

Data Driven Approach to Enhance Impact of Community Health Workers in Indonesia

SUMMIT Institute of Development


**Countdown to 2015
Cape Town, 17 April 2008**



Supplementation with Multiple Micronutrients Intervention Trial (SUMMIT)

Goal:

Compare the effects of maternal multiple micronutrients with the existing practice of iron/folate supplementation on maternal and infant health in the context of pre-existing health care system





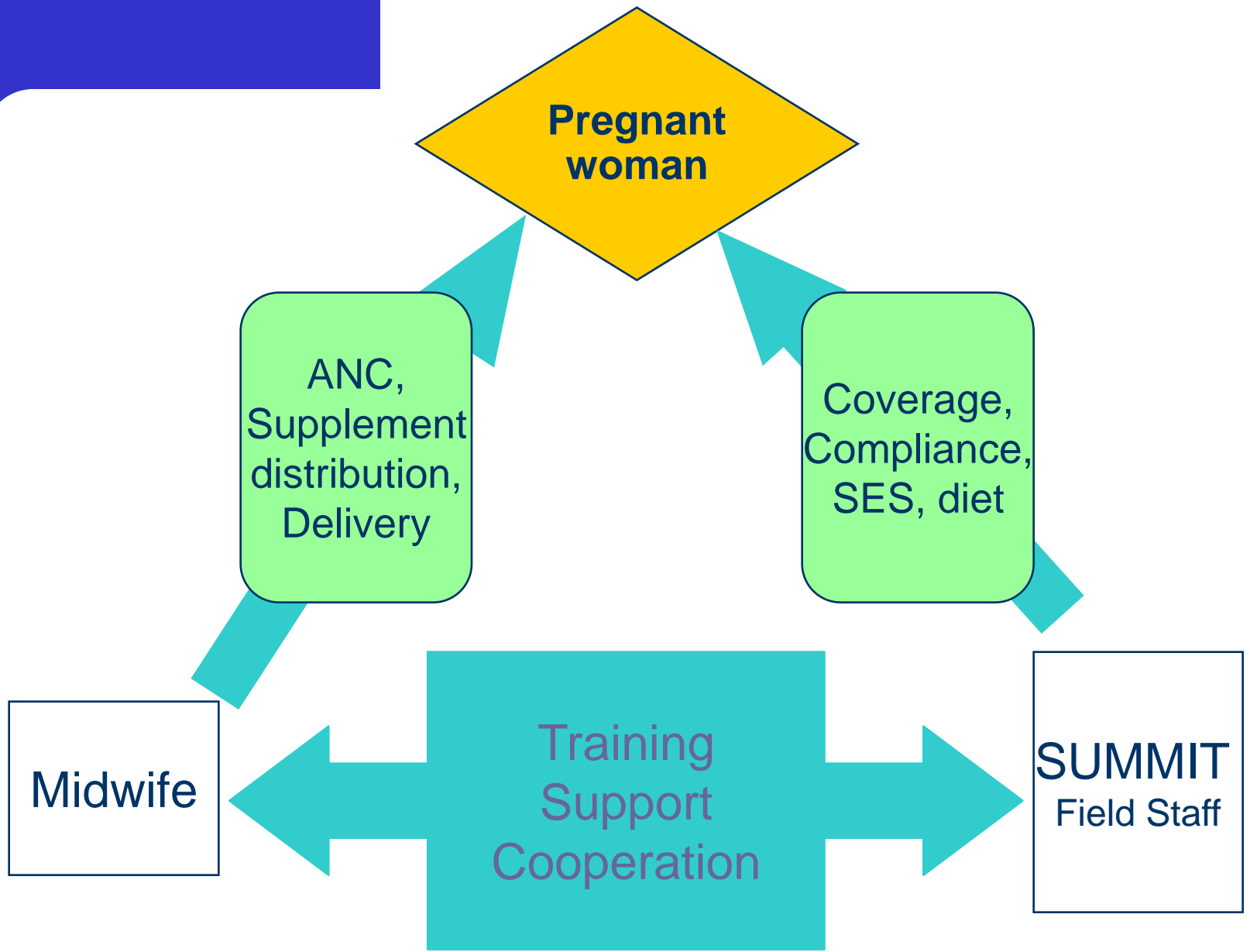
Lombok Island
West Nusa Tenggara Province
Indonesia
2001-2004
(2.7 million people, 2000 pop
census)

