PERIODIC NARRATIVE REPORT
ON
ASSESSING THE NEED FOR & DESIGNING AN ACCREDITATION SYSTEM

A case study in Andhra Pradesh

[Feb. 1st 1994 to July 31st 1994]

INSTITUTE OF HEALTH SYSTEMS

5-9-22/27, ADARSHNAGAR

HYDERABAD. - 500 463 A.P.

INDIA

CONTENTS

Status Note On Private Hospitals And Nursing Homes in Andhra Pradesh: 26 July 1994.

An increase of 5% in the number of private hospitals and nursing homes which was targeted for the period under report (Feb. 1994 - Jul. 1994) has been achieved. To be precise the increase is by 5.31%. This is the result of the field survey by our trained investigators. The information presented in this report covers the data collected and entered on the system till 26 July 1994. As of now the investigators have covered almost the whole of Hyderabad and Ranga Reddy districts and have also started work in Chittoor.

Since the State wide data validation process is going on, no major analysis is possible at this stage. Field level enquiries are certainly going to add to the existing entries in the APHIDB data base, which was derived from an Andhra Pradesh Government survey conducted in Dec.1993 - Jan. 1994. Our field survey has already yielded considerable increase over the earlier figure of Hyderabad and Ranga Reddy districts for which data collection is nearly complete. We have used several generally untapped sources such as the medical representatives organisations, I.V fluid suppliers, medical shops etc to get a more complete list of hospitals and nursing homes (See Manual for Research Investigators for details). In view of the still evolving nature of the data we have attempted to do only some preliminary analysis to see what patterns the data would be taking.The term private health institutions(PHI) used in this report includes all private hospitals and nursing homes (PHN) and also some clinics which were wrongly included in the during the original AP Government survey.The number of these clinics and PHNs which did not give information on bed strength come to 471.

We find that a large number of private hospitals and nursing homes (PHN) in Andhra Pradesh - 49.93 % are functioning in *mandal* headquarters which are essentially small towns. The average bed strength of PHNs in mandal headquarters is only 14.24. Divisional (commonly referred to as sub-division in many other parts of India) headquarters account for 10.82% of PHNs. Average size of PHNs at these places is 16.68.

The information on PHI wise bed strength distribution shows that while 41.19% PHIs fall in the 1-10 bedded category, their percentage share in bed strength is only about half of this : 19.09% . The just1.17% PHIs in the 100 -249 bedded category account for 11.42% of the total bed strength (Table2).It has to be pointed out still that In spite of such imbalances, about half (48.18%) of the bed strength in the PHIs is in the 1 -20 bedded ones.

Many (47.35%) of the PHIs offer "all services" which include medical, surgical, obstetric and "other" services. After this comes the category of medical, surgical and obstetrics (18.31%), medical (9.67%) and medical and surgery (6.47%). Obstetrics turns out to be one of the main services offered by the PHIs. Among the various services of the PHIs listed, obstetrics figures as a component in as many as 6 combinations,apart from being reported separately from some specialised obstetric care PHIs (Table 3).

As per the CMIE index of socio economic development most of the coastal Andhra districts register a relatively higher score (Table 5). We find that the coastal Andhra region with 9 districts are having 1920 PHIs with 24193 beds while the 14 less developed districts of Rayalseema (4 dists.) and Telengana (10dists.), add up to only 1231 PHIs and 22357 beds in spite of a much larger population. The population of coastal Andhra districts is 29 million while that of the districts in Rayalseema and Telengana is 11million and 26 million respectively. The spread of bed strength in Rayalseema and Telengana also does not seem, to be as even as in Andhra region. It appears that the growth of small and medium PHIs is largely determined by the presence of a better off market for health care and the general socio - economic development around (Table 4).

The concentration of private health instutions is also dependent on the general economic development of the respective districts. Private hospitals and nursing homes of the more developed coastal Andhra region constitutes 66% to 83% of all PHIs in as many as 7 out of 9 districts of the region. Among the four districts of the less developed Rayalseema region only one among them have more than 50 % PHI component. In the Telengana region the PHI componenent in 6 out of 10 districts fall between 53% in Nalgaonda to the state capital disdtrict's 84%, which is uncharecteristic of the region (Table 5).

In bed capacity also a some what similar picture emerges: in 6 out of 9 districts in the Andhra region PHI's share in over all bed strength ranges between 61% - 87%. In Rayalseema, only in one district it crosses the 50% mark, while in 6 of the 10 districts of Telengana the PHI component in bed strength ranges between a moderate 53% to 67% respectively (Table 6).

Most of the large 100 to 249 bedded PHIs are in the 7 out of 9 districts of Andhra region, the state capital of Hyderabad in Rayalseema and few other districts in Telengana. There aren't many PHIs with 250 or more bed capacity. Of the four which exist three are in Hyderabad itself. Among the small and medium hospitals also the districts of Andhra region have many more than the districts of Rayalseema and Telengana barring the exception of the State capital - Hyderabad (Table 7).

In rural as well as urban areas of A.P the coastal Andhra region is far ahead of the other two regions in both number of PHIs and bed capacity (Table 8). While we analyse the data by place status which is a sharper indicator we find a sbstantial concentration of PHIs in the mandal towns particularly in the four districts of East Godavari, West Godavari,Krishna and Guntur(Table 9) .

