Demographic Report: Benguet, 2001

Area	# of households	Total population	# authorized beds for inpatient		Totals beds
			Government	Private	
Atok	3,083	16,384	25	-	25
Bakun	2,750	15,521	-	-	-
Bokod	2,436	9,991	10	-	10
Buguias	5,952	33,784	10	35	45
Itogon	7,842	40,034	10	-	10
Kabayan	2,248	11,845	-	-	-
Kapangan	3,371	15,126	10	-	10
Kibungan	3,070	16,612	-	-	-
La Trinidad*	13,841	83,050	100	-	100
Mankayan	6,023	39,614	-	85	85
Sablan	1,926	10,412	-	-	-
Tuba	7,624	39,455	-	46	46
Tublay	2,417	15,414	-	-	-
TOTAL	62,583	347,242	165	166	331

Source: Buguias-Sebang-Lengacan Barangay Hall

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Demographic Report: Benguet, 2001

Area	Total population	# of Health Workers in LGU						
		doctor	dentist	nurse	Midwife	Med tech	BHW	TBA
Atok	16,384	1	-	1	8	-	153	3
Bakun	15,521	1	1	2	7	1	83	20
Bokod	9,991	1	1	1	10	1	92	-
Buguias	33,784	1	1	2	11	-	135	38
Itogon	40,034	1	2	6	15	1	151	1
Kabayan	11,845	1	-	1	8	1	91	20
Kapangan	15,126	1	-	1	10	-	122	19
Kibungan	16,612	1	-	1	9	1	113	21
La Trinidad*	83,050	1	-	2	12	1	65	5
Mankayan	39,614	1	-	2	12	1	100	21
Sablan	10,412	1	-	1	7	-	74	19
Tuba	39,455	1	1	3	13	1	116	72
Tublay	15,414	1	1	1	7	-	50	-
TOTAL	347,242	13	7	24	129	8	1,335	239

Source: Buguias-Sebang-Lengacan Barangay Hall

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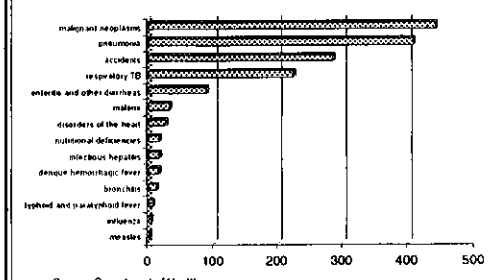
Selected causes of death CAR, 1998



Source: Department of Health

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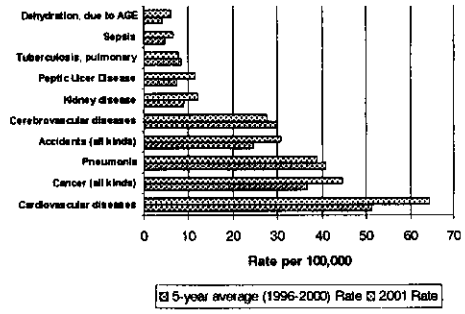
Leading Causes of Mortality, (all ages) 2001



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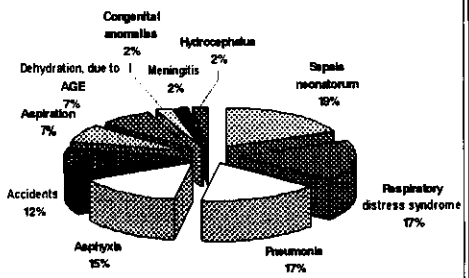
Causes of Infant deaths, 2001



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Leading Causes of Mortality, (all ages) 2001

Causes	5-year average (1996-2000)		2001	
	Number	Rate	Number	Rate
Cardiovascular diseases	171	51.3	224	64.5
Cancer (all kinds)	122	36.6	155	44.6
Pneumonia	136	40.8	135	38.9
Accidents (all kinds)	82	24.6	107	30.8
Cerebrovascular diseases	99	29.7	96	27.6
Kidney disease	30	9	42	12.1
Peptic Ulcer Disease	25	7.5	40	11.5
Tuberculosis, pulmonary	28	8.4	27	7.8
Sepsis	16	4.8	23	6.6
Dehydration, due to AGE	14	4.2	21	6.1

Source: FHSIS, DOH

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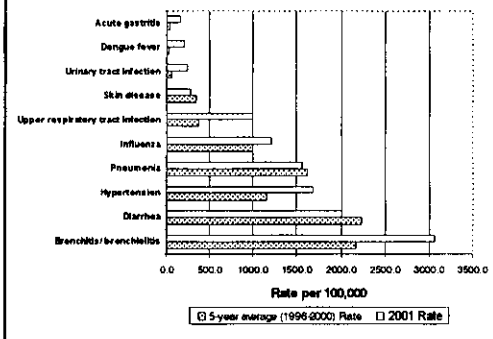
Leading Causes of Morbidity, (all ages) 2001



Leading Causes of Morbidity, (all ages) 2001

Causes	5-year average (1996-2000) Number	Rate	2001 Number	Rate
Bronchitis/ bronchiolitis	7,243	2173.0	10,843	3085.0
Diarrhea	7,441	2232.4	6,944	1999.6
Hypertension	3,861	1158.4	5,852	1685.3
Pneumonia	5,381	1614.4	5,426	1562.6
Influenza	3,339	1001.7	4,185	1205.2
Upper respiratory tract infection	1,245	373.5	3,473	1000.2
Skin disease	1,132	339.6	971	279.6
Urinary tract infection	186	55.8	844	243.1
Dengue fever	96	28.8	695	200.2
Acute gastritis	124	37.2	559	161.0

