



A systematic mechanism for the ethical collection and interpretation of display format pathology test results from Australian Primary Care records

RACGP Ethics: NREEC 07/017

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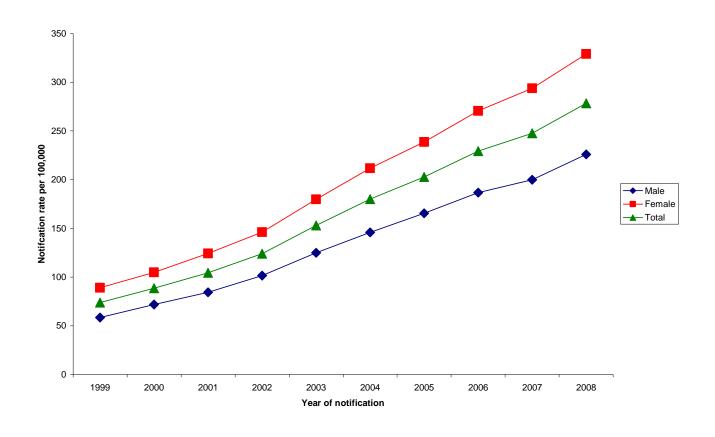
Focus Today



- Chlamydia surveillance the example today
- GRHANITE™ A tool for designed for ethical access to data for research and audit purposes
- Pathology data in GP computer systems
- How can we systematically parse the data?
- Does it work?



Figure 1: Chlamydia Notification Rates in Australia per 100,000, 1999 - 2008



Source: National Notifiable Diseases Surveillance System



Figure 2: Chlamydia Notification Numbers by Age and Sex, 2008

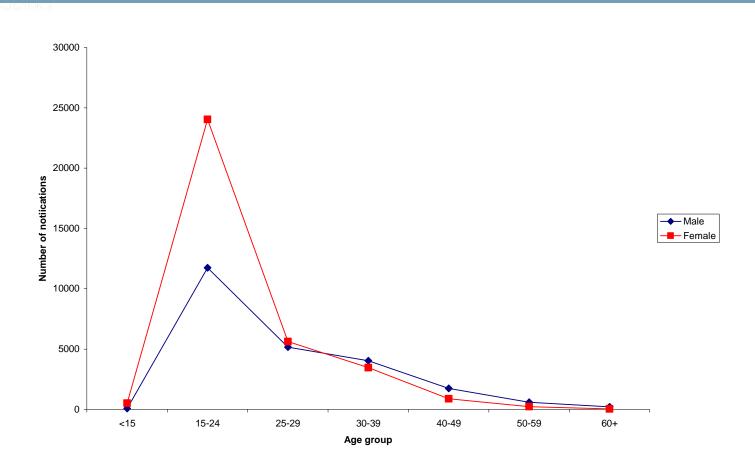
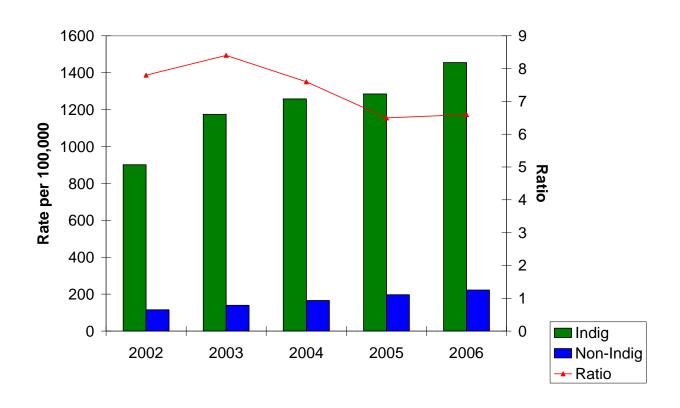


Figure 2: Notification numbers by age and sex, 2008 Source: National Notifiable Diseases Surveillance System



Figure 3: Chlamydia by Aboriginal and Torres Strait Islander status and year*





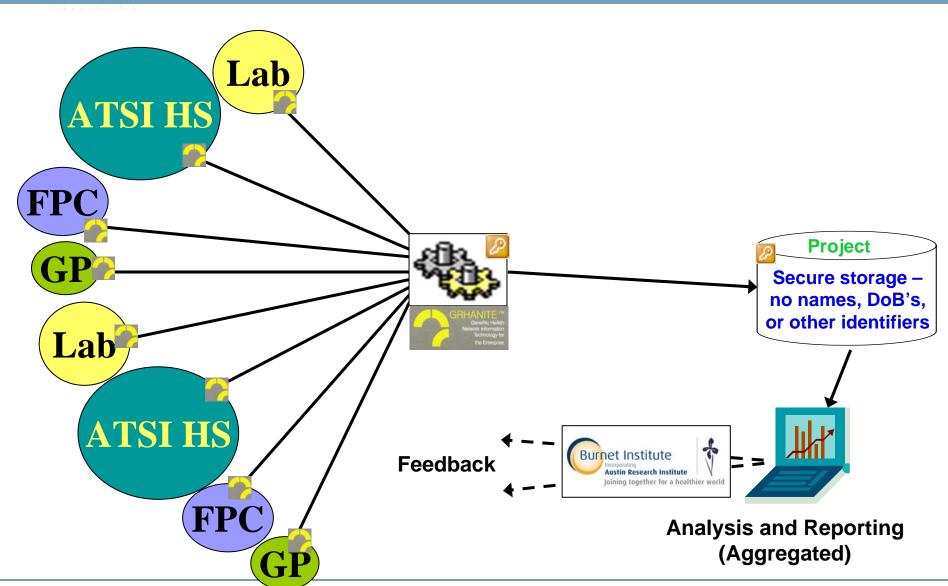
*Jurisdictions in which Aboriginal and Torres Strait Islander status was reported for more than 50% of diagnoses (NT, SA, VIC and WA)

