

HCVPOCT

Australian Hepatitis C Point-of-Care Testing Program

Standardised point-of-care operator training is associated with embedded skills post implementation

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Operator training journey

SKILLS

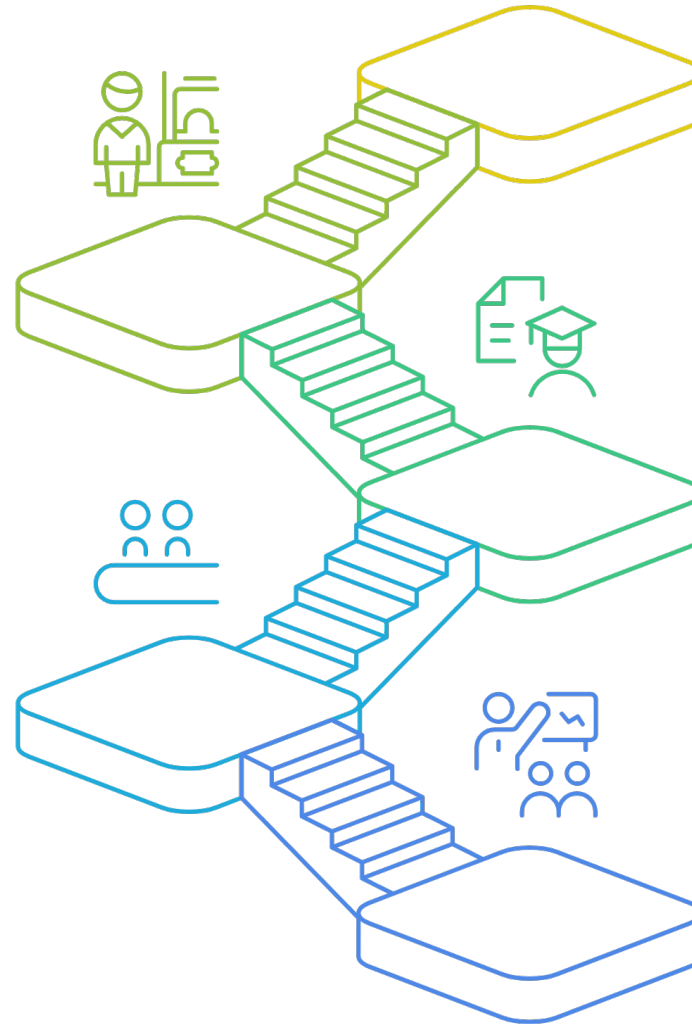
GeneXpert Practical

Hands-on experience with the GeneXpert instrument.

KNOWLEDGE

GeneXpert Theory

Understanding the principles for safe GeneXpert testing.

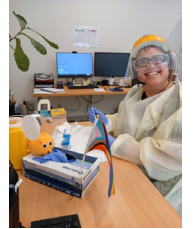


CONDUCT

Competent Operator



Achieving proficiency and readiness for participant testing on the GeneXpert.



5

3

Theory Assessment

Evaluating knowledge through a written assessment.

KNOWLEDGE

ASHM OLM



Overview of HCV infection and available diagnostics.

1

Study Design - Evaluation of operator training & quality

Questionnaire topics:

Ensuring people at risk are screened
Interpreting results and diagnosing HCV
Collecting capillary samples
Performing HCV POCT
Operation and maintenance of GX

Quantitative data analysis

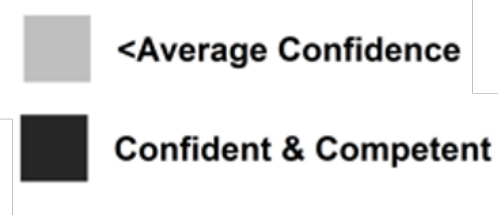
Data extraction from Program data base
QC and EQA participation and concordance
Valid tests and error rates

Qualitative data analysis

Proportion of participant responses at each stage
Self-perceived competency assessed at each stage
5-part Likert scale then dichotomised
6-month post-training review in progress