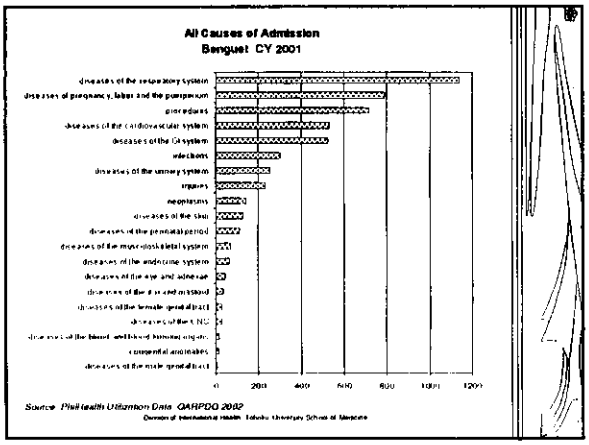
Source: FHSIS DOH

Morbidity in the under-5 age group, 2001

- Bronchitis
- Pneumonia
  - Increasing rate in 2001
- Diarrhea
  - Slight decrease in rate in 2001

Source: FHSIS DOH

Health insurance utilization in Benguet, 2001

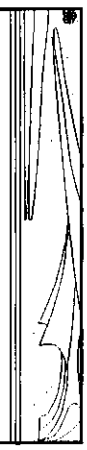


Respiratory causes of admission

- Bronchopneumonia
- Bronchitis and bronchiolitis
- Tonsillitis
- Tonsillar abscess
- Asthma
- Tuberculosis
  - Pulmonary
  - With associated extrapulmonary sites
- Pneumonia
  - CAP
  - bacterial
- Pneumonitis
- Sinusitis
- Pleurisy
- Empyema

Pregnancy-related causes of admission

- CS
- Complications of Abortion
  - Spontaneous
  - Induced
- Spontaneous delivery
- Threatened or premature labor
- Ectopic pregnancy Infections
- Hyperemesis gravidarum
- Pre-eclampsia
- Hemorrhage



Procedures as reasons for admission

- Hemodialysis
- Chemotherapy
- Hysterectomy
- -scopic procedures
  - Esophagoscopy
  - Proctosigmoidoscopy

Cardiovascular causes of admission

- Essential hypertension
- Ischemia
- Hypertensive heart disease
- Heart failure
- Dysrrhythmias
- Acute myocardial infarction

Gastrointestinal causes of admission

- Ill-defined intestinal infections
- Appendicitis
- Gastritis and duodenitis
- Cholecystitis
- Gastrointestinal hemorrhage
- Viral hepatitis

Infections as causes of admission

- Typhoid fever
- Amoebiasis
- Viral infections
- Septicemia
- Salmonella
- Chickenpox
- Dengue

Action Plan for Quality Assurance, Benguet General Hospital

- Value points
- Exhortations
  - Posting quotable quotes
- Using questionnaires on patient satisfaction
- Monitoring and evaluation
  - Extent, coverage and use not clearly defined

Issues and Concerns, Benguet

1. Need to phase-in the EPQI project
2. Need to enhance knowledge on QA standards
3. Cost of project and funding source
4. Need for training of staff (nurses)

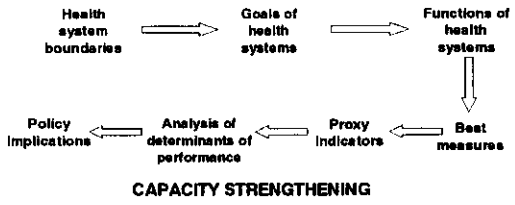
Commitments

- Office of the Vice-Governor, Benguet Province
- Department of Health, CAR
- Provincial Health Office, Benguet
- Philippine Health Insurance Corporation, QARPDG
- PhilHealth Regional Office, CAR

Banaue Rice Terraces, Ifugao

Considered one of the 7 wonders of the world...

Framework for assessing health system performance - Main elements -



World Health Organization

Outline

⇨ 1) Health System ***Boundaries***

2) Goals of Health Systems

3) Performance of Health Systems

4) Functions of Health Systems

World Health Organization

Health system boundaries

Key concept: health action

Criterion: activities whose primary intention is to improve health

World Health Organization

Outline

1) Health System Boundaries

⇨ 2) ***Goals of Health Systems***

3) Performance of Health Systems

4) Functions of Health Systems

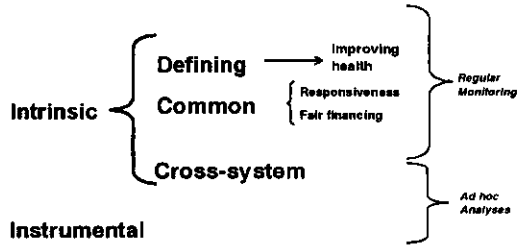
World Health Organization

Social goals and systems

Social goals	Social systems					
	Education	Health	Economic	Political	Cultural	Other
Education						
Health						
Production and Consumption						
Democratic participation						
Knowledge						
Other						
Responsiveness						
Fair financing						

World Health Organization

Goals of health systems



World Health Organization

Intrinsic and instrumental goals

- **Definition of intrinsic goals:**
  - **Can raise level of attainment of the goal holding the level of all other intrinsic goals constant**
  - **Raising level of attainment is desirable holding all other intrinsic goals constant**
- **Instrumental goals:**
  - **Desirable aims that do not fulfil criteria for intrinsic goals**

World Health Organization

Goals of the health system

- Improving health
- Enhancing responsiveness to the legitimate expectations of the population
- Assuring fairness of financial contribution

World Health Organization

Improving health

- Improving the average level of population health (including fatal and non-fatal components)
- Reducing health inequalities or improving the distribution of health

World Health Organization

Components of responsiveness

- ***Respect for persons***
  - **Dignity**
  - **Confidentiality**
  - **Autonomy**
- ***Client orientation***
  - **Prompt attention**
  - **Access to social support networks**
  - **Quality of basic amenities**
  - **Choice of provider**

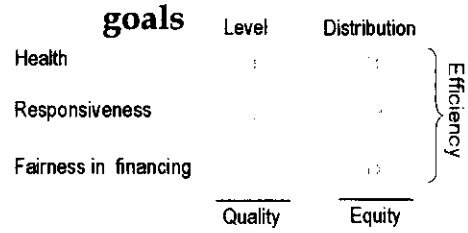
World Health Organization

Fairness of financial contribution

- **Every household pays a fair share**
- **Fair share depends on conception of fairness**
- **Two components:**
  - **progressivity of payments**
  - **extent of prepayment**

