Status of National Health Accounts in Asia-Pacific Region:

Results of the APNHAN Survey 2001

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Executive Summary

NHA development in the Asia-Pacific region is relatively advanced in comparison with other developing regions. Most countries have established or are establishing NHA systems. Eleven countries have permanent systems with routine updates or are on the verge of establishing such. Eight other countries are currently constructing NHA systems or will do so. Whilst there is a wide range in the level of development of NHA, there is a clear trend towards institutionalisation in the majority of countries. In addition to the OECD members, several countries, including some low-income developing economies, have permanent NHA systems, and have multiple years of estimates. In total, available NHA-based estimates of national health expenditure exist for 108 country-years of observations during the 1985-2000 time period, of which 64 are for non-OECD states.

Considerable differences exist in the detailed structure of NHA in countries, but despite that considerable similarity. Institutional variations may reflect differences in capacity of national agencies. In most cases, the national health ministry is responsible for commissioning NHA, but technical responsibility for producing accounts is assigned elsewhere, most often to a public sector research agency. In most countries, involvement of multiple official agencies in NHA is the norm. Health ministries are the commonest source of financial and other material support for NHA. External donors and UN agencies provide support in a small majority of countries, but often act only in a supporting role. No single donor agency is active in any large number of countries.

Reflecting a pattern of indigenous development, there is considerable diversity in the frameworks adopted in national systems. Most, but not all, countries include providers and functions in the core dimensions. Only minorities of countries estimate expenditures by sub-national region or by other dimensions. Countries do not include the same elements of spending when reporting total national health expenditures. All include recurrent and capital spending, and a majority include research and development expenditures. Fewer than half the countries include such items as medical education, nutrition, sanitation or environmental health. Comparisons between countries in total spending will require some standardisation in the elements included. Given the implicit lack of interest in many of these health-related functions, such a standard will need to be narrower than it is broader. Only a minority of countries choose to estimate their NHA systems as separate sources to intermediaries and intermediaries to providers matrices. Some countries indicate that estimating such dual matrices will not be a priority in their countries.

There is considerable interest in Asia-Pacific countries in international comparability, whilst at the same time a belief that national systems should be locally relevant. There has been rapid adoption of the OECD SHA 2000 framework. Other than OECD member states, announced adopters include Bangladesh, China, Kyrgyz, Samoa, Sri Lanka, Taiwan, Thailand and Viet Nam. Most countries that have considered the issue have adopted OECD SHA 2000, or plan to do so, and none have chosen not to. The number of positive deciders will likely increase during 2001-2003. The experience of early adopters suggests that developing countries in the region have not faced major obstacles of practicality or relevance in adapting the OECD SHA approach.

In contrast to other developing country regions, the current status of NHA in the region reflects a largely nationally-driven process, with external donors playing a minor role. Institutionalisation experience appears to have been more successful than other regions, which may be either an outcome of the limited role of external donors, or a cause of it.

Background

As part of the preparations for the Cebu Conference of Asia-Pacific countries engaged in NHA work held in May 2001, the Asia-Pacific NHA Network (APNHAN) conducted a short questionnaire survey of all members and conference participants. The questionnaire was distributed by email to the national contact points in APNHAN, plus national or WHO representatives in non-APNHAN territories. The survey collected information on current NHA status in countries, and future plans. The objective of the survey was to establish the current status of NHA development in the Asia-Pacific area. Although this area, extending from the WHO EURO region in the west to the WHO WPRO region in the east, includes the majority of the world's population and many of the pioneers in NHA development, NHA status in it has remained poorly known.

Completed questionnaires were obtained from 21 respondents (non-responses = 4). The following results are based primarily on the survey returns, but incorporate other information known to the network or obtained from papers presented at the Cebu conference. Additional information for countries not in the network or not surveyed is also included, where noted, to provide a comprehensive overview of NHA status in the region.

Survey coverage and responses

Completed survey questionnaires were returned from: Australia, Bangladesh, Cambodia, China, Hong Kong SAR, India, Indonesia, Japan, Korea, Kyrgyz Republic, Malaysia, Mongolia, Myanmar, Nepal, Papua New Guinea, Philippines, Samoa, Sri Lanka, Taiwan, Thailand, and Viet Nam. Countries which were contacted in the survey, but from which no responses were obtained consisted of Brunei, Maldives, New Zealand and Singapore.