Study Visit	Screening (Enrolment)	ASHM Pre-requisite OLM	GeneXpert Theoretical Training	GeneXpert Practical Session	6-month Post-training Review
Questionnaire (Screening)	X				
Questionnaire (Follow-up)		X	X	X	X

- 1 Not at all;
2 Have a slight knowledge, skills or confidence
3 Average competence amongst my peers
4 Confident and competent;
5 Very confident and competent



Evaluation of operator confidence to date

		Study Visit	Baseline	Post-ASHM OLM	Post-GX Theory	Post-GX Practical	6-Months Post Imp.
		All Responses (n =)	326	285	252	204	120
Question	Confidence	Baseline	Post-ASHM OLM	Post-GX Theory	Post-GX Practical	6-Months Post Imp.	
1. Capillary Specimen Collection	Confident & Competent (%)	65%	88%	93%	98%	98%	
2. Interpretation Of HCV Results		46%	80%	93%	99%	98%	
3. Performing Testing On GeneXpert		41%	80%	91%	99%	98%	
4. Understanding Of Quality Testing		60%	87%	96%	100%	98%	

As of 31 January 2025

1. *Capillary Blood Collection* - How confident are you in your ability to draw a whole blood sample into a 100µL minivette?
2. *Interpretation of HCV Results* - How confident are you in your ability to interpret the HCV viral load result from the GeneXpert platform?
3. *Performing Testing on GeneXpert* - How confident are you in your ability to perform an HCV Viral Load Fingerstick test on the GeneXpert platform?
4. *Understanding of Quality Testing* - How confident are you in your understanding of the purpose of a quality control (QC, a known HCV positive and negative specimen) for HCV testing?

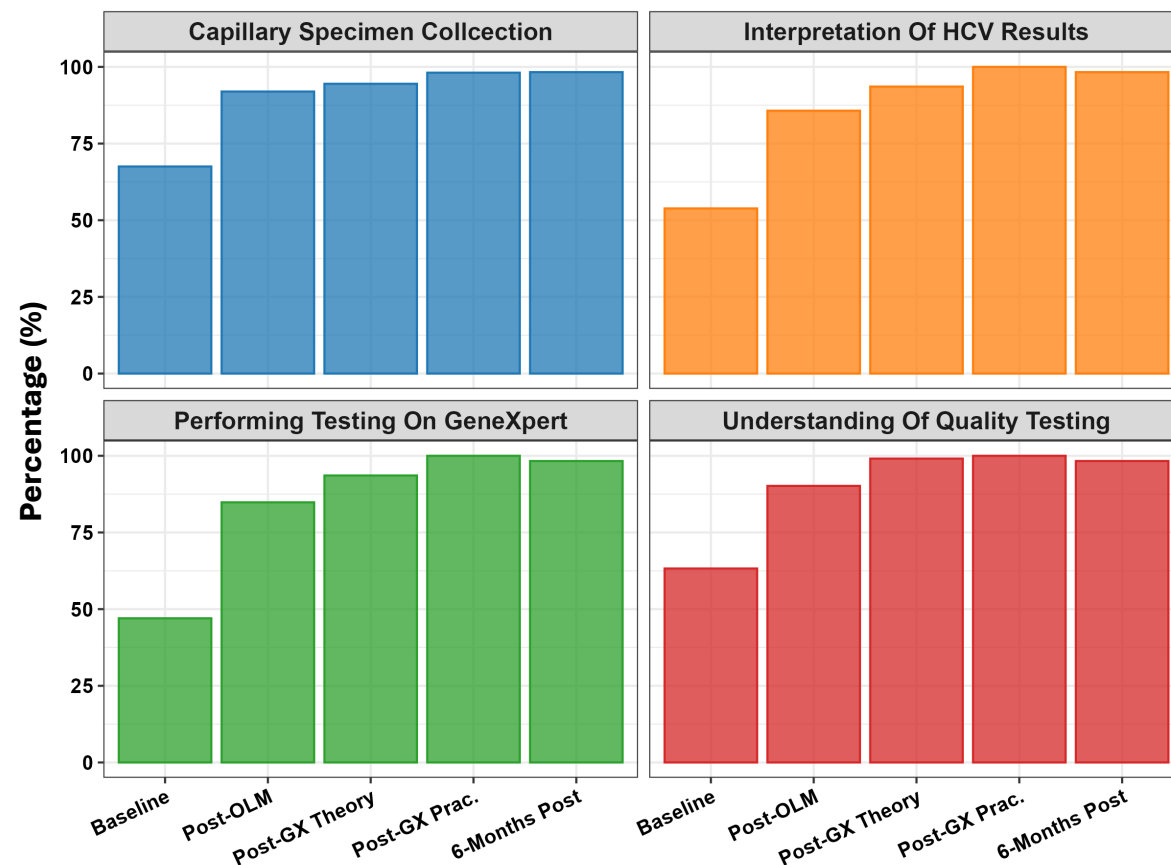
Do trained process remain effective?