World Health Organization

Health system goals



World Health Organization

H. Chimura (2002)

Outline

1) Health System Boundaries
2) Goals of Health Systems
3) ***Performance of Health Systems***
4) Functions of Health Systems

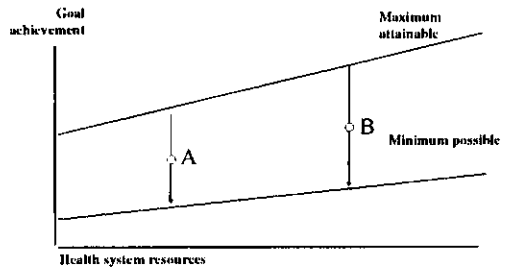
World Health Organization

Performance

- **Achievement of goals needs to be related to resources available and other non-health system determinants of health**
- **Conceptual definition of relative performance: percentage attainment of maximum goal achievement given resources and non-health system determinants**
- **Conceptual definition can apply to health system, sub-components, specific institutions, and individual providers**

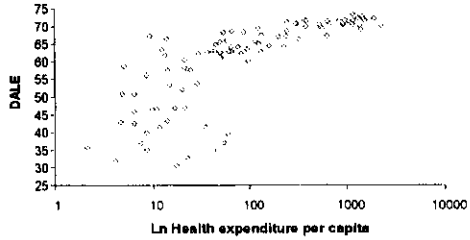
World Health Organization

Performance



World Health Organization

Health achievement and health resources, 1997



World Health Organization

Key concepts in health systems performance

Goal attainment (absolute)
- **Separate components**
- **Composite**
  - **Level → Quality**
  - **Distribution → Equity**

Performance (relative)
- **Separate components**
- **Composite → Efficiency**

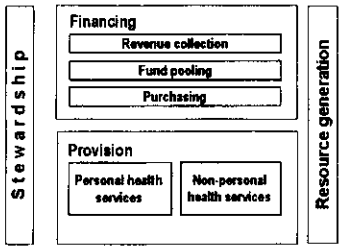
World Health Organization

Outline

1) Health System Boundaries
2) Goals of Health Systems
3) Performance of Health Systems
4) ***Functions of Health Systems***

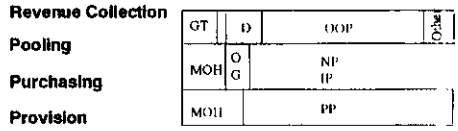
World Health Organization

Functions of health systems



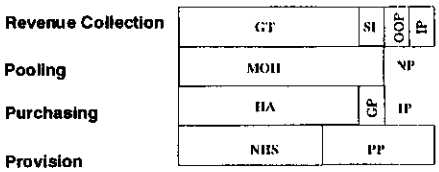
World Health Organization

Structure of health systems in Bangladesh (1996/97)



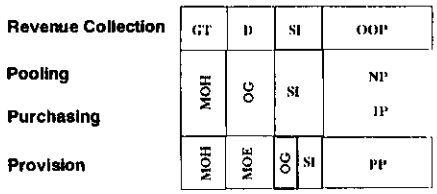
World Health Organization

Structure of health system in United Kingdom (1994/95)



World Health Organization

Structure of health system in Egypt (1994/95)



World Health Organization

Components of stewardship

- *Health policy formulation* – defining the vision and direction for the health system
- *Regulation* – setting fair rules of the game with a level playing field
- *Intelligence* – assessing performance and sharing information

World Health Organization

Stewardship

- Main technical and political barriers
- How can crucial regulatory and steering activities be made effective?

World Health Organization

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Financing

- Extending prepayment
- Protecting families from catastrophic expenditures
- Including the poor
- Choices of health interventions for resource allocation

World Health Organization

Provision

- Balancing personal and public health services
- Improving quality in service provision
- Competition among health care providers

World Health Organization

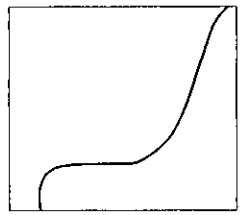
Resource generation

- Supply/demand of human resources
- Investment decisions concerning technology and its acquisition and use
- Investment in knowledge

World Health Organization

How essential is public sector involvement in health care?

Stewardship
Revenue collection
Fund pooling
Purchasing
Provision



Least essential — Most essential

World Health Organization

Key policy transitions

Rigid regulation	→ Strategic stewardship
Segmented revenue collection	→ Solidarity-based prepayment
Limited fund pooling	→ Broad fund pooling
Inertial and unstructured purchasing	→ Active purchasing
Heterogeneous provision	→ Quality-driven provision
Imbalanced resource generation	→ Balanced resource generation

World Health Organization

Final messages

- Develop strategic vision based on anticipating problems
- Empower decision makers through sound evidence
- Focus national and international energy on improving performance
- Relate goals to functions
- Achieve key policy transitions
- Progress and promise

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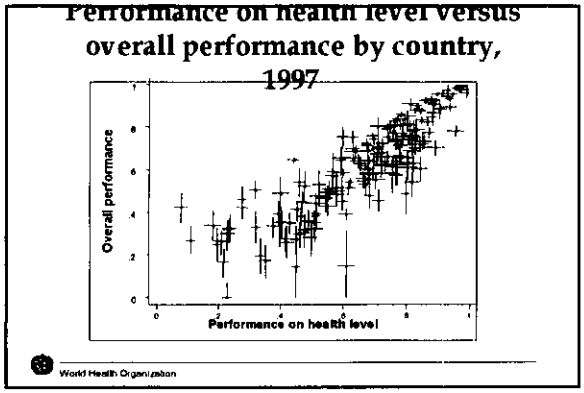

