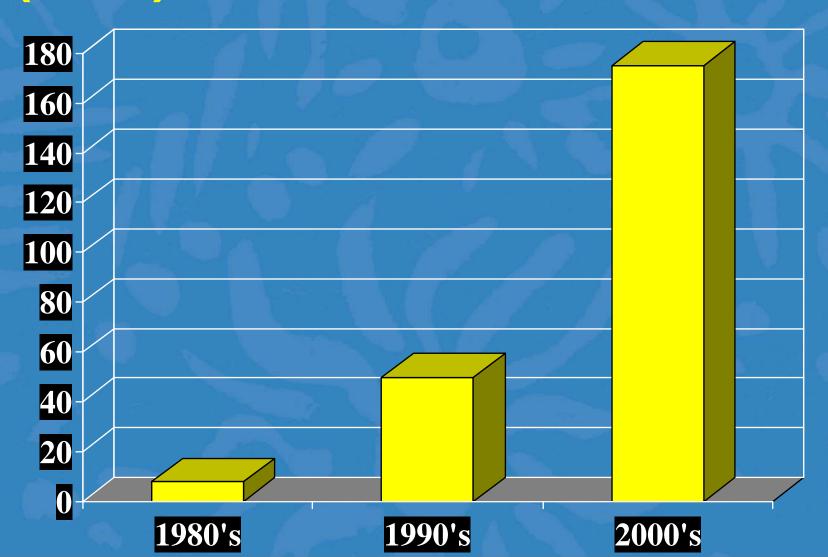
Mobile Personal Sensing for Personalized Health & Wellness Among HIV+ Drug-Abusers

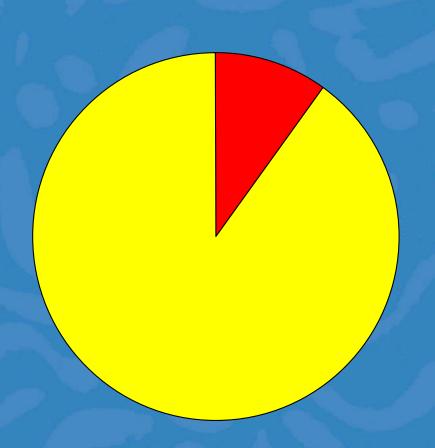


Mary Jane Rotheram UCLA

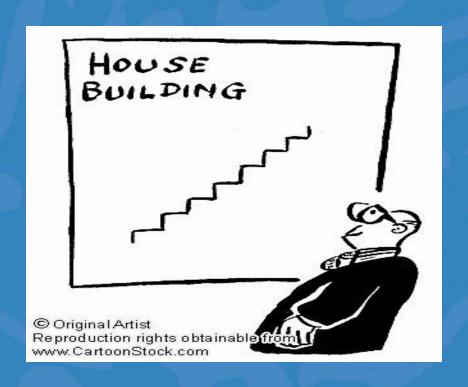
HIV Evidence-Based Programs (EBP) have increased over time.



While hundreds of EPB have been documented, program utilization is low.



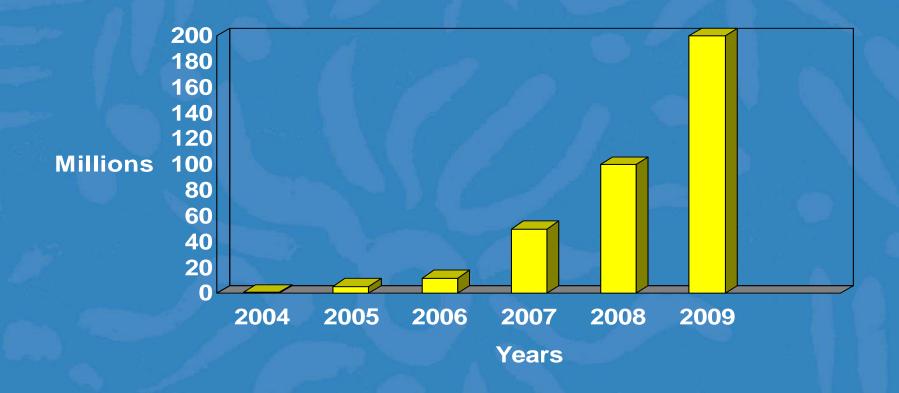
EBP take 20 years to design; 30 years to diffuse.



