

Development and use of an automated ELECTRONIC VACCINATION DATABASE for a volunteer deployable workforce

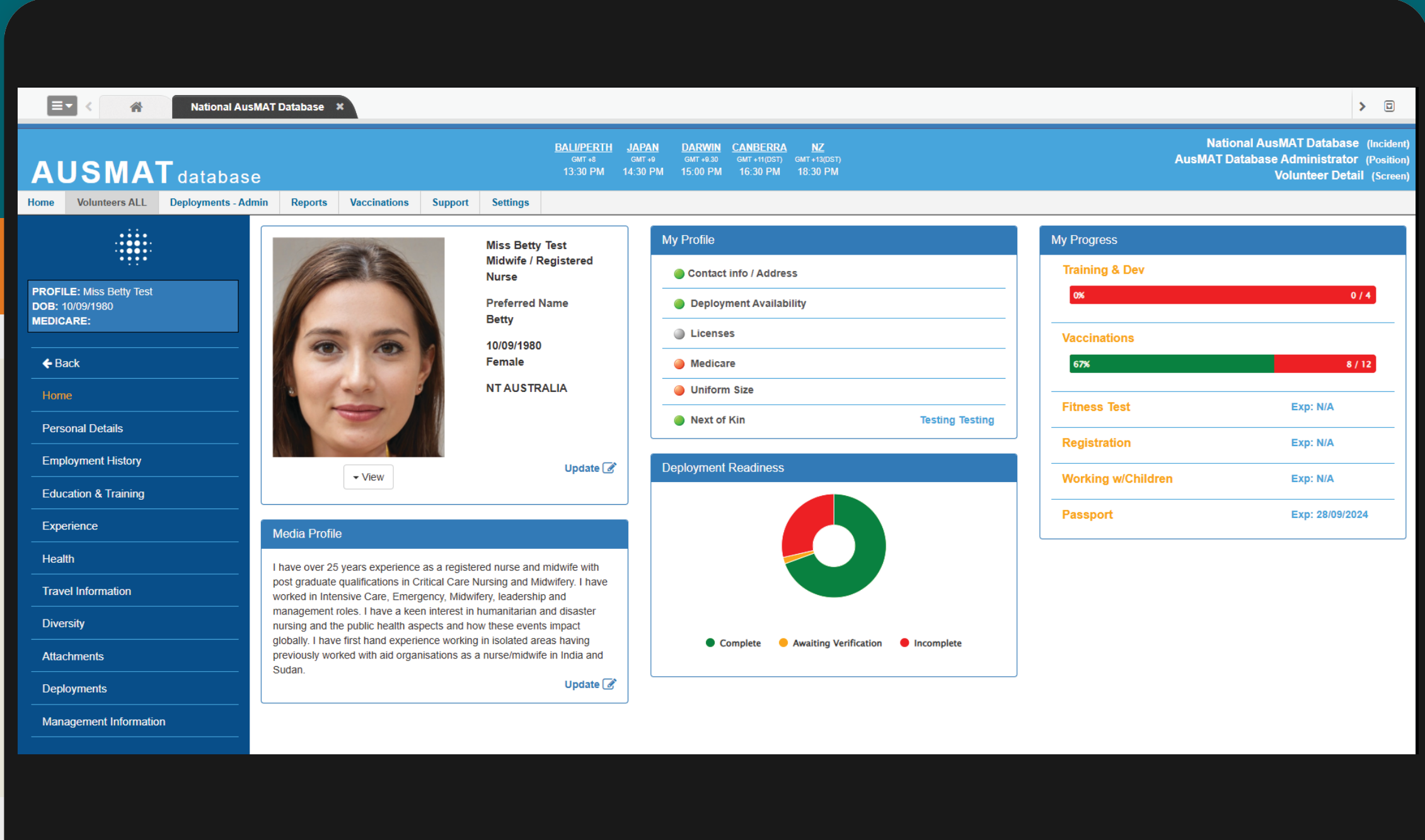


AUTHORS

Jemma McWiggan | Melanie Morrow | Kathleen McDermott
National Critical Care and Trauma Response Centre, Darwin, Northern Territory, Australia

Background

- » The National Critical Care and Trauma Response Centre maintains the AUSMAT Workforce and Deployment Management System (WDMS) with approximately 600 active members across Australia.
- » Deployments – both national and international – can occur at very short notice.
- » It is critical that all team members are appropriately immunised for diseases specific to the deployment location.