Source: National Notifiable Diseases Surveillance System



An example of GRHANITE information flows





Australian Privacy Foundation Quotation



'There is apparently limited recognition of the highly sensitive nature of identifiable health data, and the ensuing range of potentials for harm to individuals and to confidence in the medical record system which may arise from flaws in the design and execution of such monolithic systems.'



The Technology - GRHANITE



- State of the art software for ethically managing clinical data for audit and research
- Designed from scratch with the purpose of 'raising the bar' in the ethical management of clinical data in Australia
- The result of over 20 years experience in large-scale health communications and medical research ethics
- Developed by the University of Melbourne over the last three years
- It ensures the rights of the individual are upheld and respected
 - Can work with most database technologies
 - Ensures that patient consent processes are followed data only moves with the appropriate consent
 - GRHANITE allows us to record-link data when required BUT even if subpoenaed by a court of law we are physically unable to determine person identity
 - Practice computer security is unaffected by GRHANITE



GRHANITE – current installations

GRHANITE TM

GeneRic HeAlth

Network Information

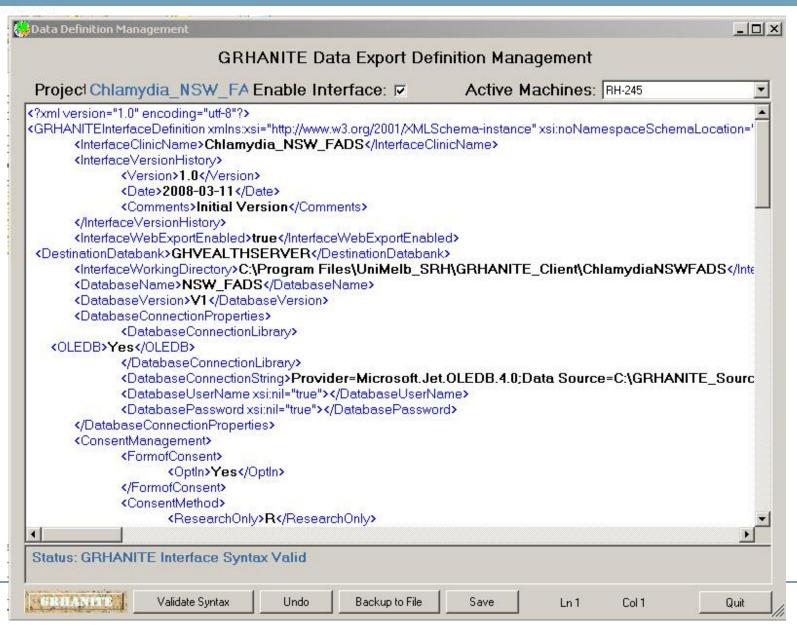
Technology for
the Enterprise





Generic Interfacing

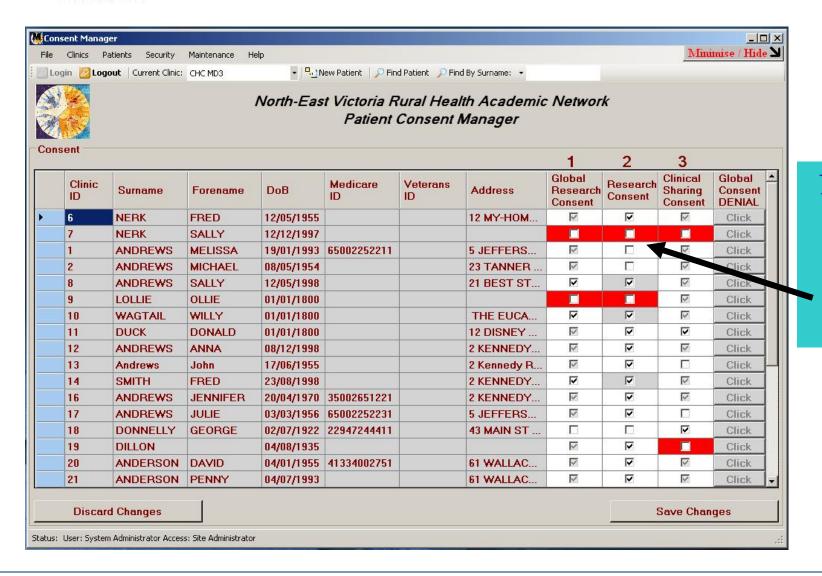






Consent management





Different types of consent can be managed



Data Export Preview





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OK



Data as it leaves the practice



20070405094343 MD MEASURE.enc.txt - Notepad

File Edit Format View Help

SITENAME: CHC Shepparton 2C16890AA66AFDB1C22565CA1D75573D0393E1979B3A8E483F37D15C7AA733EC771593311A48D13AA27F8CBD855EDDAE0BE63C93AD0B67B90B4CEFE38E2262 kZ7d6YGT7UFD3XGGm7ZthK0OLz]k1GBCYYT2yLC6ii3TNDqj9nOqoVkxqfUmH+PWQVBZcdh/oR5hqILc6ye2Qp+fTsKob+mGFG+/xh31P21HPDkYumXdtYYBP44PZZ vxzja0m/gok8c/+5sfka/HdygeznfeuovoHmirso6yfmp3gáiH0ba7p091U04cRHL0hoBxrHiw653T3rBihzbsg2tvniL/nxpvogjHamveodkrjnwH0h89ovypxBbz JzPE6Ys7wBcxyJoeTATsHwVBP16wSMzfwo2jkLz1BPJ3mstBf5bgahzwq70yqJ+5sc/nyOmmRpUQIphoQNTPro1LokvkQ3jYLRbGjqrcQkqtRBMCqqevjn6bnkE9a5 zp4vIun/HQE3Qu1Y/oow+hdSvb+ZGpWzwdGNwqxerqEtCsfZYhOpPHnzbqe9zgAPSMSjAeRAOoplldYDqjeyPm7K1h/oRIefZdwYmqhoGyuS7Oh23NAEFECRxcBL55 +BxMCm42wsb4ylu5vH1w2Hu+qnt9tZ4v+cm2YHQC1+HTsqsJbQDHzZqtmEiKv5HJzB6j3XQtVl/KQexe9Ayfi7xDaUvt4v8krqqTzL9OGlTX4zno/rJTYXCK1Kn8Ew