Feedback – a pillar for strengthening health systems in Uganda

Peter Kintu¹, Miriam Nanyunja², Nestor Ndayimirije², Ruth Magoola³, Lukwago-Luswa³ 1= Axios Group; 2= WHO Country Office for Uganda; 3=Ministry of Health, Uganda

Introduction:

Since the mid-1990s, the decentralisation policy has been embraced in Uganda. Powers were devolved from the central government to the districts through an act of parliament in order to strengthen participatory decision-making and in a way empower communities to manage their development. Districts are currently responsible for the planning and provision of social services to their catchment populations, and the central government retained the role of policy formulation and technical assistance.

Like all other social service sectors, health services were decentralised to the districts and health sub-districts. Formulation of district health plans and implementation of the nation-wide Health Sector Strategic Plan (2001-2005) is the responsibility of the districts and health sub-districts, through a network of health facilities and community health committees. Locally generated resources are supplemented by funds from the central government which are disbursed to all districts in quarterly releases for implementation of specified health programs (immunisation, disease surveillance and control, drug procurement, etc.).

It should be noted that there are several factors that contribute to the efficient functioning of the health system, notably funding, human resources, attitudes of the population served and the overall government policy on delivery of health services. However sharing and dissemination of information is a crucial catalyst that brings all these factors into play and enables visibility of results. This paper does not intend to control for all these known factors, but endeavours to demonstrate the role that feedback and information sharing can play in ensuring efficient functioning of health systems.

Description and methods:

Lack of information often puts the rural poor in a bad situation as they would not know their rights to health and to what extent they can participate in maintaining their health. Without proper information and sensitisation from leaders, community members are usually reluctant to participate in community health programs like immunisation and vaccination, water and sanitation campaigns, bush clearing to rid off vectors and general household maintenance due to ignorance about consequences or current threats. Community members in the lowest corners of society may not even know that there are resources available to facilitate the maintenance of their health since such information never sieves through. This results in increased morbidity and mortality in the communities and puts more strain on the rather fragile health systems in resource-poor economies.

In Uganda, as a way of strengthening the decentralised health system, feedback has been instilled at all levels as one of the ways to ensure that the entire population gets access to health information at all times in order to reduce and control the burden of disease and human suffering. The Health Management Information System (HMIS) has been the driving force behind this feedback mechanism (MoH, 2001). Monthly reporting of HMIS data in Uganda is done through a network of 56 district health offices which collect and summarise health information from 214 health sub-districts and over 2,000 health facilities. Summary reports for the districts are then submitted to the Ministry of Health where data is analysed to derive national figures on health and health management indicators. A feedback mechanism has been designed such that the central health databank provides summary analyses on a monthly basis to all districts, showing their comparative performance in terms of reporting (timeliness and completeness) and a selected set of health sector indicators (immunisation coverage, maternal mortality ratios, per capita out-patient utilisation rates, hospital bed occupancy rates, etc.). The districts with poor indicators are encouraged to review their service delivery strategies and reporting status. Districts are further encouraged to replicate this feedback to the lower health sub-districts and health facilities and a format for this purpose (see appendix 1) has been designed and disseminated for use in all districts (Epidemiological Surveillance Division, 2003).

Figure 1: Feedback Mechanism



It should be emphasized that the summaries giving the health situation in the districts are sent from the Ministry of Health to the District Health Offices and specially copied to the political authorities in the districts (Resident District Commissioner, Chief Administrative Officer, District Chairman and District Secretary for Health Services). The majority of these officials are either elected by the general population in the district or are appointed by the elected district council. District council meetings are regularly held, and participants normally include representatives of the several departments at the district (health, education, water and sanitation, works, personnel management, etc.) and elected councillors from the lower levels, usually subcounties. Discussion of the health situation in the district is usually key on the agenda and the feedback from the centre provides the basis for discussion and action points to be taken.

Similarly, the feedback generated at the district health offices provides the health situation in the different health sub-districts and sub-counties, and it sieves through to the sub-county councils for discussion and action taking. In so doing, the incharges of the health facilities and community development workers who normally participate in the sub-county council meetings provide the final feedback to the communities. This forms discussions and actions to be taken in village or parish meetings and campaigns for immunisation, hygiene, active search for cases of diseases due to eradication (guinea-worm, acute flaccid paralysis, etc.) and reporting of suspected cases of epidemic-potential diseases (cholera, measles. meningococcal meningitis, viral haemorrhagic fever, etc.) to health workers.

