Rapid Health Facility Assessment (R-HFA):

Analyzing, Using, and Disseminating Data

Jim Ricca, Child Survival Technical Support Project, Macro International
Bolaji Fapohunda, MEASURE Evaluation

R-HFA Data Analysis: Learning Objectives

At the end of this session, participants will be able to

- Describe the indicators generated by the R-HFA
- Describe basic analysis and reporting of R-HFA information

R-HFA: Core indicators

***IHFAN core indicator / **Child health component of IHFAN core indicator / ***SPA indicator**

Area	#	Domain	Indicator
Access	-	Geographic Access	% population with year-round access to curative MNC services
	1	Service availability	% HF in which MNC services are available (Child: sick child, immunizations, GMP; MNC – ANC services)
Inputs	2	Staffing*	% staff in HF who provide clinical services and are working on the day of the survey
	3	Infrastructure*	% essential infrastructure in HF to support MNC services available on the day of the survey
	4	Supplies**	% essential MNC supplies in HF/CHW available on the day of the survey
	5	Drugs**	% first line medications for MNC services available in HF/CHW on the day of survey (HF: ORS, oral antibiotic for dysentery, oral antibiotic for pneumonia, first line anti-malarial, vitamin A / CHW: context-specific)
Processes	6	Information System**	% HF/CHW that maintain up-to-date and complete records of sick U5 children / ANC services AND show evidence of data use
	7	Training***	% HF/CHW where interviewed HW reports receiving in-service or pre-service education in MNC in last 12 months
	8	Supervision***	% HF/CHW that received external supervision at least once in the last 3 months (includes at least one: check records or reports, observe work, give feedback)

R-HFA: Core indicators (continued)

(Indicators #10-12 are for Child Health only)

^ BASICS Integrated HFA indicator / WHO HF Survey indicator

Area	#	Domain	Indicator
Performance	9	**Utilization**	# sick child visits per year per U5 child in HF catchment area
	10	**HW Performance: Assessment^**	% HF in which ALL essential assessment tasks were made by HW for sick child (pass = 5/6 observed cases)
	11	**HW Performance: Treatment^**	% HF/CHW in which treatment was appropriate to diagnosis for malaria, pneumonia, and/or diarrhea (pass = 5/6 observed cases for HF / 5/6 most recent cases in register for CHW)
	12	**HW Performance: Counseling^**	% HF in which caretaker correctly describes how to administer ALL prescribed drugs for ARI, malaria, and/or diarrhea (pass = 5/6 exit interviews)

R-HFA: Optional Indicators

*** IHFAN core indicator / ** Child health component of TWG core indicator / *** SPA indicator**

Area	#	Domain	Indicator
Inputs	**Opt1**	Availability of Immunizations	% HF with all nationally-mandated immunizations in stock on day of survey
	Opt2*	Availability of Guidelines	% HF with all nationally-mandated guidelines for care of children available and accessible on day of survey
	Opt3*	Infection Control	% HF with all infection control supplies and equipment on day of survey
Processes	**Opt4*****	HF-Community Coordination	% HF with routine community participation in management meetings (with evidence through notes) OR have a system for eliciting client opinion, AND evidence that client feedback is reviewed
	Opt5***	Community Referral	% HF that received at least one referral from CHW in the last month
	Opt6	Malaria Drug (ACT) Logistics	% HF with adequate logistics compliance for ACTs
	Opt7	ITN/LLIN Logistics	% HF with adequate logistics compliance for ITNs/LLINs
	Opt8*	Laboratory	% HF with adequate basic laboratory services on site or ability to send out
Performance	**Opt9a**	Utilization of Immunization Services	Annualized number of immunization encounters per U5 children in HF catchment area (should be 0.8 per U5 child)
	Opt9b	Utilization of Growth Monitoring Services	Annualized number of growth monitoring encounters per U5 children in HF catchment area (should be $\geq$ 2.0 per U5 child)

Constructing Core Indicators

- The number of data elements to handle is much smaller than for a KPC. A typical data set has
  - 20 – 30 health facilities
  - 120 – 180 clinical observations & exit interviews (6 per health facility)
  - 30 – 50 CHWs (In some health systems, for this level of analysis you may want to assess small "health posts," where mainly community-oriented workers/volunteers/CHWs carry out their duties)

- R-HFA survey forms file has a tabulation plan for constructing the 12 core indicators and 9 optional indicators.

