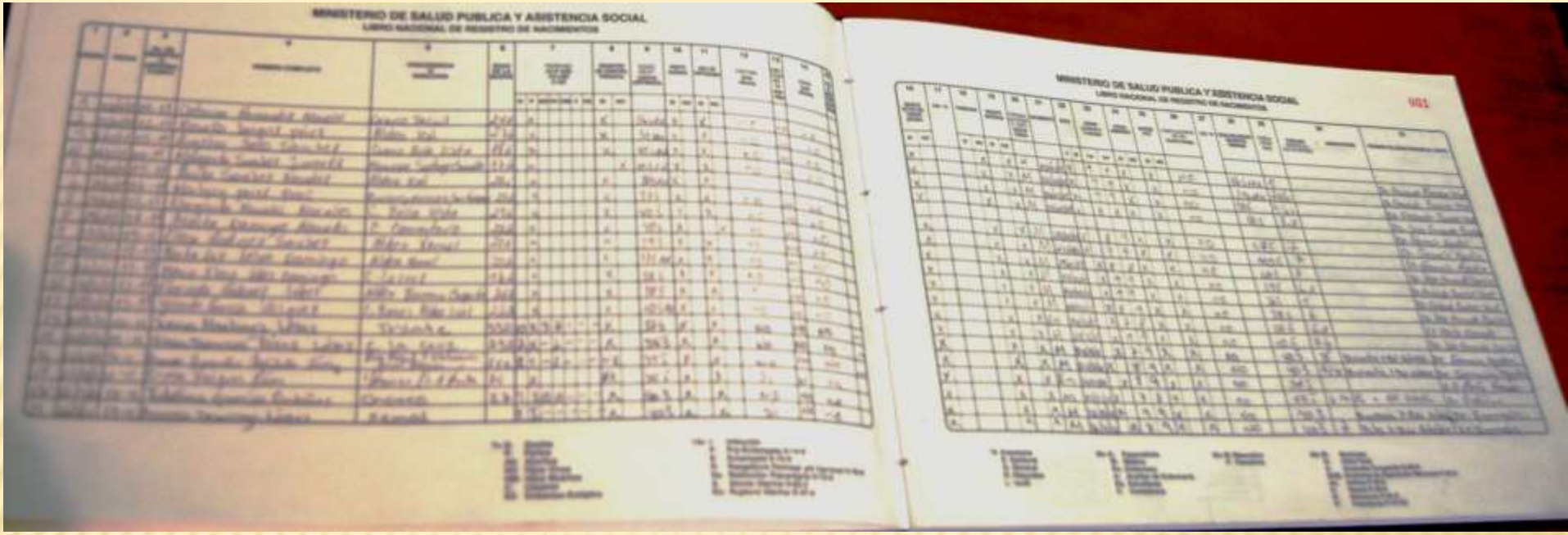


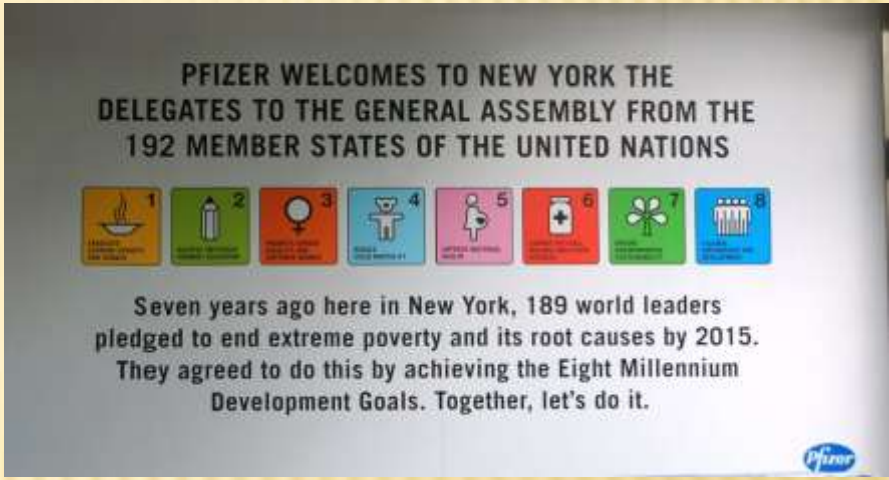
Alfredo L. Fort, MD, PhD
Area Manager
WHO Reproductive Health and Research Department
Research Capacity, Policy and Programme Strengthening Unit