Efficacy > Effectiveness > Diffusion



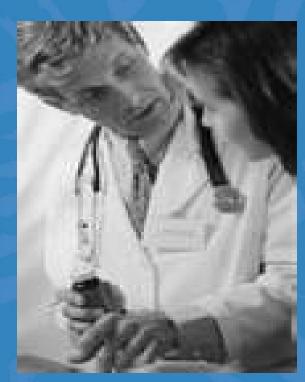
In contrast, Facebook went from 0 - 200,000,000 users in 5 years



Mobile technologies may allow us to break out of our current models of diffusing EBP.



Mobile Personal Sensing can broadly & quickly diffuse innovations.







MPS creates the Examined Life.

- Unobtrusively & continuously recorded
- Supplemented by prompted selfperceptions
- Linked in context
- Integrating biological, emotional, social, & geographic data.



MPS integrates
the person's behavior record,
with web-based information,
& biological monitoring.



AndWellness: health behavior change through self monitoring

real time (*always on)*

real place (always carried)

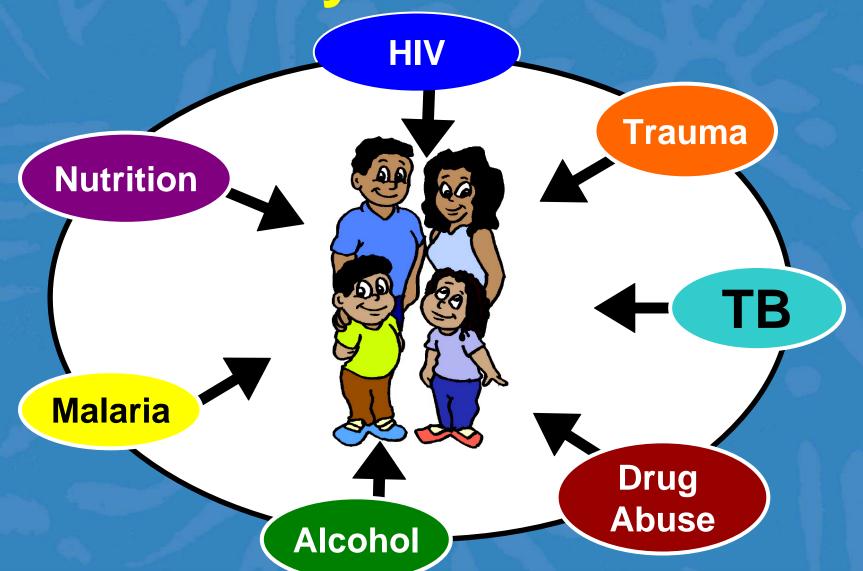
real context (historical, environmental, spatial, social)



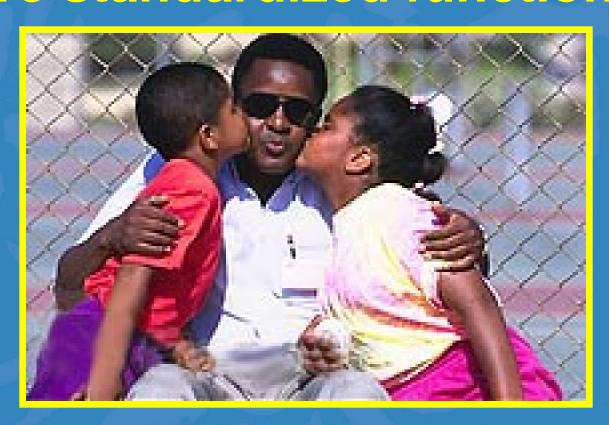
Standardized Functions are common across all HIV EBP.