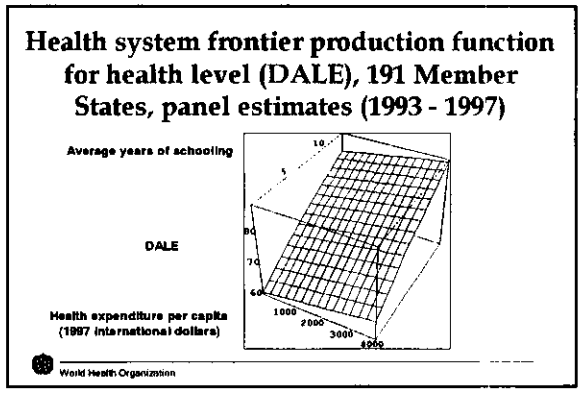

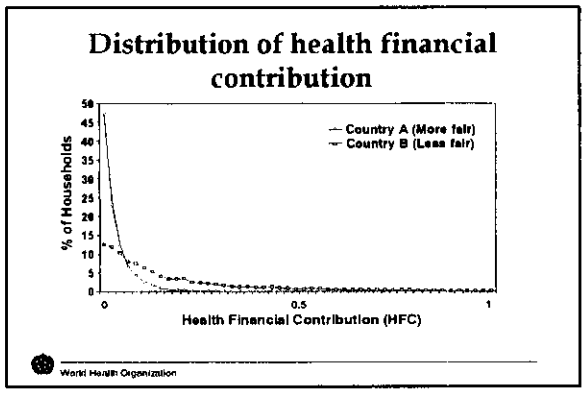

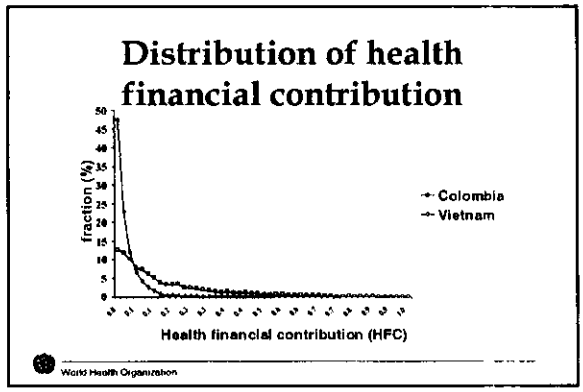

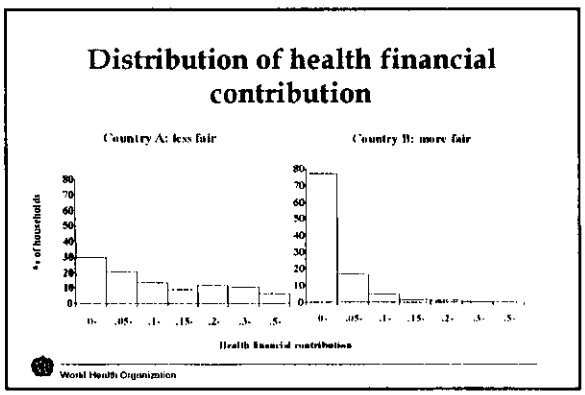

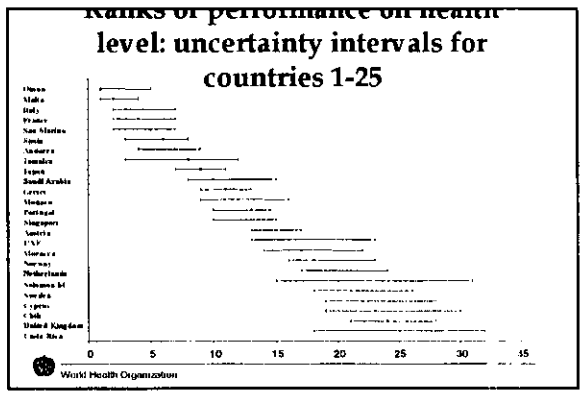

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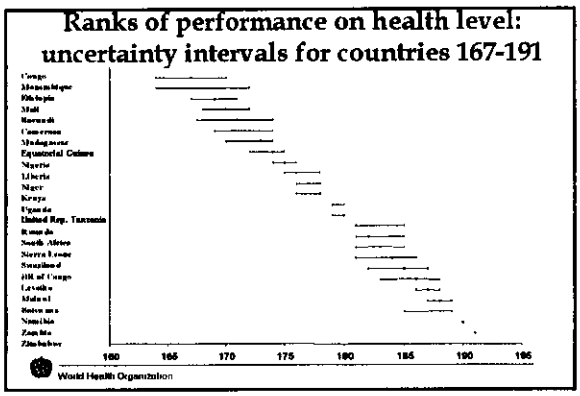

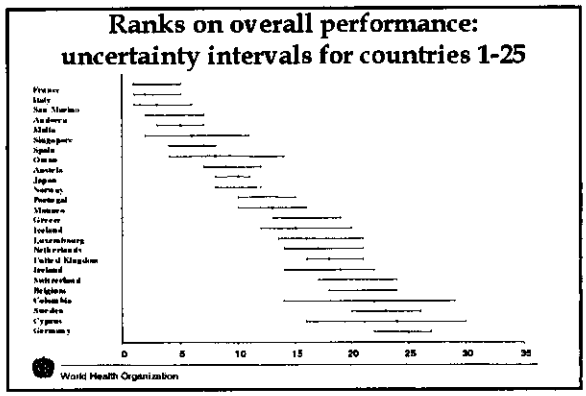

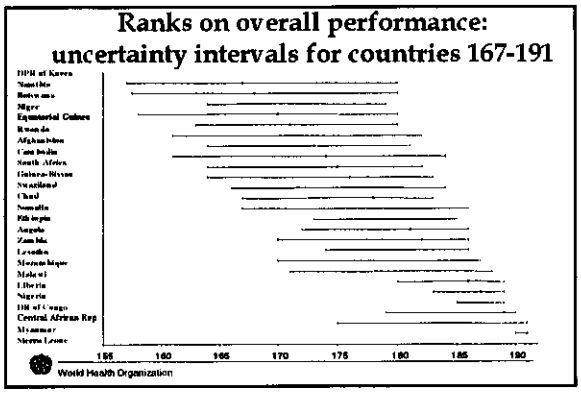

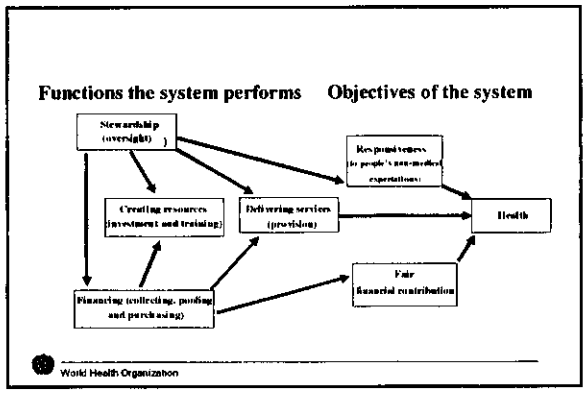

Healthy life expectancy (DALE)

