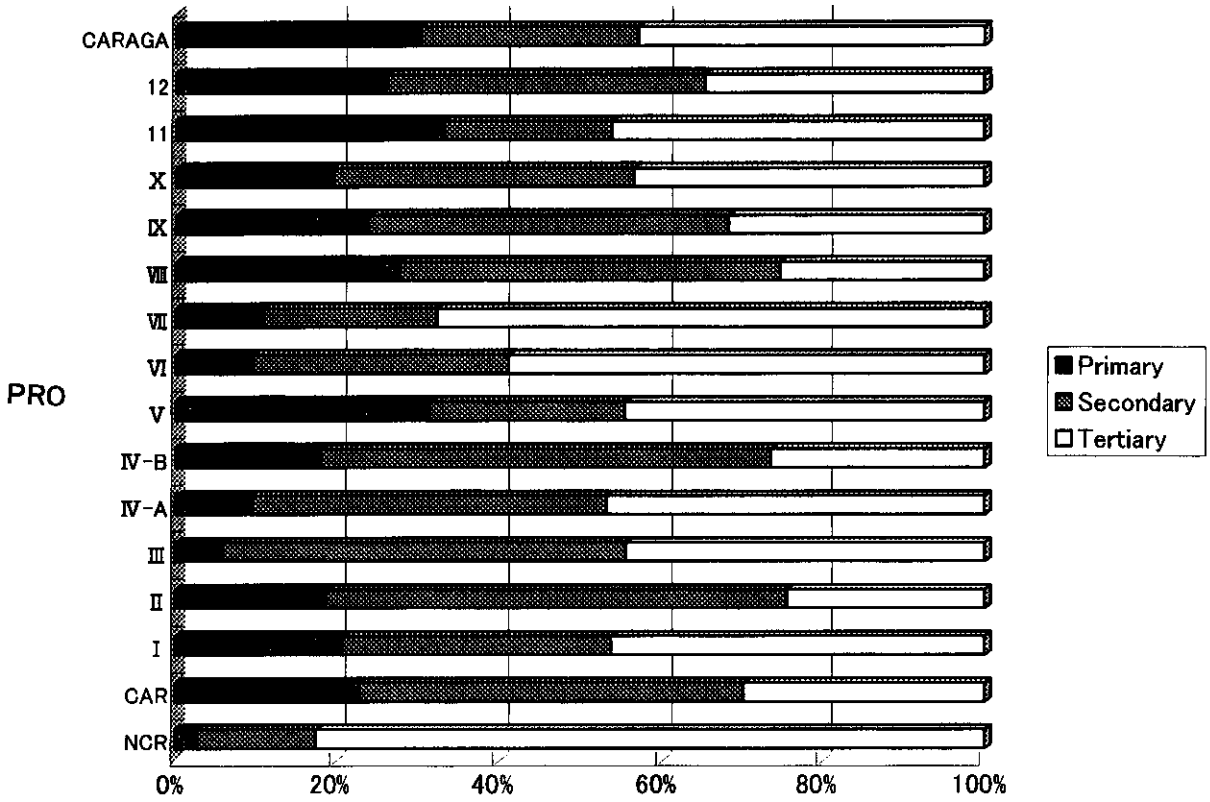
図6 PhilHealth Accredited Beds by Hospital Category
As of September 23, 2002



フィリピン、ベンゲット州における保健情報報告システムの現状について

分担研究者　マリアン　エバンゲリスタ　（東北大学大学院医学系研究科国際保健学分野）

研究概要
フィリピンのベンゲット州において、地域保健医療システムを「質」の観点で評価し改善するために、医療提供システムおよび保健情報報告システムの現状把握調査を実施し、問題点を分析した。また、現地の研究協力者と共同して、地域保健医療関係者にシステム管理・改善手法を技術移転し改善プロジェクトを試験的に実施することにより方法論的有効性を検証する実証研究プロジェクトの計画立案をおこなった。

1. Summary of the report

The World Health Report 2000 Health Systems: Improving Performance was a catalyst in making stakeholders aware of the performance of their health systems. It created opportunities for ministries of health to assess themselves and improve on what they have been doing thus far. It also provided an opportunity to identify suitable ways to make the assessments. In developing countries like the Philippines, Evidence-based Participatory Quality Improvement (EPQI) is a likely candidate.

In cooperation with the Philippine Department of Health, the Provincial Government of Benguet and the Ministry of Health, labor and Welfare-Japan through the Tohoku University School of Medicine, proponents of this EPQI project in Benguet commenced in 2002.

The goal of the project is to improve the quality and equity of health service system in the province of Benguet and consequently to serve as showcase for the launching of similar projects nationwide. By strengthening the capacity of front-line staff and management in improving community-centered quality, the project hopes to enhance the performance of work making it more patient-centered, relevant and affordable to majority of the population.

Specific research questions aimed at identifying possible intervention areas for improvement was developed by Professor Uehara using the systems analysis by preventable death events approach.