Paired responses from operators, both baseline and 6-months post-implementation surveys.

Study Visit	Baseline	6-Months Post Imp.
Responses	117	117

Question	Baseline	6-Months Post Imp.*
1. Capillary Specimen Collection	68%	98%
2. Interpretation Of HCV Results	54%	98%
3. Performing Testing On GeneXpert	47%	98%
4. Understanding Of Quality Testing	63%	98%

*p <0.001 for difference between baseline and 6-months post implementation for all for questions.



1. *Capillary Blood Collection* - How confident are you in your ability to draw a whole blood sample into a 100µL minivette?
2. *Interpretation of HCV Results* - How confident are you in your ability to interpret the HCV viral load result from the GeneXpert platform?
3. *Performing Testing on GeneXpert* - How confident are you in your ability to perform an HCV Viral Load Fingerstick test on the GeneXpert platform?
4. *Understanding of Quality Testing* - How confident are you in your understanding of the purpose of a quality control (QC, a known HCV positive and negative specimen) for HCV testing?

Standardised POC operator training

Standardised POC operator training

- Improves self-assessed GeneXpert competency
- Develops a greater understanding of quality management procedures
- Associated with embedded skill sets at six months post-implementation

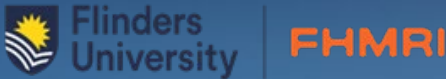


Questions

We acknowledge all people living with hepatitis C and other infectious diseases who have generously participated in research that has informed this presentation.

Disclosures:

