

Making Useful Job Aids for Performance Improvement

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Background

In the context of increasingly complex health care tasks, human resource shortages, and task shifting, job aids such as checklists are increasingly cited as important tools for improving performance.¹

Job aids, which have been widely used by industry, the military and developed country health care systems, are also being used in developing country health systems as part of quality improvement efforts.^{2, 3, 4}

What is a job aid?

Job aids are tools that help improve performance by health workers or caregivers of a health-related task or behavior.

Job aids:⁵

- Remind **how** to take action correctly
 - Cookbook-like sequential list
 - Non-sequential checklist

- Help decide **what** action to take
 - Algorithm (e.g., IMCI)
- Trigger as to **when** to take an action, or when not to
 - Vaccine vial monitor tells if vaccine is safe to use
 - Blister pack or pill box for medication ensures right dose at right time
- Perform a **calculation or classification**
 - Pregnancy calculator
 - Color-coded anthropometric tape measures or low birth weight scale
 - Acute respiratory infection (ARI) timer

What are they useful for?

Performance problems have multiple causes, hence multiple solutions. Lack of information or skill can often be addressed by training or job aids. Job aids reduce training time (training workers to recall information from memory takes longer than training them to follow a job aid), reduce errors and uncertainty, reduce variability in performance, and often allow task shifting to lower-cadre workers without significantly reducing quality of performance.

Tanzanian HIV and Infant Feeding Job Aids

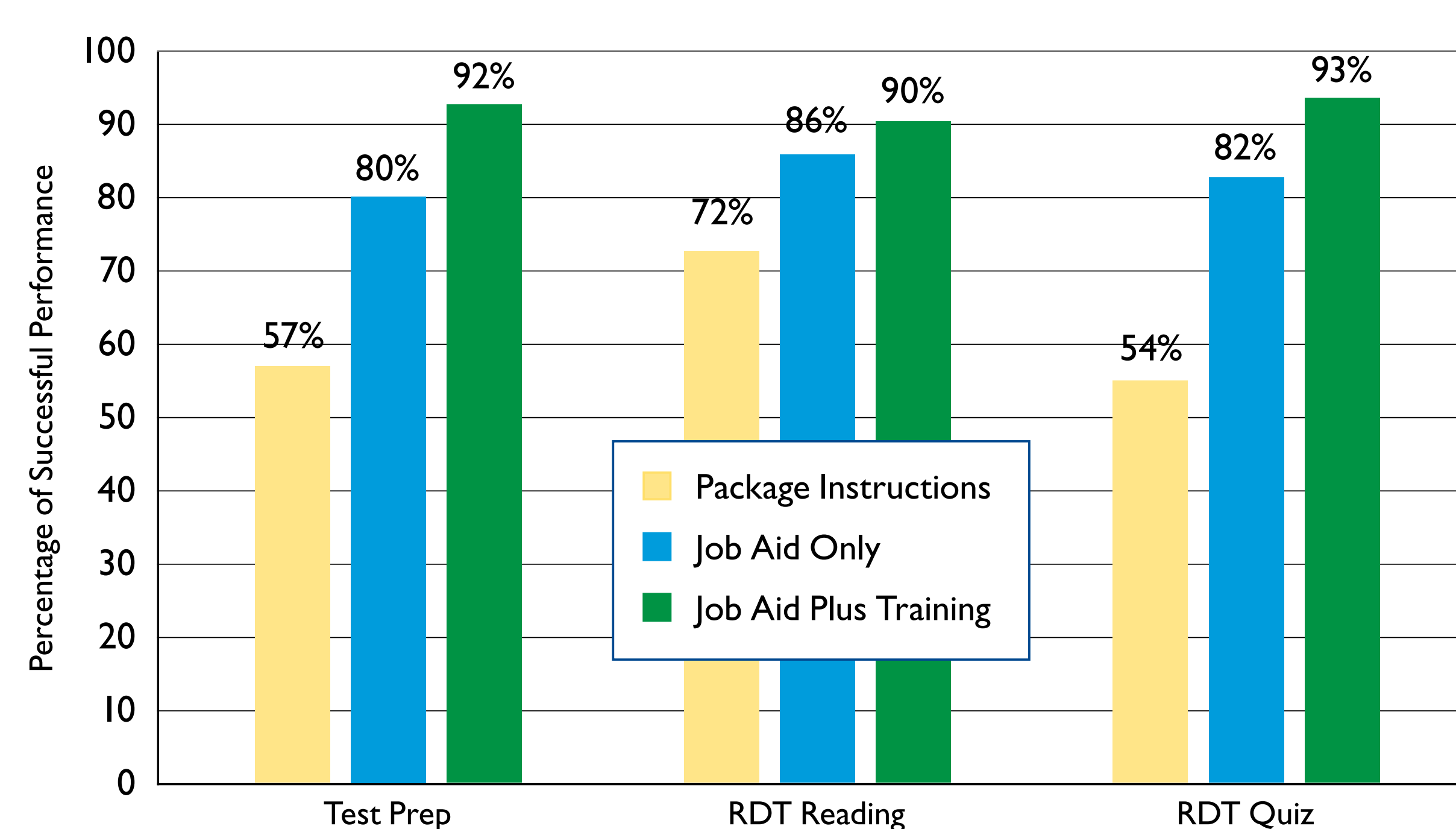
Examples of Effective URC-Developed Job Aids

