

# Community Involvement to Increase IPTp and ITN Coverage in a Highly Endemic Area in Akwa Ibom State, Nigeria

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With

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# Basic Malaria in Pregnancy Interventions and Indicators

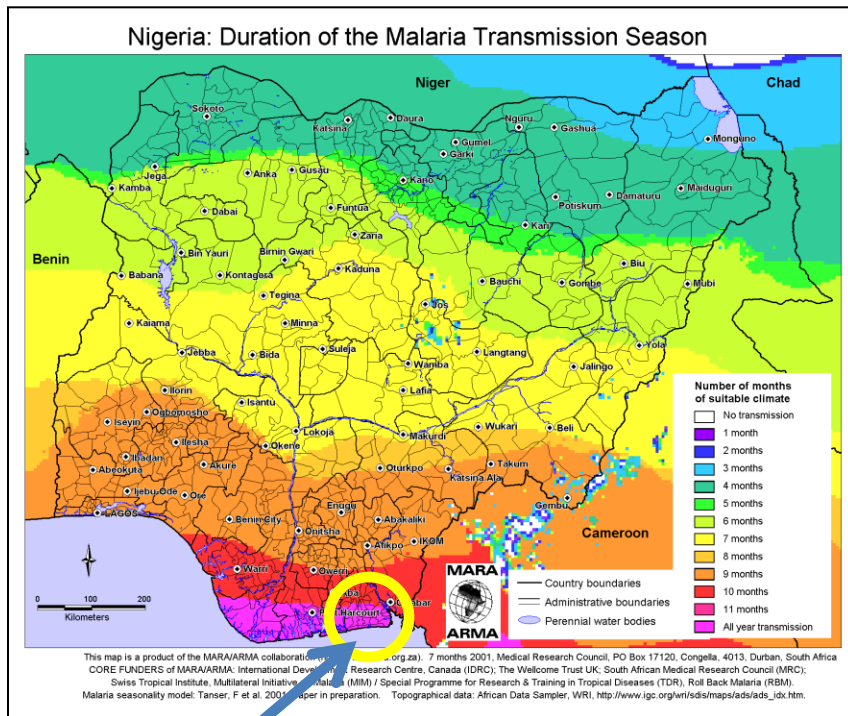


- Malaria in pregnancy (MIP) causes anemia, miscarriage, still birth and low birth weight
- To control MIP we must increase
  - Number of antenatal care (ANC) visits (where MIP control services provided)
  - Use of insecticide-treated nets (ITNs) during pregnancy
  - Taking the recommended two doses of sulphadoxine pyrimethamine (SP) intermittent preventive treatment (IPTp)

# High Risk, Low Coverage

In Akwa Ibom at baseline:

- Only 11.7% of pregnant women had slept under an ITN
- Only 5.8% of pregnant women had received two doses IPTp



Study area has year-round malaria transmission

# Basic Concepts

## **Malaria in Pregnancy**

- Coverage of interventions remains low, despite massive anti-malaria campaigns.
- Low uptake reflects
  - lack of knowledge,
  - poor access, and
  - limited support of programs by local communities and authorities
- To reduce MIP lessons were adapted from community service delivery programs