- There is an Excel program that calculates tables and indicators automatically once data is transcribed. If desired, data can be exported for additional statistical analysis in other programs like SPSS or Stata.

Applying R-HFA: Initial Analysis (1 additional day)

Ease of data entry and analysis is a strength of the R-HFA

Data entry and cleaning

• There is an Excel program for data entry and analysis in the R-HFA zip file available on the CSTS web site. This has an instruction sheet in it. If possible, data should be "entered as you go" on a laptop during data collection stage by the supervisor on each assessment team. Data should be entered by supervisors each afternoon/evening for the data collected that morning.

• Data from each assessment team should be combined into single Excel file once all assessments are done. A simple validation procedure is to visually inspect 20% of records for accuracy of transcription.

Data analysis

• Excel data entry and analysis program automatically calculates all disaggregated tables and core/optional indicators for inclusion in report.

• Analysis focuses on a. mapping of service availability (by hand or with GIS program if GPS coordinates of HF/CHWs collected) b. utilization analysis – is it high or low? If low, is it likely due to access or quality issues? c. analysis of service gaps for Child Health and MNC to identify priority problems for action

R-HFA: Examples of disaggregated tables

Example on next 4 slides from SAWSO/Zambia pilot

ITEM	% HF WITH ITEM
Infrastructure	
HF has safe water on facility ground or within 100m of the site	94
Electricity on day of interview	56
Usable client toilet/latrine on day of visit	100
Client consultation area with auditory and visual privacy	83
Supplies	
Functioning refrigerator for storing vaccines	66
Functioning child scale (standing scale)	94
Functioning infant scale	61
Functioning timer/watch with second hand	66
ORS equipment (Jar/pitcher/cup/spoon)	61
Syringes and needles	94