1) Use of malaria rapid diagnostic tests (RDTs) by CHWs

URC, with support from USAID, WHO, and Foundation for Innovative Diagnostics (FIND), worked with the Ministry of Health of Zambia to develop and test a step-by-step job aid for community health workers (CHWs). We found that the job aid, along with a three-hour orientation, significantly improved performance and interpretation of malaria RDTs by CHWs as compared to following the manufacturer's instructions, or following a job aid without any orientation.⁶

Subsequent surveillance during one year sought to determine if these promising results could be replicated under field conditions. Observations at 3, 6, and 12 months found that most CHWs performed critical steps correctly relying on the job aid.

CHW Performance Phase 2: Systematic Testing June – July 2006



Step-by-step performance – critical steps:

Percent of CHWs who performed each step correctly

| | 3 months n=62 | 6 months n=60 | 12 months n=59 |
|----------------------------------|------------------|------------------|-------------------|
| Critical Steps | | | |
| Wearing gloves | 90.3 | 98.3 | 100.0 |
| Clean finger before pricking | 98.4 | 100.0 | 98.3 |
| Use sterile lancet | 87.1 | 95.0 | 100.0 |
| Dispose of lancet safely | 96.8 | 96.7 | 98.3 |
| Blot blood correctly | 87.1 | 95.0 | 100.0 |
| Dispense buffer drops accurately | 74.2 | 83.3 | 89.8 |
| Wait correct amount of time | 82.3 | 85.0 | 91.4 |
| Read RDT results correctly | 95.1 | 98.3 | 98.3 |
| Dispose of non-sharps correctly | 93.6 | 98.3 | 96.5 |

2) Counseling on Maternal and Newborn Care by Skilled and Lay Providers in Benin

In Benin, with USAID support through the Health Care Improvement and Integrated Family Health (PISAF) projects, URC worked with the Ministry of Health to develop clear, attractive and simple job aids and training to enable task-shifting of counseling from nurse-midwives to nurse aides without sacrificing the quality of counseling.