MONITORING AND EVALUATION OF FAMILY PLANNING / REPRODUCTIVE HEALTH PROGRAMS – HEALTH SYSTEM-, PROJECT- & FACILITY-BASED INFORMATION

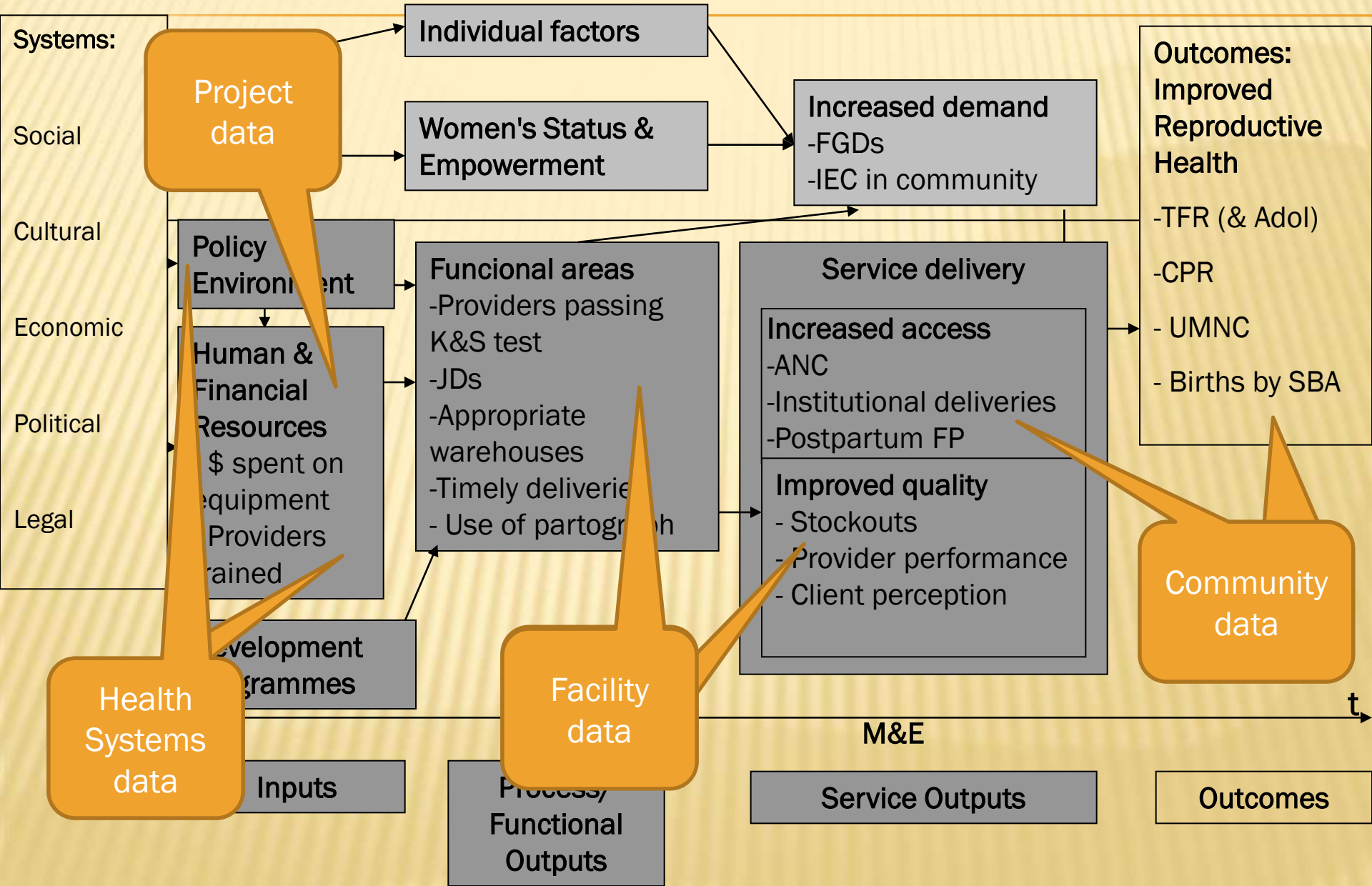
Training Course in Sexual and Reproductive Health Research
Geneva 2012