Frame Apply health information Monitor - Surveillance Shape Support

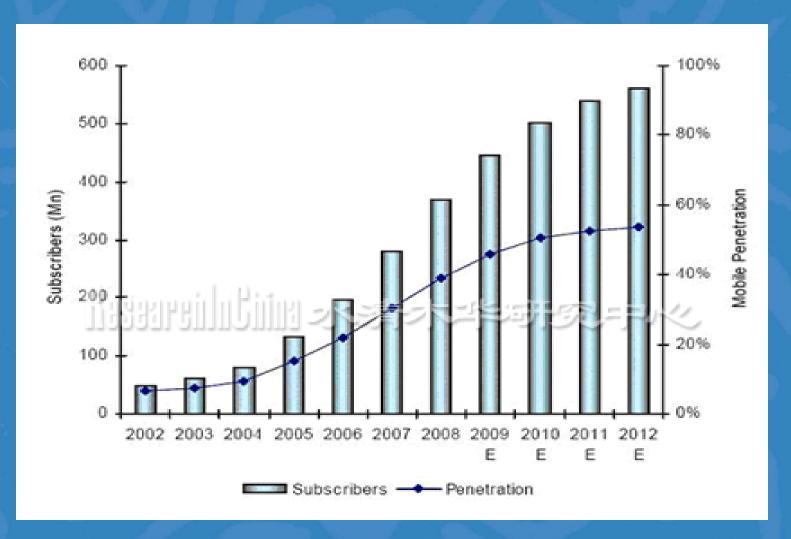
The processes are same for many diseases.



Health Care Delivery, Research on HIV, & Consumer Self-Management share standardized functions.

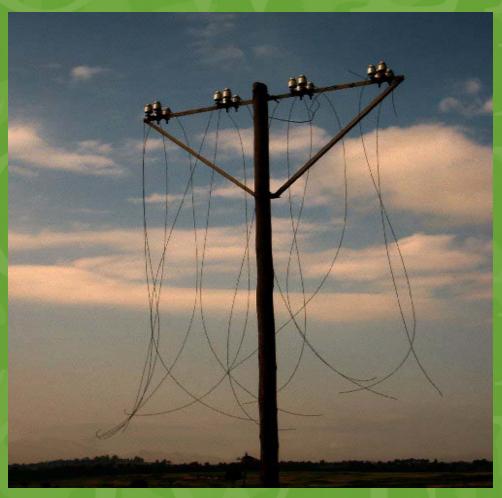


Penetration of Mobile Phones in Africa is higher than the US



Jumping over the era of wire, MPS has improved the Efficiency, Quality, & Ease of Data collection.





Mobile personal sensing

is used for

Assessment, Intervention Delivery, Support, System Integrity



Assessors in Kwa Zulu Natal monitor Pregnant HIV+ Mothers in their local communities.