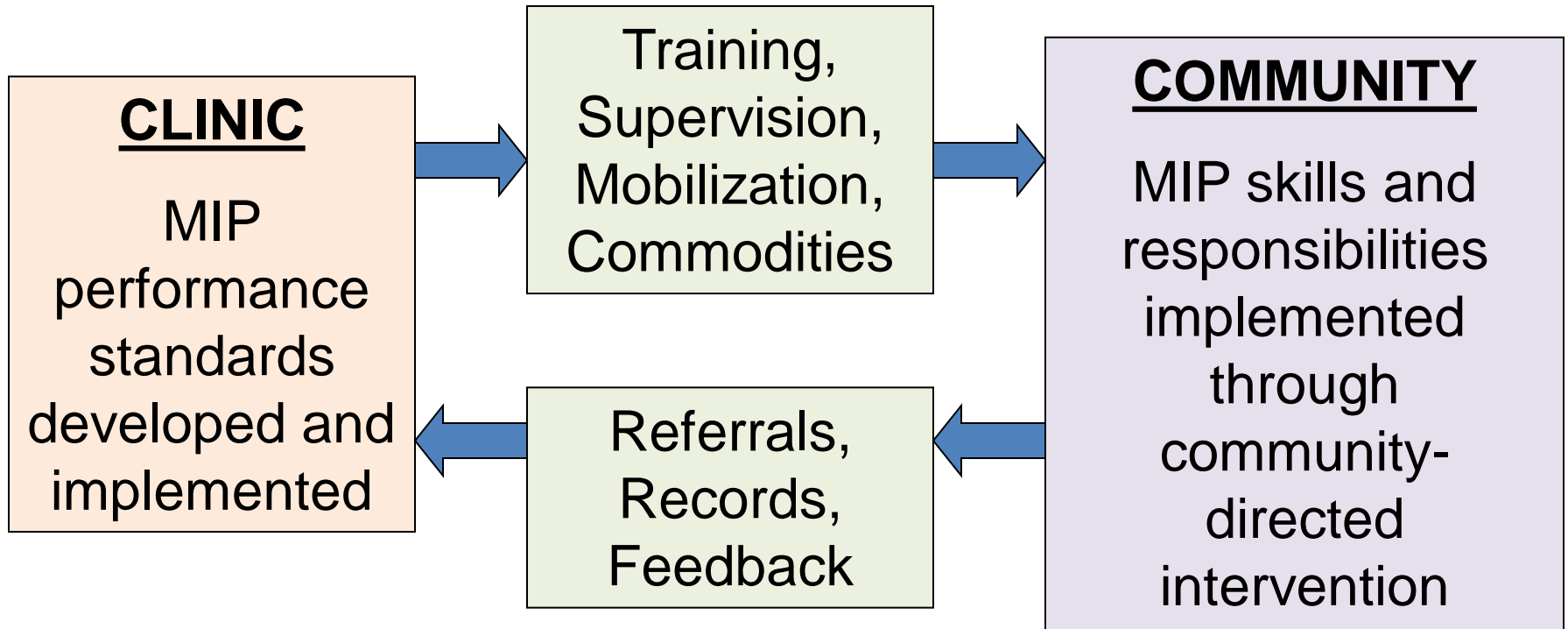
## **Community Directed Intervention (CDI)**

- CDI happens when communities plan and implement health intervention with minimal guidance from the health system