SOURCES OF INFORMATION TO EVALUATE PROGRAMME PROGRESS / RESULTS

- HEALTH SYSTEM - BASED
- PROJECT – BASED
- FACILITY - BASED
  - Records
  - Observations
    - Infrastructure, equipment, supplies, processes
    - Client-provider interactions, consultations
  - Interviews (clients, providers, programmers)
  - Knowledge tests
- COMMUNITY - BASED (quantitative-qualitative)



OUR ILLUSTRATIVE FRAMEWORK (ADAPTED)



HEALTH SYSTEM INFORMATION

- Good for context and background of interventions
- Policy-makers: priorities, investment, leadership
- Gives picture of inputs and processes, e.g., recruitment, training efforts, updating/distribution of guidelines, supervision, construction/refurbishing, purchase of equipment/maintenance, distribution of medicines/supplies
- Can attempt to look at central-level statistics (e.g., MIS/HIS) – to compare against field-level

PROJECT/PROGRAMME INFORMATION

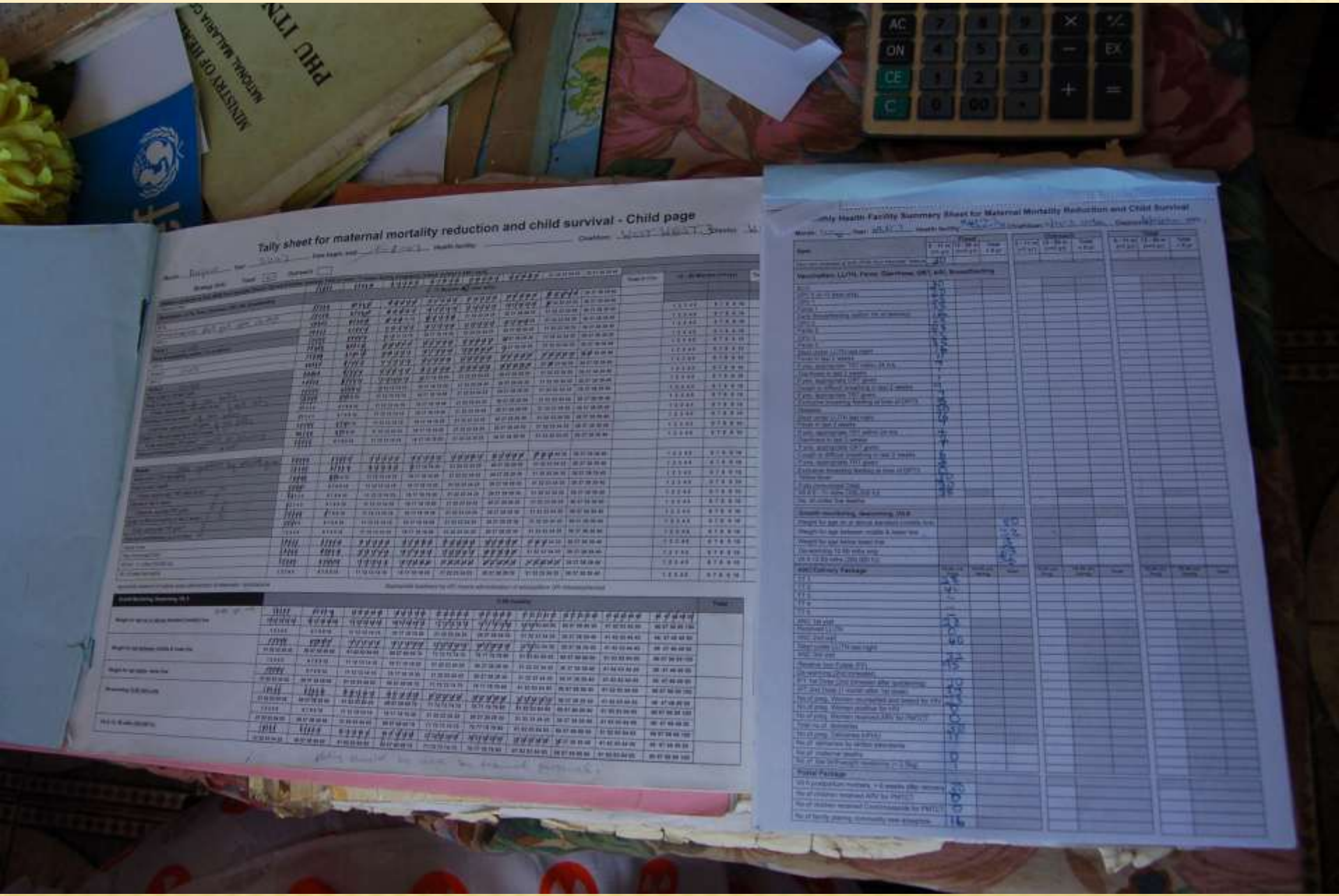
- Good for inputs and

processes: resources brought to intervention(s) – important for cost-related analyses