WGXqB/XH1F/KÉtYkmao1wrwyKKP5YVeISMhMKU1qimic9TKweuNcZyX+SGp66P1ebn5XkS9wQyXDD8+Z]pK8H3G2ecEAKyC5Noqq/TeScrxwcnUSettZM03ovT3ii8 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9UKBbdMU104hVPN5ow/vz3Jbxhfk]DHřjBFG8k4TNG2kB3TuiJJvoKB8iQIJcLUp3YS1FTz4C8iKŎ/3Nr/dHyiq4HAxD1BSZUYUtYXt6kĞjFgTK06fsMXXK]C6aK2+ otuj5vlnBugP5fMgFgRR/Vlypw9LdallSRYDDiYy+vDS6VvsafIc4LhNUkThH/PwM/zcdvpV7Td9LbocReb6c5izo9pJYCTz2Cwm0S0+lJsbilnrVkl/cJuwys4FgC |e9wErwsH+1n7pFwnhzqcn3f8X5uCa80Lc1iKhA6qAd/Mi2ubHHMo5uN5A7j6ODNDojJ7PCO8VLXIB4Fsp2b/OQppcHQMCA89zrfkKcTYOFk8KQEUqHa+eOyk3OfeJ2 |lrfqEz7qEGIbCsNllx5FPMsp+RQewdowc1dwaFcPxxFb16s8mn7INIMVhZFXhwb3AMneSp7fRviAYAYs3kqAeb1lvqTFxuvS/4d2skIsruDYqdv6HDV0hjA3ywk/QC |wJZqYpqi2VpZU7savBwKXZJoavXJLiU0x1YxUEzxasYVG3dGnqGIKKOMUU3I2OUUKY/ZoX3jS9qbNRObRJOmR3dqLHw/BSqjeU4hIi41sO76OSy96rhmmrqw5mcLqC Cg+kwBr4ZFfV/IGv5ohGrfFuzYFl5AKQAMNnotsuBYXNxfxYgy3rIGrmXntzUpJy5Qwr4ppmX8iB3vBn6XgMJc5tfHv1TJ0go0/sNzK895JxX4M9XhHBgQtfHyGzD3 ZQOhJyiQBtkqTS8wvrGYW5HXierDaPbo6tvUknTRQBlwNlTmwYoQ+vMDMg3kiDGreip5YieLgGFlSJP+hncxn/YXtw8wlscRmcND7F0G+eKNCOc38d1w3ExgaKgHHm KNQhFaS7vEkyvGsolSA6aC2vZo3quTA7yRGU1xU96qf4qJFokXeQHMv0wX/y7b7C/nqciP2tKd38wjXvUNnMrX7umREkX/upxzQzkhnnJq4jqmc+7ioGN9Ye5cL2MC pfiRfhqsYulbEPKquhKbm8vZTl18bCLoKv83EykLIRaj34MQ7TtENUU8Rav6IqWGYjda5+trcfJpNTrLUlFLuuMq6v9Cpc3Lok1SdUqT6pHcIv7nq6738BjjK2+6yc ZGMOGKVZq5KuV5I8AJpjm8opAhDRav9ofaKx3óM0+/qjRk5ZAOe93VXbBX2XCX9wcVozTIhxpSXHRCJnDw3TtximI/LqB3ZwRN/oiOfR+e/qrtrqIMRLGoVnkcjAN7 gKgakmaxilQBKuoLeAXcJ08bkB3JvPewt059goLXBkz+B2YkTo3c+HEFLuk1vm96LZQ3MxGvRocYtHvuoaBCPwocaQNAsoYULg9RytxRbeDfMigf0kw9Jnatts98vL |FRO1D3uThTr35OKNNVE3SO/OSdjdcPMLbvfLR8u3q0D5/LNNN9X/df6NsqbS+UVXKMKXtPUWYq3Do9VPUUyRAeWhHWsJosLRVK6qEFQAmhurZ55DxLuD6Tf5RitWWm G5aA3O4LRbdoTBC4qnku5G4xJek4VFxVlc0DzHHGřZfH50Bf3XFqDujPIbRiM5CGTyTx2nNYFq7plLM3bLoQdETt3F+MaLU+sinRo1+uSMMClKNWc3nCnyikO5qVSW jxHZa8lMyYr5WxtrjKlqwzfb7ProERArMq7o38oJdluimvaBlDDĀwox+1/lPF9+JwBk9N6RonPzaH1n9SeQlzKZii4bqp/wq3Tw4GryRH7sA+mNCS7pfrNPC6VI4kc bouzo7nkoLuovabfxi2BqdsABkzsMom1cKnhGyT3tqabAZfpoBaYExwC4CYBwJPpnGt+JNN1FoLjaDhClvx5JDHx5vmvofow4N11aef9uww7radeoErzuotmhuNH2x k7mPZXdGIla3q6Shfm2V8MDpeqKEs3FbsZvqTM+w2Eq8+LOTUoPih+wALpVqkYofkoreB+HtwiQUoXRF1xQqn6OILqv4xOViqAIXHzhHq8vqetADQnVwcSXIOnwsqc O6OD2W5OwZc2Ldxds63hbqKqCBQ+tAWbzGuĕkWrKqk+1PWsFN2j8k7uHZLqkMxR4Oj70IdqNOnU4P348nmrwr6DacIUtbnsWcun1NWiIGm/55W21835Vf8KOrS/5V7 |uhbpcpc+clm1amcg|9v+/wkhHzti84k/wu|9Rlnrdw512hin062vi1b9axl1xzRn03llPp6aiAdlzp8a+Mua4zvgigkgv4Pkg00kd2mtT3U81x2owc1vrwuiTiSzk7