This year, a steering was developed to provide much needed leadership for the project. The Department of Health takes the lead with Tohoku University School of Medicine as co-chair. The Philippine Health Insurance Corporation, the University of the Philippines College of Medicine, the provincial government of Benguet, and the regional and provincial offices of DOH as members.

Intensive planning sessions were conducted during the year to clearly lay down the foundation of the project.

To oversee the implementation of the project at the local level, we have the provincial governor's office taking lead, and complementing this as the regional DOH and Philhealth offices, the Benguet General Hospital as well as the Baguio General Hospital.

A team of instructors will be developed in the next year to have a steady pool of quality experts in-country who will conduct lectures and can provide guidance to project implementers. These instructors will come from the DOH, Philhealth as well as from the province of Benguet.

In order to know what information we already have and do not yet have and to better place the project, this year we conducted an assessment of the health system of Benguet as well as an evaluation of the current health information system. We conducted review of existing data from the provincial health office, the rural health unit and from the municipal mayor's office, and conducted interviews with the Provincial Health Officer as well as with the respective program coordinators at the PHO-Benguet.

Following the Local Government Code of 1991, the Benguet health system became a devolved system. Devolution meant to pass on the administrative management for the provincial and district hospitals to the hands of the Governor of the Province, while management of rural health units and barangay health stations is the responsibility of the Municipal Mayor. Funds for the operational costs for hospitals and other health related matters, including public health concerns, come from the local government, specifically the Governor's office, not from the Department of Health.

The province of Benguet currently has 7 public hospitals (one provincial hospital and 6 district hospitals), 13 rural health units, 163 barangay health stations, and 3 private hospitals. It has a manpower complement of 13 doctors, 7 dentists, 24 nurses, 129 midwives, 8 medical technologists, 1,335 barangay health workers, and 239 traditional birth attendants at the RHU and BHS levels.

Devolution has made it difficult to sustain the processes in the previously integrated health system under DOH. Inadequate technical capability of local executives on health management as well as the rigidities of the existing bureaucracy made implementation of old programs and development of new ones an uphill climb from the provincial health office down to each barangay health station.

Like all other provinces in the country, the province of Benguet use the National Objectives for Health 1999-2004 in setting their goal for program achievement. As part of the Health Sector Reform Agenda, the DOH developed explicit indicators to show improvement of health status, risk reduction, as well as in service provision and disease prevention. What the HSRA and NOH does not include, however, are indicators on how to continuously monitor and improve on the health service delivery aspect of health care.

The province of Benguet is rich in health data. The Department of Health, through the Field Health Service Information System (FHSIS) collects data regularly from all government rural health units nationwide. Areas covered include the Expanded Program on Immunization, National Tuberculosis Program, Malaria, Rabies, Leprosy, Sexually transmitted diseases, Maternal and Child Health, Family Planning, Philippine Cancer Control Program, and Health Education / Information Education Campaign.

Data collection for these programs is done on a regular basis but the collection itself is quite tedious and laborious for all concerned. Delay in transmission of reports to the DOH is a common problem and it is often compounded by logistic problems like computer breakdown or running out of forms.

2. Objectives and strategies of the Project

2.1. Overall Goal:

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

2.2. 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

2.2.1. To improve performance of work toward community-centered quality

2.2.2. To improve relevant functions of the health service system toward community-centered quality

2.2.2.1. To afford both quality of public services and sustainability, with particular concern about target problems in the priority target population

2.3. Outputs:

2.3.1. A team of instructors on EPQI

2.3.2. Q-Experts (facilitator of EPQI) at every health service unit and at every program

2.3.3. Mini-projects by Quality learning circles, conventions and award

2.3.4. Team projects on system-concerned problems

2.3.5. Standardization of work processes

2.3.6. Quality Indicators and their monitoring system

2.4. Inputs:

2.4.1. TOT on EPQI

- Penetrate the culture and skills of KAIZEN (EPQI: Evidence-based Participatory Quality Improvement)

2.4.2. Training of Q-Experts (facilitators of EPQI)

2.4.3. Community Satisfaction Survey

2.4.4. Community-based mortality survey

2.4.5. Team conferences to analyze system factors in preventable death events

2.4.6. Mini-projects by quality learning circles

2.4.7. Policy deployment

2.4.8. Problem-oriented team projects

3. The concept and framework of EPQI and TQM/DHS

The World Health Report 2000 introduced the concept of health systems performance assessment (HSPA) and it was the first attempt to assess performances of health systems of member countries.

It was an attempt to assess how well the health systems were performing in terms of attainment of health, responsiveness and fairness of financing. Albeit a number of countries were not happy with their rating, citing the method was unfair, and which consequently sparked discussions and debates about the HSPA, it was a beginning. For the first time perhaps, nations became aware of the need to evaluate if they health systems were indeed achieving their mandated roles.

The WHO report necessarily underscored the need to work at improving performance of health systems within the means available to them.

