
Support in strengthening mandatory Quarterly Reporting

Experiences from the
National Health Information Systems
(NatHIS) Project



Christa van den Bergh

christa@hst.org.za



All strategies and activities were executed in close collaboration with:

- Cluster Strategic Planning at NDoH
- Cluster PHC, Districts and development at NDoH
- Provincial Strategic Planning Units
- Provincial Health Information Units
- NatHIS project team at NDoH and PDoH



Purpose of presentation

- Provide information on NatHIS Project support towards strengthening the QRS in SA
- Share 'best practice' experiences
- Identify potential shortcomings for further assessment and implementation of strengthening measures



Background

- Quarterly performance monitoring is mandatory in terms of the:
 - National Health Act (NHA) of 2003
 - Public Finance and Management Act (PFMA) of 1999 with 2005 regulations
 - Public Audit Act (PAA) of 2004 – The Auditor General’s (AG) office now audits both financial and non-financial data annually
- The Provincial Quarterly Reporting System (PQRS) with 67 elements and indicators was introduced in 2002/3
- The District Quarterly Reporting System (DQRS) has 100 elements and indicators



QRS data challenges identified...

- Discrepancies in data reported via the:
 - Joint NDoH & National Treasury PQR reporting format (implemented in 2005 to alleviate reporting requirements faced by provinces)
 - DHIS
 - Inter Governmental Fiscal Review (IGFR)
 - Provincial annual reports
 - Integrated Health Planning Framework (IHPF)
- Different data sources, systems and software in use for QR lead to discrepancies in different reports & distrust in data
- Reporting dates and data flow policy dates did not correlate
- Poor data quality (timeliness, completeness & consistency)



Strategy 1 - Comparative analysis

- Comparative analysis of NDoH & National Treasury PQR data and those in the DHIS (Strategic Planning Module and DHIS NDoH 4&5) – major discrepancies
- Shared results with NDoH MANCO and provinces
- Outcome of this strategy
 - managers wanted/need one source and one point of access to data for priority reports
 - Valid and reliable data should be easily accessible at all levels of the HCS
 - DHIS (adopted as RHIS for SA in 1999) with standardized data flow strategies should be used to support the QRS



Strategy 2 - Adapt the DHIS to meet priority reporting needs?

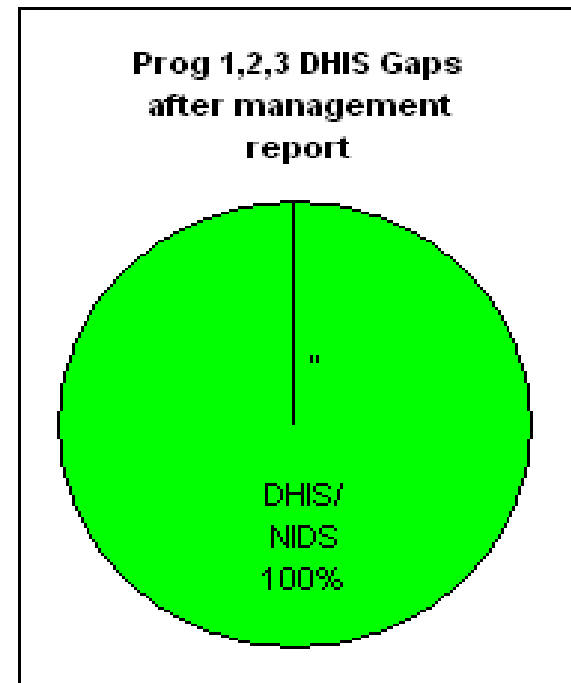
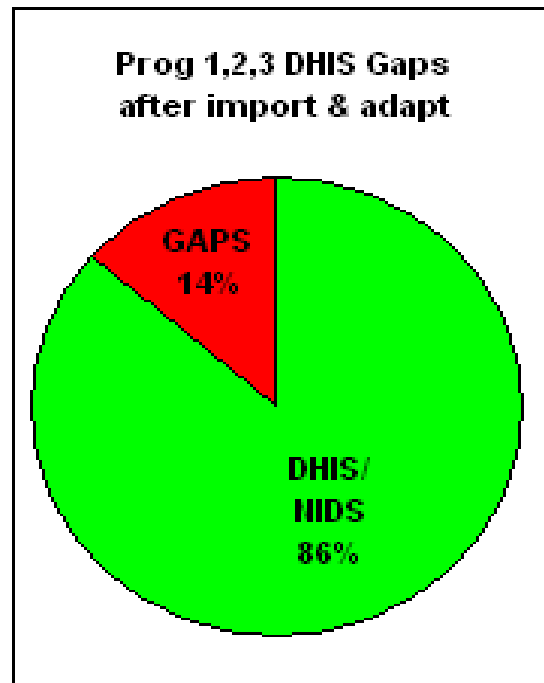
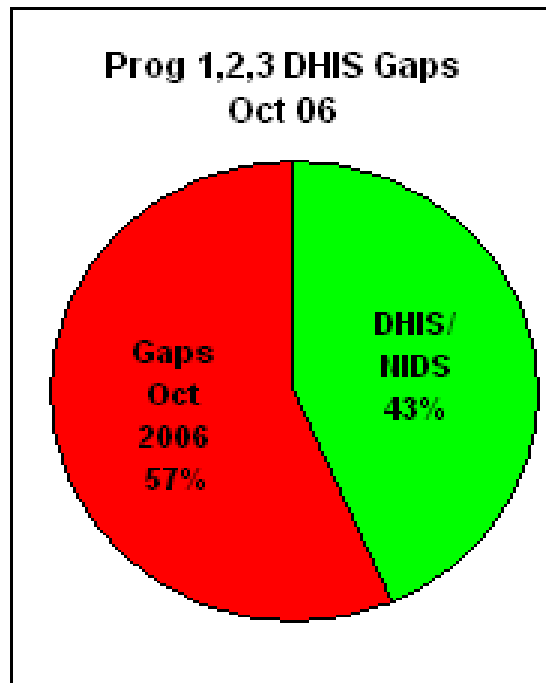
Assess the ability of DHIS to meet PQRS, IHPF and IGFR reporting requirements

