

# Migration, Loss-to-Follow-Up, and Population Health Surveillance in South Africa

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## Overview

We analyze migration in one well-known long-running health and demography surveillance system (HDSS) from Agincourt in South Africa. Migration is a key demographic event yet under-appreciated in some HDSS practice: Project aims to (1) examine migration selectivity (2) test methods for migrant follow-up.

## Why we care

- Migration and Health Transitions
- HIV transmission & treatment
- Non-Communicable Diseases (NCDs) and Mobility
- Migration & Demographic Surveillance (HDSS)
- Longitudinal info w/ origin population
- Key for low-resource populations,
- INDEPTH network: 45 HDSS's in Africa & Asia
- Loss-To-Follow-Up (LTFU) looms

## Study Area



## The Approach

1. **EXPERIMENT:** for a modest sample drawn from the existing DHSS, randomly assign migrant respondents:
  1. In-person interview
  2. Phone interview
 THEN → Examine differentials
2. **BACKGROUND SECONDARY DATA:** Using the ongoing AHDSS (N ≈ 70,000), determine: (a) basic descriptive patterns of *temporary* and *permanent* migration; and (b) factors that predict migration



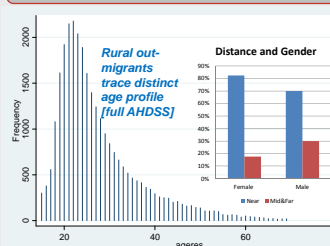
## Pilot Study Results: Feasibility

**Q:** Is phone contact feasible? **A:** Yes. Many households and their migrants keep in touch via mobile or "cell" phone. Re-contact info for 88%

**Q:** Do response rates (given contact info) vary by interview type and distance? **A:** very little.

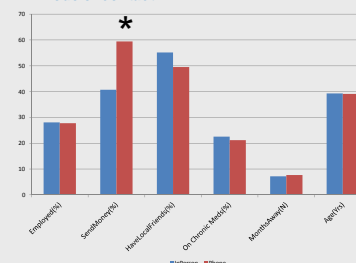
Migrant Distance from Origin	Response Rates		
	Telephone	In-person	Total
1. Near	92.2%	95.2%	94.2%
2. Mid-distance	100.0%	82.6%	88.6%
3. Far	93.8%	83.3%	87.0%
Total	93.2%	92.3%	92.6%
N	118	220	338

## Who Moves?



## Pilot Study Results: Consistency

**Q:** Do phone and in-person interviews give similar results? **A:** Yes, for most variables we cannot detect a significant difference by mode of contact



\* "Send Money" differs by interview method (p=0.059)

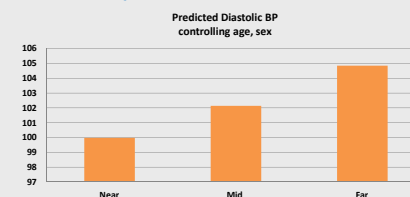
## Where do they go?



## Pilot Study Results: Health

**Q:** Any health differentials in pilot sample?

**A:** Preliminary results are suggestive: older, male, and more distant migrants are more likely to exhibit elevated BP.



Note: distance results do not achieve conventional significance upon robust SE estimation. N=200  
In-person interviews only; Predictions for male, 40 yrs

## Conclusions

- Migration and LTFU clear challenges for HDSS
- Migration quite selective by age, sex, HH traits
- Success employing cellphone technology
- Preliminary results implicate health transition
- Suggest value of larger N studies to follow migrants to the city, back home – and elsewhere

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