However, while it is helpful, the HSPA method requires information which may not be available to frontline people routinely. In order to sustain improvement efforts, simple assessments should be familiar activities to people at their workplace. Perhaps a more suitable method is needed, particularly in developing countries.

Discussion of the merits and weaknesses of the HSPA is beyond the scope of this report. However we will use the HSPA and WHO Report 2000 as take off point for introducing EPQI or Evidence-based Participatory Quality Improvement.

EPQI takes root in the concept of *KAIZEN*. Japanese industries have shared the concept of KAIZEN (CQI or Evidence-based Participatory Quality Improvement, EPQI) to health service organizations in Japan since the early 80's. QC circle has formed part of the methods to ingrain the concept of KAIZEN among frontline staff through "learning in practice". A QC circle is a small voluntary group of members belonging to the same workplace and who are actually involved in the work process. They implement small projects, usually for a period of 3-6 months, on a subject they have chosen by themselves.

Because EPQI involves the very people who are doing the work, they are able to identify priority problems based on fact data and they are able to solve those problems through team work.

Specific research questions aimed at identifying possible intervention areas for improvement was developed by Professor Uehara using the systems analysis by preventable death events approach.

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?

The premise is *there are opportunities for improvements in health systems that have preventable death events occurring*. The preventable death events thus become the sentinel events that signal the need for further analysis and subsequent improvement efforts.

4. Organizational structure of the project, and list of members and their roles

4.1. Steering Committee

4.1.1. Co-chairpersons

- Dr. Elvira Dayrit, Chairperson of the National Quality in Health Committee, Philippine Department of Health.
- Professor Naruo Uehara. Professor of the Division of International Health (Quality and Health System), Tohoku University School of Medicine.

4.1.2. Secretariat

- Dr. Madeleine Valera. Vice-President of the Quality Assurance Research and Policy Development Group, Philippine Health Insurance Corporation.

4.1.3. Committee Members

- Dr. Teresita Bonoan. Regional Director of the Center for Health

Development- Cordillera Autonomous Region, Philippine Department of Health.

- Dr. Esteban Piok. Provincial Health Officer II, Province of Benguet, Philippines.
- Dr. Nicolas Gordo, Department of Health-Benguet Province
- Director of Baguio General Hospital
- Ms. Rissa Yapchiongco, Bureau of Local Health Development-DOH
- Dr. Zorayda Leopando. Chair of the Department of Family and Community Medicine, University of the Philippines College of Medicine.

4.2. Local Project Committee

4.2.1. Vice-Gov. E. Tabanda (Representative of the Governor)

4.2.2. Representative of Provincial Health Council

4.2.3. (Municipalities, Districts)

4.2.4. Director of the Baguio General Hospital

4.2.5. Director of the Benguet General Hospital

4.2.6. Representative of the community

4.2.7. Regional DOH

4.2.8. Regional PhilHealth

5. Profile of the Benguet district health system

5.1. Administration

In 1990, the Local Government Code was passed into law. With it came devolution of power and responsibility of many public health sectors, including health.

This code placed the provincial and district hospitals under the administrative jurisdiction of the local government units. It necessarily broke up the integrated health care delivery system of the Department of Health.

The Benguet health system is a devolved system. Devolution meant to pass on the administrative management for the provincial and district hospitals to the hands of the Governor of the Province, while management of rural health units and barangay health stations is the responsibility of the Municipal Mayor. Funds for the operational costs for hospitals and other health related matters, including public health concerns, come from the local government, specifically the Governor's office, not from the Department of Health.

The jurisdiction for public health program setting and direction as well as clinical supervision, however, remain with the Department of Health. Programs goals and related activities are designed at the national level and implemented at the lower levels, with only slight modifications to suit the local settings.

The effect of devolution has not been uniform throughout the country. In some areas where the local executives have set health as a priority program, their constituents continue to benefit. However, in areas where local executives have other priorities, the state of the hospitals and health programs in their jurisdiction are very poor.

In most areas, the local executives faced the challenge of managing a health system which they, unfortunately, were not equipped to do given the inadequate technical capability in health administration.

This and other bureaucratic rigidities in the system led to inappropriate logistic support for their areas of responsibility.

In a hospital devolution study done in 1994, results showed that after devolution, allocated budgets for government hospitals, which were now placed under the LGUs, were half of what they were pre-devolution. Further, any requests for funds had to go through so much red tape. It was noted that, under a devolved set-up, at least 17 signatures (compared to 2-3 signatures before devolution) are needed before purchases are made and at least two months lapse before medicines and other supplies are delivered (HSRA, 1999).

In answer to this discrepancy in responsibility and technical capability which is further compounded by layers of bureaucracy, the Department of Health's Health Sector Reform Agenda (HSRA), includes the development of interlocal health zones (ILHZ) also known as health districts.

At this point it is prudent to clarify that in the Philippine setting the term "district" is used differently depending on which setting it is applied. A political district differs from a health district. For instance, the province of Benguet is one political district. But at the same time, it is also divided into 3 health districts or ILHZ.