In order to strengthen further the community knowledge and awareness, the feedback mechanism is extended through the press. On a weekly basis, the epidemiological situation in the country is published in the local newspapers which circulate across the whole country. This summary provides the morbidity and mortality situation due to a selected list of 12 national priority diseases across the 56 districts (see appendix 2). Similarly, program-specific indicators which compare district performance are also disseminated in news papers (see appendix 3).

On the other hand, it should further be noted that the central government provides funds to the districts on a quarterly basis for the implementation of the Health Sector Strategic Plan. For proper accountability and awareness by the whole population, these quarterly financial disbursements to districts for implementation of health programs are also communicated in the local newspapers. *(see Appendix 4).* The districts in turn disseminate allocations to the different health sub-districts and hospitals. In so doing, districts, health sub-districts and communities are made aware of the resources available in the districts for implementation of health programs.

Lessons learnt

Reporting

Timeliness and completeness of HMIS reporting has been considered a key process indicator for the implementation of the Health Sector Strategic Plan (2001 – 2005) and the 5-year target set at 80% (*Resource Centre, 2001*). Timeliness in reporting has been defined as receipt of the monthly report at the Ministry of Health by the 28th day of the following month. These cut-off dates vary from 7th at the health facility to 14th at the health sub-district and 21st at the district level. On the other hand, completeness is defined as the proportion of health facilities reporting out of the total number of units in the districts. This is similarly defined at the district and health sub-district levels.

Since inception of the feedback mechanism in early 2001, reporting on morbidity and mortality from the communities to the health facilities to the districts and finally to the Ministry of Health has generally improved. During 2000, the number of districts submitting monthly reports in time was very small (<50%). However, with improved feedback from the centre to the districts, reporting improved significantly during most of 2001 and continued to date. During the past 5 years, timeliness of monthly reporting of out-patient data from the districts to the central level improved markedly from a national average of 21% in 2000, 63% in 2002 and 88% in 2004. The graph below shows the trend in timeliness of monthly HMIS reporting from the districts to

the centre. Timeliness at district level had also improved to an average of 88% by the end of December 2004.



Figure 2: Timeliness of Reporting

Source: Health Databank, Ministry of Health

Similarly, there was also general improvement in completeness of the data reported to the Ministry of Health from 73% in 2000 to 85% in 2002 and 98% in 2004 *(graph below)*. District-level completeness has also improved in a similar order.

It should be noted that data on in-patient information (admissions, bed occupancy, deaths, etc.) has been very scanty due to non-availability of the necessary reporting tools and the limited sensitisation of clinicians. With the on-going feedback provided at all levels, coupled with training workshops focussing on importance of reporting in-patient information, 38% of the districts reported in-patient data to the Ministry of Health in 2004 compared to as low as 5% in 2001.

The main lesson learnt from this analysis is that provision of feedback strengthens reporting of health events from the lower to higher levels.

Figure 3: Completeness of Reporting



Source: Health Databank, Ministry of Health

Epidemic management and control

Through improved feedback, epidemics have been controlled through early detection and response. Community members have been able to get a picture of the numbers affected in their localities, including deaths, through news papers and health workers, and this has put them on high alert to report suspected epidemics on first sight. Communities have also been given simple case definitions for epidemicpotential diseases (*e.g. measles* = *fever with a skin rash*) and based on the information that is provided by health workers and other community development cadres in the communities on past numbers, risks and consequences of these diseases, communities are motivated to report at the earliest opportunity. In so doing, rapid response from health workers through treatment of those infected and further sensitisation is undertaken, and eventually the would-be epidemic is controlled at its infancy. Cholera is a good example of epidemic potential diseases that have brought grave suffering to the people of Uganda in the recent past. Cholera epidemics used to hit almost the whole country every year. The huge epidemic of 1998/99 severely affected the whole country, with a third of the districts reporting more than 1,000 cases each. Through community surveillance systems and sensitisation through the feedback mechanism, the cholera situation has generally been brought under control. There are only 7 out of 56 districts which currently report sporadic cholera cases and this is mainly because they are overwhelmed by refugees who normally cross from the neighbouring Congo.





