophthalmic Ointment
gentamicin 0.003 MG/MG / prednisolone acetate 0.006 MG/MG Ophthalmic Ointment [Pred-G]
gentamicin 0.003 MG/MG Ophthalmic Ointment
gentamicin 0.003 MG/MG Ophthalmic Ointment [Garamycin]
gentamicin 0.003 MG/MG Ophthalmic Ointment [Genoptic]
gentamicin 0.003 MG/MG Ophthalmic Ointment [Gentak]
gentamicin 0.003 MG/MG Ophthalmic Ointment [Ocu-Mycin]
gentamicin 0.6 MG/ML Injectable Solution
gentamicin 1 MG/ML Topical Cream
gentamicin 1 MG/ML Topical Cream [Ed-Mycin]
gentamicin 1 MG/ML Topical Cream [G-Myticin]
gentamicin 1 MG/ML Topical Cream [Garamycin]

gentamicin 10 MG/ML Injectable Solution	
gentamicin 10 MG/ML Topical Cream	
gentamicin 3 MG/ML / prednisolone acetate 10 MG/ML Ophthalmic Suspension	
gentamicin 3 MG/ML / prednisolone acetate 10 MG/ML Ophthalmic Suspension [Pred-G]	
gentamicin 3 MG/ML Ophthalmic Solution	
gentamicin 3 MG/ML Ophthalmic Solution [Garamycin]	
gentamicin 3 MG/ML Ophthalmic Solution [Genoptic]	
gentamicin 3 MG/ML Ophthalmic Solution [Gentacidin]	
gentamicin 3 MG/ML Ophthalmic Solution [Gentak]	
gentamicin 3 MG/ML Ophthalmic Solution [Gentasol]	
gentamicin 3 MG/ML Ophthalmic Solution [Ocu-Mycin]	
gentamicin 40 MG/ML Injectable Solution	
Gentamicin Injectable Solution [Garamycin]	
ceftizoxime Injectable Solution	ceftizoxime
ceftriaxone	
ceftriaxone 100 MG/ML Injectable Solution	
ceftriaxone 1000 MG [Rocephin]	
ceftriaxone 1000 MG Injection	
ceftriaxone 1000 MG Injection [Rocephin]	
Ceftriaxone 2000 MG [Rocephin]	
ceftriaxone 2000 MG Injection	
Ceftriaxone 250 MG [Rocephin]	
ceftriaxone 250 MG Injection	

ceftriaxone 500 MG [Rocephin]	
ceftriaxone 500 MG Injection	
ceftriaxone 500 MG Injection [Rocephin]	
ceftriaxone Injection [Rocephin]	
azithromycin 33.3 MG/ML Extended Release Suspension [Zmax]	
{6 (azithromycin 250 MG Oral Tablet) } Pack	
azithromycin 500 MG Injection	
azithromycin 600 MG Oral Tablet [Zithromax]	
{6 (azithromycin 250 MG Oral Tablet [Zithromax]) } Pack [Z-PAK]	
azithromycin 10 MG/ML Ophthalmic Solution	
azithromycin 1000 MG Powder for Oral Suspension [Zithromax]	
azithromycin 600 MG Oral Tablet	
azithromycin 250 MG Oral Tablet [Zithromax]	
azithromycin 500 MG Oral Tablet	
azithromycin 250 MG Oral Tablet [ZPAK]	
{3 (azithromycin 250 MG Oral Tablet) } Pack	
azithromycin 33.3 MG/ML Extended Release Suspension	
{3 (azithromycin 500 MG Oral Tablet) } Pack	
Azithromycin 500 MG Injectable Solution	
azithromycin 500 MG Injection [Zithromax]	
azithromycin 250 MG Oral Capsule [Zithromax]	
azithromycin	
azithromycin 10 MG/ML Ophthalmic Solution [AzaSite]	
azithromycin 1000 MG Powder for Oral Suspension	

{3 (azithromycin 250 MG Oral Tablet [Zithromax]) } Pack [Z-Pak Sample]	
azithromycin 20 MG/ML Oral Suspension [Zithromax]	
azithromycin 500 MG Oral Tablet [Zithromax]	
azithromycin 20 MG/ML Oral Suspension	
azithromycin 40 MG/ML Oral Suspension	
azithromycin 250 MG Oral Capsule	
azithromycin 250 MG Oral Tablet	
{3 (azithromycin 500 MG Oral Tablet [Zithromax]) } Pack [TRI-PAK]	
azithromycin 40 MG/ML Oral Suspension [Zithromax]	
gemifloxacin 320 MG Oral Tablet	
gemifloxacin 320 MG Oral Tablet [Factive]	
Spectinomycin 2000 MG Injectable Solution	spectinomycin

Supplemental Table 4. The fully adjusted time ratios as well as the difference in number of days compared to fixed referent groups, for patients who received a diagnosis of chlamydia or gonorrhea without a confirmed positive test.

Variable	Category	Chlamydia, Diagnosed Only, N=4,256				Gonorrhea, Diagnosed Only, N=1,724			
		TR	TR LCL	TR UCL	P-value	TR	TR LCL	TR UCL	P-value
SDI Quintile	1: 0-20	Ref				Ref			
	2: 21-40	0.93	0.48	1.79	0.83	0.36	0.11	1.17	0.09
	3: 41-60	1.27	0.65	2.48	0.48	0.62	0.20	1.89	0.40
	4: 61-80	1.32	0.71	2.47	0.38	1.17	0.35	3.95	0.80
	5: 81-100	0.98	0.47	2.04	0.96	0.42	0.13	1.33	0.14
Age Group	10-19	0.56	0.39	0.79	0.00	1.16	0.44	3.04	0.76
	20-29	Ref				Ref			
	30-39	1.96	1.14	3.37	0.02	1.77	0.79	3.97	0.16
	40-49	1.11	0.52	2.36	0.79	0.94	0.41	2.19	0.89
	50-59	0.75	0.27	2.06	0.57	0.49	0.18	1.30	0.15
	60-69	2.88	0.28	30.05	0.38	1.36	0.37	4.95	0.64
Rurality	>60% urban	1.10	0.63	1.94	0.74	1.73	0.68	4.41	0.25
	>60% rural	1.13	0.60	2.16	0.70	3.00	0.94	9.58	0.06
	40-60% urban/rural	Ref				Ref			
Race	White	Ref				Ref			
	Non-Hispanic Black	0.67	0.43	1.03	0.07	0.68	0.31	1.48	0.33
	Asian	0.86	0.24	3.14	0.83	0.58	0.04	7.66	0.68
	Hispanic	0.66	0.41	1.05	0.08	0.58	0.22	1.53	0.27
	Other, Unknown, Missing	1.06	0.64	1.74	0.82	1.17	0.45	3.05	0.75
Female		0.98	0.68	1.42	0.91	1.04	0.53	2.04	0.90
Chlamydia and Gonorrhea Co-Infection		0.57	0.29	1.10	0.09	0.14	0.07	0.29	0.00