Main DHIS shortcomings/data gaps identified:

- ❑ Tuberculosis (data in ETR.net)
- ❑ Emergency Medical Services (no standardized national electronic system)
- ❑ Human Resource (data in PERSAL)
- ❑ Finance (data mainly in BAS)

Challenge – how could the DHIS be adapted in an effective and efficient way?

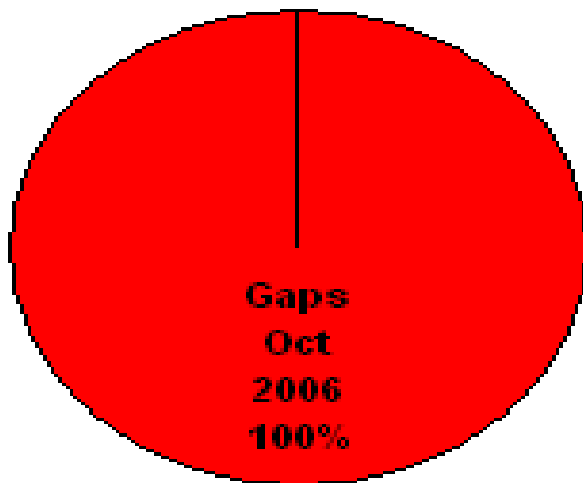
Example: DHIS assessment - PQRS data for financial programs 1,2,3



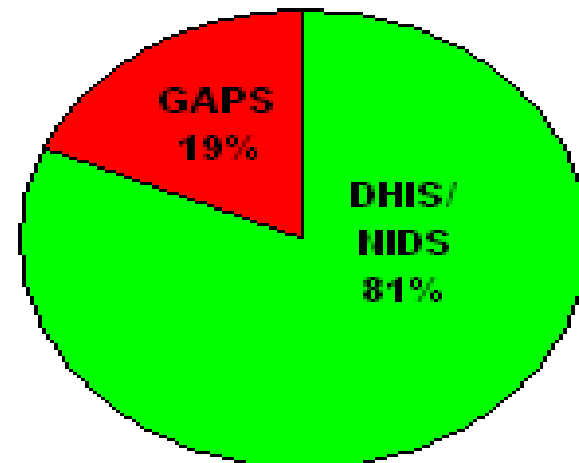
Example: DHIS assessment - IGFR

Human Resource data

**DHIS gaps for annual
IGFR and PQRS**



**DHIS GAPS for annual
IGFR & PQRS after
management report**



DHIS assessment conclusions

- Most data could be obtained from different systems and sources, but
 - they were not easily available and accessible to managers
 - management time was spent on obtaining data rather than on evidence-based management
- The DHIS could be fairly easily adapted to meet priority QRS reporting needs
- Use the DHIS as 'data repository' until sophisticated systems are in place



Strategy 3 - Strengthen the DHIS for supporting the QRS

- Aligned PQRS elements, indicators and definitions with DHIS
- Developed data extraction mechanism to obtain PQRS data from the integrated NDoH 5 dataset (to be decentralized when National Indicator Dataset (NIDS) and DHIS 1.4 are implemented in all provinces)
- DHIS EMS module (data to be incorporated into the comprehensive DHIS once version 1.4 is implemented in all provinces)
- Import TB data from ETR.net at sub-district level (alignment of facility names and reporting structures)
- Enhance utilization of existing data in the DHIS...