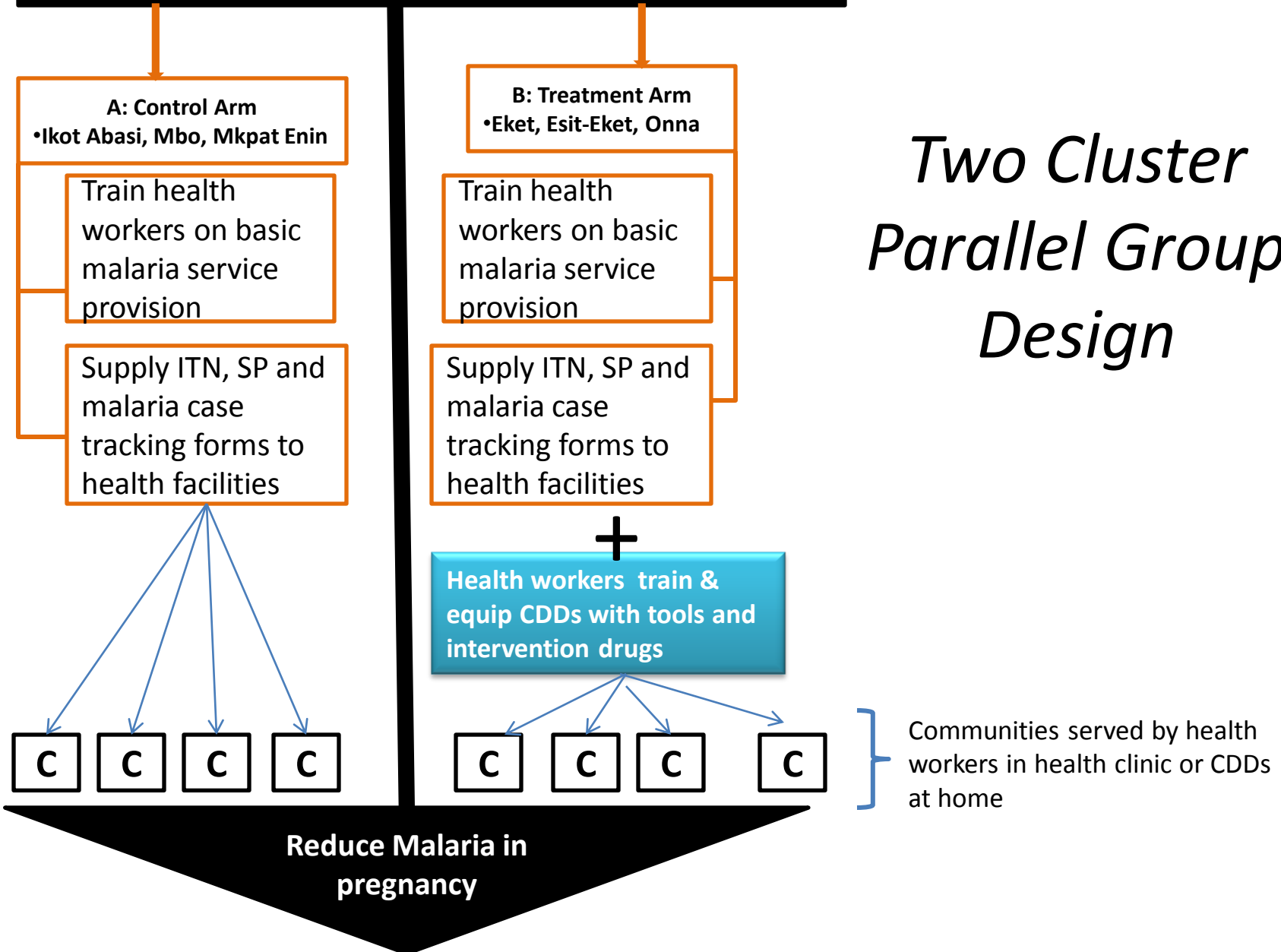
## **Research Questions**

- Will CDI increase uptake of the following malaria in pregnancy services?
  - ITN use during pregnancy
  - number of ANC visits
  - taking the recommended two doses of SP for IPTp