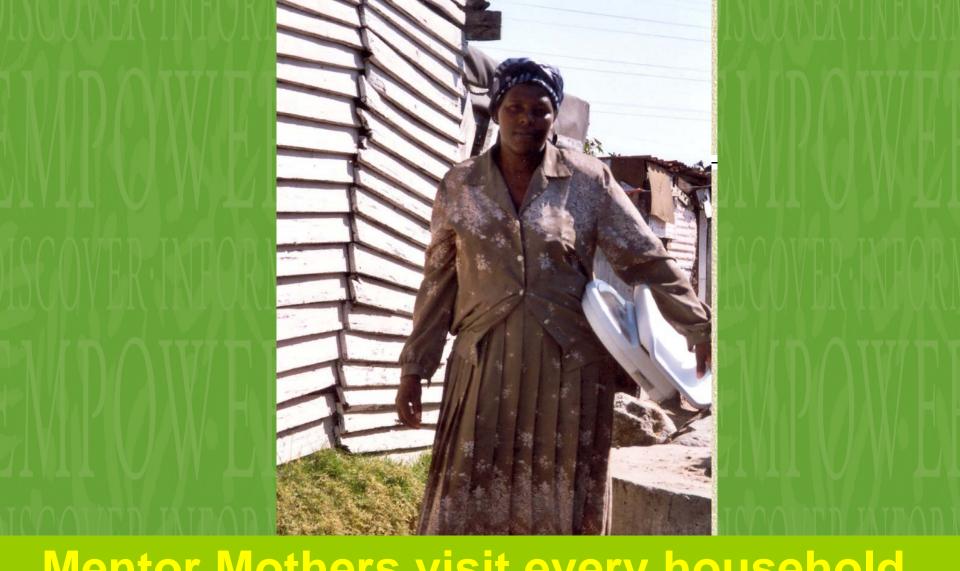


Find Me applications allow tracking



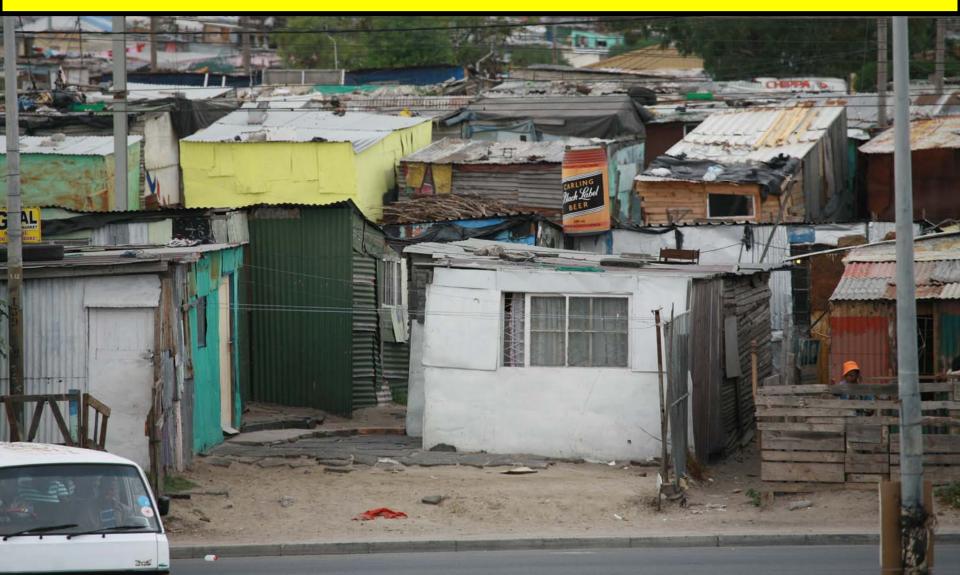
Rapid, point-of-care diagnostics are revolutionizing surveillance & disease monitoring.





Mentor Mothers visit every household, clicks her phone on entry, indicates content, & gives feedback at end.

Mentor Mothers build social capital, provide education & support to families in home visits monitored in real time.



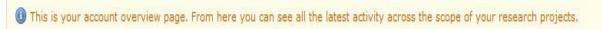
HSRC Masihambisane Research Centre



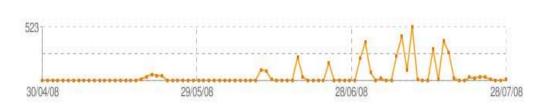


Logged in as Alastair Van Heerden (<u>log out</u>)

Account Overview



Responses Uploaded in last 90 days



■ Total Responses for Top 5 Surveys

Key	Survey Title	Responses			
1	Clinic Register	3520 (91.29%)			
2	Clinic	114 (2.96%)			7
3	02 Pre-Assessment	86 (2.23%)	1	1) C.R.—	14
4	01 Pre-Assessment	72 (1.87%)	£		
5	03 Pre-Assessment	64 (1.66%)			