- Vertical vs Integrated; Scale
- Timing of interventions
- Potential for scaling up/expanding; sustainability

FACILITY – BASED INFORMATION

- RECORDS
  a) Easy, they are available
  b) However, they are often of poor quality
     i. Under-recording
        - Purposely (e.g., overburden, no data on abortion, adolescent FP)
        - Inadvertently (e.g., did not know, forgot)
        - Untimely (esp at higher levels – data arrive/are compiled late – e.g., two months after)
     ii. Inconsistent recording
        - Sometimes OK, sometimes under/untimely
        - Some fields OK, some left blank (sensitive, «will do later», etc.)

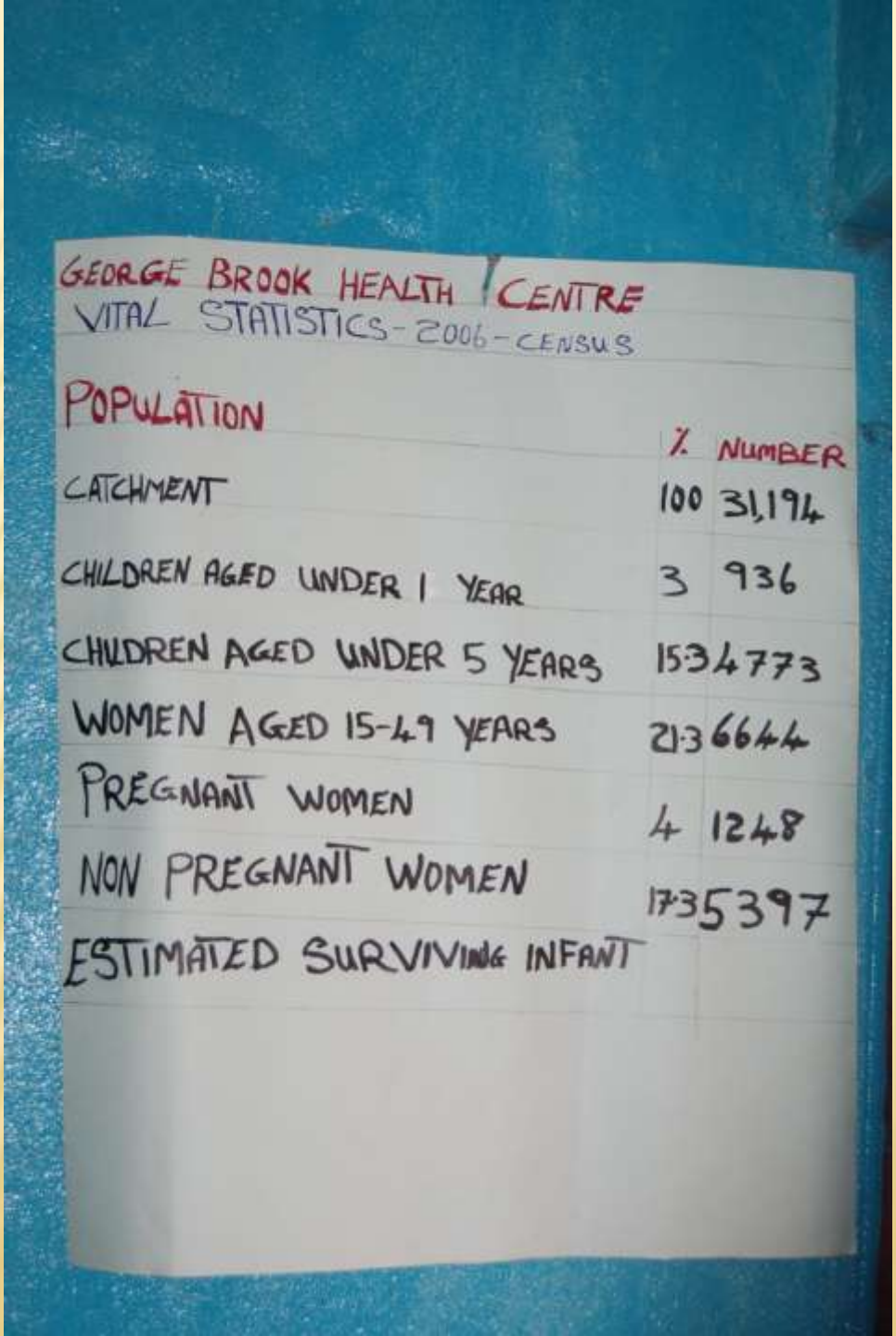

Tally sheet for maternal mortality reduction and child survival - Child page
Monthly Health Facility Summary Sheet for Maternal Mortality Reduction and Child Survival

MORE ISSUES WITH RECORDS

- Consistent errors are better than inconsistent
  - One can estimate omissions (e.g., by direct observation, on average, one tenth of all bed usage is for abortion-related complications) – add fraction
  - Inconsistent: omissions may **vary**
    - e.g., busy days, rainy days (transport), blackouts, no stationary: 🡻
    - just back from training, new staff: 🡹
    - what fraction to add/correct?
- Trends: what happens over time?
  - Continues pattern of inconsistency, stable recording
  - Improvement? 👁 («real» success/failure or measurement issue?) – especially between sites

WHAT DO RECORDS TELL US?

- Numerators: Access, Users, Atypical?
  - Representativity (20% vs 80%) Differentials (who are the «users»?: Distance, socio-economic status, previous users) – Equity – who's not accessing?
  - Careful with double-counting (i.e., new/first vs returning) – can you «index» cases?
- Denominators:
  - Catchment: Updated? Eligible? Census-based? Real vs assumed
  - Account for: Self-referrals, by-passing (proximity, sensitive services: e.g., FP, adolescents)
  - Other [competing] services: private (pharmacies, informal, social security, armed forces). May be differential uses (e.g., for some but not for other services)
- Picture: Coverage, quality of services (structure, equipment, processes, adherence)