SUMMIT methodology

- **Double-blind randomized controlled trial integrated with government maternal health services**
 - **Each village-based midwife was randomized to distribute either IFA or MMN every month (cluster randomized) to pregnant women as routine prenatal care**
 - **Pregnant women self-report to midwives to enroll and receive supplements.**
 - **Social marketing and promotion activities for women to enroll and consume supplements.**
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The SUMMIT integrates programs and research

	Program	Study	SUMMIT
Large scale	√		√
Special selection process		√	√
Randomized and blinded design		√	√
Implemented through health department	√		√
Sustainable mode of delivery	√		√
Monitored through health department	√		√
Monitored through auxiliary staff		√	√
Informed consent required		√	√
Focus on community participation	√		√
Process indicators are monitored	√		√
Health indicators are main outcomes		√	√



Can local personnel with no research experience design and conduct a randomized controlled trial?

- “YES!”, by doing the following:
 - Using systematic data collection and use for decision-making
 - Fostering an interactive climate of creativity
 - Implementing key **“tools of excellence”**



Staff Selection & Recruitment

Staff selection process

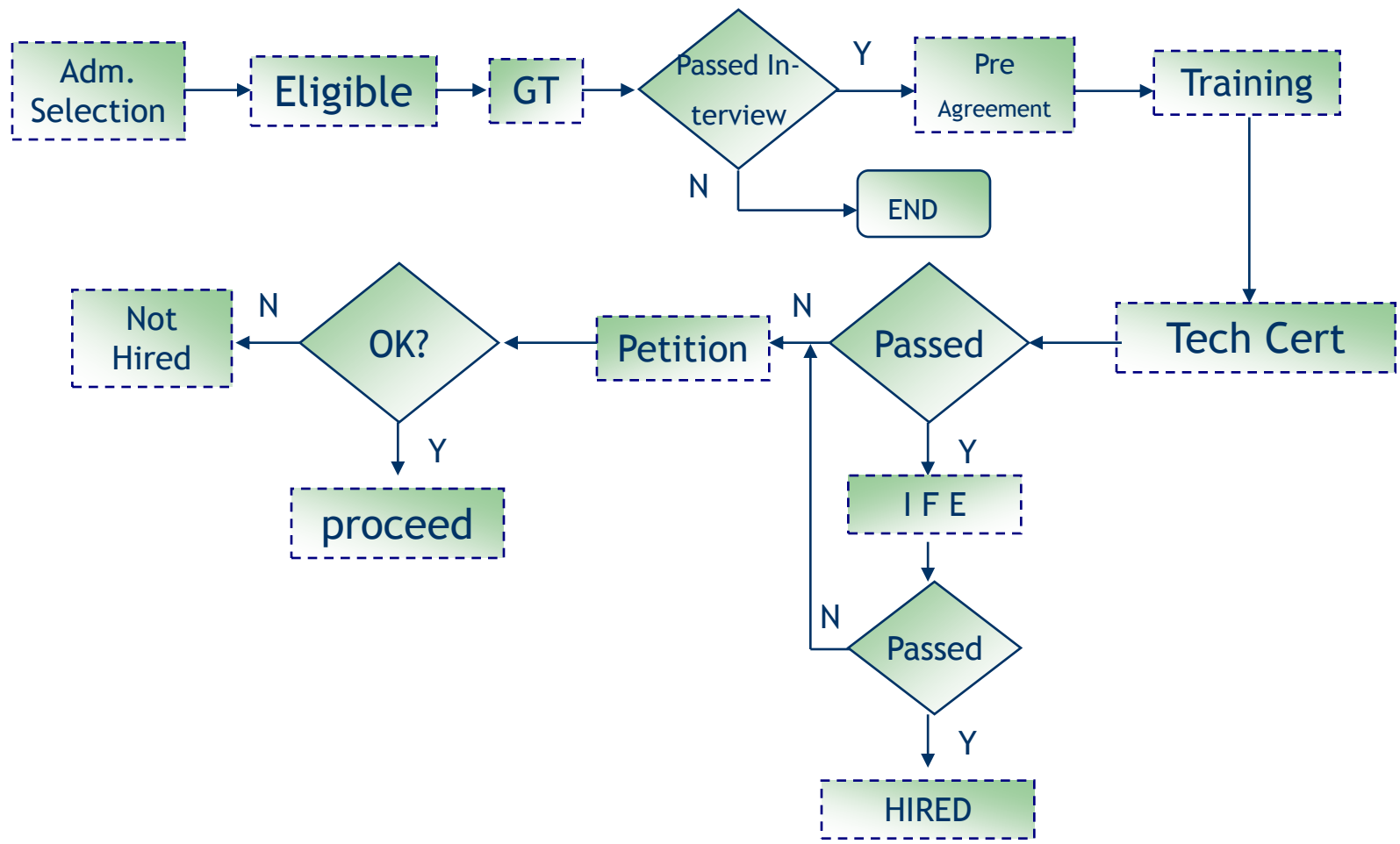
- Began by using traditional review of CVs and recommendations, and interview. Selected trainees based on:
 - Health backgrounds
 - Recommendations
 - Good impression in interview
- BUT: trainees selected experienced high failure rate in training (i.e. >50%)