Source: Constructed using HMIS data from Ministry of Health

It can therefore be concluded that awareness building, coupled with the feedback provided and information sharing have contributed a lot to the functionality of community surveillance systems which could be strengthened further to curtail the spread of disease epidemics.

General health systems strengthening

With the implementation of the feedback mechanism, systems for health service delivery have been strengthened. The monthly HMIS data availability and use has

improved. Quarterly and annual reports are produced and discussed at the health facility (WHO, 2003). Accuracy and reliability of the reported information has been strengthened since those at the lower reporting ends know very well that their outputs will be analysed and fed back for discussion. Therefore, the feedback mechanism has helped to check on reporting errors at source and the information base generated can be relied upon for taking further decisions in strengthening the health system.

On the other hand, some morbidity and mortality (although not yet measured) have been averted with support from this feedback mechanism. Information that sieves through from the centre to the districts and finally to the rural villages has helped to raise community awareness and change attitude of the general population towards the provision of health services based on western medicine. This to some extent has relieved some pressure on the fragile health systems.

Accountability systems have been strengthened as community members have began to demand for services since they are aware of the resources provided in their localities. With accessibility of funding information to the general public, it has been observed in many community meetings that issues of services available at health facilities vis-à-vis the funding obtained form a significant part of the discussions. The district council meetings are usually heated up with regard to the health services, infrastructure, human resources and available financial resources. This in a way has improved accountability of resources meant for delivery of health services in the communities.

HMIS-reported data has also facilitated the process of assessing districts by constructing league tables that compare achievement in the different health sector indicators (*WHO*, 2003 & 2004; *MoH*, 2004). A selected set of key indicators for monitoring the health sector strategic plan are considered (HMIS reporting, total OPD utilisation per capita, proportion of children under 1 year completing immunisation, proportion of deliveries administered in health facilities, etc.) and data for each district is extracted from the reports on an annual basis. Scores and rankings are then worked out to identify the best, average and worst performing districts. The best performing districts usually get prizes during the annual national

health conference. This, in a way, stimulates health workers in the districts to work harder and ensure progressive improvement in the delivery of health services.

Challenges

The main challenge to the provision of feedback to the communities has been the low level of literacy in the population, especially in the rural communities. The current literacy rate for adults aged 15 and above in Uganda stands at 69% (*World Bank, 2004*). This sometimes hinders the smooth flow and sometimes misinterpretation of information since many cannot ably read and internalise reports, news papers and any other such published material.

Low income levels also sometimes facilitate the limited access to news papers and other printed material. In most cases, it is the learned and formally employed members of society, normally residing in urban centres who get access to most of this information and in turn, it is these few who benefit from the health services.

Sustainability of the feedback mechanism instituted by the health sector is still a very big challenge. It involves a lot of paper work (forms, reports, etc.) which needs to be filled, analysed and disseminated to big network of health facilities every month. This requires a lot of time, effort and resources to sustain. On top of the costs of stationery, communication and labour, even filing the accumulated volumes of paper for future reference by the target groups remains a big challenge as it reflects on the utilisation of these generated volumes of information.

One way of going around this would be the computerisation of this feedback mechanism. However, the capacity at district or health sub-district level is still limited. The central level is computerised, with e-mail connectivity. Although 95% of the district headquarters have access to a computer, only about 20% have internet connection (*MoH & WHO, 2004*). Computer use at health centre level is far below 10%. It would take a huge investment to purchase computer units for all health facilities in Uganda, connect them to e-mail networks and train all health workers to use them.

Conclusions:

Information is a crucial force for sustainable development. Strengthening feedback in the delivery of heath services in Uganda has shown that the rural poor get fully involved in implementing health programs for their benefit and this has a positive impact on national health outcomes. The challenge lies in the funding and sustainability of the feedback mechanism as it takes a number of resources (personnel, stationery, funds for distribution, etc.) to implement. The onus is on the leaders to inculcate the feedback norm at all levels so that the required resources for its implementation are parts and parcel of the district budgets for its sustainability.

