

A Four Year Analysis of UK & Irish Laboratories' Performance in UK NEQAS for H&I's External Quality Assessment Schemes

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Introduction

UK NEQAS for H&I provide 12 assessed EQA schemes covering clinical H&I services. Schemes are assessed on a 75% consensus basis.

We analysed the number of UK and Ireland laboratories that did not meet minimum annual satisfactory performance criteria from 2011-2014.

Performance Assessment

Annual satisfactory performance criteria for the schemes varies but essentially:

1. Requires all results in agreement with consensus findings [Schemes 1B (B27), 4B (ABO genotyping), 5A (HFE genotyping), 7 (B*57:01 typing)]
2. Allows a single error [Schemes 1A (HLA phenotyping), 4A1 (1st field HLA genotyping), 4A2 (2nd field HLA genotyping), 8 (Class II disease typing)]
3. Requires 75-85% of results, depending on scheme, in agreement with consensus findings [Schemes 2A (CDC crossmatching), 2B (flow cytometry crossmatching), 3 (antibody specification), 6 (antibody detection)].

Laboratories failing to meet satisfactory performance criteria are classed as unacceptable performers (UP).

Results

There were 8 UK and Ireland laboratories that were UP in 2011, 12 in 2012, 11 in 2013 and 19 in 2014 (Table 1). Three schemes had no UP over the 4 years (1A, 4A1, 7).

The number of UP in Schemes 1B, 4B and 4A2 varied, but was not at its highest in 2014. Performance in Scheme 5A improved with 2 UP in 2014 compared to 4 in 2011.

Table 1: Number of labs with UP 2011-2014

| Scheme | Number of UP (%) | | | |
|----------|------------------|----------|----------|----------|
| | 2011 | 2012 | 2013 | 2014 |
| 1B | 1 (2.2) | 4 (8.5) | 1 (2.1) | 2 (3.9) |
| 2A | 0 | 0 | 2 | 7 |
| PBL/T | 0 | 0 | 1 (4.3) | 3 (13.0) |
| B cell | 0 | 0 | 1 (4.8) | 4 (19.0) |
| 2B | 1 | 2 | 2 | 4 |
| T cell | 0 | 1 (4.3) | 0 | 2 (8.7) |
| B Cell | 1 (5.9) | 1 (5.3) | 2 (10.0) | 2 (10.0) |
| 3 | 1 | 0 | 1 | 0 |
| Class I | 1 (3.8) | 0 | 1 (3.8) | 0 |
| Class II | 0 | 0 | 0 | 0 |
| 4B | 0 | 1 (25.0) | 0 | 0 |
| 4A2 | 1 (5.0) | 2 (9.5) | 2 (9.5) | 1 (4.8) |
| 5A | 4 (9.3) | 3 (5.9) | 2 (3.9) | 2 (4.0) |
| 6 | 0 | 0 | 0 | 1 (4.0) |
| 8 | N/A | N/A | 1 (12.5) | 2 (22.2) |

Performance in 4 schemes had declined over the 4 years, leading to the highest number of UP in 2014 [2A (7 laboratories), 2B (4), 6 (1), 8 (2)].

In 2014 two laboratories were UP in two different schemes, compared to one laboratory in 2013 and 1 in 2011.

Comment

The higher number of labs with UP in 2014 is concerning and will be carefully monitored in future years.

Further Information

Full information on all UK NEQAS for H&I schemes is available at www.neqashandi.org.uk or contact the Scheme Manager at ukneqashandi@wales.nhs.uk