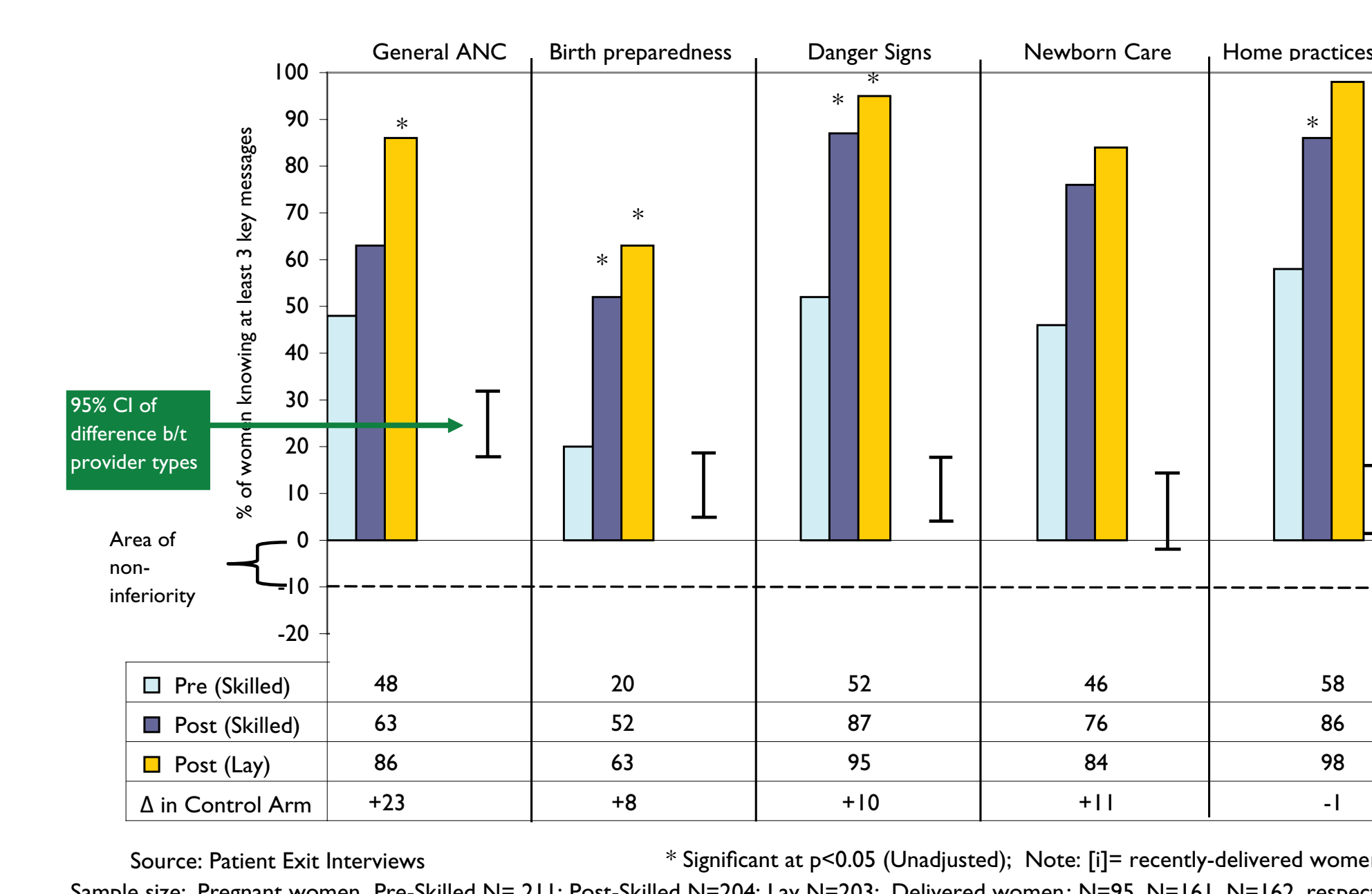
A follow-up study (using a randomized pre-post group design) found that use of job aids by skilled providers increased the quantity of pregnancy and newborn care messages provided, as well as clients' retention of these messages. Job aids, when used by lay nurse aides, ensured counseling performance and effectiveness comparable to or better than that by skilled providers.

This and other studies suggest that job aids are particularly useful for improving the performance of health workers with less education and experience—a particularly important issue in the context of the human resource crisis in developing country health systems.