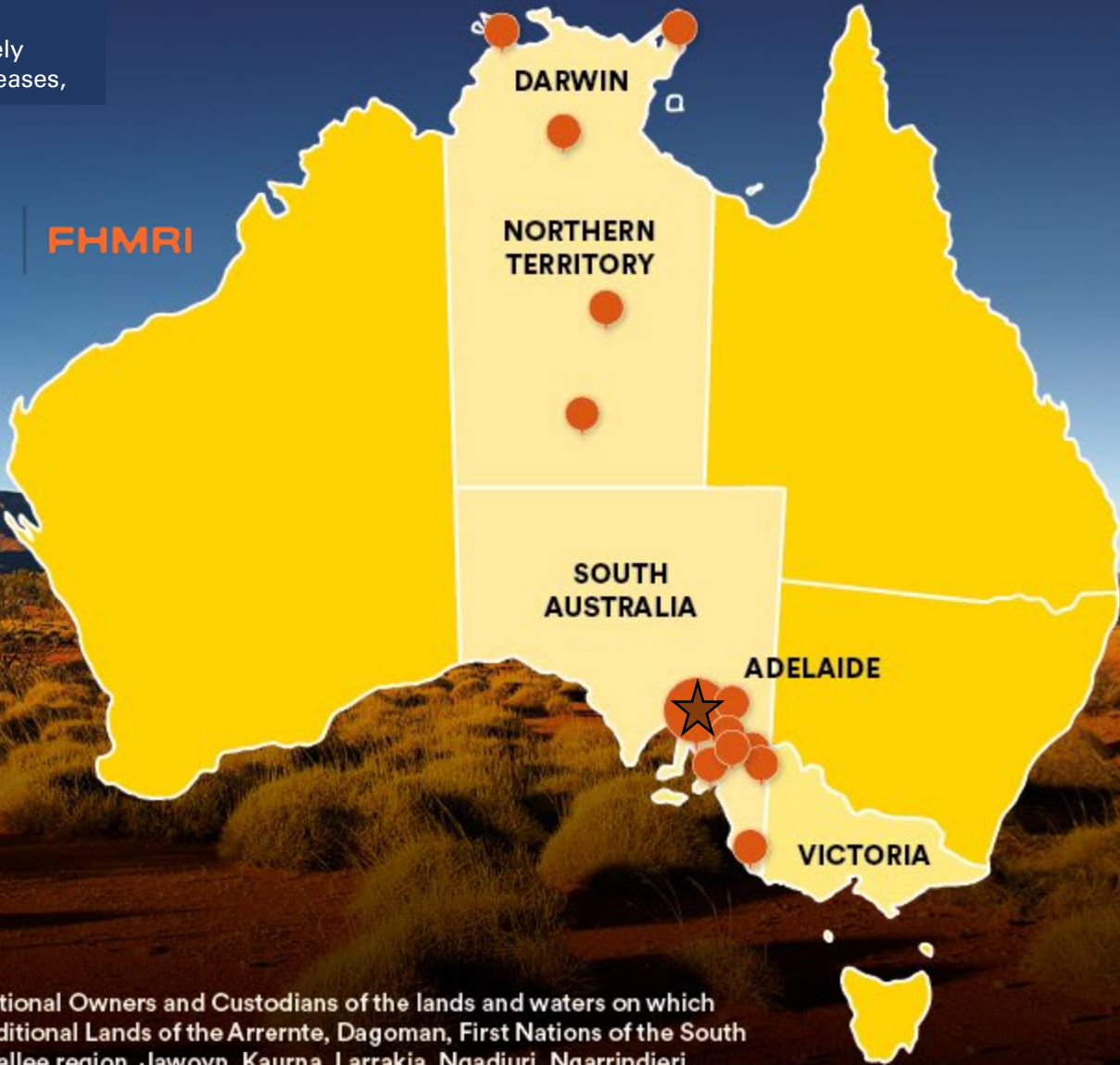
- No known conflicts of interest to declare
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Flinders University acknowledges the Traditional Owners and Custodians of the lands and waters on which its campuses are located, these are the Traditional Lands of the Arrernte, Dagoman, First Nations of the South East, First Peoples of the River Murray & Mallee region, Jawoyn, Kurna, Larrakia, Ngadjuri, Ngarrindjeri, Ramindjeri, Warumungu, Wardaman and Yolngu people. We honour their Elders past, present and emerging.