- Constructed on life expectancy
- Includes non-fatal health outcomes
- Equals life expectancy in equivalent full health
- Calculated using data on epidemiology of major conditions and population health surveys

World Health Organization

Health inequalities

- Health analogue of gini coefficient for the distribution of income
- Plan to measure inequality of DALE
- For WHR2000, measured equality of child survival
- Estimated from small area vital registration data and/or censuses and surveys on child mortality

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Measuring responsiveness

- Major strategy is to ask individuals about their own experience with the health system through household surveys
- Household surveys supplemented by key informants' survey
- Challenge remains that poor often rate same services as more responsive than the rich
- Future efforts to measure responsiveness will include a component of facility-based observation

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Distribution of responsiveness

- Responsiveness may vary within a country for social groups and households
- Distribution of responsiveness in WHR2000 is a first attempt to measure inequalities in responsiveness
- Measure will be further developed for WHR2001

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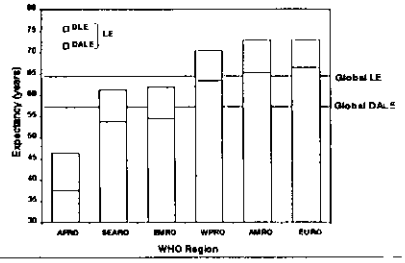
Future development of performance assessment

- WHR2000 is a first attempt to measure performance of health systems
- Milestone in an ongoing process of consultation and development
- Performance assessment framework will be further refined through its detailed application in pilot countries in each region

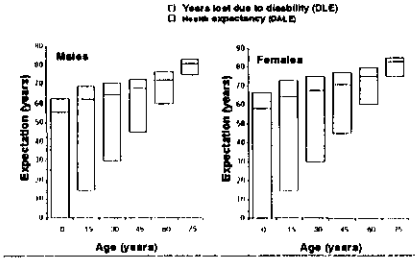
World Health Organization

Disability-adjusted life expectancy (DALE), years lost due to disability (DLE) and life expectancy (LE), at birth for total populations, WHO regions, 1999



World Health Organization

Global disability-adjusted life expectancy (DALE), global healthy years lost due to disability (DLE) and global life expectancy (LE), by age, 1999



World Health Organization

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Status Report: Benguet Project

MA Evangelista, O Tanaka
Division of International Health
Tohoku University School of Medicine
2003 February 13

Timetable

- September 15, 2002
  - First meeting with Philippine project counterparts in Manila
- January 19, 2003
  - Meeting in Manila with main project proponents, Dr. Valera and Dr. Dayrit
- January 20-21, 2003
  - Planning workshop in Benguet, Philippines
- Mid-April 2003 (tentative)
  - First intensive course on EPQI

Proposed Project Title

Quality Improvement of the District Health System

Quality of Health Service
Quality of Work
Quality of Health System

Overall Goal

To improve
the quality and equity
of health service system
in the Benguet Province.

Project Purpose

To strengthen the capacity of front-line staff and management on assurance/improvement of community-centered quality of the provincial health services system

- To improve performance of work toward community-centered quality
- To improve relevant functions of the health service system toward community-centered quality
  - To afford both quality of public services and sustainability, with particular concern about target problems in the priority target population

Outputs

1. A team of instructors on EPQI
2. Q-Experts (facilitator of EPQI) at every health service unit and at every program
3. Mini-projects by Quality learning circles, conventions and award
4. Team projects on system-concerned problems
5. Standardization of work processes
6. Quality Indicators and their monitoring system

→ Quality Management System

Inputs

1. TOT on EPQI
   Penetrate the culture and skills of KAIZEN (EPQI; Evidence-based Participatory Quality Improvement)
   - to identify priority problems based on fact data
   - to solve those by a team work
2. Training of Q-Experts (facilitators of EPQI)
3. Community Satisfaction Survey
4. Community-based mortality survey
5. ※Team conferences to analyze system factors in preventable death events
6. Mini-projects by quality learning circles
7. Policy deployment
8. Problem-oriented team projects

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Our Inputs

1. Training on EPQI (TOT course)
2. Distance-learning
3. Monitoring and supervision
4. Instruments (Statworks etc.)
5. EPQI Award
6. Design & instruments of surveys
7. ※Reporting format on Excel

Option:
Community survey for system analysis on preventable death events

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Research Questions

1. Where people die?
2. Coverage of the official death registration system
3. Healthcare-seeking behavior and response of the system regarding the death cases
4. Preventable death events and critical causing factors in the system
5. Current status of the identified system factors
6. Priority targets of improvement efforts; population, illnesses, problems (failures) of system functions
7. Quality of data in the current HIS/MIS
8. Useful and practical indicators for quality management
9. Useful and practical system for data collection, reporting, analysis and feed-back for QI.
10. Will the EPQI strengthen the organizational capacity on quality assurance/improvement?
11. What will be the most effective motives/incentives to enhance EPQI?

Etc.