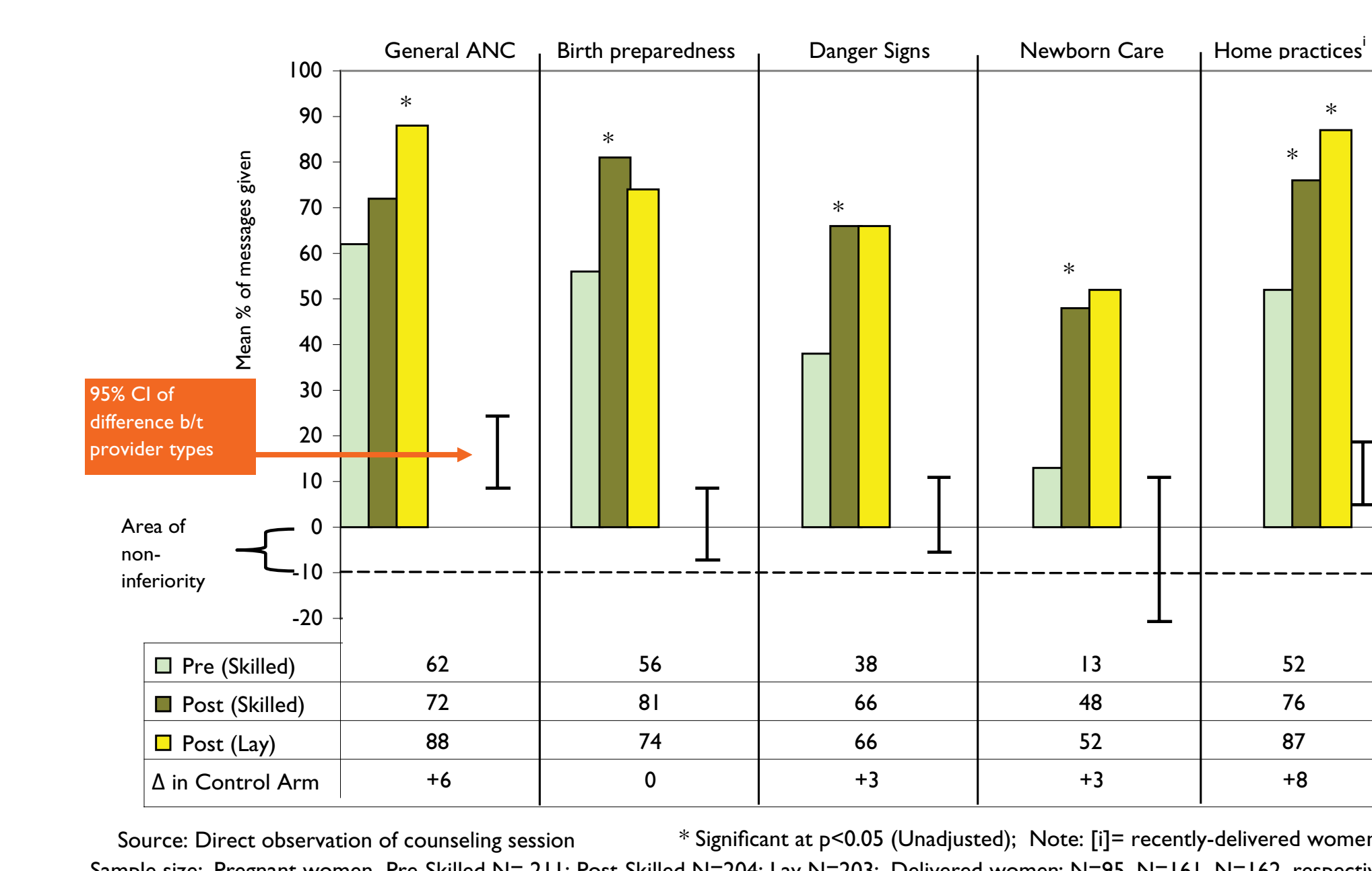
Maternal and Newborn Health Job Aids

Improved quality of facility-based maternal and newborn care counseling by skilled and lay health providers using pictorial job aids in Zou/Collines, Benin



Source: Patient Exit Interviews. * Significant at p<0.05 (Unadjusted). Note: (J) = recently-delivered women. Sample size: Pregnant women: Pre-Skilled N=211; Post-Skilled N=204; Lay N=203. Delivered women: N=95, N=161, N=162, respectively.

Increased knowledge of pregnant and recently-delivered women following counseling of job aid-supported skilled and lay health care providers