WDMS captures information relevant to deployment, including professional qualifications, next of kin details, immunisation records, and more.

Method

1 Vaccine rules

Each vaccine has rules set within the WDMS, which ensures appropriate spacing of vaccine doses and allows automatic identification of expiry dates.

2 Vaccine upload and verification

Vaccine records are uploaded to WDMS by the pharmacy technician, and verified by the pharmacist.

3 Traffic lights

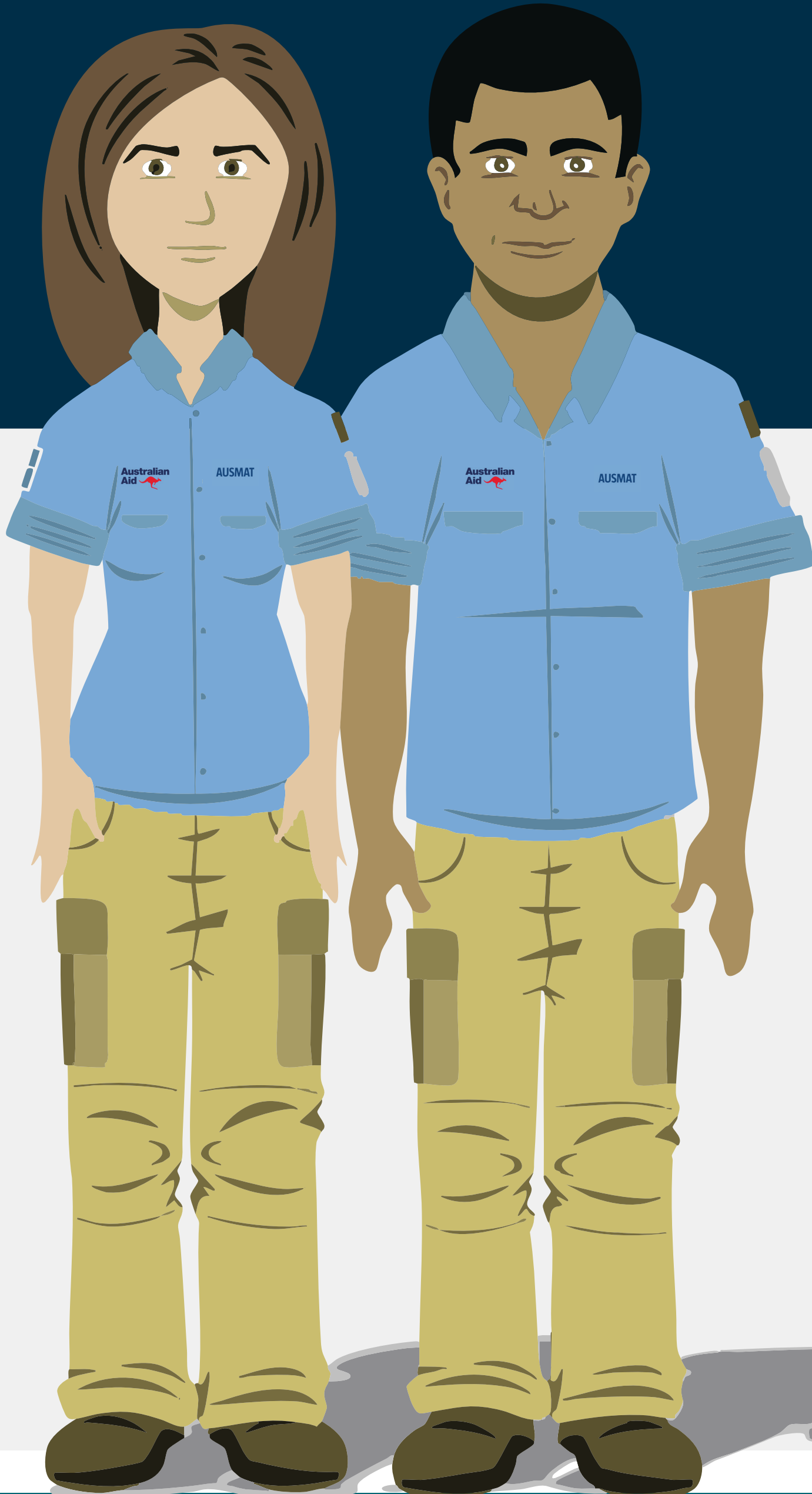
Vaccination status can be easily seen with a traffic light system – green (up to date), orange (expiring soon), red (not immune).