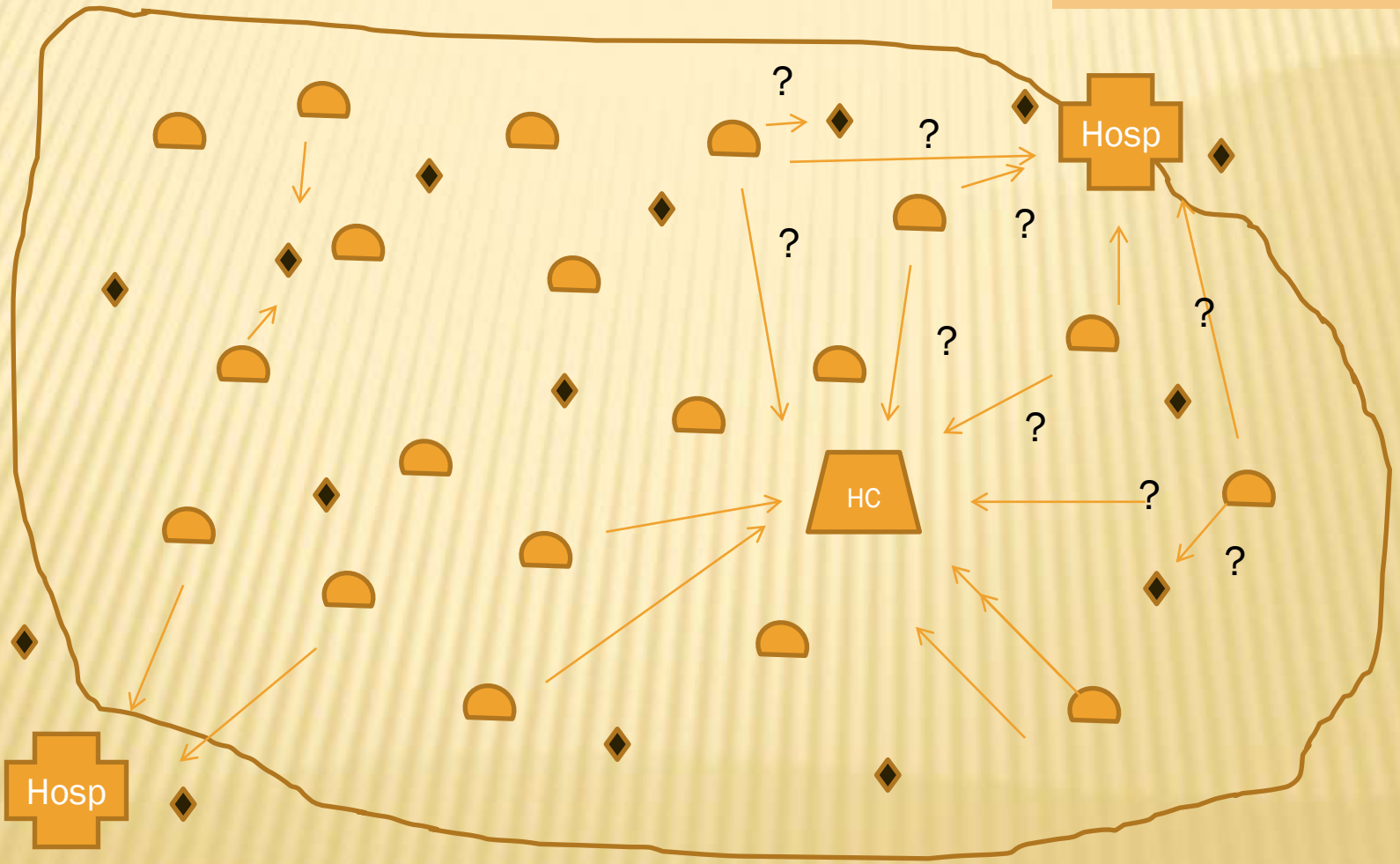


- Catchment represents what?
- Census is national or locally-conducted? Updated?
- Children under one year is what percentage over pregnant women? Why?
- What is the [approximate] crude birth rate?

Population of country – 2009: (5,696,000)
Under-fives: 964,000 (16.9%)

DIFFERENTIAL USE – BY PASSING

May vary by service!



Affects the catchment area!

WHAT TO DO TO IMPROVE KNOWLEDGE OF CATCHMENT POPULATION?

- Use current Census figures
- Conduct own community census, regularly
- Conduct community survey (asking for common usage of facilities, buy type of service needed)
- Estimate from records of higher-level facility the number/% of clients coming from community (e.g., for ANC/delivery)

ADVANTAGES / DISADVANTAGES OF USING FACILITY RECORDS

ADVANTAGES	DISADVANTAGES
Readily available; relatively easy to access	May be unreliable (incomplete, outdated, biased)
Can provide **trends** over time	Trends may be affected by inconsistent recording
Can provide a picture of **quality** of services	Can mislead if incomplete or biased
Can provide a picture of **coverage** of services	Can underestimate if unrepresentative, overestimate if erroneous
Can be a useful **monitoring** tool	Staff will lose confidence in data if corrections are not made constantly
Can be a useful **research** tool (e.g., increased quality and utilization)	Needs forums and
Should be revised for simplicity and avoiding duplication	If duplication or unnecessary detail, staff will be discouraged from correct completion