# Nigeria MIP Community-Clinic Partnership Intervention



# 6 LGAs Selected for Intervention



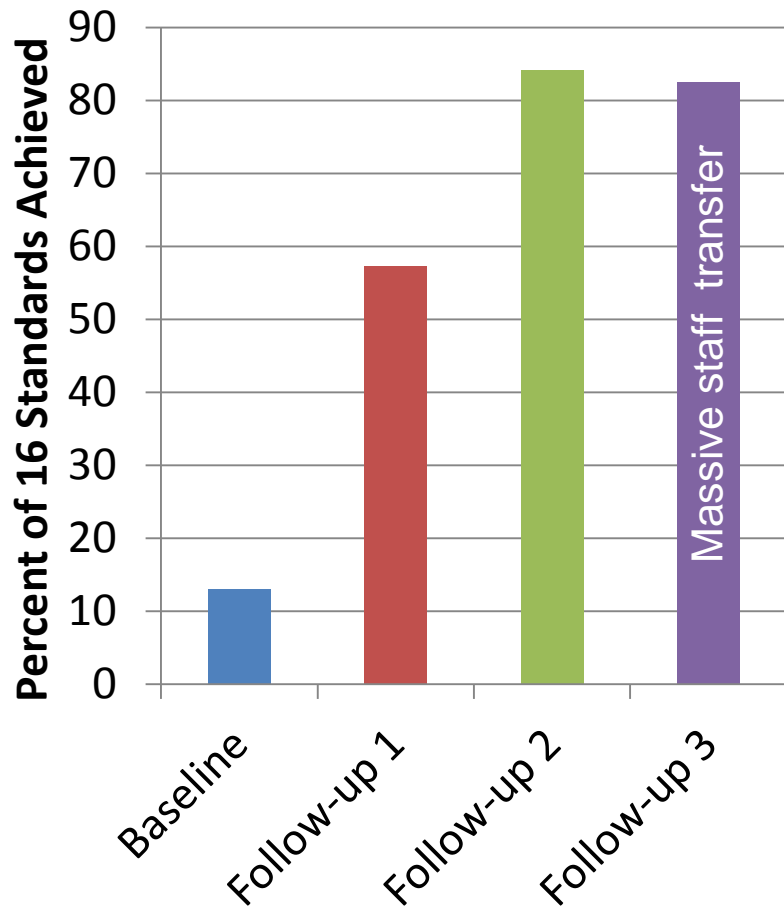
# CDI to the Rescue for MIP

For the past 16 years, the African Program for Onchocerciasis Control has used CDI to provide ivermectin successfully in over 100,000 African villages



**WHO-supported research showed CDI could be adapted to deliver ITNs and malaria treatment**

# Performance Standards Scores (%) for ANC Services



**Based on 16 Performance Standards**

# Key Findings

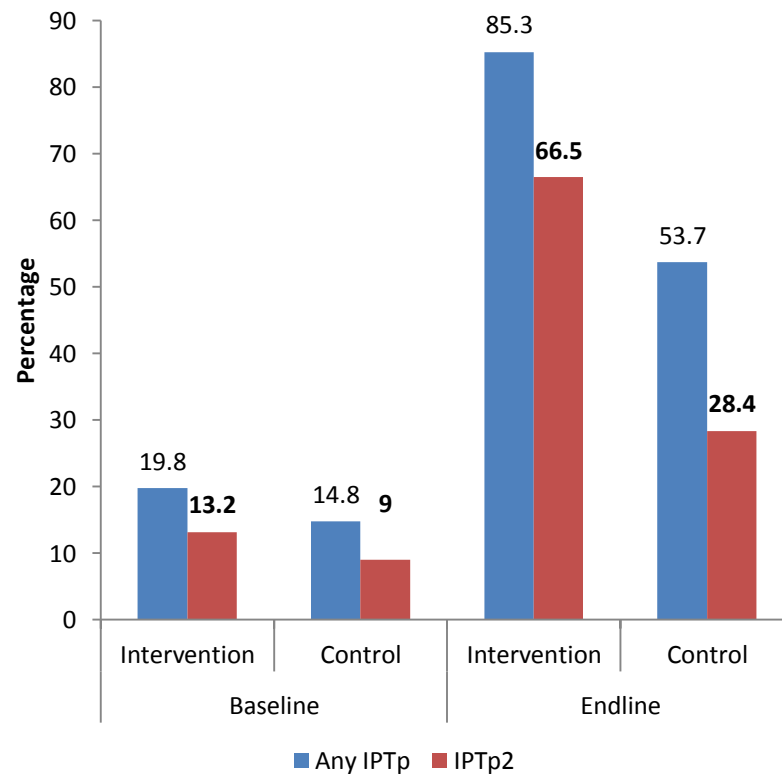
- **ANC visits rose** in treatment and control groups (estimated coefficient on group differences -0.016, 95% CI [-0.107, 0.074],  $p= 0.646$ ).
- CDI led to substantial, **additional increases in ITN use** and in **adherence to the prescribed IPTp** protocol.
  - Relative to women in the control area, an additional 7.4 % of women slept under a net during pregnancy (95% CI [0.035, 0.115],  $p<0.01$ ).
  - An additional 8.5% of women slept under an ITN after delivery and before the interview (95% CI [0.045, 0.122],  $p<0.001$ )
  - The effects of the CDI program were largest for IPTp adherence, increasing the fraction of pregnant women taking at least two SP doses during pregnancy by 35.3 percentage points [95% CI: 0.280, 0.425],  $p < 0.001$ ) relative to the control group.