Typical GRHANITE Data



Patient_UUID		YOB	GENDER_CODE		TSI	POSTCODE	AGEATEXTRACTION	
07ce551f-dd0e-4bc9-a96b-e76f8293e7fb		1983	М			3629	25	
06523812-150f-430b-8163-ad7d5c5bdb7b		1983	М			3629	25	
3fba9b55-e01d-488b-93f0-78b02e396595		1981	М			A	27	
35ed6db8-0bda-4371-b4e5-2f88da311c56		1981	М			Patient	27	
ccea6963-560d-4b9e-9b00-ab8c6b627336		1985	F			6054	23	
c0086ba0-8e4	Patient_UUID	Lesevoes	PROGRESS	_ID	VISIT_DAT	E	AGEATCONSULTATION	
	2EF7A9C1-CB45-492B-8747-0026FECCD06B 2EF7A9C1-CB45-492B-8747-0026FECCD06B 39082371-4753-42E7-9797-00292023D2EA 39082371-4753-42E7-9797-00292023D2EA		89834	89837 2008-08-13 0 148297 2008-08-01 0		00:00:00.000	22	
			8 89837			00:00:00.000	22	
			148297			00:00:00.000	22	
			160468			00:00:00.000	22	
	390 Concult	ation dat	0469		2008-11-05	00:00:00.000	22	
	390 Consult	ation dat	0470		2008-11-05	00:00:00.000	22	
	9B20246C-50B7-40FB-969A-0029B5C3C342		273160		2006-03-28 00:00:00.000		19	
	56C9DCD2-630F-49B2-8	375B-002C0F755D5I	E 44		2006-02-24	00:00:00.000	25	
	56C9DCD2-630F-49B2-8	375B-002C0F755D5I	E 150		2006-03-02	00:00:00.000	25	
	56C9DCD2-630F-49B2-8	375B-002C0F755D5I	E 152		2006-03-02	2 00:00:00.000	25	
	56C9DCD2-630F-49B2-8	R75B-002C0E755D5I	E 295		2006-03-09	00:00:00.000	25	