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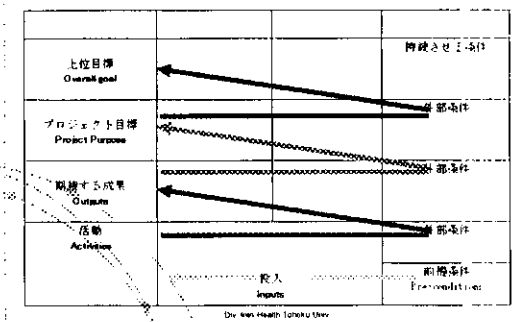
ロジカル・フレームワーク（ＬＦ）または
プロジェクト・デザイン・マトリクス（ＰＤＭ）



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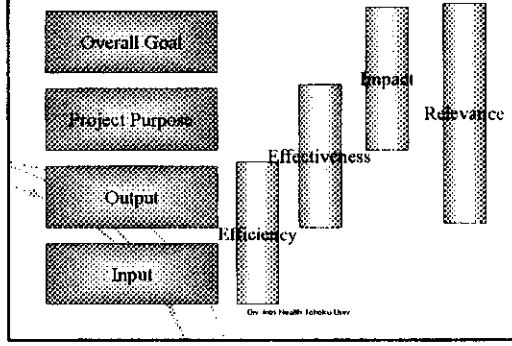

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12

Steering Committee* (tentative)

* should represent the resource organizations

<Co-Chairperson>
- Dr. E. Dayrit (National Quality in Health Committee-DOH)
- Dr. N. Uehara (Professor, Tohoku University)

<Secretariat>
- Dr. M. Valera (Vice-President, Philhealth)

<Committee members>
- Dr. T. Bonoan (Director, Regional DOH)
- Dr. E. Piok (PHO II, Provincial Health Office)
- Dr. N. Gordo (DOH Representative in the province)
- Director of BaguioG eneral Hospital
- Ms. R. Yapchiongco (Bureau of Local Health Development-DOH)
- Dr. Z. Leopando (Chair, Dept. of Family and Community Med-UP)

The team of EPQI Instructors

Dr. Nick Gordo, Provincial DOH, presenting the composition of the team:

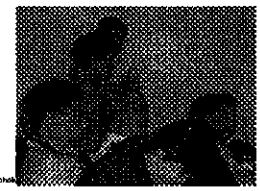
Central DOH – 2
PhilHealth – 3
Regional DOH – 2
Benguet province – 3

Local Project Committee (tentative)

- Vice-Gov. E. Tabanda (Representative of the Governor)
- Representative of Provincial Health Council (Municipalities, Districts)
- Director of the Baguio General Hospital
- Director of the Benguet General Hospital
- Representative of the community
- Regional DOH
- Regional PhilHealth

Next Steps:

- February 20, 2003
  - Meeting in Benguet to identify current indicators available in the province.
- Mid-April 2003 (tentative)
  - First intensive course on EPQI

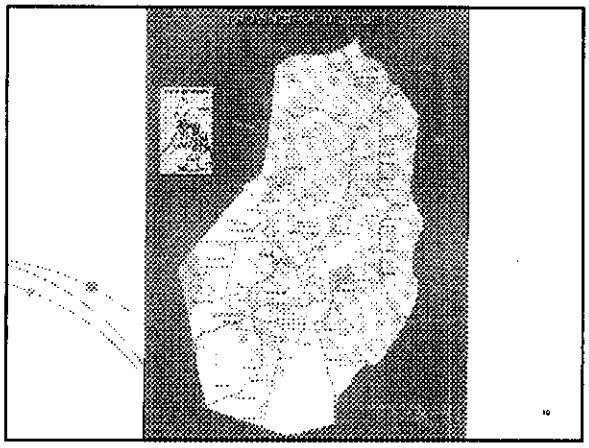


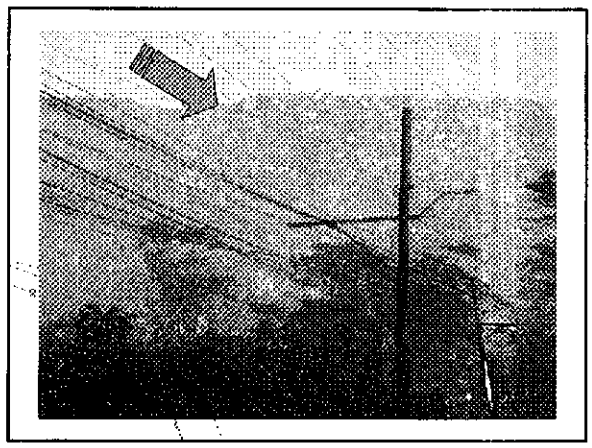
Benguet as a devolved system

- Local Government Code of 1990
  - *Intention:*
    - To empower the local executives to design their health programs according to the needs of their constituents.
  - *Effect:*
    - **Because the local executives were not knowledgeable in health service administration, they could not provide the appropriate logistic support for their areas of responsibility.**

Benguet as a devolved system

- "political district" DIFFERS from a "health district"
  - Benguet province is one political district
  - Benguet province currently has 2 health districts -t he Atok district and the Dennis Molintan district
- A health district is a group of municipalities that agree to cooperate in order to provide themselves an opportunity to work together in health planning and mobilization as well as in resource sharing.

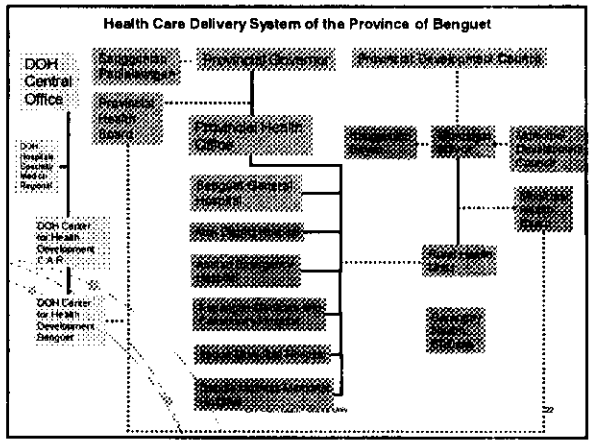


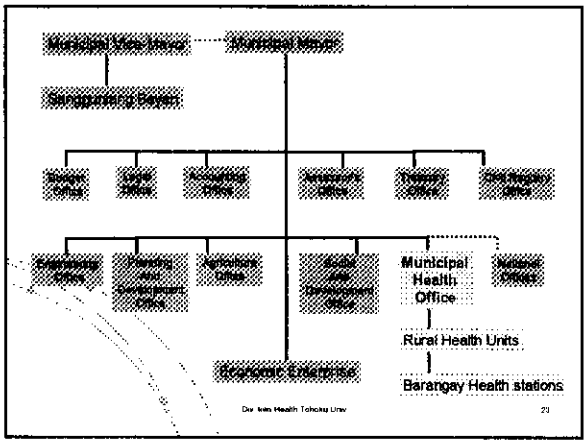


Benguet as a devolved system

- Provincial government
  - Office of the Provincial Governor
  - Administrator of the provincial and district hospitals
- Municipal government
  - Office of the Municipal Mayor
  - Administrator of the rural health units