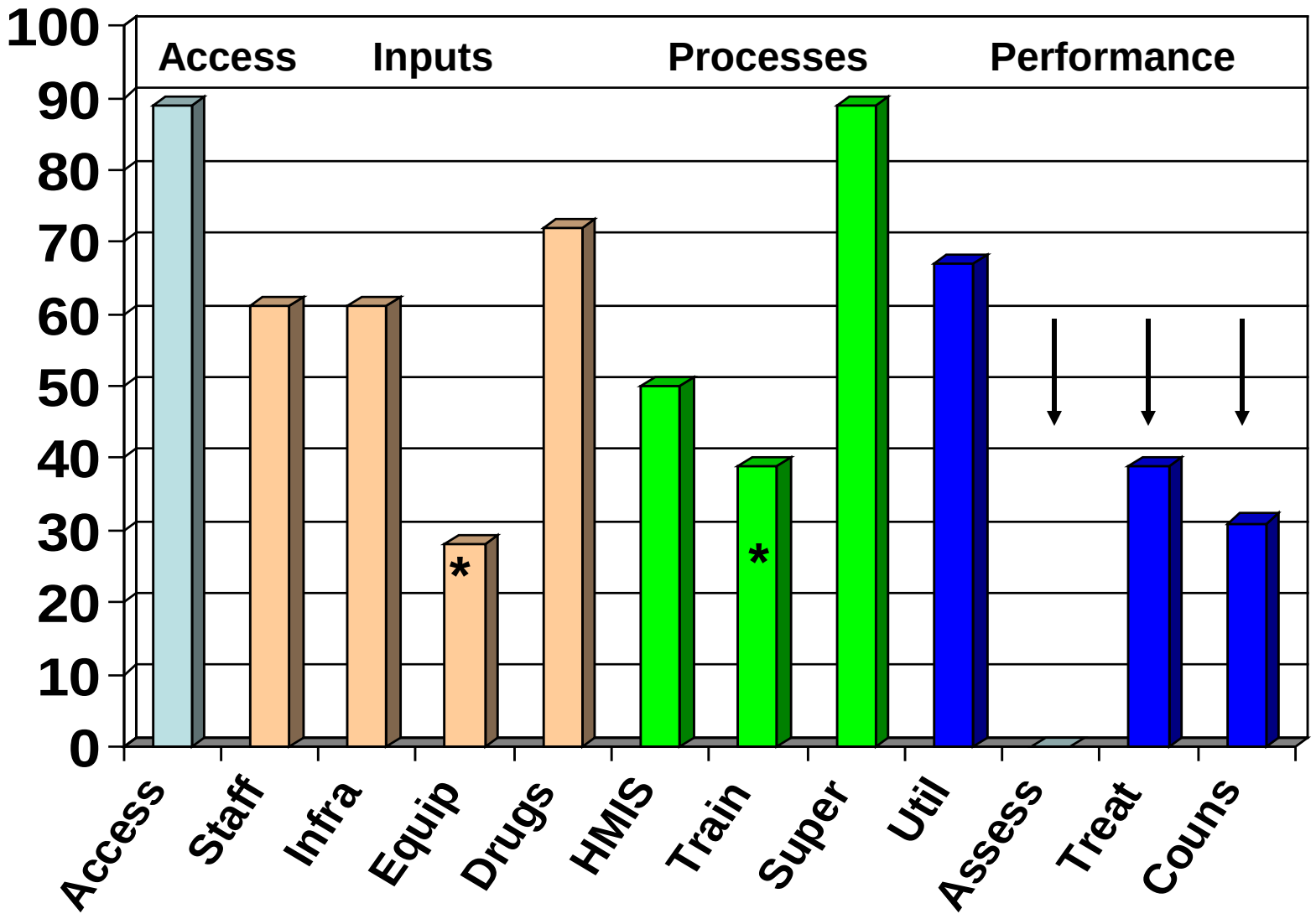
R-HFA data: Service units meet benchmarks?

Summary data by HF for whole district

	#	Indicator	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Aggregate Results
AC	1	Service Availability	X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	HF: 16 / 18 (89%) (12.7 HF / 100,000)
IN	2	Staffing	X	X		X				X	X	X		X	X	X	X			X	HF: 11 / 18 (61%)
	3	Infrastructure	X	X		X				X		X	X	X	X	X		X		X	HF: 11 / 18 (61%)
	4	Supplies												X	X		X		X	X	HF: 5 / 18 (28%) CHW: 0 / 20 (0%)
	5	Drugs		X	X	X	X	X		X	X	X			X	X	X		X	X	HF: 13 / 18 (72%) CHW: 5/20 (25%)
PR	6	Information System	X		X	X		X			X	X		X	X				X		HF: 9 / 18 (50%) CHW: 12 / 20 (55%)
	7	Training	X		X				X		X					X		X		X	HF: 7/18 (39%) CHW: 11/20 (55%)
	8	Supervision	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X		HF: 16 / 18 (89%) CHW: 10/20 (50%)
PE	9	Utilization		X	X	X		X	X		X	X		X	X			X	X	X	HF: 1.9sick visits/child/yr. CHW:0.3sick visits/child/yr
	10	Assessment																			HF: 0 / 65 (0%)
	11	Treatment																			HF: 1,943 / 4,959 (39%) CHW: 58 / 437 (14%)
	12	Counseling																			HF: 19 / 62 (31%)