Staff selection process (cont'd)

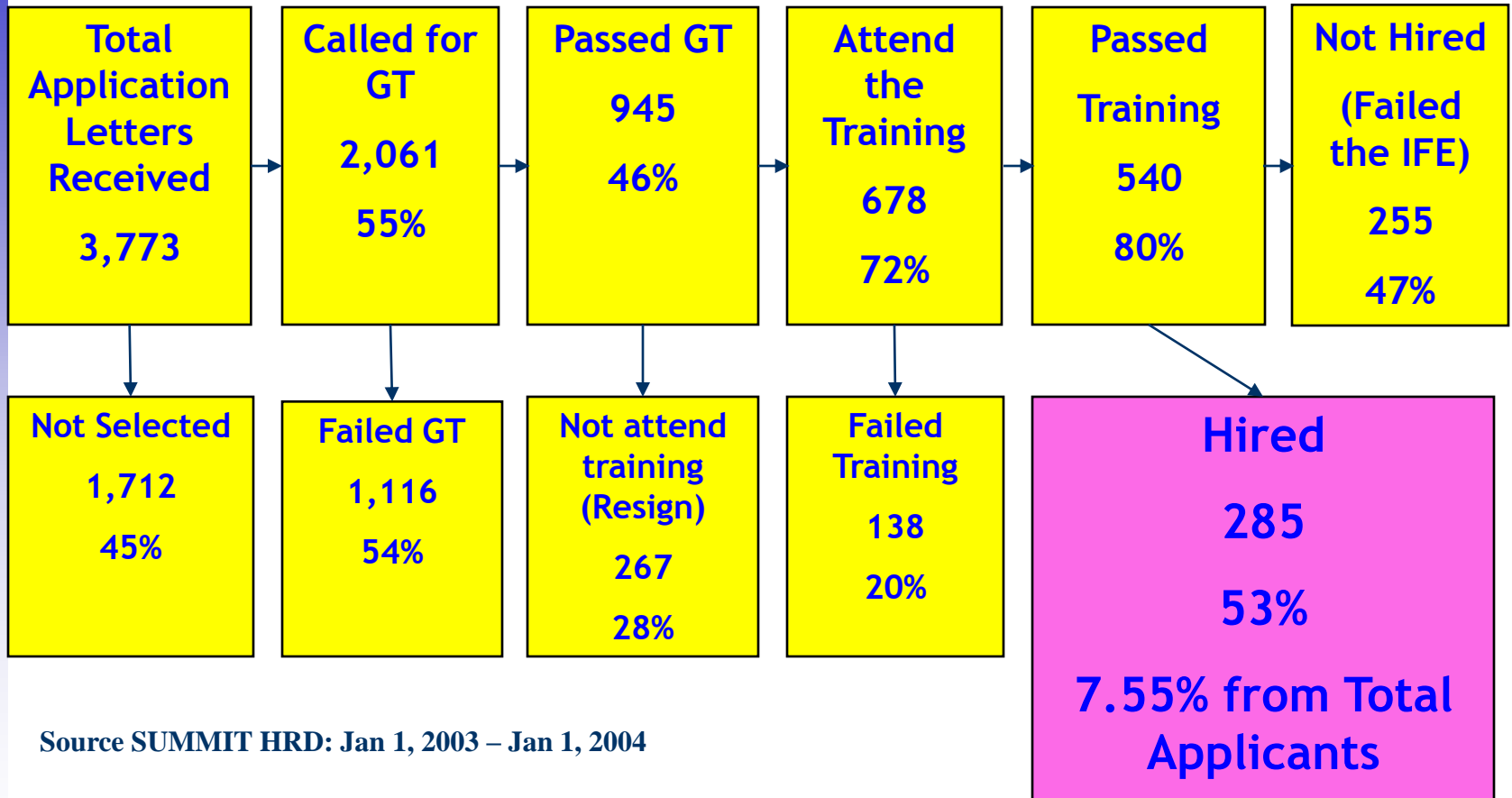
- Based on review of recruitment data, traditional screening process was found to lack prediction of success for trainees. New more open process was developed.
- Criteria for selection
 - Motivation
 - Honesty
 - Intelligence
 - Compassion