HOW TO IMPROVE RELIABILITY OF RECORDS?

- Triangulate for errors (underestimates and biases)
  - Direct observation (e.g., «forgetfulness», inaccuracies, etc.)
  - Comparisons (e.g., usage vs reporting, clinic vs community coverage from surveys)
- Highlight improbabilities: e.g., >100% immunization
- Encourage continuous and critical **use** - analyse data (will increase compliance, reduce inaccuracies, bring sense of «pride»)

FACILITY ASSESSMENTS / SURVEYS

- Can complement well the examination of clinic records
- Has advantage of independent and on-site observation-verification
- More difficult to organize (like any survey): sampling, data collection tools, interviewer training, data collection, supervision, data entry)

FACILITY SURVEYS

- Units of analysis: facilities, providers, clients
- Sampling (or Census):
  - Facilities: same principles (representativity, known probability of appearing in sample; stratification, etc.). Normally: all/majority of hospitals, sample of health centres, dispensaries, posts
  - Providers: present the day of the survey (all or sample)
  - Clients: sample (spread during the day!)
- Data collectors: clinical background; trained for 3 weeks (incl mock interviews, pilot testing); teams of 4-5 + leader; complex logistics (vehicles, questionnaires vs PDAs/batteries) for simultaneous spread over country; supervision; rules for presence/absence of items (e.g., office or adjacent room); double-checking of completed records; editing, double data entry and reconciliation