Patient_UUID	PATHOLOGY_ID	LAB_NAME	REPORT_DATE	TEST_NAME	REPORT_TEXT
AA76D362-69D5-4BA2-911A-0009690B46C9	17728	dhm	2006-01-10 00:00:00.000	CHLAMYDIA PCR	\par Clin Notes : PREGNANT\par \par Chlamy
AA76D362-69D5-4BA2-911A-0009690B46C9	18524	Mayne Health Laverty Pathology	2006-01-24 19:54:00.000	CHLAMYDIA PCR (CHM-0)	\par \cf1 \ul POLYMERASE CHAI
AA76D362-69D5-4BA2-911A-0009690B46C9	23933	dhm	2006-05-10 00:00:00.000	CHLAMYDIA PCR	\par Clin Notes: 1ST PASS URINE AND VAGIN
17D4FD96-71AD-456A-8F5E-001CFA9E6ABC	108430	SULLIVAN NICOLAIDES PATH	2008-10-27 13:08:00.000	CHLAMYDIA TRACH PCR 1	Clinical Notes :\par \par \par \b Chlamydia
6C8EB2DC-4AD6-470 <mark>1-BAC0-00A42EA1B097</mark>	6060	Capital Bathology	2008-01-16 10:56:00.000	CHLAMYDIA	\par \par \par \b EXAMINATION FOR CHLAM
D60318AF-F444-44BE	1: - 4 -	04 40071140	2007-11-03 10:56:00.000	CHLAMYDIA	\par Clin Note : No Clinical Notes given.\par \pa
87BC2D42-5B9F-4FD Chlam	yara te	est results	2008-05-27 00:00:00.000	CHLAMYDIA PCR	\par Clin Notes : AT RISK\par \par Chlamydia t
E436CA4C-573D-4DA _D -5D-30-0160AFBAE366	10857	Capital Hathology	2008-09-03 00:00:00.000	CHLAMYDIA	\par \par \par \b EXAMINATION FOR CHLAM



A closer look at pathology data



- Test results arrive at practices either manually or via Pathology Information Transfer (PIT) format or HL7
- Regardless, assuming the data is electronically imported, the data may still be textual in nature (non-numeric) – especially for tests such as chlamydia or HIV
- Every lab in Australia has a different structure to their lab reports – a set of rules to identify a disease and outcome for one lab will not necessarily work with another
- What we can do is extract only the test results without identifying information – and so without exposing identity we can centrally analyse tests and generate rules to control their behaviour.
- Only because of the security and identification protection mechanisms of GRHANITE can we do this.



What do we extract?



- We developed overarching rules to limit the extraction of pathology test results to those indicative of Chlamydia
- On occasion we have test results with no corresponding test request or a test request with no corresponding test result – the percentage of these help in validating the quality of the data held within the practice
- We stipulate test search names such as:
 - CHLA, TRACH, NG AND CT, CT AND NG
- And test results containing CHLA or TRACH.
- These rules do require some research initially to determine what general terms reliably catch the data.



The data looks like this



\par Clin Note: Routine, Screening, last UPSI 4 months ago\par \par \b EXAMINATION FOR CHLAMYDIA BY PCR\b0 \par \par SPECIMEN: URINE\par \par Chlamydia trachomatis Not Detected\par \par SL\par \par Tests requested (Please note * indicates test result pending):\par SYPS, HIVS, P, CHL, GON

\b CLINICAL NOTES:\b0 \par \par CHLAMYDIA
TRACHOMATIS BY PCR \par \par Collection site
Cervix/Endocervix\par \par C.trachomatis Not
Detected\par \par GSC-W CHY-C \par \par This request has
other tests in progress at the time of reporting



Chlamydia Parsing Rules



Laboratory	TestName	UseEx	SampleType	ReportSpecimen	PositiveText	NegativeText	SpecimenText	Rule	IgnoreTest
'GRIBBLES PATH	CHLAMYDIA DN	True	Cervical	SITE:Cervix/End	POSITIVE	Trachomatis by r	NULL	105	False
'GRIBBLES PATH	CHLAMYDIA DN	True	Genital	SITE:Genital	Trachomatis by r	Trachomatis by r	NULL	106	False
'GRIBBLES PATH	CHLAMYDIA DN	True	High Vaginal	CHLAMYDIA TES	Trachomatis by r	Trachomatis by r	NULL	107	False
'GRIBBLES PATH	CHLAMYDIA DN	True	Penile	Collection site	C.trachomatis	C.trachomatis	NULL	108	False
'GRIBBLES PATH	CHLAMYDIA DN	True	Site Unspecified	CHLAMYDIA TES	Trachomatis by r	Trachomatis by r	NULL	109	False
'GRIBBLES PATH	CHLAMYDIA DN	True	Urethral	SITE:Urethra	POSITIVE	Trachomatis by r	NULL	110	False
'GRIBBLES PATH	CHLAMYDIA DN	True	Urine	SITE:Urine	POSITIVE	Trachomatis by r	NULL	111	False
'GVH PATHOLOGY'	CHLAMYDIA PCR	True	Cervical	SITE :	NULL	Chlamydia trach	NULL	112	False
'GVH PATHOLOGY'	CHLAMYDIA PCR	True	Urine	SITE :	NULL	Chlamydia trach	NULL	113	False
'GVH PATHOLOGY'	CHLAMYDIA TR	False	Site Unspecified	Site: Not Stated	C. trachomatis:	C. trachomatis:	NULL	114	False
'GVH PATHOLOGY'	CHLAMYDIA TR	False	Urine	Site: Urine\par	C. trachomatis:	C. trachomatis:	NULL	115	False
'GVH PATHOLOGY'	CHLAMYDIA TR	False	Urine	SPECIMEN	trachomatis	trachomatis	NULL	116	False
'GVH PATHOLOGY'	GONO & CHLAM	False	Urine	SPECIMEN	trachomatis	trachomatis	NULL	117	False
'HAPS'	Direct Antigen T	False	Site Unspecified	\par C.trachom	NULL	C.trachom PCR	NULL	118	True
'Institute of Med	CHLAMYDIA TR	True	Cervical	Sample: CERVIC	Chlamydia trach	Chlamydia trach	NULL	119	False
'Institute of Med	CHLAMYDIA TR	True	High Vaginal	Sample: HIGH V	Chlamydia trach	Chlamydia trach	NULL	120	False
'Institute of Med	CHLAMYDIA TR	True	Thin Prep Fluid	Sample: CERVIC	Chlamydia trach	Chlamydia trach	NULL	121	False
'Institute of Med	CHLAMYDIA TR	True	Urethral	Sample: URETH	Chlamydia trach	Chlamydia trach	NULL	122	False
'Institute of Med	CHLAMYDIA TR	True	Urine	Sample: URINE\par	Chlamydia trach	Chlamydia trach	NULL	123	False
'Institute of Med	CHLAMYDIA TR	True	Vaginal	Sample: VAGINA	Chlamydia trach	Chlamydia trach	NULL	124	False
'Mayne Health L	CHLAMYDIA PC	False	Genital	site G	NULL	Chlamydia trach	NULL	125	False
'Mayne Health L	CHLAMYDIA PC	False	Genital	site G	NULL	Chlamydia trach	NULL	126	False
'Mayne Health L	CHLAMYDIA PC	False	Urine	site U	NULL	Chlamydia trach	NULL	127	False
'Melbourne Path	CHLAMYDIA PCR	True	Cervical	Sample Type \	DETECTED	Chlamydia DNA	NULL	128	False
Marilla, mark	CUI AMUDIA DOD	T	7-1ru-1	Carrella Time	DETECTED	Chiamada Bara	AW W /	100	ester.