Staff Selection Process

“Getting right person for the right position”



Novel data driven process selects successful trainees



Source SUMMIT HRD: Jan 1, 2003 – Jan 1, 2004

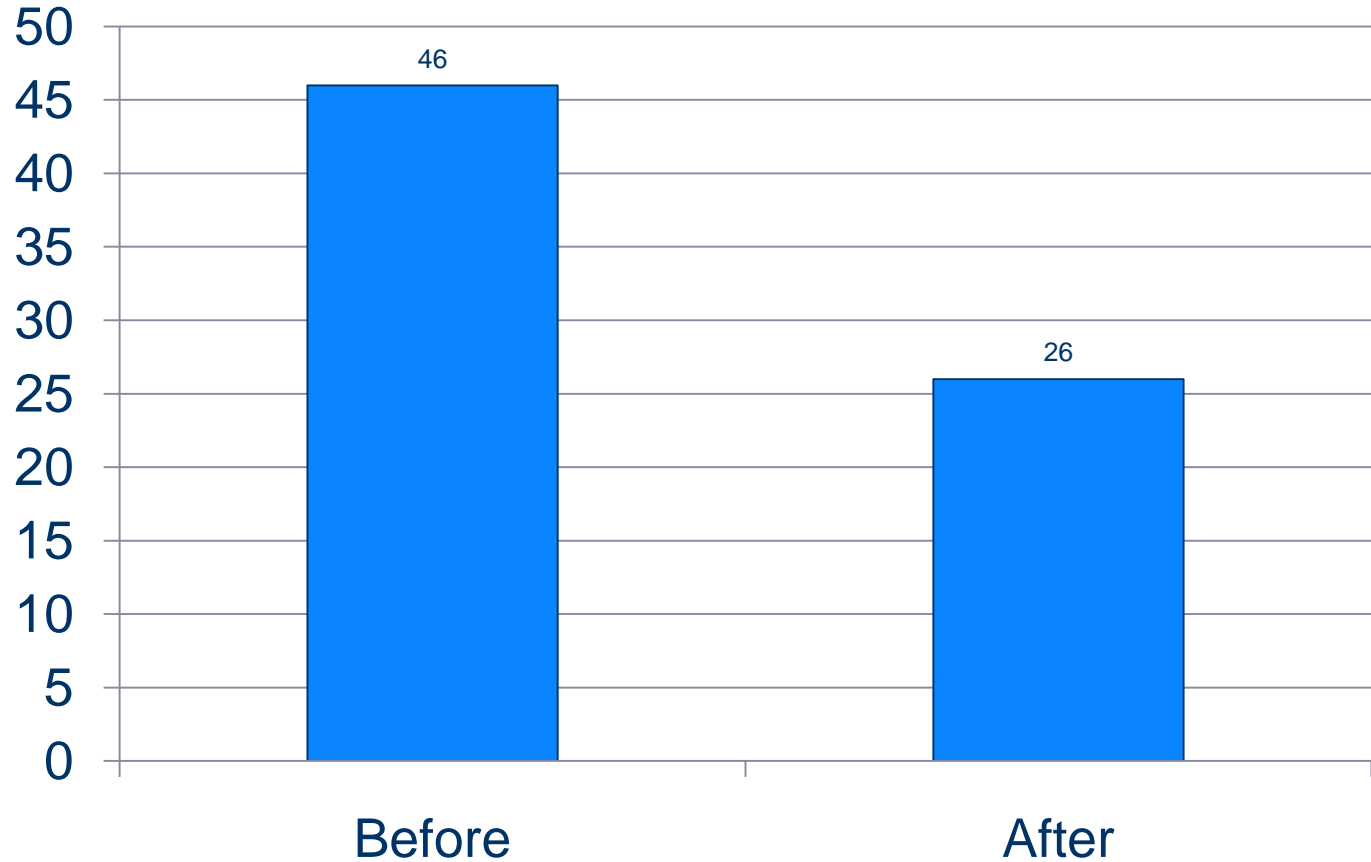
Community Health Facilitators function: promotion, information, participation