A health district or ILHZ is a group of municipalities that sign a memorandum of agreement and agree to cooperate in order to provide themselves an opportunity to work together in health planning and mobilization as well as in resource sharing. One ILHZ includes a core referral hospital, a provincial hospital and a medical center.

The province of Benguet currently has two operational health districts, the ABBM DHS consisting of the municipalities of Atok, Bugias, Bakun and Mankayan (*see annex for map)*, with Atok District Hospital as primary referral hospital. The second ILHZ is the Dennis Molintas DHS consisting of the municipalities of Kapangan, Kibungan and Itogon, with the Dennis Molintas Memorial Hospital as primary referral hospital. The Benguet General Hospital is the secondary referral center for both district hospitals.

5.2. Facilities

The province of Benguet has:

- 7 public hospitals, (one provincial hospital and 6 district hospitals)
- 13 rural health units,
- 163 barangay health stations, and
- 3 private hospitals

Manpower complement in the RHU and BHS levels include:

- 13 doctors
- 7 dentists
- 24 nurses
- 129 midwives
- 8 medical technologists
- 1,335 barangay health workers, and
- 239 traditional birth attendants

5.3. programs

Following the public health programs of the Department of Health, the province of Benguet has ongoing public health programs on:

- Expanded Program on Immunization

- National Tuberculosis Program
- Malaria
- Rabies
- Leprosy
- Sexually transmitted diseases
- Maternal and Child Health
- Family Planning
- Philippine Cancer Control Program
- Health Education / Information Education Campaign

Since the province is constrained by limited resources for health care provision and public health services, they rely on external sources such as donors. For instance, the NGO *Medicos del Mundo* supports the tuberculosis program of the province until 2004. The continuing dilemma of program coordinators is what happens thereafter.

6. description of the current health information system (HIS)

A myriad of health information is generated in the province of Benguet regularly. Among these are the required reports for the Department of Health, as well as reports generated by the province for its own use.

6.1. FHSIS

The Field Health Service Information System (FHSIS) is a passive reporting system designed by the Department of Health which consolidates most of the public health statistics from government health centers nationwide.

It contains information regarding the following public health areas:

- Maternal care
- Family planning
- Child care
- Disease control
- Tuberculosis
- Malaria
- Rabies
- Leprosy
- Sexually transmitted diseases (STD)
- Dental care

Maternal care data include the following:

- Pregnant with 3 or more prenatal visits
- Pregnant given tetanus toxoid
- 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

Child care data include the following:

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

Family planning data refer to:
Current users, dropouts, new acceptors for the following family planning methods:

- Condoms
- Injection
- Intra Uterine Device (IUD)
- LAM
- Natural Family Planning
- Pills
- Male sterilization
- Female sterilization

Disease control data include the following:

- Tuberculosis
    - Symptomatics with sputum exam
    - New sputum initiated treatment
    - Old sputum on re-treatment
    - New sputum admitted

- Treatment 12-15 months ago
- Completed short course chemotherapy (SCC)
- Cured

- Malaria
  - Confirmed with microscopy
  - Clinically diagnosed (without microscopic confirmation)
  - 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

Other information in the FHSIS include:

- Infants seen at 4th month
- Infants exclusively breastfed up to 4 months
- Diarrhea cases (0-59 months)
- Diarrhea cases given oral rehydration solution, 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

Data collection begins at the barangay health stations (BHS) and then 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 on a periodic basis for its own use. The DOH central office receives quarterly reports reflecting the national picture at least from the government health centers. For a full national picture, data should also be collected from government and private hospitals and also private clinics.

Relevant forms have been developed by the DOH for this purpose making it standardized. The midwife from each BHS records all patients and clients seen daily. She then aggregates the data into an FHSIS M-form then sends it monthly to the public health nurse at the RHU.

The public health nurse at the RHU in turn consolidates the reports from the different BHS into the FHSIS Q-form. The municipal health officer verifies the information and affixes his signature. This report is used for decision-making, planning and supervision at the municipal level. A copy of the consolidated report is also sent to the PHO quarterly.

The program coordinator in charge of the FHSIS consolidates all reports from the MHOs into a similar FHSIS Q-form. This quarterly report is likewise used for planning and decision-making at the provincial level. A copy of the consolidated Q-form is also sent to the regional DOH.

For reporting notifiable diseases or those that have potential for causing outbreaks and epidemics a weekly FHSIS FS-1 form and quarterly FHSIS FS-3 forms are available. In these forms, specific diseases are listed and the health unit concerned is expected to report any occurrence immediately. For diseases with outbreak potential, other means of reporting such as by telephone calls are also done to the RHU,

PHO and finally DOH in order not to delay appropriate action. The paper reports come in a little later.

