

# Using microbiology pathology data and “Hackathons” to improve healthcare quality and antimicrobial stewardship

## PathWest Laboratory Medicine Western Australia



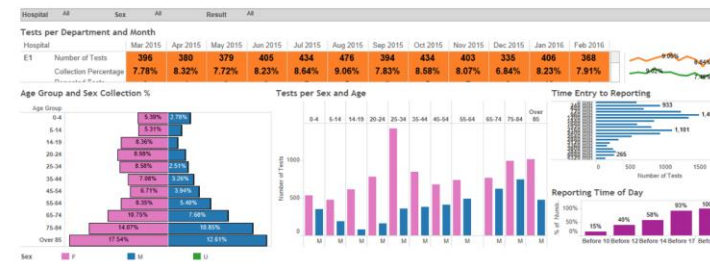
**Problems:** Suboptimal use of microbiology diagnostic tests contributes to reduced quality of patient care and represents inefficiency in the health system. Additionally, 10% of hospital episodes of care have a urine, blood or wound swab culture performed with at least 30% of these tests are used sub-optimally.

**Solution:** A “Hackathon” - a quick cycle improvement event – was conducted which included: Volunteer “hackers”, access to ideas and expertise external to health (data analysts, statisticians, programmers, design specialists) and an agile methodology where you don’t control the outcome and get surprise findings.

### Results:

- Survey on use of microbiology tests
- Identify knowledge gaps and systems barriers
- New testing and collection policy and educational resources
- System redesign
- Departmental process mapping etc.
- Next Steps: Implementation

### Science on the Swan Conference Hackathon May 2016 ED Urine Dashboard



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