Task Scheduling

- **Conventional:** teach field worker to make own schedule for one month --→ on-time visit rate was low
- **New method based on data review:** scheduling by data management section for each field staff to visit within a 3 day window
 - More visits done on-time
 - facilitated scheduled supervision

Reduction in Late Visitations



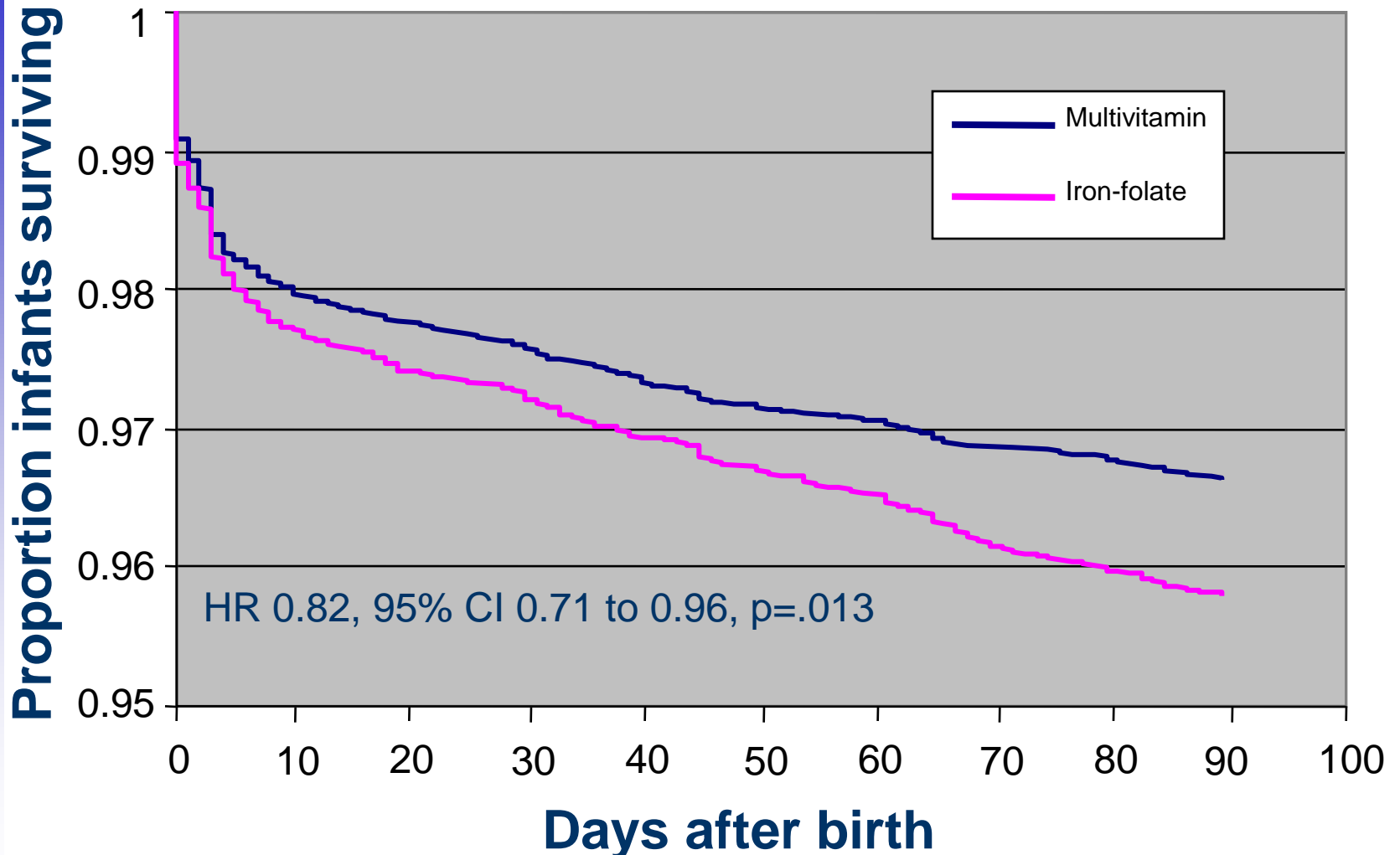
Performance of staff: Head, Hand, Heart

- Monthly performance scores based on known:
 - Head: Knowledge of job task
 - Hand: Number of visits done on time & error in reporting
 - Heart: Feedback from supervisor and client, birth data Supervisors work as coaches to help staff improve their performance
- Performance score given to staff every month. Supervisors work as coaches to help staff improve their performance