References:

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Appendix 1: Example of a feedback tool used by districts to communicate status of health indicators to health sub-districts on quarterly basis

Appendix 2: Example of a weekly epidemiology summary published in the press (New Vision 17 January 2005)

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indicate de	pider aths)	miolo	gical	reports	receive	ed for	r week end	ting 2r	nd Jan	uary 20	005 (N	umber	s in b	rackets
District	% of H/U reporting	AFP	Animal bite (suspected rables)	Cholera	Dysentery	Guinea worm	Malaria	Measles	Meningitis	Neonatal Tetanus	Plague	Typhoid fever	Sleeping sickness	Others
Adjumani	53	0	5	0	30	0	1.527	0	0	0	0	0	0	14.00
Apac	68	0	2	0	7	0	1,979 (1)	0	0	0	0	0	0	14 CAPOX
Arua	75	0	12	. 0	68	0	5,714 (8)	0	0	0	1	54	4	
Bugiri	57	0	0	0	4	4	1,339	0	. 0	0	0	0	0	
Bundibugyo	56	0	2	10	41	0	1,459 (8)	0	3	1(1)	0	0	0	
Bushenyi	99	0	11	0	14	0	11,568 (10)	0	0	0	0	7	0	8 C/pcx
Busia	89	0	11-	0	0	0	1,773	0	0	0	0	0	0	
Gulu	47	0	5	0	75	0	2,490 (2)	0	2 (1)	0	0	3	0	1 C/pox 4 Hepatilis
Hoima	58	0	7	0	29	0	1,397 (11)	0	0	1 (1)	0	0	0	
lipio	61	0	4	0	0	0	3,002 (4)	0	0	0	0	0	0	
Kabale	00	0	0	0	11	0	3,266 (1)	-0	0	0	0	16	0	8 C/ pax
Kaharole	90	0	0	0	1/	0	4,744 (1)	0	0	0	0	0	0	
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Kampala	88	0	13	0	20	0	5 222 (3)	0	0	0	0	25	5	34 C/ pax
Kalangala	91	0	1	0	13	0	516 (1)	0	0	0	0	11	0	5 C/pox
Kamuli	84	0	1	0	1.5	0	4 928 (4)	0	0	0	0	0	0	
Kamwenge	57	0	2	0	13	0	1,407 (4)	1	0	0	0	0	0	
Kanungu	77	0	0	0	3	- 0	3,499 (4)	0	0	0	- 0	26	0	
Kapchorwa	83	0	2	. 0	3	0	863	0	0	0	. 0	20	0	
Kasese	30	0	3	5	7	0	2,874 (8)	0	1	0	0	0	0	
Katakwi	83	0	2	0	45	0	3,674 (2)	0	1	0	0	0	0	61 Chur
Kayunga	71	0	3	0	17	0	1,395 (5)	0	2	0	0	5	0	4 C/pox
Kibaale	93	0	0	0	45	0	4,573 (4)	0	0	0	0	4	0	
Kiboga	67	0	3	0	. 8	0	1,281 (2)	0	0	0	0	0	0	
Kisoro	86	0	3	0	80	0	2,909 (4)	• 0	0	0	0	. 0	0	1. A
Kitgum	68	0	5	0	63	0	2,473 (6)	0	0	0	0	5	17	7 С/рак
Kumi	53	0	15	0	27	0	2,413 (3)	0	0	0	0	1	0	2 C/pox
Kuanioio	100	0	2	0	71	0	6,143 (5)	5	0	0	0	2	0	
lina	87	0	. 5	0	17	0	1,983	0	0	0	0	0	0	
uweem	43	0	5	0	25	0	2,304	0	1	0	0	0	0	
Masaka	79	0	5	0	11	0	6 820 (4)	0	0	0	0	28	0	
Masindi	63	0	13	0	32	0	2 412 (4)	0	0	0	0	2	0	
Mayuge	58	0	4	0	4	0	1 254	0	0	.0	0	15	0	+
Mbale	83	0	5	0	45	0	4 670	0	0	0	. 0	0	0	
Mbarara	79	0	5	0	4	0	5,111 (10)	0	0	0	0	0	0	
Moroto	NR					-			-		0	0	0	
Mayo	44	0	1	0	19	0	618 (1)	0	0	0	0	0	2	
Mpigi	54	0	1	0	3	0	883 (6)	0	2	0	0	0	0	
Mubende	37	4	0	0	0	0	1,464 (1)	0	0	0	0	3	0	
Mukono	63	0	2	0	9	0	1,701 (1)	0	0	0	0	2	0	
Vakapiripirit	33	0	. 1	0	16	0	315 (1)	0	0	. 0	0	0	0	10 Kalaza 3 Brucelosia
Nakasongoia	57	0	1	0	18	0	1,118 (1)	2	0	1	0	0	0	
Vebbi	83	0	6	0	38	0	3,838 (7)	0	1	0	1	0	0	9 C/pax
viungamo	90	0	4	0	3	0	3,943 (6)	0	0	0	0	0	0	