Uganda 2007 Health Facility Survey

Total # of facilities: 3,000
Sample: 491 (16.4%)

Table 1.1 Distribution of facilities by background characteristics

Percent distribution of facilities (weighted) and number of facilities (weighted and unweighted), by background characteristics, Uganda SPA 2007

Background characteristic	Percent distribution of facilities (weighted)	Number of facilities	
		Weighted	Unweighted
Type of facility			
Hospital	4	19	119
HC-IV	6	27	81
HC-III	32	158	127
HC-II	58	287	164
Managing authority			
Government	76	373	351
Private	24	119	140
Region			
Central	20	98	81
Kampala	2	9	40
East Central	16	78	69
Eastern	10	49	50
Northeast	8	41	38
North Central	7	37	39
West Nile	7	37	39
Western	12	60	56
Southwest	17	83	79
Total	100	491	491

Available from: http://www.measuredhs.com/publications/publication-SPA13-SPA-Final-Reports.cfm

Available from:
http://www.measuredhs.com/publications/publication-SPA13-SPA-Final-Reports.cfm

Table 1.3 Distribution of interviewed providers

Percent distribution (weighted) of interviewed providers and number of interviewed providers (weighted and unweighted), by background characteristics, Uganda SPA 2007

Background characteristic	Percent distribution of interviewed providers (weighted)	Number of interviewed providers	
		Weighted	Unweighted
Type of facility			
Hospital	20	357	689
HC-IV	12	204	364
HC-III	34	603	390
HC-II	34	607	328
Managing authority			
Government	69	1,219	1,221
Private	31	552	550
Region			
Central	21	380	278
Kampala	4	75	193
East Central	14	246	256
Eastern	7	127	130
Northeast	7	119	135
North Central	11	196	179
West Nile	8	148	152
Western	12	219	188
Southwest	15	263	260
Qualification of provider			
Clinicians[1]	12	221	329
Nurses/midwives	38	669	835
Counsellors/social workers	5	88	22
Lab staff[2]	6	113	198
Pharmacy staff[3]	1	11	14
Other clinical/technical services[4]	36	629	370
Non-clinical/technical services[5]	2	39	3
Total	100	1,771	1,771

[1] Clinicians include all consultants, physician specialists, medical officers and clinical officers.
[2] Lab staff include: lab technologists, lab technicians and lab assistants
[3] Pharmacy staff include: pharmacists and pharmacy dispensers
[4] Other clinical/technical service providers include: nursing assistants and nursing aides, nutritionists, health educators and any other client service providers.
[5] Non-clinical/technical service providers include: statisticians, records clerks and hospital administrators

INFORMATION FROM FACILITY SURVEYS

- Personnel, structure and equipment / supplies
  - E.g., staff present on day of survey, by type; existence of protocols/guidelines
  - Waiting rooms, rehydration rooms, labs, electricity, sterilization, sanitation facilities, privacy of examination rooms, beds, incinerator, cold chain, ambulance (& fuel!), pharmacy and storage rooms
  - Fees signs, expiry dates of medicines & stock-outs, whether oxytocin/vaccines in refrigerator (& temperature charts), gloves, specula, rapid tests, etc.

INFORMATION FROM FACILITY SURVEYS

- Observation of processes
  - Services provided (e.g., PMTCT, ART, outreach)
  - E.g., waiting times to services
  - Actual consultations
    - Third-person observation
    - Mistery [simulated] client (skills and competence, attitudes and courtesy)
- Client perception
  - Client exit interviews (medications/contraceptives & instructions, side effects discussed, knowledge of danger signs, satisfaction, payments, etc.)

INFORMATION FROM FACILITY SURVEYS

- Provider knowledge, attitudes and competence
  - Interviews (e.g., training, supervision received, working conditions, incentives, satisfaction, attitudes, perception of stigma, etc.)
  - Knowledge tests (procedures conducted, diagnosis & treatment, management of complications (simulated scenarios)

From: Kenya HIV/MCH SPA, 2010, available at http://www.measuredhs.com/publications/publication-SPA17-SPA-Final-Reports.cfm