Questions

Supporting non-experienced operators

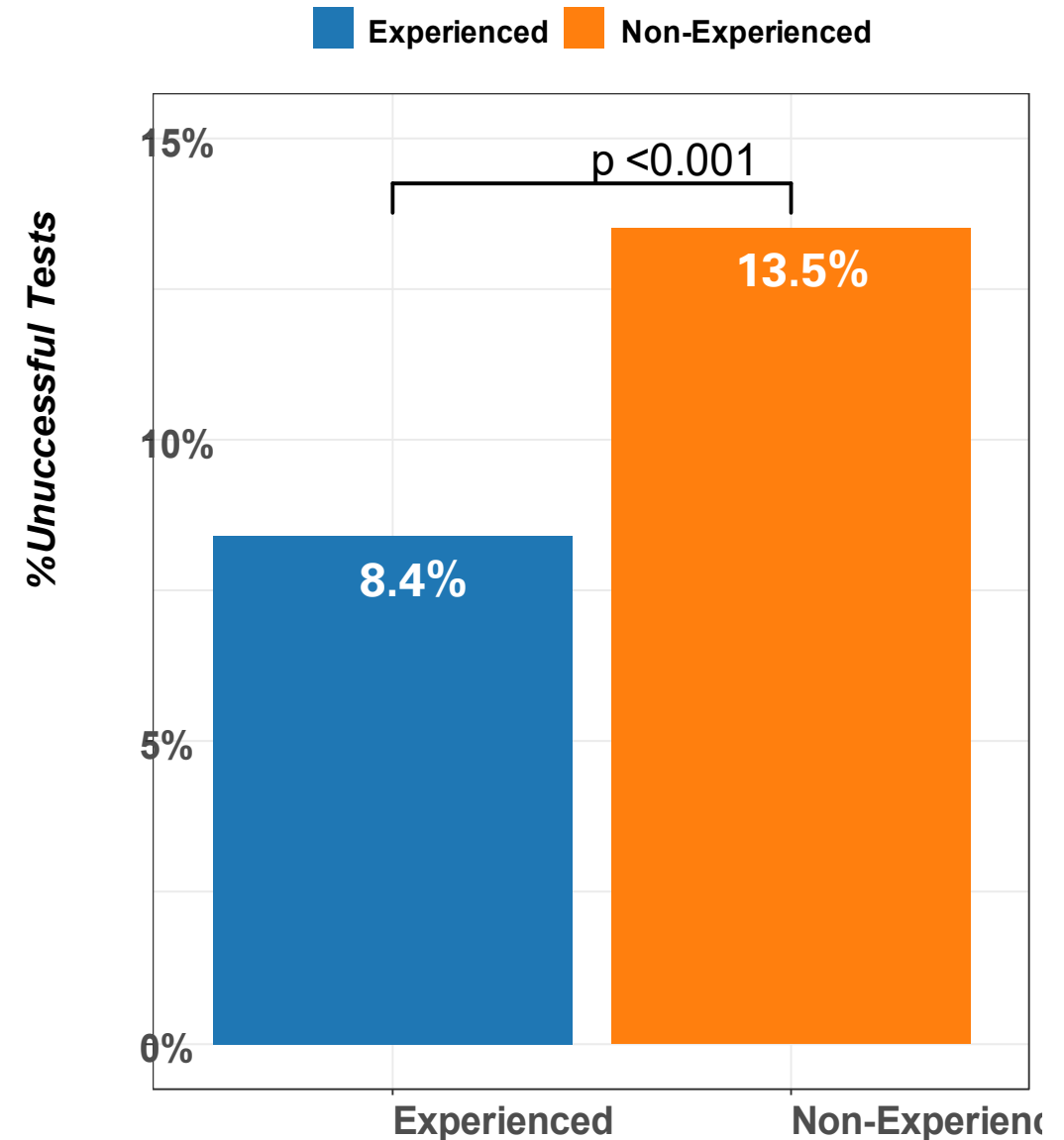
Experienced operators defined as:

- Greater than 200 tests performed
- Predominately high testing volume sites or high intensity testing campaign staff

Significant difference between experienced and non-experienced operators.

Operators	Total Tests	Unsuccessful
Experienced (n=30)	16,486	1,387 (8.4%)
Non-Experienced (n=225)	9,241	1,250 (13.5%)

As of 31 January 2025



Top 4: Quality testing issues

QC result	Nurse	Peer
Concordant	2,099	250
Discordant	25	4
Error	134	12
Total	2,258	266

As of 31 January 2025

Nursing Staff (n=145)

- Wrong/swapped QC sample tested - 7
- Incorrect electronic ordering – 13
- Expired QC material – 1
- Sample stability issue – 4 (reported to Program)

Peer Workers (n=16)

- Wrong/swapped QC sample tested - 1
- Incorrect electronic ordering – 3