4 Proof of immunisation

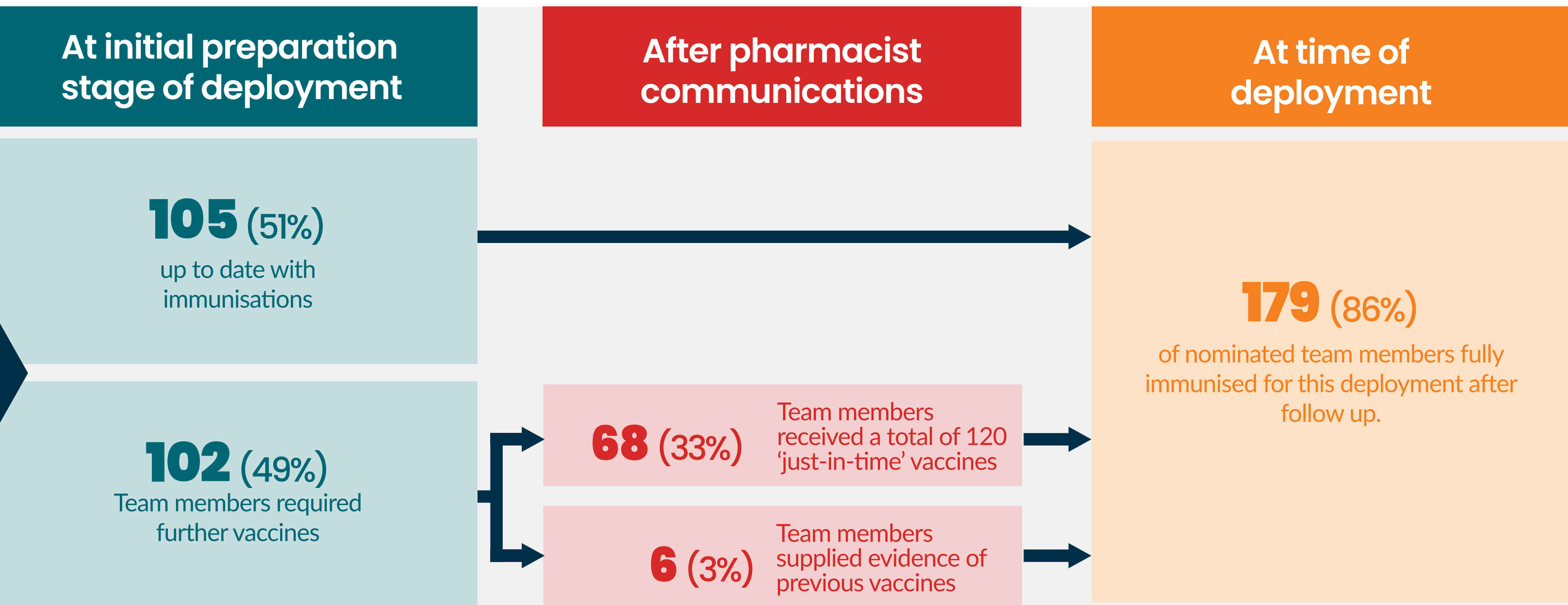
The WDMS allows easy and fast immunisation status checking to clear team members for deployment.

Results

Recent Deployment in December 2024
(30 team members deployed)



207
Team members nominated



Workload to review vaccines



159
Emails



40+
Phone calls



137
Records uploaded and verified

Conclusion

- » A significant number of team members required 'just-in-time' booster doses.
- » 'Just-in-time' doses are very labour intensive in a time-critical situation.
- » Future work aims to increase the number of fully vaccinated team members and reduce the need for 'just-in-time' vaccinations.

Future Works

- » Automated email notifications sent to team members when vaccines are expiring soon.
- » Pilot a reimbursement system for team members to improve the timeliness of booster doses.