906	Please give me some examples of stigma in the health facility PROBE BY ASKING: Any other examples?	USING LATEX GLOVES FOR NON-INVASIVE PROCEDURE ON SUSPECT/HIV+ CLIENTS .. A EXTRA PRECAUTION IN THE sterilisation OF EQUIP USED ON HIV+ CLIENTS ..... B PROVIDERS GOSSIPING ABOUT A CLIENT'S HIV STATUS ..... C LESS CARE/ ATTENTION GIVEN TO HIV+ CLIENTS .... D SENIOR STAFF PUSHING HIV+ CLIENT TO JUNIOR STAFF .... E STAFF UNWILLING TO SHAKE HANDS WITH HIV+ CLIENTS .... F OTHER _____ X (SPECIFY)	
907	Does stigma occur outside health facilities?	YES ..... 1 NO ..... 2 → 911 UNCERTAIN/DON'T KNOW ..... 8 → 911	
908	Where have you observed or heard stigma occur? PROBE: Anything else?	HOUSEHOLD/FAMILY ..... A COMMUNITY ..... B WORKPLACE ..... C PLACES OF WORSHIP ..... D PLACES OF ENTERTAINMENT .... E OTHER _____ X (SPECIFY)	
909	Please give me some examples of stigma that occur outside health facility	SEPARATION/DIVORCE WHEN ONE PARTNER BECOMES HIV+ .... A NEIGHBORS/FAMILY GOSSIPING ABOUT CLIENT'S HIV STATUS .. B NOT BUYING FROM OR PATRONIZING HIV+ PERSON'S BUSINESS ..... C FAMILIES/NEIGHBORS RELUCTANT TO PROVIDE MONEY TOWARDS CARE FOR HIV+ PERSONS ..... D FAMILY MEMBERS UNWILLING TO SHARE BED/UTENSILS WITH HIV+ PERSONS ..... E OTHER _____ X (SPECIFY)	
910	If you ever saw any of the above types of stigma happening to a person because s/he is a PLWHA, would you be willing to inform to authorities or relevant groups if they existed?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
911	I don't want to know the result, but have you ever had an HIV test?	YES ..... 1 NO ..... 2 → 913	
912	The last time you had an HIV test, did you yourself ask for the test, were you encouraged to take it, was it offered to you and you accepted, or was it required?	ASK SELF ..... 1 ENCOURAGED TO TAKE IT ..... 2 WAS OFFERED ..... 3 WAS REQUIRED 4	
913	Finally, please tell me: In your opinion, how effective are condoms in preventing HIV infections when used correctly? Are they completely effective (100 percent) or not at all effective (0 percent) or somewhere in between? HELP THE RESPONDENT TO ESTIMATE A PERCENTAGE.	CONDOM EFFECTIVENESS ☐☐☐ DON'T KNOW 998	
	Thank you for taking the time to talk with me and to answer these questions. As I mentioned at the beginning, all of your responses will remain confidential.		

	READ: Section Two Mrs. C. reports onset of severe headache and blurred vision six hours prior to coming to the clinic. She denies upper abdominal pain or decreased urine output, and fetal movement is normal. Further information: • BP 160/120 mm Hg • Pulse 84/minute • Temp 37.2°C • Respirations 18/minute • Fetal Heart Tones 140 beats per minute • Fundal Height Appropriate for gestational age • Abdomen Non-tender • Patellar reflexes Normal • Urine 3+ protein • Contractions Two in ten minutes lasting 20 seconds by palpation		
120	Given the information presented above, what is your working diagnosis?	KIDNEY INFECTION ..... 1 SEVERE PRE-ECLAMPSIA ..... 2 MALARIA ..... 3 ECLAMPSIA ..... 4 IN LABOUR 5	
121	What action do you believe is appropriate in managing the MOST urgent presenting condition?	PROVIDE ANTIMALARIAL ..... 1 SEND HOME ON STRICT BED REST .... 2 IF AVAILABLE, STABILIZE WITH MAGNESIUM SULFATE AND ANTI-HYPERTENSIVES ..... 3 DOCUMENT FINDINGS AND IMMEDIATELY REFER MRS. C TO A HIGHER LEVEL .. 4	

From: Kenya HIV/MCH SPA, 2010, available at http://www.measuredhs.com/publications/publication-SPA17-SPA-Final-Reports.cfm

HEALTH-SYSTEM, PROJECT & FACILITY-BASED DATA HAVE A GREAT POTENTIAL TO INFORM PROGRAMME PROGRESS & RESULTS: LET'S USE THEM MORE!