ader	64	0	0	0	16	0	560	0	0	0	0	0	0	
allisa	87	0	2	0	49	0	5,295 (2)	0	1	0	0	0	0	1 C/pax
	20	0	3	0	14	0	5,152 (3)	0	0	0	0	14	0	
Simonko	20	0	0	0	0	0	3,473	0	0	0	0	31	0	
Sorati	43	0	0	0	4	0	801	0	0	0	0	0	0	
Sembabula	84	0	2	0	14	0	1,403 (2)	1	7	0	0	0	0	
Tororo	66	0	12	0	. 31	0	5 150 (8)	0	0	0	0	1	0	
Nakiso	94	0	32	0	22	0	5 540 (2)	0	0	0	0	17	0	6 C/pox
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		MIN	ISTRY O	F HEALT	н			
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		coverage 2004	Rate attained	attained	HMIS timeliness	completeness		
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1	Apac	76%	0.28	100.0%	100%	100%		
	Arua	80%	1.11	100.0%	100%	100%		
	Bugiri	128%	0.88	100.0%	9170	91%		
	Bundibugyo	91%	3.51	100.0%	100%	100%		
	Bushenyi	94%	3.41	100.0%	91%	100%		
	Gulu	109%	1.66	100.0%	91%	100%		
	Hoima	75%	1.61	100.0%	100%	100%		
0	Iganga	73%	1.08	100.0%	82%	91%		
1	Jinja	83%	0.94	100.0%	91%	100%		
12	Kabale	89%	2,13	100.0%	100%	100%		
13	Kabarole	104%	1.66	100.0%	64%	100%		
14	Kaberamaido	84%	3.13	100.0%	100%	100%		
15	Kalangala	79%	2.85	83.3%	91%	100%		
17	Kamuli	88%	1.08	75.0%	100%	100%		
18	Kamwenge	73%	0.65	100.0%	73%	100%		
19	Kanungu	83%	1.92	100.0%		100%		
20	Kapchorwa	61%	2.94	100.0%	91%	100%		
21	Kasese	63%	1.44	100.0%	64%	100%		
22	Katakwi	61%	1.19	100.0%	100%	100%		
23	Kayunga	97%	4.90	75.0%	73%	100%		
24	Kibaale	(9%	1.60	100.0%	73%	100%		
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20.	Kitaum	65%	0.66	100.0%	91%	100%		
28	Kotido	61%	30.29	100.0%	91%	91%		
29	Kumi	132%	1.96	100.0%	100%	100%		
30	Kyenjojo	87%	1.51	100.0%	100%	100%		
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33	Masaka	61%	4 38	90.9%	82%	91%		
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36	Mbale	136%	1.07	75.0%	100%	100%		
37	Mbarara	83%	1.07	100.0%	55%	91%		
38	Moroto	89%	1.10	100.0%	91%	100%		
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45	Nebbi	92%	1.80	75.0%	55%	100%		
46	Ntungamo	83%	2.84	75.0%	100%	100%		
47	Pader	86%	3.24	100.0%	100%	100%		
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56	Yumbe		2.80	100.0%	91%	91%		
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	Target	>80%	>or =1.0	>80%	>80%	-00%		

Appendix 3: Example of district feedback on immunisation indicators published in the press (New Vision 24 March 2005)

Key Message

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L L When the OPV-3 coverage and non-polio AFP rates are not shaded gree, the risk of poliovirus infection and rapid spread without our knowledge is highest. All districts should to make sure that all indicators are met (Green shading) this year 2005.

Appendix 4: Example of funding by central government to the districts published in the press (New Vision 13 July 2004)

16 NOTICE

The New Vision, Tuesday, July 13