Ideally, if any of the listed diseases occur, the midwife fills up the FHSIS FS-1 form and sends it to the RHU on a weekly basis. A quarterly recapitulation is done by the RHU using FHSIS FS-3 and is submitted to the PHO. The PHO recapitulates quarterly data from all RHUs and submits this to the DOH.

On an annual basis, recapitulation of notifiable diseases is done using FHSIS form A-2. Annual data collection begins at the RHU level where the public health nurse consolidates the quarterly data into this annual form. This annual data is then submitted to the DOH at the beginning of the succeeding year.

An FHSIS A-1 form is also filled in annually. Information collection again begins from the RHU. Province-wide data is then recapitulated at the PHO and submitted to DOH as part of its annual reports.

The DOH developed a computer software specifically for the FHSIS. It has undergone several revisions since 1992. This information system is designed to be paper-based at the barangay and rural health unit levels, and computer-based at the provincial, city and regional levels.

Currently, the province of Benguet has at least one computer at each RHU. The system however is stand alone and is used primarily for data entry functions. The FHSIS software itself is not yet fully designed to output computer-generated reports. Whatever consolidated reports they have at the municipal and provincial levels are based on a separate system, that is, simple excel tables also developed by the DOH and disseminated to the PHO, and RHU.

Ideally the analysis of the data generated by the FHSIS should be as follows:

Weekly – RHU
Monthly – PHO and city level
Quarterly – regional DOH
Annually – central DOH

However, difficulties in doing this have been due to a delay in collecting and processing the data. This delay is attributed to inadequate reporting forms from the PHO down to the BHS levels, computer malfunction, insufficient data management and insufficient analysis skills. The last two are particularly relevant at the municipal level because there are not enough people capable of doing them.

Other relevant points perhaps include some possible weaknesses in the formats used. For instance, in the monthly M-form it takes account of the number of treated cases and successfully completed SCC. These data, being optional, are not recapitulated in the Q-form which eventually gets submitted to the DOH.

One can surmise that perhaps this is where the redundant data from the separate and older reporting system of the National Tuberculosis Program (NTP, discussed below) comes in. In its current form, the FHSIS along does not capture all relevant data.

6.2. NTP (National Tuberculosis Program)

Apart from the FHSIS, another form of data collection is done for the details of the National Tuberculosis Program surveillance and report. It is actually a much older reporting system compared to the FHSIS which only commenced in 1992.

The NTP report has been used for decades to monitor the status of the TB control

program nationwide. The forms used have undergone some modifications but they are used at all levels of health reporting, from the BHS to the PHO level.

Naturally, some content of this report are duplicated in the FHSIS forms. Information collected is consolidated onto (3) forms and they include the following data:

- Case finding (information available by age group and by sex)
    - Pulmonary tuberculosis
        - New smear positive cases
        - Relapse smear positive cases
        - New smear negative cases
    - New extra-pulmonary tuberculosis
    - # of smear (+) sputum
    - # who underwent sputum exam
    - # sputum converters
- Treatment follow-up
- Treatment outcome
- Drug inventory

NTP registries are used widely in all BHS and RHUs, wherein they input the above information. The NTP report forms are used to consolidate data and are the ones sent to the next higher health office. The NTP report forms are the same for all levels, which facilitates ease of use.

Data collection also begins from the BHS daily count. A monthly report is consolidated onto the NTP report forms and sent to the RHU. The RHU in turn consolidates the data and sends a quarterly report to the PHO. The PHO likewise consolidates the data and sends the final report to the regional DOH quarterly.

6.3. National Rabies Prevention and Control Program

Monthly, quarterly and annual reports on rabies are generated in Benguet. As with other reports, data collection begins at the BHS which sends a monthly report to the RHU. The RHU consolidates and after the MHO verifies and signs the document, sends it as a quarterly report to the PHO. The PHO consolidates and sends a signed report to the regional DOH also on a quarterly basis.

The program coordinator at the PHO also takes charge of consolidating an annual report (a provincial summary) for all these data collected within the year and submits it to the regional DOH at the beginning of each year.

One common form is used at all levels of health care service.

Information contained in the report include:

- age and sex of patients
- # of animal bites seen (categorized into dog, cat, bat, others)
- # of human bites seen
- type of post-exposure treatment given

6.4. OPT (Operation Timbang)

The Province of Benguet conducts an annual assessment of the nutritional status of children from 0- under 7 years on the first quarter of each year. Children of appropriate age are weighed at each BHS and classified into any of the following according to age group:

- Severely underweight
- Moderately underweight
- Mild underweight
- Normal
- Overweight

The consolidated data is submitted to the DOH, and kept for provincial reference. A weakness in this report is the possible duplication of data because children who

are under 7 years old but have started schooling may also be counted in another weighing program. At present this issue has not been addressed.

6.5. PCCP (Philippine Cancer Control Program)

As part of the surveillance of cancer in the province, the PHO has a PCCP reporting system carried over from the old system. This is not required reporting by the DOH but the province has opted to continue collecting the data and forwarding it to the DOH.