Strategy 3Optimize utilization of existing DHIS data

- NDoH extracts PQRS data from DHIS at NDoH, color-code and sent to provinces with inputs/comments (see slide for example) – helps with problem ID & report writing
- Provinces validate these data, complete Joint NDoH & National Treasury reports and submit to provincial HODs for signing – final submission to NDoH and provincial treasuries.
- NDoH Strategic Planning Directorate integrate & submit to National Treasury
- Provinces implement strategies to address shortcomings in terms of:
 - data quality and/or service delivery (focus on ‘red’ areas)
 - NDoH provides support on request
- Following quarter - indicator results are compared to assess progress to identify where support is needed



Example of ranges used for color-coding

Indicator	Target / Benchmark	< 60 %	60-95%	96-110%	> 110%
Doctor Clinical workload	30	18	29	33	>
Nurse Clinical workload	40	24	38	44	>
Utilization rate < 5 yr	5.0	3.0	4.8	5.5	>
Utilization rate - PHC	3.5	2.1	3.3	3.9	>

Example of NDoH feedback Nurse clinical workload

(Benchmark 40 patients per nurse per day)

Province	Ind Type	2005/0 Q4	2006/07 Q1	2006/07 Q2	2006/07 Q3	Prov Av	NDoH Inputs
Eastern Cape	No	28	29	34	34	31	<p>FS met the national target over the past four quarters.</p> <p>MP, NC and WC do not reflect data for this indicator in Q3 and the Q3 NW data are clearly incorrect. LP reported a consistently low nurse clinical workload.</p> <p>Provinces are requested to validate these data and LP is requested to explain potential reasons for low nurse clinical work load.</p>
Free State	No	37	38	35	45	39	
Gauteng	No	24	23	24	20	23	
Kwa-Zulu Natal	No	24	24	21	22	23	
Limpopo	No	19	20	19	19	19	
Mpumalanga	No	27	26	42		40	
North West	No	43	44	44	653	55	
Northern Cape	No	33	29	32		40	
Western Cape	No			32		137	
South Africa		30	30	27	35	30	

Similarly DQRS support and development

- Development of DQRS in line with PQRS
- Management, Economic, Social and HR (MESH) tool
 - District Management Team assessment annually
 - Quarterly monitoring indicators
 - Rather than another 'system' - fully aligned with DQRS
 - Quantitative measures required – integrated with color coding (currently being piloted), e.g.
 - Red – reported data, but evidence shows critical underperformance = 1
 - Blue – making progress = 2
 - Green – target achieved (congratulations) = 3
 - Black – reported data but values appear unrealistic = 1(if logical & acceptable explanation, 3 may be assigned after agreement e.g. cross boundary flow leading to immunization coverage > 100%)



Achievements

- Reduced fragmentation and duplication in data management and reporting
- Improved data quality
- Excellent team work between two clusters at NDoH and NGO
 - Leadership from 2 Clusters, e.g. specific decision that DHIS should be used in best possible way (until sophisticated systems are fully functional)
 - More focus on utilization of evidence to strengthen health information and the health care systems
 - Needs-based skills development (identified through data)
 - Enhanced accountability – provinces were requested to explain specific discrepancies and shortcomings in service delivery in a simple & easy way



Shortcomings/Challenges

QRS challenges are mainly info management related:

- No national health information management policy
- Data flow time lines and QR dates don't correlate
- HR and financial data are not available in DHIS yet
- Insufficient resources (HR, hardware & basic software) for effective and efficient info management and M&E
- Data not accessible to managers at all levels
- Line, information and program managers are not being held accountable for acts and omissions impacting on M&E and HCS outputs & outcomes
- Delay in renewing the NatHIS contract for the 3rd and final year - negative impact on work in progress....



Summary

Poor utilization of (especially) RHIS has been identified as an obstacle to effective HCS management and performance internationally and in South Africa

- **Managers need one easily accessible source of information**
- **For managers to use information, it must be displayed in a user-friendly format, indicating best performance and priority areas where interventions are needed**
- **Feedback from NDoH on specific indicators and requests to clarify specific problems identified by data, assist managers in addressing priority challenges with limited resources**
- **Dedicated resources are needed for effective and efficient health information management, monitoring and evaluation**



Priorities impacting on data quality & reporting

Challenges

Recommendations

No national info policy	Outsource (modular participative approach) info policy development
Insufficient resources for info and M&E	Use NatHIS info audit & HR recommendations to develop realistic resource plans (include database managers)
Data not accessible to all managers	Require NDoH and PDoH to put monthly updated pivot tables on intranets, give access & develop skills
HR and financial data not available at all levels	Implement management reporting system until exchange is functional
Managers are not held accountable (line, program & info managers)	Provide color-coded feedback with NDoH inputs to relevant role players & request inputs + data quality improvement strategy
Time lag between financial and non-financial data	Adapt Data Flow Policy, processes, procedures and time lines officially (servers)

Conclusion

- The health sector has come a long way in development, implementation and monitoring of plans aimed at strengthening the SA HCS
- There is still a long way to go
- With teamwork aimed at optimal mutual outputs and outcomes, MUCH can be achieved in relatively short periods!



'Best practice' experience

Several achievements and best practice experiences at NDoH and PDoH levels, but most valuable:

Excellent team work between two clusters at NDoH, provincial information and strategic planning units and the NatHIS project

- ❑ at NDoH NatHIS project team members were accepted as full team members
- ❑ situational leadership approach
- ❑ open but shared communication



Acknowledgements

- Strategic Planning Cluster at NDoH
 - Yogan Pillay
 - Thulani Masilela
 - Oumiki Khumisi
 - Rod Bennett
- PHC, Districts and Development Cluster at NDoH
 - Bennett Asia
- Provincial Strategic Planning and Information staff
- NatHIS Project Team at NDoH and PDoH



Thank you