It is clear from the responses that there is considerable ambiguity in the understanding of what NHA is. Many countries have been producing annual national health expenditure estimates for many years, but these often do not conform to the sources to uses matrix structure that is characteristic of a health account. Some respondents nevertheless provided responses relating to such estimates of health spending, whilst others also indicated that their countries were shifting to a full health accounting system, or in some cases were intending to maintain health accounts type estimates alongside the older concepts. In tabulating responses, some discretion has been exercised in interpretation in order to ensure that the reported results relate specifically to the more recent concepts of a health account as a sources to uses matrix.

Current status of NHA in countries

Countries were asked to indicate the status of NHA as official statistical systems in their countries. Countries are at quite different stages in the development of NHA, but it is quite apparent that there has been considerable success in establishing and institutionalising NHA in many countries. Countries can be categorised into several groups according to their level of institutionalisation (Annex Table 1).

Group I consists of countries with permanent NHA systems where annual (or semi-annual) updates are being routinely generated. Not surprisingly, all the OECD states

(Australia, Japan, Korea, New Zealand) are included in Group 1. However, they are not alone, and Group I also includes several developing nations, some of which are low-income developing economies (China, Philippines, Sri Lanka, Thailand). Group I countries are all characterised by the availability of multiple year estimates.

A second group of territories can be identified, which have established official NHA systems and intend to produce regular estimates in future. Territories in Group II are likely to join Group 1 countries during the 2001-2003 period, and include Bangladesh, Hong Kong SAR and Taiwan. It should noted that both Hong Kong SAR and Taiwan have been producing annual estimates of national health expenditure prior to developing NHA systems, so the major issue for these is switching to a health accounting based methodology for future annual estimates. In both Group I and Group II countries, NHA results are usually treated as official statistics by national authorities.

Countries that are currently engaged in developing NHA systems have been categorised as Group III. They consist of Indonesia, Kyrgyz Republic, Papua New Guinea, Samoa and Viet Nam. Some of these, such as Indonesia or Kyrgyz, have produced annual estimates previously, but these probably did not conform to the health account concept or were only partial in coverage. Funding constraints, technical expertise and institutionalisation are probably the major issues for Group III countries.

Group IV countries consist of countries which indicate the intention to develop NHA systems in the near future (Brunei, Malaysia, Mongolia). It is likely that at least one of these will have established a permanent NHA system by 2004.

Countries that as yet have not initiated any official process to establish NHA systems have been categorised as Group V. These include some countries where NHA estimates have been previously produced either on a national basis or at the subnational level. There is interest by researchers or officials in developing NHA systems in some of these countries, but this interest still has to result in official commitment (Cambodia, India, Myanmar, Nepal).

Institutional responsibility for NHA

Countries report a wide diversity of institutional arrangements for NHA, which presumably reflects differences in agency capacity and national circumstances. In many countries, a distinction can be made between the agencies responsible for commissioning NHA and those responsible for technical production of estimates. Ministries of health are typically the commissioning agency, although in the Group I/II countries, the National Statistical Office performs this function in the Philippines and a public sector research agency (HSRI) commissions NHA in Thailand.

Health ministries are not as likely to be responsible for technical production as for commissioning. Most countries involve other agencies in production, particularly national statistical agencies, public sector research agencies and other ministries, and in several cases the lead role for technical production is assigned to a different agency to that responsible for commissioning (Figure 1). Amongst the Group I/II respondents, which have achieved institutionalisation, the norm appears to be commissioning by the health ministry, but technical production by a public sector research agency. The only

exceptions in these groups are Japan and Taiwan, but in both these cases responsibility for developing new OECD-compatible accounts has been assigned outside the ministry.

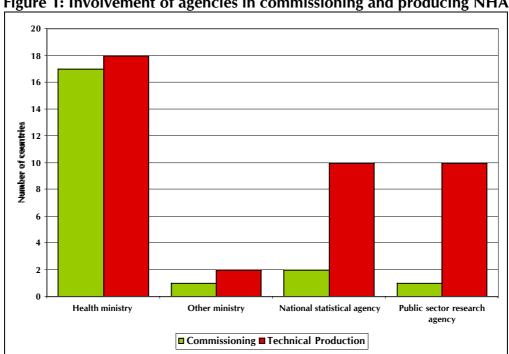


Figure 1: Involvement of agencies in commissioning and producing NHA

Years covered in NHA estimates

A significant number of countries (10 out of 32) in the region have produced time series estimates of national health expenditures, either using the health accounting approach, or an earlier NHE-type concept. Group I/II countries have extensive time series, in most cases comprehensive for the 1990-1998 time period. Thailand which produced semiannual estimates during the 1990s reports that it is working to fill the gaps in its NHA series. Group III and IV countries as would be expected for countries still developing NHA estimates generally only have incidental estimates, although Indonesia has published estimates for the 1985-1995 time period using a non-NHA basis.