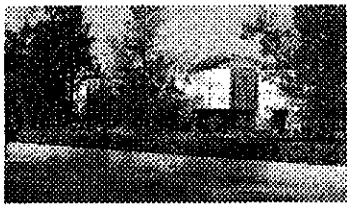
Responsibility for both essential logistics as well as support for public health





Difficulties arise when the local government has other priorities and hence appropriate inadequate funds health

Benguet General Hospital



[redacted]

Provincial health plan

- In reality, there is no provincial health plan.
- The annual "plan" is simply a list of what the provincial and district hospitals need for the current fiscal year – medicines, consumables, logistics for some meetings and trainings.

- Any mention of programs or activities like "awareness enhancement" or "provide quality health service" is nominal and used only to justify the resource requirement.

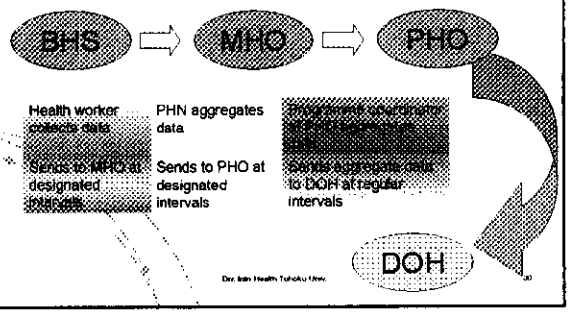
Public Health

- Programs and targets come from the central Department of Health
- The province makes heroic attempts to implement fully the public health programs and meet the targets set by the DOH

Public Health

- Very limited support comes from the DOH for the implementation of programs.
- The province relies on external sources of funds to meet its targets.
  e.g. *Medicos del Mundo* (a French NGO) supports the TB program until 2004

Health Information System



FHSIS

- Field Health Service Information System
- Consolidates most of the public health statistics from government health centers nationwide.
- Passive reporting system
- Contains information regarding:
  - Maternal care
  - Family planning
  - Child care
  - Disease control
    - Tuberculosis
    - Malaria
    - Rabies
    - Leprosy
    - STD

FHSIS: Maternal care

- Pregnant with 3 or more prenatal visits
- Pregnant given TT2 plus
- Pregnant given complete iron dosage
- Pregnant confirmed with anemia (optional)
- Postpartum (PP) with at least 1 PP visit
- PP given complete iron dosage
- PP initiated breastfeeding
- Breastfeeding mothers given Vit A
- Women 15-49 given iodized oil capsules

FHSIS: Child care

- Infants given BCG, DPT, OPV, measles, Hep B vaccines (with breakdown)
- Fully immunized children (9-11 mos)
- Children 9-11 mos given Vit A.

FHSIS: Family Planning

- Current users, dropouts, new acceptors
  - Condoms
  - Injection
  - IUD
  - LAM
  - NFP
  - Pills
  - Male sterilization
  - Female sterilization

FHSIS: Disease Control

- Tuberculosis
  - Symptomatics with sputum exam
  - New sputum initiated treatment
  - Old sputum on re-treatment
  - New sputum admitted
  - Treatment 12-15 months ago
  - Completed SCC
  - Cured
- Malaria
  - Confirmed
  - Clinically diagnosed
  - Given treatment
- Leprosy
  - New cases diagnosed
  - Completed treatment
  - Continuing treatment
- Rabies
  - Animal bite cases seen
  - Given post-exposure immunization
- STD
  - With vaginal discharge
  - with urethral discharge
  - With genital ulcers

FHSIS: Others

- Infants seen at 4th month
- Infants exclusively breastfed up to 4 months
- Diarrhea cases (0-59 months)
- Diarrhea cases given ORS (0-59 months)
- Pneumonia cases (0-59 months)
- Pneumonia cases given treatment (0-59 months)
- Children 12-59 months given Vit A
- Moderately underweight (6-59 months)
  - Given food supplementation
  - Receiving food supplementation
  - Rehabilitated
- Severely underweight (6-59 months)
  - Given food supplementation
  - Receiving food supplementation
  - Rehabilitated

FHSIS

- Data collection begins at the barangay health stations (BHS) and sent to the rural health units, provincial, city, regional and national offices.
- A copy of the consolidated provincial report is sent to the regional DOH for its own use.
- DOH central office receives quarterly reports reflecting the national picture.

FHSIS

- Paper-based BHS ⇒ RHU
- Computer-based { PHO, City-level, National level }

FHSIS

- The midwife from each BHS records all patients and clients seen daily.
- Midwife sends a monthly report to the public health nurse at the RHU.
- The nurse consolidates the data quarterly for decision-making, planning and supervision at the municipal level.
- A copy of the consolidated report is also sent to the PHO.

