



MHFUS

Where we have been

An Overview



MHFUS Mini-Conference,
25 October 2022

Michael J. White And all!!

Where We Came From: A MHFUS Timeline

- WBCA – 2003 to 2011
- CFAR Pilot Project 2011-2013
 - “Migration, HIV, and Socioeconomic Change in South Africa”
 - 2012 Pilot Survey fieldwork (random split in-person & phone) → **feasible**
- R01 – 1st submission 2014
 - “Migration, Urbanization and Health in a Transition Setting”
- R01 – 2nd submission 2015 (+ response to NIH Council) → **funding!**
- R01 NIH award commences 2016
- R01 Now in Year 7

“Migration, Urbanization and Health in a Transition Setting”

Why We Care...and What We Said:

- To improve our understanding of how migration and urbanisation impact population health
- To enhance our knowledge of population redistribution, to incorporate spatial demography into companion health investigations
- To identify circumstances where population mobility may compromise the continuity of health care
- Focus on rural-origin, young adults: key group for above
- **➔ Internal Migration – still key for health and development**

Longitudinal Data Collection HDSS “Scaffolding” + following migrants

“Wave 0” Initial Household Visits	Wave 1	Wave 2	Wave 3	Wave 4
	Face to face interview	Telephone interview	Telephone interview	Face to face interview
	Collection of biometrics	~	~	Collection of biometrics

Waves 1 & 4 Two Teams

Agincourt
Rural Origin

Gauteng
Urban Destination

2017

Feb'18 to
Jan'19

Sep'19 to
Jan'20

Late 2020 to
Early 2021

Feb '22 to
Aug '22

Selective QC
follow-up now

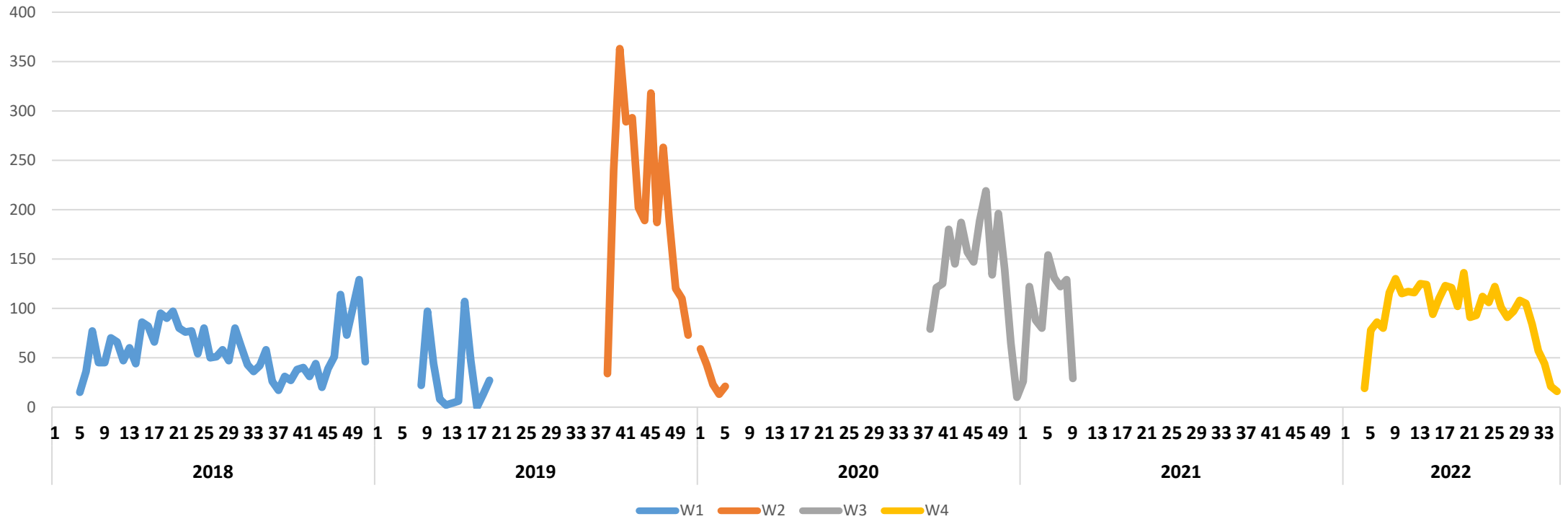
Survey Content

(some variation across waves)