For the time period 1985-2000, the available NHA-based estimates amount to 108 individual country-year observations, of which 44 are accounted for by OECD states, and 64 by non-OECD territories. These numbers do not include the New Zealand time series which is available for the 1925-1999 time period, but is estimated using a pre-OECD SHA conceptual basis, nor the Indonesian time series. In contrast to reports from other regions, Asia-Pacific countries seem to have experienced less obstacles in shifting to time series estimates having initiated NHA work. This may be related to the fact that many Asia-Pacific countries seem to have estimated multiple years in their first NHA estimates, instead of only estimating a single year as apparently the practice elsewhere.

Structure and frameworks for NHA

Dimensions

There is considerable diversity in the structure of NHA frameworks used by countries. All countries report disaggregating expenditures by sources. Use of providers and functions as dimensions in NHA frameworks is characteristic of most NHA frameworks in the region, but not completely universal. Amongst the Group I/II countries, functions are universal, but Australia, Korea and Philippines report not including providers as a dimension of analysis. Presumably this will change as countries adopt the OECD SHA, although Korea expects difficulties because of data limitations. In total, 16 (76%) and 18 (86%) respondents out of 21 reported using providers and functions as dimensions (Figure 2).

Only 43% (9/21) of countries provide subnational breakdowns in their NHAs. This would reflect the relative lack of importance of subnational jurisdictions in several of the smaller states.

Figure 2: Dimensions used in NHA

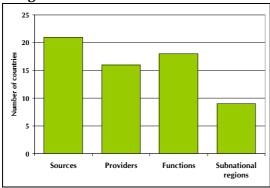
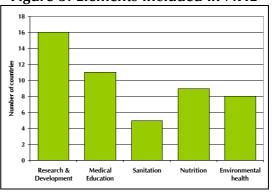


Figure 3: Elements included in NHE



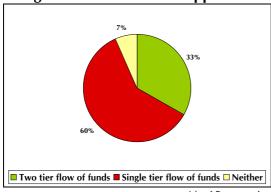
Elements included in definition of national health expenditures

Whilst all countries include both recurrent and capital expenditures in their definition of national health spending, there is considerable diversity in the treatment of what OECD SHA terms health related functions. Out of 18 responses, 89% report including research and development, and only 61% include medical education. Less than half the countries in the region report including expenditures on sanitation, nutrition and environmental health (Figure 3). Since countries in the region all have developed their NHAs as domestic initiatives, this suggests that inclusion of functions such as sanitation, nutrition and environmental health in the core definition of health spending does not attract significant policy interest amongst users of NHA. Even amongst the countries that do attempt to include these items, several report difficulties in obtaining data on private spending on these categories, and that their NHA estimates underestimate these categories.

Flow of funds

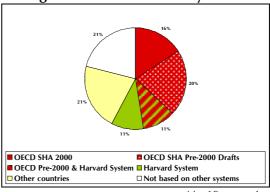
The majority (60%) of countries with NHA or developing NHA construct NHA by estimating expenditure flows between the last payer (i.e., financing sources combined with financing intermediaries) and users. Only a third estimate their NHA using separate financing sources to financing intermediaries and financing intermediaries to providers matrices (Figure 4). It is observed that most of the latter countries are countries yet to institutionalise NHA. Comments made at the Cebu Conference indicate that for many countries estimating the flow of funds using a two-tiered approach is not considered a priority, which may reflect lack of perceived policy importance.

Figure 4: Flow of funds approach



N = 15 countries

Figure 5: Basis of NHA systems



N = 19 countries

Basis of NHA frameworks

The majority (53%) of countries responding with NHA or developing NHA have used the 2000 version of the OECD SHA or earlier unpublished versions as the basis for developing their NHA frameworks. Of these 2 (13%) countries also report using the "Harvard" approach. One other country reports using only the "Harvard" approach, implying that 20% of respondents had used the "Harvard" approach overall. The remaining 6 (40%) respondents reported using other countries' systems or developing their own indigenous national systems (Figure 5). The relatively widespread use of the OECD SHA approach in contrast with use of the "Harvard" approach may reflect considerable interest in international comparability and the early dissemination of drafts of OECD SHA through the APNHAN network.