# Program Impact:

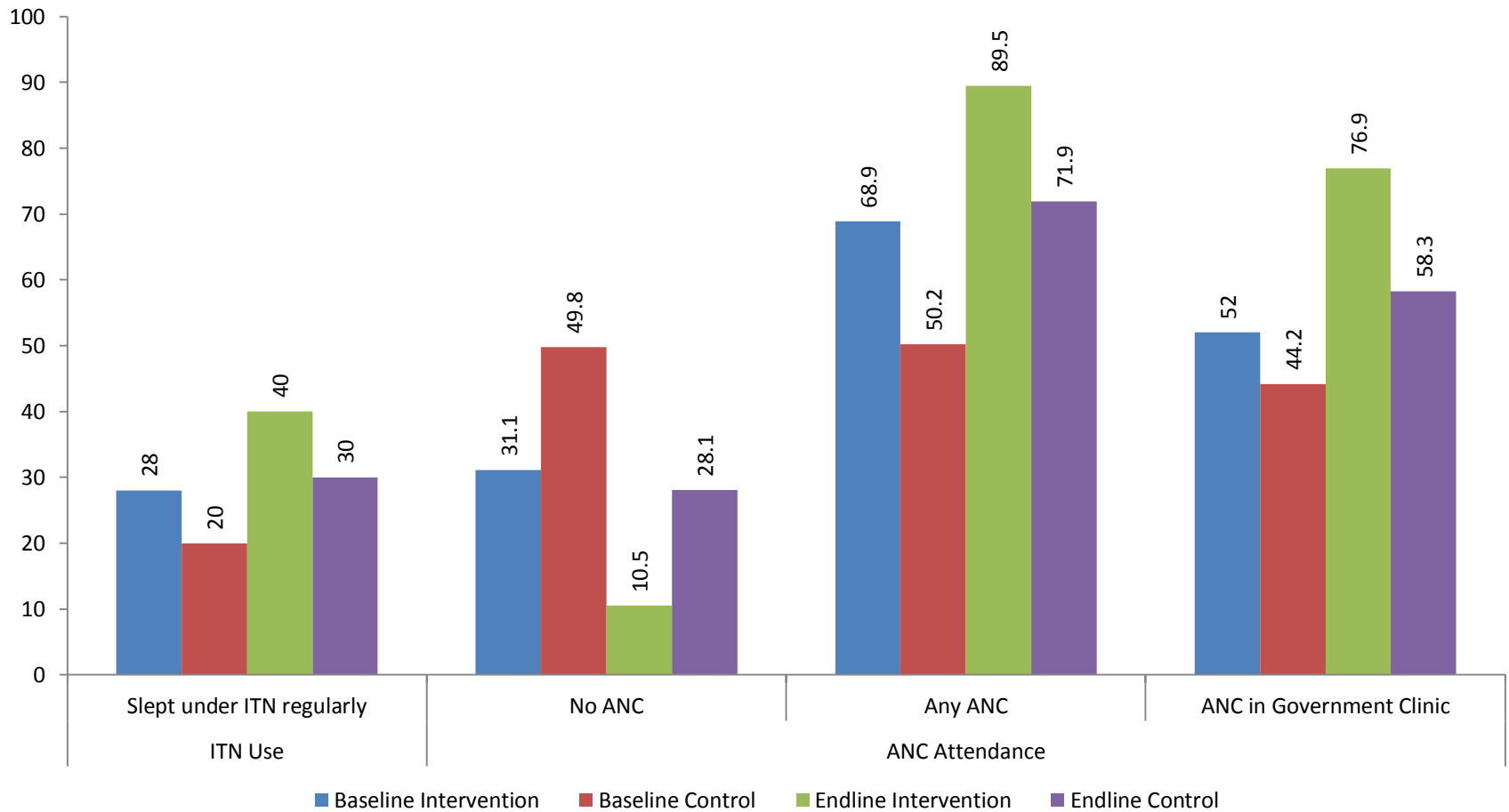
## Improved IPTp Uptake

- There was general increase in uptake of IPTp from baseline to endline assessment
- However, the intervention arm with CDI had greater increase of women taking any IPTp ( $p < 0.0001$ )
- Similarly, more of the women in areas with CDI took IPTp2 than the control between baseline and endline assessment ( $p < 0.0001$ )

**Uptake of IPTp over time among pregnant women**



# Improved Use of ITN and ANC Attendance over Time



# Conclusions: CDDs Are on Hand to Encourage ITN Use, IPTp Adherence and ANC Attendance



- The results suggest that community-based programs can substantially increase effective access to malaria prevention in high endemic, high burden areas
- The participatory approach underlying CDI programs also promises to strengthen ties between the formal health sector and local communities and improve utilization of services including ANC