Central Manchester University Hospitals



Is Point of Care Testing "Unsafe in The City"?

Dr Susanna Currie

Central Manchester University Hospitals NHS Foundation Trust



Background

- Undiagnosed HIV in UK
- Known benefits of POCT
- MCSH outreach and POCT
 - Back-up serology since 2007







Unsafe Sex in The City







Central Manchester University Hospitals





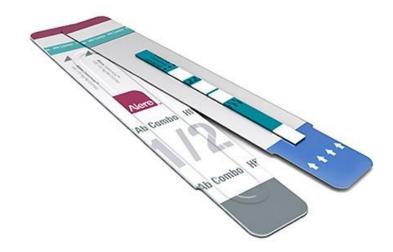
- To evaluate real time false positives and false negatives with our outreach programme
 - To review the need for back-up serology







- A retrospective review of all Alere Determine[™] HIV-1/2 Ag/Ab Combo tests at a Central Manchester outreach services in 2013
- POCT results were compared with concomitant serology









- Sensitivity 50%
- PPV 60%

- Specificity 99.4%
- NPV 99.2%

	Blood +ve	Blood -ve	Totals
POCT +ve	3	2	5
POCT -ve	3	359	362
Totals	6	361	367



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Manchester Centre for Sexual Health

	1	2	3
Age	36	22	30
Date of test	10/1/13	15/5/13	25/9/13
Last test	NEVER	6 months ago	3 years ago
Contacts in 3/12	1	1	1
Risk	HIV positive partner Unspecified UPSI 8/52 No drug use ?Condom use Passive & active OI/AI	HIV positive partner Condom accident 8/52 Snorts drugs AI always with condoms Passive & active OI/AI	No drug use Never uses condoms AI & OI passive only
PEPSE Aware	Yes	Yes	No
Expected result	Positive	Positive	Negative
Seroconversion	5/52 prior + ↓weight	2/52 prior	Not documented
Early $ riangle$	Yes	Yes	Yes
Other STI	C4R	No	C4R
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spitals **NHS**

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- Importance of counselling at time of test with regard to risk and window periods
- Of the 367 patients who had a POCT, 1 could have slipped through the net without back-up serology
- Manufacturers state that Alere provides an "earlier window of detection" in comparison with 3rd generation tests. It has the "ability to detect HIV sooner than conventional rapid tests"





Conclusion

- In real time POCT showed low sensitivity and PPV
- Specificity and NPV were good
- Counselling dependent on recent sexual history is of paramount importance within POCT programmes
- False negatives remain a possibility





The Future

- Now using INSTI (3rd generation)
 - with back up serology
- Additional sexual health screening
- Plan to review 12 months data

 Home testing is now available to all with well documented advise regarding window periods and re-testing