FHSIS

- Reports from private and government hospitals and private clinics have to be collected to give a full picture of the national data.
- Data analysis:
  - Weekly – RHU
  - Monthly – PHO and city level
  - Quarterly – regional DOH
  - Annually – central DOH

FHSIS

- Difficulties:
  - Lack of reporting forms
  - Computer malfunction
  - Insufficient data management
  - Insufficient analysis skills

} Municipal level

Vital Statistics Registry

BHS ⇒ MHO ⇒ PHO

Health worker collects data

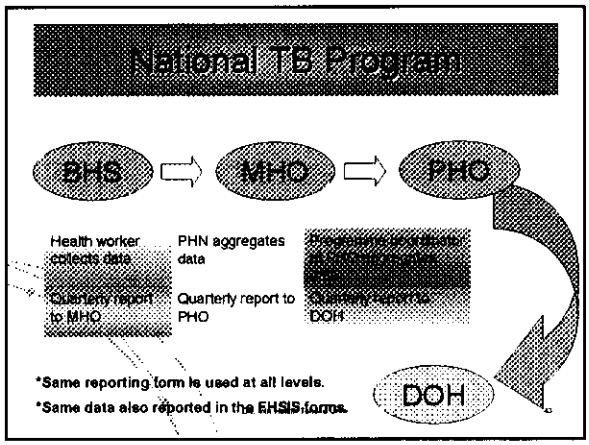
Monthly report to MHO

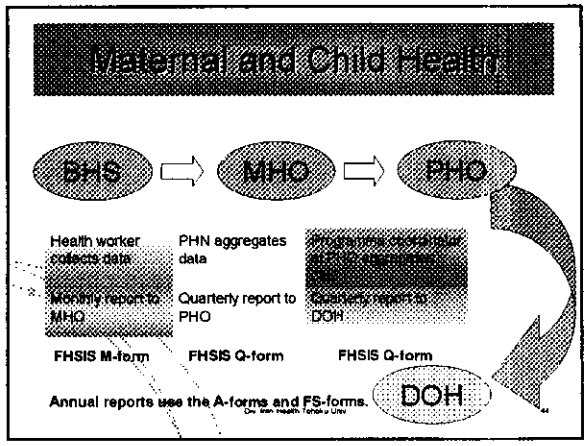
PHN aggregates data

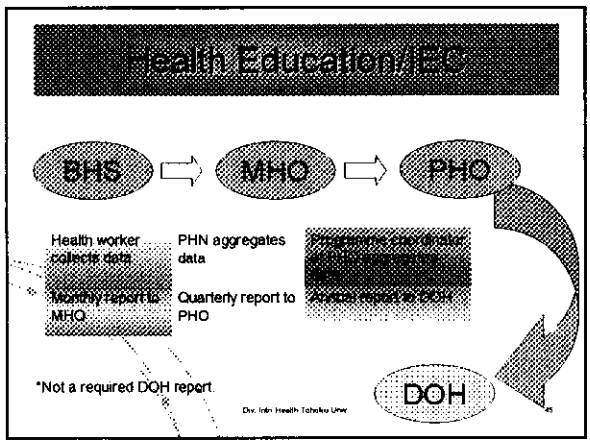
Quarterly report to PHO

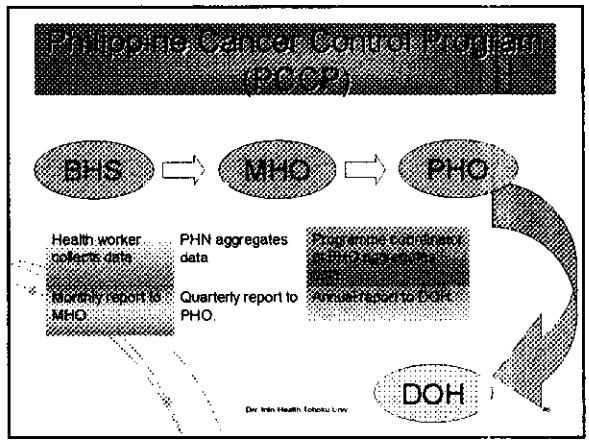
Aggregated data is filed.

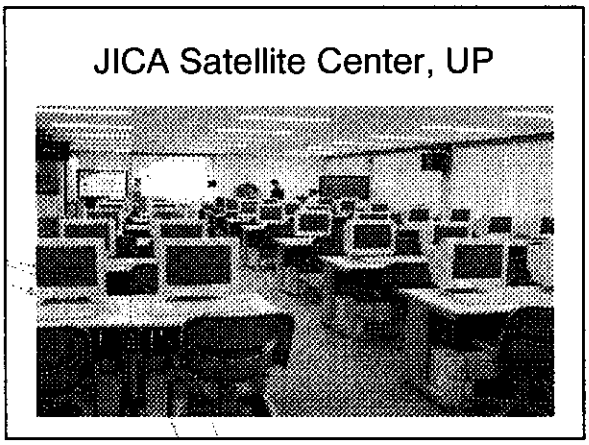
The municipal civil registry office submits its own reports to the National Statistics Office for official reports.

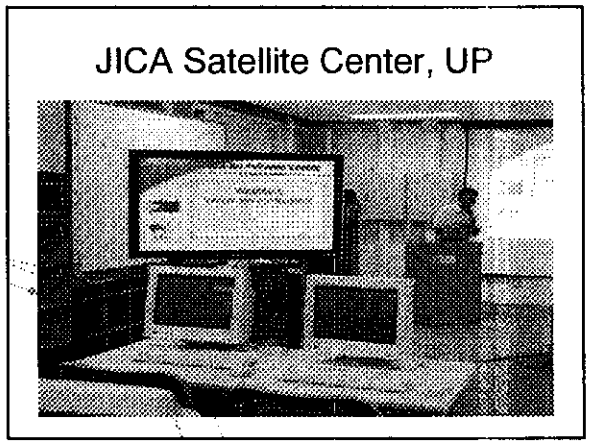

National TB Program
BHS
MHO
PHO
Health worker collects data
PHN aggregates data
Quarterly report to PHO
Quarterly report to DOH
*Same reporting form is used at all levels.
*Same data also reported in the FHSIS forms.
DOH


Maternal and Child Health
BHS
MHO
PHO
Health worker collects data
PHN aggregates data
Monthly report to MHO
Quarterly report to PHO
FHSIS M-form
FHSIS Q-form
FHSIS Q-form
Annual reports use the A-forms and FS-forms.
DOH


Health Education/IEC
BHS
MHO
PHO
Health worker collects data
PHN aggregates data
Monthly report to MHO
Quarterly report to PHO
Annual report to DOH
*Not a required DOH report
DOH


Philippine Cancer Control Program (PCCP)
BHS
MHO
PHO
Health worker collects data
PHN aggregates data
Monthly report to MHO
Quarterly report to PHO.
Annual report to DOH
DOH


JICA Satellite Center, UP


JICA Satellite Center, UP