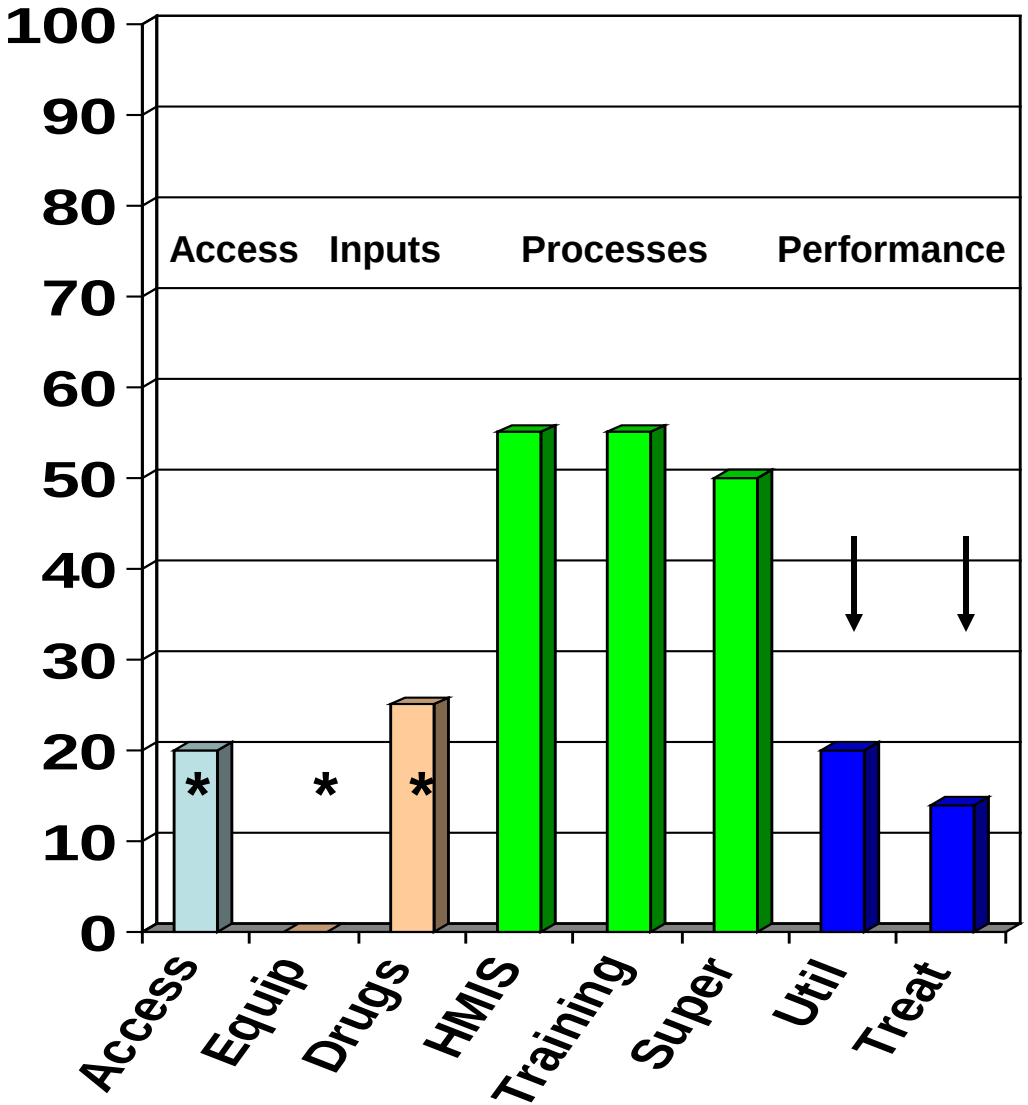
Analysis of service gaps: All assessed HFs

Bar chart shows % HF assessed that met minimum standard for each of 12 core indicators



Analysis of service gaps: All CHWs

Bar chart shows % CHW assessed that met minimum standard for each of 8 core indicators



Priority setting for intervention, monitoring and supervision

- The R-HFA already has “done some of the work” in terms of priority setting for MNCH services at the primary level:
  - It looks at a “critical path” of a minimum number of areas for quality care
  - It collects data on a small set of standard indicators
  - These indicators are already benchmarked at a minimum level of quality

- Therefore, when we look at the service gaps in a matrix like on slide #10,
  - As we go across a row, we can prioritize the indicators that are most in need of improvement across ALL facilities.
  - As we go down a column, we can identify individual facilities most in need of improvement.

CONCLUSION:

Although we cannot be completely mechanical in priority setting and we will need to get more qualitative information to investigate the “why” of service gaps, the R-HFA should help us set priorities for improvement in conjunction with the District Health Team.