Typical auto-generated code for processing rules

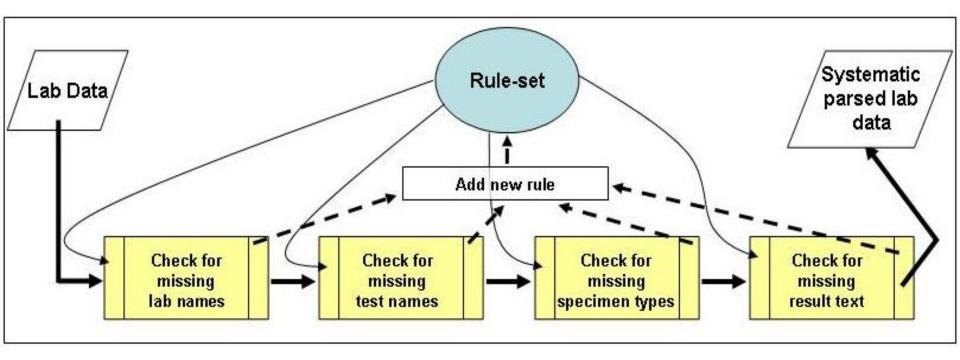


```
--Add positive & negative test results where a matching request is present --
PRINT 'Adding test requests with matching positive and negative results'
PRINT 'RULE 1: Site Unspecified Negative, Laboratory :'
INSERT INTO tmp1 ([Processing Rule], [Clinic Name], [Laboratory], [Doctor Name], [Dr Provider Number],
SELECT 1, p.GRHANITE Site, p.LAB NAME, r.PRACTITIONER, r.PROVIDER NO, p.Patient UUID, 1, r.REQUEST DA
FROM DB Medical Director ALL CHLA REQUEST r INNER JOIN DB Medical Director ALL CHLA PATHOLOGY p ON r.
AND p.LAB NAME IN ('')
AND TEST NAME = 'CHLAMYDIA'
AND REPORT TEXT Like '%not detected %'
AND REPORT TEXT Like '% not detected %'
PRINT 'RULE 2: Urine Negative, Laboratory :'
INSERT INTO tmp1 ([Processing Rule], [Clinic Name], [Laboratory], [Doctor Name], [Dr Provider Number],
SELECT 2, p.GRHANITE Site, p.LAB NAME, r.PRACTITIONER, r.PROVIDER NO, p.Patient UUID, 1, r.REQUEST DA
FROM DB Medical Director ALL CHLA REQUEST r INNER JOIN DB Medical Director ALL CHLA PATHOLOGY p ON r.
AND p.LAB NAME IN (!!)
AND TEST NAME = 'CHLAMYDIA'
AND REPORT TEXT Like '&Specimen'b0
                                                               First Void Urine\par%'
AND REPORT TEXT Like '%Chlamydia trachomatis DNA\b0
                                                             \cf4 * # DETECTED%'
PRINT 'RULE 3: Site Unspecified Positive, Laboratory :'
INSERT INTO tmp1 ([Processing Rule], [Clinic Name], [Laboratory], [Doctor Name], [Dr Provider Number],
SELECT 3, p.GRHANITE Site, p.LAB NAME, r.PRACTITIONER, r.PROVIDER NO, p.Patient UUID, 1, r.REQUEST DA
FROM DB Medical Director ALL CHLA REQUEST r INNER JOIN DB Medical Director ALL CHLA PATHOLOGY p ON r.
AND p.LAB NAME IN ('')
AND TEST NAME LIKE '&CHLAMYDIA PCR%'
AND REPORT TEXT Like '%Detected on HVS %'
AND REPORT TEXT Like '&Detected on HVS %'
```



The process





Status

- 10 practices, 236 rules, 16 laboratories
- > 11,000 lines of SQL automatically generated (no room for human error)
- Rule processing takes about 5 minutes then we have our systematic data





- For the Burnet ACCESS project we receive data directly from some laboratories
- We are able to compare the number of tests received from a laboratory in a fixed time period with the number of tests found in a practice database using GRHANITE. Any disparity represents less than perfect data.
- We can also compare test request numbers against test results to determine disparity in test requesting and result data within the practice database.