- Interviews administered on tablets using **REDCap**
- Questions Sections include:
 - Education and employment
 - Residential history
 - Remittances & Social Capital
 - Transport
 - General health (self-rate overall) & conditions
 - Sleep PSQ
 - Grit-S Module
 - CESD-10
 - Healthcare access
 - Diet and exercise
 - Tobacco and alcohol
 - Sexual partnerships/ HIV
 - Maternity/Paternity History
- Biometrics [**Waves 1&4 Only**]:
 - BP, Height & Weight (for BMI)
 - DBS (Blood Glucose [HbA1c] & HIV)

W4 Fieldwork to completion 1 Sep 2022

MHFUS Wave1 to Wave4 (complete as of 1Sep2022) Interview Dates
Number of Interviews, by Week within Year



Cohort Characteristics at Baseline (W1)

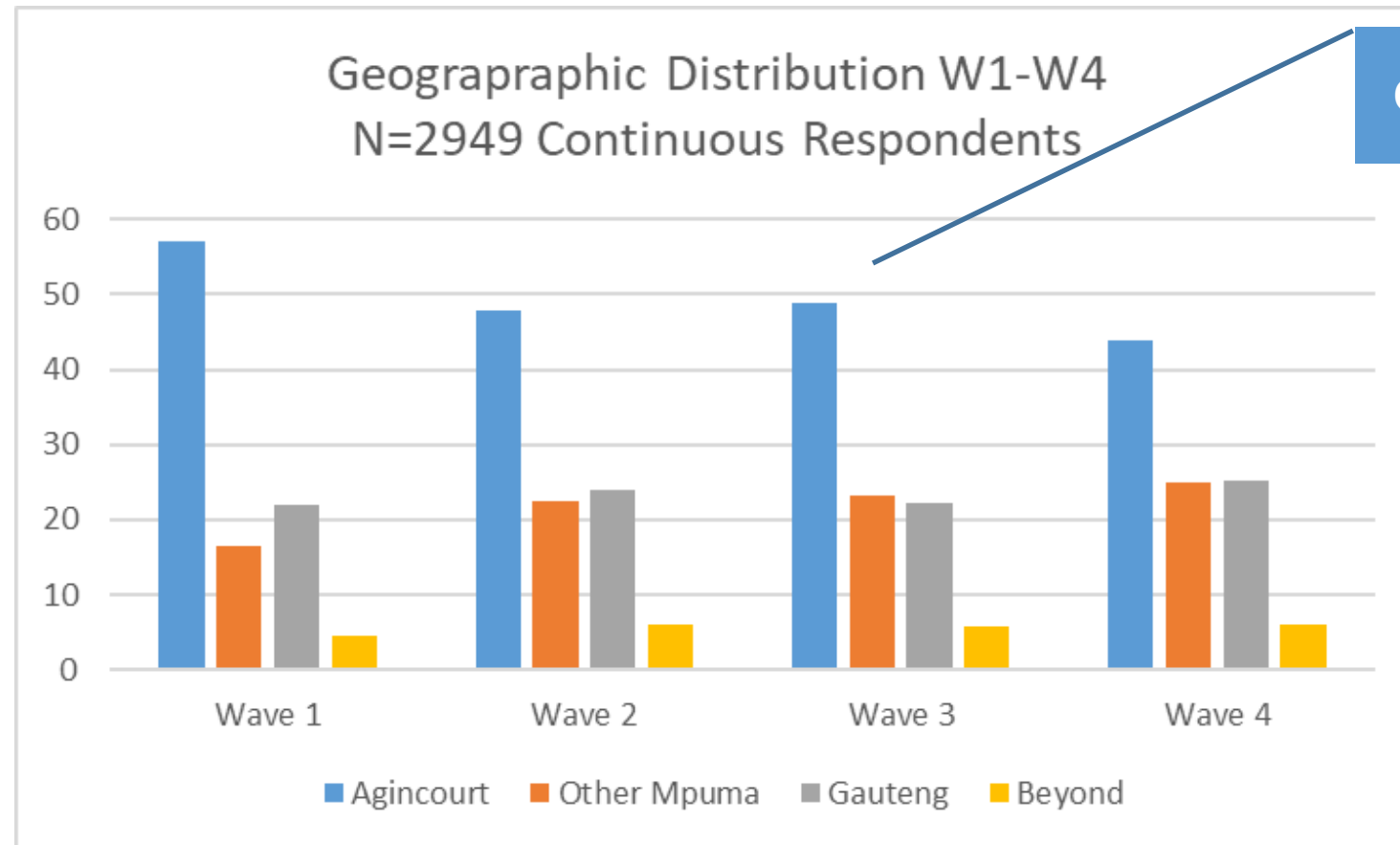
18-40 @W1

		Non-Migrant (n = 1764, 57%)	Migrant (n = 1334, 43%)
Age	Mean (SD)	27.8 (6.0)	29.0 (5.3)
Sex	Male	785 (45%)	773 (58%)
	Female	979 (55%)	561 (42%)
Education	Lower than matric	866 (49%)	325 (24%)
	Matric or post school	898 (51%)	1008 (76%)
Employment status	Not in labour force	408 (23%)	178 (13%)
	Unemployed	813 (46%)	272 (20%)
	Employed	543 (31%)	884 (66%)

Source: Ginsburg et al. "Internal migration and health in South Africa: determinants of healthcare utilisation in a young adult cohort." *BMC Public Health* 2021

Migration Geographies, by Wave

MHFUS Sample (N=2949, all waves) -- unweighted

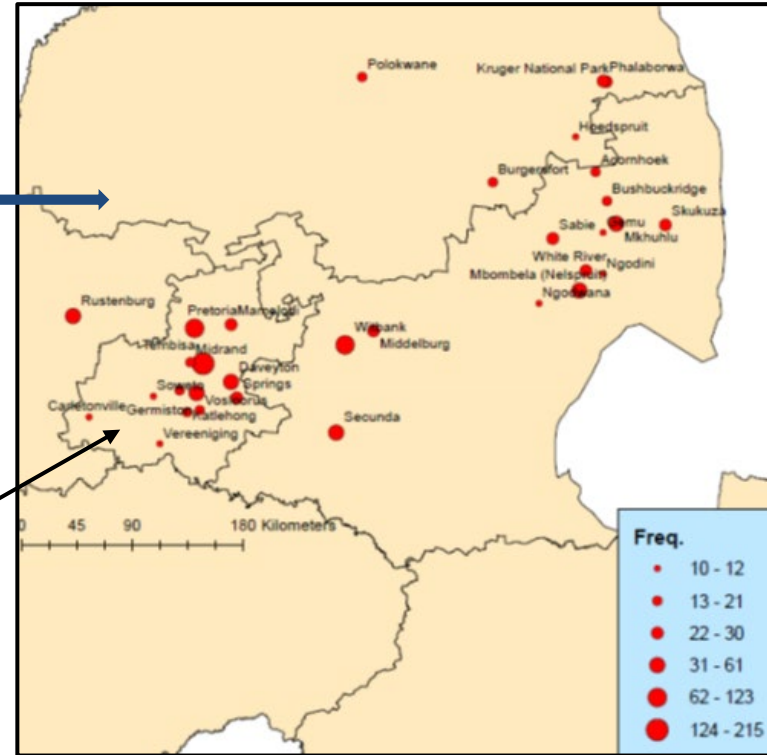


Covid Retrenchment?