Example of Data Use: Project-DHMT planning

3 main problems identified / solutions agreed upon

(Example from SAWSO / Zambia pilot)

Equipment deficient in HF

- Equipment purchases not within the mandate of the NGO project. Will advocate with national MOH and other donors to fill gaps identified.

Training not adequate among HW

- Agreed to a refresher training plan for priority gaps identified (e.g. malaria treatment), funded and facilitated by NGO project.

Disconnect between CHWs and HF

- D-HMT will strengthen supervision of CHWs by facility personnel, in conjunction with NGO project.
- NGO project will recruit and train new CHWs. DHMT committed to absorbing new CHWs after the end of the project.

Methods for collecting monitoring data

Through routine supervision reports

- Supervision, including OJT and “spot training”
- Drugs
- HMIS
- Utilization
- (Performance – in parentheses, because although important, this is much more involved)

Through routine project reports

- Training, including pre- and post-tests)
- Access / service availability

R-HFA: Data use and dissemination

Form of Dissemination	Timeframe	Comments
Feedback to HF staff	Immediate	Each indicator is benchmarked with hand tabulation guidance for the two complex indicators, facilitating on-site interpretation by supervisor
Internal project discussion and preliminary analysis	Within 1-2 days	With simplified data entry and basic analysis standardized, rapid analysis of the meaning of the data is facilitated
Dissemination and planning with DHMT	Within 2-3 wks	Have focused discussion, based on core indicators: • Analysis hierarchy facilitates identification of performance "bottlenecks" • Analysis also gives externally comparable data (6 INFAN indicators; others from DHS SPA and BASICS HFA)
Final report	Within 4 weeks	

Summary of Logistics

- **Timeline**
  - 2-4 weeks for preparation (partnership with District Health Medical Team, assemble assessment team, choose units to be assessed, adaptation of data collection forms to local context, etc.)
  - 3-4 days for training of assessment teams
  - 4-6 days for data collection, data entry, and initial analysis
  - 2-4 weeks for report writing and dissemination

- **Data collection**
  - 2-3 people per team
  - Best if supervisor on each team is a health worker; better yet if they are from MOH

- **Analysis**
  - Data entry and analysis program in Excel
  - Focused on core indicators, which are calculated automatically by Excel data entry and analysis program

R-HFA: Strengths

For projects:

- Facilitates partnership between NGO and District Health Medical Team (DHMT)
- Generates data in a form that is quickly and easily analyzed and suggests priority actions to improve access and quality
- Generates data comparable to national data – SPA, WHO SAM, JICA HFC, etc. (just as KPC is comparable to DHS/MICS data). This facilitates placing the situation of the project area HF/CHWs in context both for planning and advocacy purposes.

For USAID:

- Standardizes the information collected by grantees so it can be rolled up to show aggregate grantee results for reporting and advocacy on improving quality and access

Summary

- CSHGP projects get most of their impact from community-based interventions
- However, health facilities are main actors for interventions to improve **quality** and also play a key roles to support increased **access.** They can even play a role in supporting community-level behavior change.
- **Almost all grantees already assess health services** in order to strengthen partnership between MOH & communities; assess access and quality, and prioritize project interventions. However, there has been **little standardization** of indicators, hindering planning and advocacy.
- **R-HFA** helps collect core standard indicators
  - It is gives rapidly collected, valid, and comparable information
  - It is basic “core” information and grantee may want to supplement it

Questions

- **R-HFA documents available at CSTS website** www.childsurvival.com
  - Data collection tools in Excel (DHO interview form for planning, five data collection modules, brief instructions, tabulation plan)
  - Data entry and analysis program in Excel
  - Instruction manual (sampling, logistics, training guide, instructions, etc.)
  - Presentations for training (introduction & implementation; data analysis)
  - Sample R-HFA report (thanks to WR, IRC, and Concern Rwanda project)

- **Questions or consultation**

  Get in touch with Jim Ricca at CSTS:

  +301-572-0317

  James.G.Ricca@macrointernational.com