Results



- We validated data from 5 practices where we had corresponding laboratory data.
- GRHANITE correctly classified 100% of all Chlamydia tests as positive or negative and correctly identified the specimen type in all cases.
- In all but one practice, 92 95% of data matched exactly with the laboratory data.
- Where the matches were not present, we were able to identify disparity between practice test requests and test results – i.e. even without access to lab results we know we can determine rates of data incompleteness.
- Knowing the rate of incompleteness allows us to reliably use the data for research and we don't need to separately query the lab data.
- We also have some test requests with no corresponding lab test result and for the first time we are able to determine rates of laboratory test incompletion.
- The one site that had lower completeness rates was obvious via the test request comparision data it is running an old system and the practice has been experiencing problems with its electronic lab interfaces indeed we were able to tell the practice which one was causing them a problem.





- GRHANITE provides the safety blanket that allows us to ethically extract and manipulate pathology test results as well as other clinical data on a secure, ethical, study-by-study basis.
- We can interface currently to MD2, MD3, Communicare, Zedmed and Best Practice
- Data is never perfect, but our systematic parsing allows us to use pathology test result data from primary care with confidence.
- In conjunction with the ability of GRHANITE to record link without exposing person identifiers, we have the means of supporting systematic recordlinked research spanning the primary / secondary care divide.

Future Directions

- We plan to systematically implement the technologies across NE Victoria over the next three years as part of the DHS Victoria funded University of Melbourne Centre for Excellence in Rural Sexual Health in Shepparton.
- We are also planning to implement the technology as part of a Commonwealth RCT in approximately 140 sites Nationally.
- We are working with BioGrid Australia to validate the efficacy of GRHANITE for cross-jurisdictional record linkage.
- We have piloted record linkage between DHS Victoria and Biogrid and we are about to validate the linkage against AIHW linkage algorithms.





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Using 'Hashing' to preserve Anonymity



Example:

Surname + Forename + Date of Birth "Boyle" + "Douglas" + "19690118"

"BoyleDouglas19690118"

'SHA-256 Hash generation' and additional 'AES encryption' using secured encryption passphrase

"u62KHSJyZQUt2QJkOUSXyFie4B5g2yVv/8kzvj4FUrsLV0EvZjsig3keoClh3TcMcDR5/m5SOEgsl8Z/diucZQAzVaX+iBKz/mzfFfiDdCA="