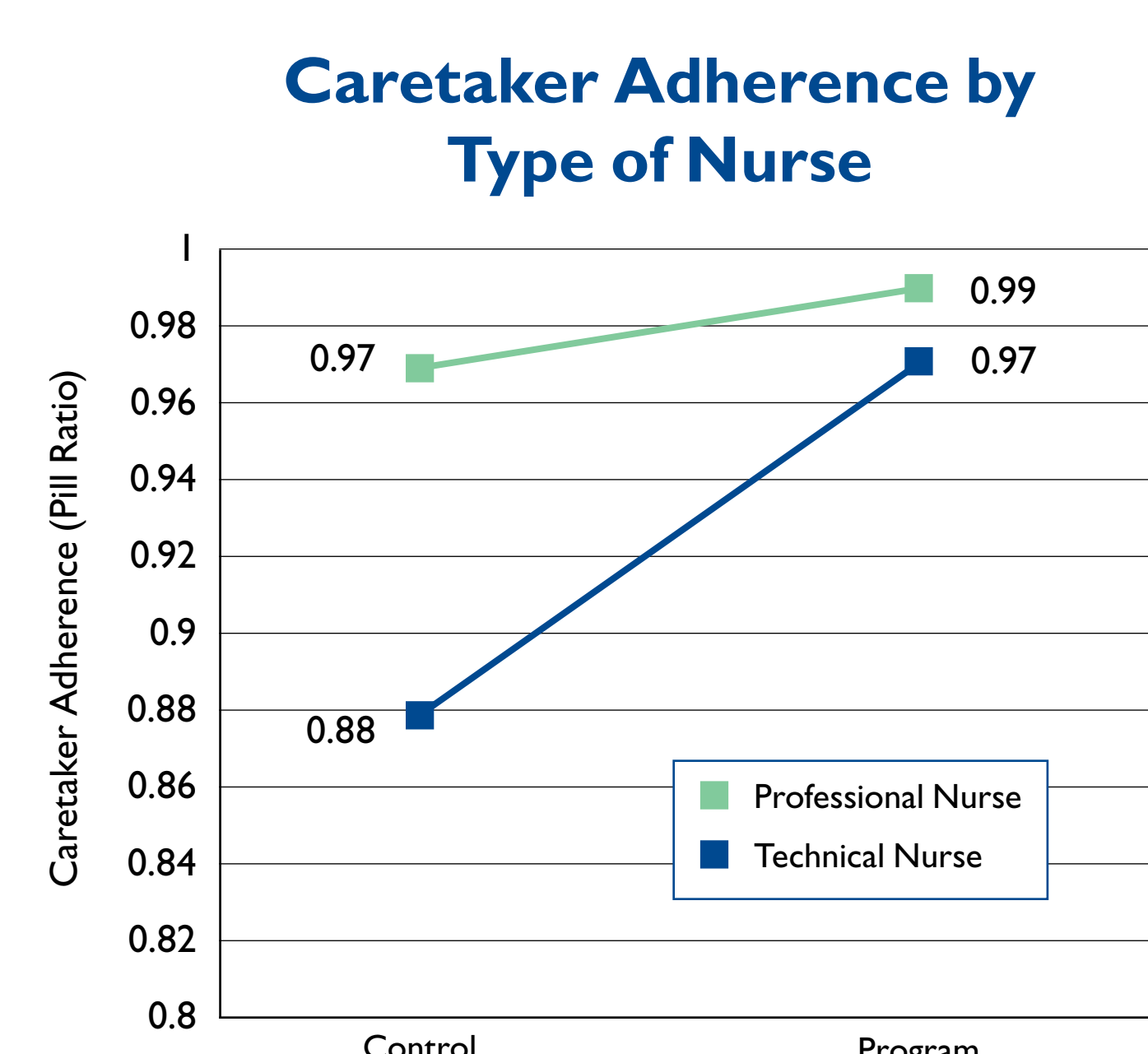


Source: Direct observation of counseling session. * Significant at p<0.05 (Unadjusted). Note: (J) = recently-delivered women. Sample size: Pregnant women: Pre-Skilled N=211; Post-Skilled N=204; Lay N=203. Delivered women: N=95, N=161, N=162, respectively.

3) Adherence to Cotrimoxazole Dosage in Niger

With USAID support through the Quality Assurance Project URC worked with the Ministry of Health in Niger to improve cotrimoxazole prescribing and adherence for childhood pneumonia. Job aids (counseling cards and a poster for health workers, medication envelope for caretakers) and training given to professional and technical nurses improved both provider counseling and patient adherence to the correct antibiotic regimen. The use of the tools also produced higher rates of attendance at follow-up appointments.

The improvement for counseling and caretaker adherence was only slight in clinics with higher-level staff, but was significant in clinics with lower-level nurses.⁸



Cotrimoxazole Medication Envelope and Counseling Cards

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