It is a quarterly report which includes data on cervical cancer, breast cancer and lung cancer. Among the information included are frequency of public health information dissemination conducted, number of pap smears, number of grossly abnormal lesions referred, etc. Because data collection begins at the BHS where midwives are not experts in cancer detection, information collected is mostly on follow-up cases or those that are grossly abnormal. All confirmation are done at the pathology-capable labs like the Benguet General Hospital, hence the report includes the numbers on referrals made.

There is one common form used throughout the health facilities from the BHS to the PHO level.

6.6. HE/IEC (Health Education/Information Education Campaign)

In order to monitor the kind and frequency of health information campaigns being done in the province, a HE/IEC report is done. It includes information on which kind of organization conducted the health education activity – local organization, NGO, individual group counseling. It also includes information about what kind of materials were used for the activities – posters, flipcharts, video, etc.

One common form is used throughout. The BHS accomplishes a monthly report. The RHU consolidates the monthly reports and submits it quarterly to the PHO. The PHO in turn consolidates the quarterly reports and submits this to the DOH. An annual report is also consolidated from the BHS to the PHO level.

7. vital registration system

7.1. births

Section 5 of Republic Act 3753 states that the physician or midwife who attended the birth is responsible for accomplishing a birth certificate. In unattended births, the declaration of the parents is sufficient to register a birth.

7.2. deaths

Section 91 of Philippine Presidential Decree 856 and Section 6 of Republic Act 3753 state that no human remains shall be buried without a death certificate. In an ideal setting, this certificate is issued by the attending physician. If there was no physician in attendance, it is issued by the mayor, the secretary of the municipal board, or a councilor of the municipality where the death occurred. The death certificate is forwarded to the local civil register within 48 hours after death.

In the province of Benguet, the midwife at the BHS level is the person of first contact for both. Actual filling up of the form however is done at the RHU level through the MHO. The signed forms are then sent to the civil registry office at the municipal office. A different vital registry data form is used by the BHS and RHU in tabulating their reports.

Similar to other reports, data collection for vital registration begins at the BHS level. The midwife from each BHS records all

births and deaths that have been reported to them. She then aggregates the data into a vital registry form and sends it monthly to the public health nurse at the RHU.

The public health nurse at the RHU in turn consolidates the reports from the different BHS into a similar form but on a quarterly basis. The municipal health officer verifies the information and affixes his signature. A copy of the consolidated report is sent to the PHO quarterly.

The program coordinator at the PHO in-charge of vital registries consolidates these data from the different municipalities on a quarterly basis. The report is then filed at the PHO. The official vital registry data used in national figures comes from the local civil registry office of each municipality.

An annual report of mortality cases is prepared beginning from the BHS to the RHU and up to the PHO levels using the FHSIS A-3 form, wherein causes of death are included as well as breakdown into age-groups. Because the quarterly vital statistics report from the RHU does not include information about age, data collection has to begin again from the BHS where the age data is available. The midwife is asked to fill in the A-3 form, submits this to the RHU where data is aggregated from all BHS. A consolidated report is then submitted to the PHO, where data is again aggregated from all RHU. The consolidated data is then submitted to the DOH as the annual mortality statistic of the province.

Whether or not the statistics in this A-3 form is consistent with the quarterly reports generated within the year remains to be assessed.

8. provincial health plan

A provincial health plan is sadly lacking in Benguet. Prior to the devolution, as part of DOH regulations, the Provincial Health Office of Benguet devises a five-year provincial health plan at each cycle detailing their program strategies and activities. According to the current PHO, after the devolution this was no longer required by the provincial governor's office.

Instead, the PHO is asked to submit an annual "plan" which is simply a list of what the provincial and district hospitals need for the current fiscal year such as medicines, consumables, repair and maintenance costs, and 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.

9. rural health unit plan

There are no written municipal or health center plans. Implementation of public health programs follows the targets and activities set by the central DOH. There is a general idea among health center people that at the current situation, the health offices at this level have scarcely the resources and time to conduct other activities apart from the present programs.

10. what measurable goals have they set for the province

In line with the Health Sector Reform Agenda, the Department of Health has set national targets on improving the morbidity and mortality statistics of the country as laid down in the National Objectives for Health 1999-2004.

The National Objectives are prepared in

such a way that it provides measurable targets in terms of improving health status, risk reduction, as well as improving services. These targets make it easier for health service providers to benchmark their performance over time. These targets are likewise applicable nationwide at all levels of health care provision.

Some of these indicators include:

- Reduce the incidence of sputum positive cases of tuberculosis to 84 per 100,000 population from a baseline of 134 per 100,000 population.
- Increase the proportion of TB symptomatics consulting a health provider from 21.4% to 60%.
- Increase the percentage of the population with access to DOTS strategy from baseline 31% to 100%.
- Reduce malaria mortality from 59 to 24 cases per 100,000 population.
- Increase the percentage of children with diarrhea given ORT and continued feeding from 64% to 80%.
- Reduce the incidence of human rabies cases from 5 to no more than 3 cases per million population.
- Ensure that from the current 3 hospitals, all DOH Regional hospitals and medical centers have the capability of providing proper diagnosis, management, care and support of, people living with HIV/ AIDS.
- etc

Therefore, in terms of measurable goals for Benguet, the provincial health office down to the rural health units refer and try to meet the targets in the National Objectives for Health.