1edaa12c-62ce

d98a0c52-2109

d98a0c52-2109-40fa-af80-07a169cd93d2

Typical GRHANITE Data



	Patient_UUID	HashType	Hash
>	88693834-84b5-478b-9c90-0058bbc6611c	5	j0OXm/un9hzOia5B2HO0pGACSTWT2Cls3VR6ez3kiPJiECtRb5ICEdT/KMzoJXaI24dXENVdA18xc/h9X6boljdWTQ59qUROmESadIKIng4=
	88693834-84b5-478b-9c90-0058bbc6611c	7	7WMmFzuuQjvKwFsO27+S3uUKRrxE+kW5vZ87Iv9Y86K2tmfK9EvXXOVcG5AN8Q9ngTBe400AzaUcoTtJ3rWKCVaf1zfzeqvi5CSoed55w5A=
	09442fe8-e4b4-4653-a750-0184f39d5f44	5	INTGcWAgvq8m+hWQxxsuHKUhRtp4TT8aDBSEq4UgedmL9IUBvA9mDKZG4DfNqtWV/OX3BuGgdhEBOFv6PgU2zHpNCR1XMa/xaHi23BsA7lindersetting and the second statement of t
	09442fe8-e4b4-4653-a750-0184f39d5f44	7	$\tt q8va4jildeq7RJhD5WEtHs0aeaNkiMNyOXf7Y8JHa4VvJcZXZXGhaV3WHbLBQ9aJ5yq5PTTZlmAr/6jd/zFRw5XuPe4YPK4M17WtrgW0N2o=0.00000000000000000000000000000000000$
	09442fe8-e4b4-4653-a750-0184f39d5f44	8	WuWF65On43D7mYnUTa17EsQBjnUUgLDdJQ3cRowgheeOdhM7A3dlp27uI+8TliBX2Nf1dyPWUQOa7kr59nPfQnfHimwcPKUba+M/YMCRhjQharandarandarandarandarandarandarandaran
	a1b51347-91ef-40ff-990b-043ba2a29421	5	ynVWD2T57U5h + eKiLaxOw00zRDB8apRfgaHyxu1pAUbfi5sIfRqDUjCMMjCSdchD + uXg3diVJruGi7/OM0qJsB8Jfdok/8uVVBYC/eBTO0E = 0.000000000000000000000000000000000
	a1b51347-91ef-40ff-990b-043ba2a29421	7	9B2k/Rw3ZDEPPCgJyOE4eNoS869feXvAGq4suZHdr91Zsj1t19OpDRwrSO8mcKhTsanS1tC0h2OrDe1O8cW58NMb7mqAwwN+5MxZCPNhP
	a1b51347-91ef-40ff-990b-043ba2a29421	8	rqz2XVN12uw6Wtg0nW1nI/LM1RsX0ntuUZGF+oqhBPZGQtiVpuFHFIYyUEhnBXt3ADxcUUgo/XIkIJWsW4i35dy+SYd8551toDT7JsVyaSc=
	3aa10887-016d-490e-8431-046e0292b1f1	1	9kmu3wWHTAOwsO45YR9Fj9JZgCDCp3ziYseRPYawBbYMdkIrc6iCiyzc1cD++qN1e7jqLIXbqe4TMDAHWy40YyrUkN/qToCY+OKaFCmHWA4
	3aa10887-016d-490e-8431-046e0292b1f1	3	YDAtI0Hy9AabW7tIgKPwy5MFtdLUgsXPuC3oT5n/bt1BrT7Jx5MiIHeegWDt4kwyWYh0dk1OI8yAAqXbbCDJUaiRFXEkSEr71eZHEGGNyso=
	3aa10887-016d-490e-8431-046e0292b1f1	5	rJfm3GCMrYAFuxrpYPeVlt9kmUs7W4iyRaOVq2XFkQNk8ADiHowmiRopWuInFtmkv38F1G+REJP2tugoGUVonCnzJvTXCuC6q/rqjXYSlhE=
	3aa10887-016d-490e-8431-046e0292b1f1	7	lk7203VVWny4lOzegWQE5GpN+y7zEePXpl4ITm7zJWN+VuTX4k7vVOR6yP+SeLR5BnCUZOB4v3xZlEeY0fjhyBs5GPW/UOeB1X/u+5ulP4k=
	9765d1a0-65ae-4609-b830-047a51ca9f6f	5	j00Xm/un9hz0ia5B2H00pGACSTWT2Cls3VR6ez3kiPJiECtRb5ICEdT/KMzoJXaI24dXENVdA18xc/h9X6boljdWTQ59qUR0mESadIKIng4=
	9765d1a0-65ae-4609-b830-047a51ca9f6f	7	7WMmFzuuQjvKwFsO27+S3uUKRrxE+kW5vZ87Iv9Y86K2tmfK9EvXXOVcG5AN8Q9ngTBe400AzaUcoTtJ3rWKCVaf1zfzeqvi5CSoed55w5A=
	c2a9ac18-125b-423e-838c-05167a0e340e	5	3 aqUId/ks BoNg 7 OLp J1 avqcs FJY 869 JR ii DoDbuL7 Lt H3 HkC dz OjCWIFS kPvXBIqcNe3DErN/BL0 aksjUBs Unz VbpS 365 dEjOKng 7 Nv25 a 4 = 2000 Albert Nr.
	c2a9ac18-125b-423e-838c-05167a0e340e	7	BWUFnW+qVQmxtyL92wUszR+mKtxrCFQZl00hryyClD5B3dT+NLfahjdTerFxEwthh9rtlJq8EONLcCWx/BnFjY6pKwa8ggCgOBJkl5waruk=0.00000000000000000000000000000000000
	c2a9ac18-125b-423e-838c-05167a0e340e	8	2QDF4deZTOcDtheWJPyQpRiCMaPOIApDCnOpk3mewSrVysU7khWVxtsAtJk4iy2LhEiyTEbRT75TMgdvz8gDrugXtaUdqLtcecFqVc19HfU=
	0aa28542-6831-4c88-a4cf-052c2697b100	5	SMCQ0bdVMvme9F4/7wZ/aV0QLh7k1mVd1ac42v+HBAywJc2Gbx+C9SKU5Bwp2U7T01szSvaXM7nwyqYFQAJtPRClPVGziLvupmJjAJyidTw=
	0aa28542-6831-4c88-a4cf-052c2697b100	7	0ETKdHn1fGw486DBmO7n58JXULD+l6aQiG8sfllOWGCNG8ZMC4zw2oICmaM3277n1XGoaLThnH3CKWxR60FlK5YUpG5iRaL8NkYy9mcAIKA=
	0aa28542-6831-4c88-a4cf-052c2697b100	8	ufMtnGEIZJip54UPX+X0XDqYfWqNGmO7JOZtTGSTWRV0hHof7/3KdhZ3YxGWqgZWmJJqsZ8bzT0dBpqgIs3pok3gKRK8MSVKxeRNxHg47jg=
	1edaa12c-62ce		
	1edaa12c-62ce		Data used to link patients

(NO names, dates of birth, Medicare ID or other usual identifier)

bQC/TrHtAaXWZ9tmjPmpkYhuyEY7ykzsozGQ3WRQPwRUfPSJxgXC36FqOv00IzPGbfEY2yRJTtb51IVPNJYD+fZZYYmKA/LbS/mYB5ZwJrM=