Adoption of OECD SHA

There is considerable interest in the new OECD SHA 2000 standard, with 52% of 21 responding countries classifiable as adopters. Out of 20 countries responding, three countries have already adopted it, and four are currently implementing it. These include not only the OECD states (Australia, Japan, Korea), but also developing countries China, Philippines, Samoa, Sri Lanka and Thailand. Four other territories intend to adopt the OECD SHA in future. The remaining ten countries divide equally between those that are still considering adoption, and those that have not considered the issue. Most of this latter two groups are countries which are yet to establish NHA systems.

Table 1: Adoption of OECD SHA in Asia-Pacific NHAs, May 2001

Adopted	Implementing	Plan to adopt	Under consideration
Korea	Australia	Bangladesh	Indonesia
Sri Lanka	China	Kyrgyz	Malaysia
Thailand	Japan	Taiwan	Mongolia
	Samoa	Viet Nam	Nepal
			Papua New Guinea

It should be noted that countries adopting OECD SHA 2000 are generally making modifications to it during implementation, and this includes the OECD states. Several countries also report producing two different sets of national health expenditure estimates – one based on locally relevant definitions (but closely related to OECD SHA 2000), and a second set of estimates for international comparability following OECD SHA 2000. Examples of this include Japan and Sri Lanka.

Support of NHA development

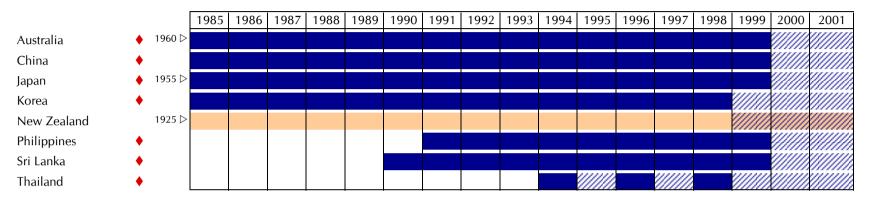
Respondents report a large number of agencies supporting current development of their NHA systems. In most cases, financial and other material support is derived from more than one agency. The most common supporting agency is a national ministry, most often the health ministry. External donor or UN agencies are only reported to be providing support in half the countries, and there is no general predominance by any one donor. WHO and World Bank are cited 4 and 5 times each (out of 21 responses), and other bilateral donors such as USAID, Ausaid, Dfid, etc are only cited once each. The pattern of NHA development in Asia-Pacific region appears to be one of nationally-driven institutionalisation, with external donors playing only a supporting role.

Interest in APHNAN web-site

All but one responding country indicated they were interested in using the planned APNHAN web-site to make available their NHA results and reports. There will need to be further consultation with APNHAN members about the structure of this web-site.

ANNEX TABLE 1: STATUS OF NATIONAL HEALTH ACCOUNTS IN ASIA-PACIFIC REGION, MAY 2001

GROUP I: Territories with permanently established NHA systems with routine updates



GROUP II: Territories with NHA systems intending to produce routine updates in future

		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Bangladesh	•																	
Hong Kong SAR	•																	
Taiwan	•																	

GROUP III: Territories currently constructing NHA systems

		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Indonesia	•																	
Kyrgyz	•																	
Papua New Guinea	♦																	
Samoa	•																	
Viet Nam																		

GROUP IV: Territories planning/considering to initiate NHA systems

Brunei

Malaysia •

Mongolia ♦

1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
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GROUP V: Territories with no official decision to establish NHA

Cambodia Cook Islands

East Timor

Fiji

India

Laos

Maldives

Marshall Islands

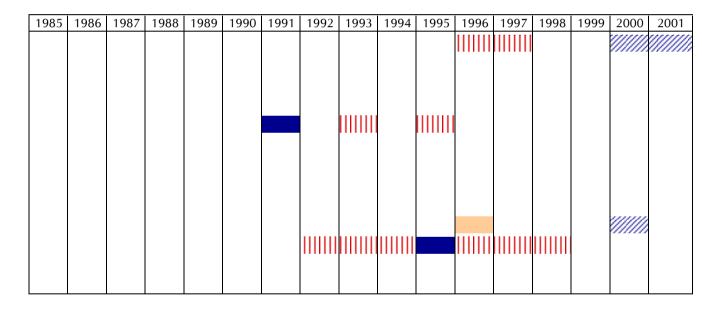
Micronesia

Myanmar

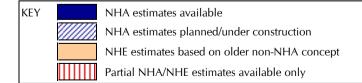
Nepal

Solomon Islands

Vanuatu



♦ APNHAN member



Sources: APNHAN Status Survey 2001; published documents & WPRO sources.

Countries excluded for lack of information: DPR Korea,

Singapore, Afghanistan, Pakistan, Kiribati