On matters closer to home, in the current situation, one of the Benguet provincial health office's primary concerns is how to improve the satisfaction of the community in terms of health service availability. Since the facility of the provincial hospital was upgraded in 2000, the community has come to expect that there is also concomitant upgrade in the services available. Since there was no counterpart increase in funding from the provincial government for hospital operations, the expectations have not been met. Because of this, the community has expressed dissatisfaction with the performance of the provincial hospital and the provincial health office in general. The PHO and the Governor's office have yet to address this issue in a concrete manner.

Difficulties in meeting the set national objectives are myriad and multifactorial. For instance, in meeting the goal for the National Tuberculosis Program the RHU at La Trinidad has encountered the following problems:

- Poor follow-up for sputum examinations.
- Poor treatment compliance among patients on SCC possibly because there is inadequate information provided to patients.
- Some health personnel are not knowledgeable about the DOTS strategy.
- Some patients refuse to have sputum examinations, taking preference for x-rays instead.
- Difficulty in following-up migrants.

Likewise in meeting the goals for STD and HIV/AIDS, problems encountered include:

- Minimal information sharing about STDs because it is a taboo in the communities.
- People who are afflicted with the condition avoid going to health centers because they are fearful of the social stigma, thus early treatment is not given to them.

- Sadly, even some health staff have inadequate knowledge about STDs.

While the HSRA and NOH provide indicators on improving health status and risk reduction, its indicators for service provision are very minimal. This is perhaps necessary if we are to aim to improve on the health service delivery aspect of health care.

11. what level of activity have they implemented regarding quality and its location

Quality health care has been a catchphrase in the Philippine health system since 1995, yet actual activities relating to improving quality has been limited to the licensing and Sentrong-sigla activities of the Department of Health and the accreditation program of the Philippine Health Insurance Corporation.

Beyond those mentioned, there are currently no ongoing programs that provide training or support to hospital or health personnel on quality improvement. The common notion of "improvement" still follows the old quality assurance dictum that if the appropriate structures are in place, the goodness of the outcome is assured. Hence, upgrading the physical facility or increasing the number of personnel are still common ways of trying to achieve quality improvement. However, these are changes which are not immediate options for government health facilities since they already have a constant shortness of logistic support to begin with.

As such, in it current situation, the province of Benguet does not have any ongoing programs on quality improvement of health services and it opens an opportunity for intervention through this EPQI project.

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Country Project
Benguet, Philippines

Project Background
2002 December 13

National Quality in Health (QIH) Committee

- Created in 2001
- Department of Health (DOH)
- To formulate strategies and activities for continuing improvement of quality of health services not only in government hospitals but in the entire health sector.
- Chair: Elvira Dayrit, MD
  - Director for Center for Health Development-NCR
- Co-Chair: Madeleine Valera, MD
  - Vice-President for Quality Assurance, PhilHealth

PhilHealth

- Philippine Health Insurance Corporation
  - Corporation tasked to provide social health insurance to all Filipinos
  - Attached agency of the DOH
  - Quality Assurance Research and Policy Development Group
    - VP Madeleine Valera, MD
    - Provides policy direction and conducts researches for quality related matters

Goals of the QI Effort*

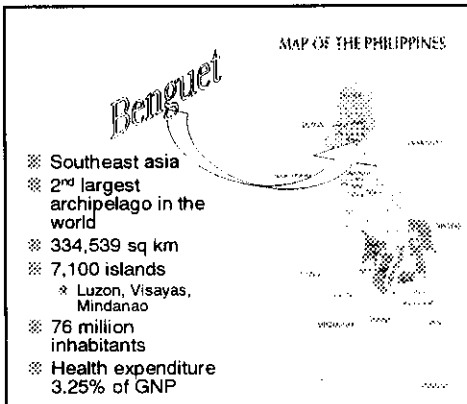
- to improve the quality of health care by increasing the level of average quality of
  - out-patient care
  - hospital care
  - community care
- while reducing the variations around the average quality among different categories of providers and services

* From the Quality in Health Committee

Main instruments to attain goals with priority on public & non-profit providers*

- Mandatory licensing (DOH)
- Voluntary accreditation (Philhealth)
- Provider payments under NHIP
- Sentrong Sigla certification
- Advocacy – (excluding suppliers to providers)
- Research, training & education
- Data information systems, surveillance, monitoring and evaluation

* From the Quality in Health Committee



- Southeast asia
- 2nd largest archipelago in the world
- 334,539 sq km
- 7,100 islands
  - Luzon, Visayas, Mindanao
- 76 million inhabitants
- Health expenditure 3.25% of GNP

Reference: BaguioC ity

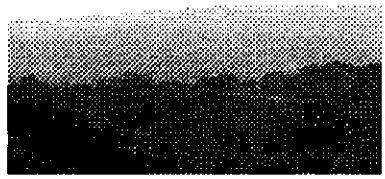
- ~ 8 hours by car from Manila to Baguio City
- ~ 15 mins by car from Baguio City to the capital of Benguet, La Trinidad

The Penagbenga...