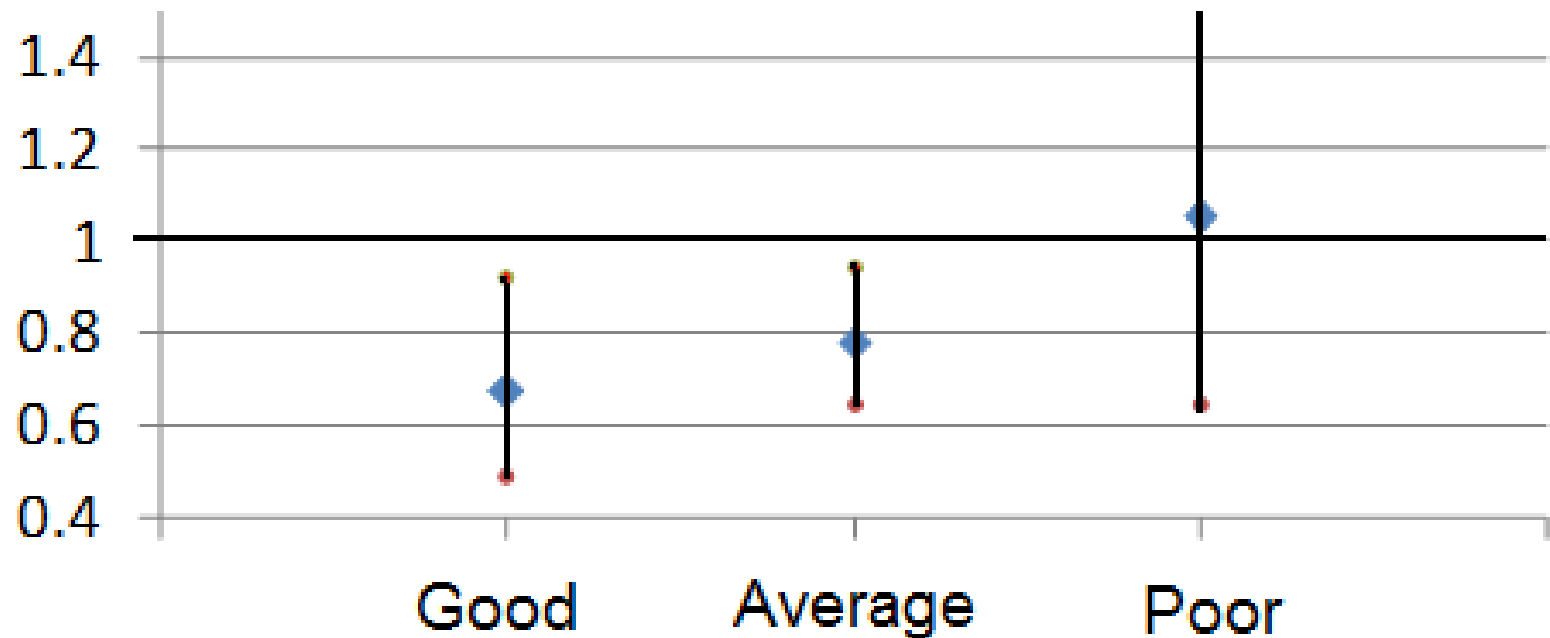
Key Tools of Excellence and their Use

Tools of Excellence		Govern't	NGO	Other Research	SUMMIT
Pre-Field Implementation:					
1	Formative Research			√	√
2	Baseline Data				√
3	Selection and Recruitment:				
a	Screening of Written Applications	√	√	√	√
b	General Knowledge Certification				√
c	Interview and Skill Test	√	√	√	√
d	Training	√	√	√	√
e	Technical Certification				√
f	Field Practice Evaluation				√
g	Mutually Agreed Written Contract		√		√
Field Implementation:					
1	Technical Re-Certification				√
2	Supervision, Monitoring and Coaching	√	√	√	√
3	Objective Evaluation based on Evidence		√	√	√
4	Mutually Agreed Re-Hiring		√		√


Kaplan-Meier survival curves



Impact of MMN based on Community Facilitator's Performance



Summary

- Data driven improvements in recruitment processes can enhance trainee selection
 - Data driven adjustment to field procedure and supervision lead to improved staff performance
 - Routine data-based feedback to staff results in improved performance and better health for clients
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Conclusion

- Use of data to improve staff performance leads to better quality of work and better health in the community
 - Adequate transfer of knowledge and practice through rigorous training and coaching will lead to “willingness of personnel” to do the job well.
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