Latest Communication

SMS	23 Jul	Sorry, I see Monday. But nothing for tuesday or today.	sent to	HSRC 015 2630 (Balgowan)
SMS	23 Jul	Hi Tola, I have not recieved any clinic counts from you f	sent to	HSRC 015 2630 (Balgowan)
SMS	08 Jul	Hi Buyi, please use the first 6 numbers of your id as the	sent to	HSRC 016 2630 (Howick)

Your published surveys

Create a new survey

Published surveys

- 01 Pre-Assessment
- 01 Pre-Assessment (Zulu)
- 02 Pre-Assessment
- 02 Pre-Assessment (Zulu)
- 03 Pre-Assessment
- 03 Pre-Assessment (Zulu)

Clinic

Clinic Register

Demo

MB - Antenatal Visit

MB - Delivery Info

MB - First Antenatal Visit

MB - Postnatal Baby Weight

MB - Postnatal PCR Test

MB - Postnatal Visit

MB - Vaccinations

Medical Record

Nurse Survey

Protocol Deviation

Session Attendance Register

View unpublished surveys



Mentor Mothers in clinics send text messages, record & rate session content for pregnant, HIV+ mothers.



Mobile phones allow Diabetes Buddies to text social support messages to peers.



MPS helps mothers obtain information to secure a Child Grant.



identifying community pollution.

New technologies create shared platforms, not always OPEN.

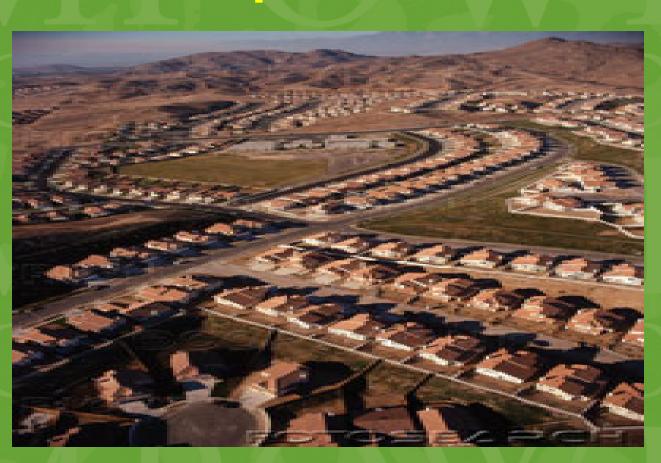




Each research team, country, & disease specialty reinvents their own MPS program.



Open platforms create simpler, cheaper, & good enough solutions that will be optimized over time.



Standardized, open platforms allow substantial tailoring.

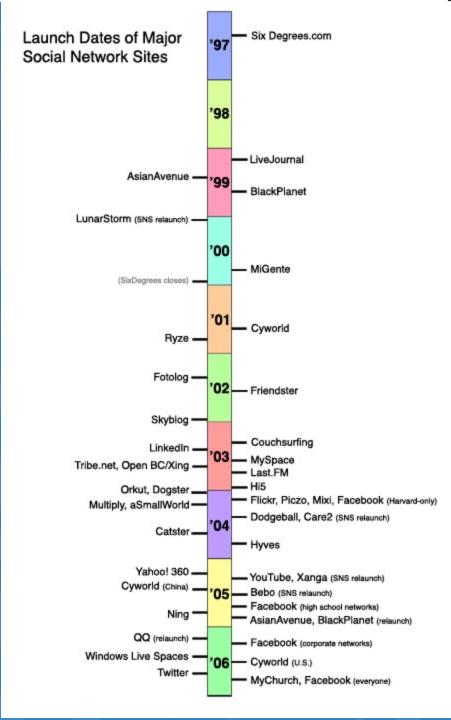


Open-source platforms are needed to realize the public health potential of technology.



Time is of the Essence

when investing to keep an open-source Platform.



Researchers & providers are typically 10 years late.









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