Why Benguet?

- The local executives (governor of the province and other officials) have expressed willingness to cooperate with the DOH and PhilHealth in taking the first steps to improving the quality of health service provision with the technical assistance of Tohoku University School of Medicine.

Benguet, Philippines



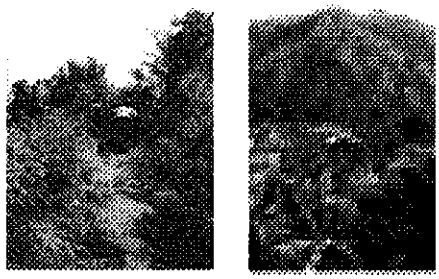
- The land is mountainous and is cut by deep river valleys.
- The elevation keeps the temperature cool.
- It has a wet season from June-October and dry season from November-May.

Benguet, Philippines

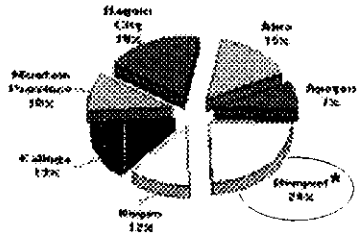
- Capital : La Trinidad
- Area : 2,616 sq km
- Population : 347,242
- Cities : Baguio City
- No. of Towns: 13

Benguet is one of the 6 provinces and one urbanized city comprising the Cordillera Administrative Region or CAR.

Local terrain in the rural areas...

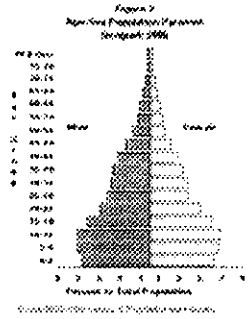


Benguet, Philippines



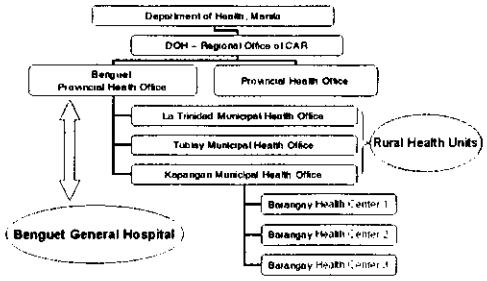
Source: NSO 2000 Census of Population and Housing

Benguet, Philippines



- Median age =20
- Males>females
- Overall dependency ratio 72%
- 58% economically active pop'n

Organizational Structure



Demographic Report: Benguet, 2001

Area	Land Area, sq. km.	Population density	Total population	# of households	# of barangays
Atok	137	120	16,384	3,083	6
Bakun	237	65	15,521	2,750	7
Bokod	435	23	9,991	2,436	10
Buguias	193	175	33,784	5,952	14
Itogon	423	94	40,034	7,842	9
Kabayan	177	67	11,845	2,248	13
Kapangan	136	111	15,126	3,371	15
Kibungan	192	86	16,612	3,070	7
La Trinidad*	61	1,353	83,050	13,841	16
Mankayan	131	301	39,614	6,023	12
Sablan	91	114	10,412	1,926	8
Tuba	314	126	39,455	7,624	13
Tublay	84	182	15,414	2,417	8
TOTAL	2,616	132	347,242	62,583	140

Source: Buguias Sebang Lengaoan Barangay Hall

Demographic Report: Benguet, 2001

Area	# of BHSs/ Sub-clinics	# of RHU/MHC	# of Government Gen. hospitals		# of Private Gen. hospitals	
			Primary	Sec	Primary	Sec
Atok	7/3	1	-	1	-	-
Bakun	6/4	1	-	-	-	-
Bokod	9/4	1	1	-	-	-
Buguias	13/3	1	1	-	-	1
Itogon	8/4	1	1	-	-	-
Kabayan	12/0	1	-	-	-	-
Kapangan	12/0	1	1	-	-	-
Kibungan	6/4	1	-	-	-	-
La Trinidad*	15/5	1	-	1	-	-
Mankayan	11/1	1	-	-	-	1
Sablan	7/2	1	-	-	-	-
Tuba	12/4	1	-	-	1	-
Tublay	7/4	1	-	-	-	-
TOTAL	163	13	4	2	1	2

Source: Buguias Sebang Lengaoan Barangay Hall

- Ave ratio of main health center to population
  - 1:26, 711
- Ave ratio of BHS/ sub-clinic to population
  - 1:2,130