Migrant geographies: Wave 3

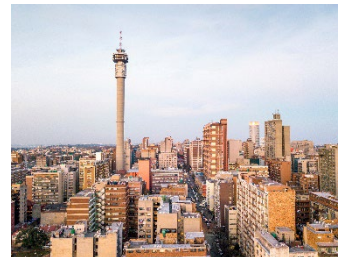


52% are migrants at Wave 3



Origin Community: Agincourt sub-district, Bushbuckridge, Mpumalanga Province

SOUTH AFRICA 

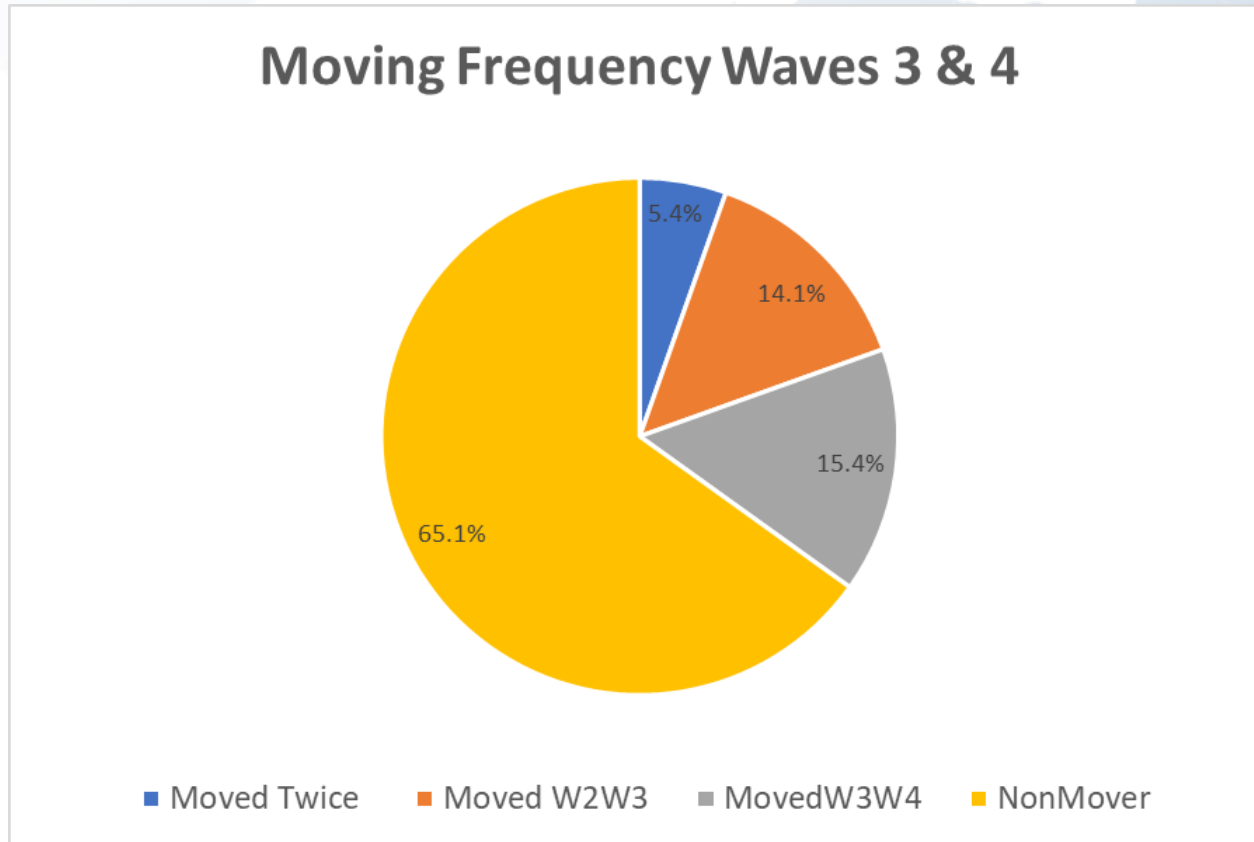


Leading Migrant Residences (10+ persons) by Wave 3

Gauteng: 44%
Mpumalanga: 44%
Limpopo: 7%
Other 3%

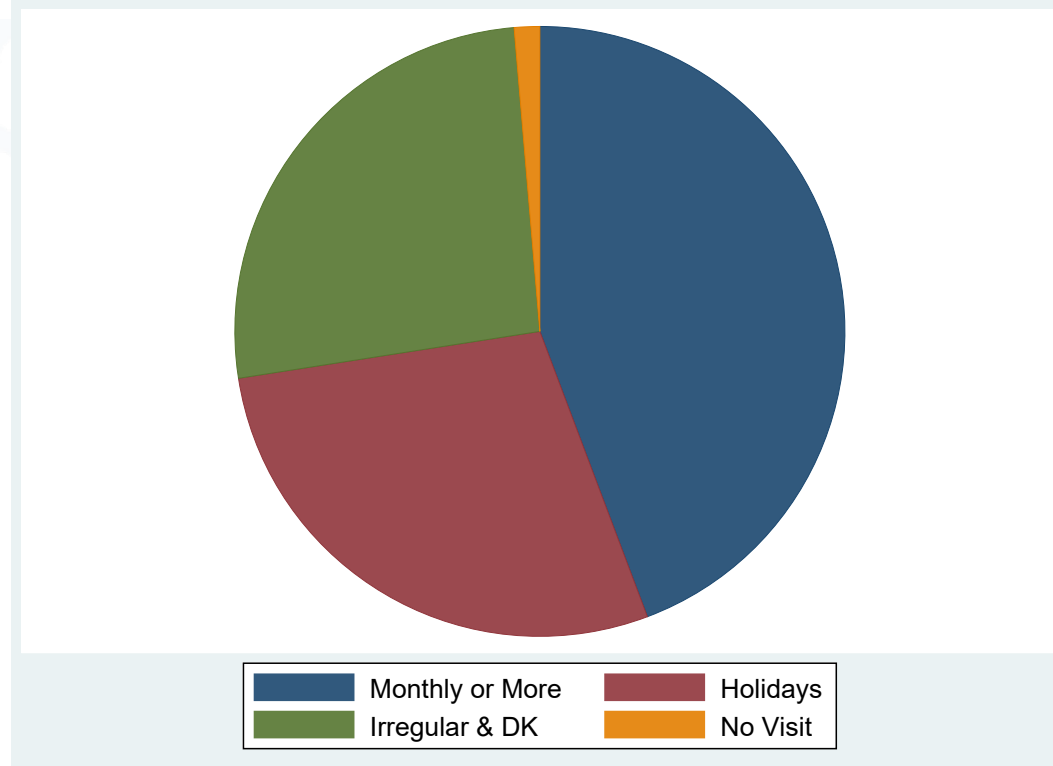
Moving Frequency Waves 3&4 (same residence as prior interview, or not)

More than one third of the sample moved at least once during most recent 2 years (2020-2022)



N=2,954 Continuous Respondents

Keep Connections to Origin HH But not always frequent



N=1708 Wave 4 visit frequency (recoded W4_q_10_5)
Difference by Sex not stat. Sig.

Key Accomplishments and Challenges

Accomplishments

- Research Design
 - build on HDSS
 - SRS
- Excellent Follow up
 - 98%+% if W1 in W4
 - 80% of 3800 drawn sample
 - Large % consent to Biomarkers
- Good balance Mig & Stay
 - 43% → 57%
 - Age group 18-40
- Fieldwork Success
 - Interview duration ~ 45 min
 - Few mishaps

Challenges

- QN complexity
 - Some Anomalies (QC)
 - Retrospective histories (Mig; Empl; Fam)
 - → more data management (merging)
- Language, Subjective Items, & FW
- Geography
 - Fieldwork Spread (resources)
 - Consistent Coding
- Some tech issues
 - Remote internet & GPS in field
 - DBS storage
- COVID!

Output

- Presentations at internal institutional settings
- Presentations at Scientific meetings
- Range of Topics : Self-reports + Biomarkers
 - Many current results seen here Tue-Wed
 - More for discussion Wed aft → looking to future analysis
- For mini-conf later discussion – what are we missing?
- Data Dissemination (**soon**)

Selected findings

Some peer-reviewed; some published; some preliminary

- Continuing outmigration to “current usual resident” outside Agin.
- Plenty of connection to origin; large % irregular
- Large % PLWH did not report as HIV-positive
- Gender-migration variation in High Blood Pressure
- Health service utilization variation by migrant status and sex
- Migration Selectivity variation (resilience) by sex
- Heterogeneous geographic (& gender) impact of COVID
- Dietary Changes with migration / urbanization
- 22% report experiencing COVID



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