The bed - population ratio in respect of PHIs is 0.71 per 1000 as compared to the corresponding ratio for public hospitals of 0.43 per 1000. For rural areas the respective PHI figure is 0.22 per thousand as against 0.08 per thousand of public hospitals and for urban areas the PHI figure is 2 per thousand while the public hospitals' figure is 1.34 per thousand (Table 10). The bed population ratios of PHIs in some districts are likely to undergo an upward revision in the coming months since our field survey is going on.Therefore we are not going in for a detailed analysis of bed population ratio at the district level. The magnitude of this upward revision is not expected to be as high at the state level, as it may be in some individual districts.

Note : Tables are provided towards the end of this status note.

Table - 1

DISTRIBUTION OF PHIs AND No. OF BEDS BY PLACE STATUS

Place Status	P.H.I.'s		Beds	
	No.	%	No.	%
District Headquarter	944	29.95	18264	39.23
Subdivisional Headquarter	320	10.51	4838	10.39
Mandal Headquarter	1533	48.65	19057	40.93
Village Headquarter	354	11.23	4391	9.43
Total	3151	100.00	46550	100

Table - 2

PHI DISTRIBUTION BY BED STRENGTH

Bed Size	P.H.I.'s		Beds	
	No.	%	No.	%
0	471	14.94	0	0
1-10	1,298	41.19	8,891	19.09
11-20	842	26.72	13,543	29.09
21-30	307	9.74	8,231	17.68
31-50	140	4.44	5,855	12.57
51-99	52	1.65	3,553	7.63
100-249	37	1.17	5,319	11.42
=<250	4	0.12	1,158	2.48
Total	3,151	100	46,550	100

TABLE - 3

SERVICES OFFERED BY PHIs

Service	PHIs		Beds	
	No.	%	No.	%
Obs	49	1.55	590	1.26
Sur	40	1.26	527	1.13
Med	305	9.67	1,914	4.11
Others	68	2.15	412	0.88
Obs & Sur	36	1.14	565	1.21
Obs & Med	105	3.33	774	1.66
Med & Sur	204	6.47	2,902	6.23
Obs & Oth	33	1.04	449	0.96
Sur & Oth	9	0.28	17	0.03
Med & Oth	90	2.85	472	1.01
Med,Sur & Obs	577	18.31	9,664	20.76
Med,Obs & Oth	64	2.03	470	1
Med,Sur & Oth	74	2.34	1,211	2.6
Obs,Sur & Oth	5	0.15	79	0.16
All Types	1,492	47.35	26,504	56.93
Total	3,151	100	46,550	100

Table 4

Abstract table on share of Pub/Pri/Vol HI in different geo-regions of A.P.

Geographic Region	Public Hosp.		Private Hosp.		Voluntary		Total	
	Inst.	Beds	Inst.	Beds	Inst.	Beds	Inst.	Beds
Coastal Andhra	698	10244	1920	24193	26	2787	2644	37224
Rayalaseema	336	4389	229	3145	13	973	578	8507
Telengana	657	13307	1002	19212	15	738	1674	33257
T O T A L .	1691	27940	3151	46550	54	4498	4896	78988

Table from AP HIDB prepared at IHS as on 24/08/94

Table 5

District wise index of Socio-economic development and Share of Public / Private / Voluntary Health Instutions

S.No.	District	ISED *	Public Hosp.		Private Hosp.		Voluntary		Tota
			Inst.	%	Inst.	%	Inst.	%	Inst
Coastal Andhra									
1.	SRIKAKULAM	56	67	53.60	57	45.60	1	0.80	12
2.	VIZIANAGARAM	65	65	78.31	18	21.69	0	0.00	8
3.	VISAKHAPATNAM	92	53	32.92	106	65.84	2	1.24	16
4.	EAST GODAVARI	93	111	25.17	327	74.15	3	0.68	44
5.	WEST GODAVARI	115	78	17.93	357	82.07	0	0.00	43
6.	KRISHNA	119	80	15.36	433	83.11	8	1.54	52
7.	GUNTUR	114	78	21.67	274	76.11	8	2.22	36
8.	PRAKASAM	86	84	34.43	159	65.16	1	0.41	24
9.	NELLORE	96	82	29.93	189	68.98	3	1.09	27
Rayalaseema									
10.	CHITTOOR	84	88	46.07	98	51.31	5	2.62	19
11.	CUDDAPAH	83	68	51.91	60	45.80	3	2.29	13
12.	ANANTAPUR	92	91	70.00	38	29.23	1	0.77	13
13.	KURNOOL	83	87	70.63	33	26.19	4	3.17	12
Telengana									
14.	MAHBUBNAGAR	53	85	54.84	68	43.87	2	1.29	15
15.	RANGAREDDY	75	48	30.00	111	69.38	1	0.63	16
16.	HYDERABAD	299	50	16.50	253	83.50	0	0.00	30
17.	MEDAK	86	63	54.78	52	45.22	0	0.00	11
18.	NIZAMABAD	104	49	40.83	69	57.50	2	1.67	12
19.	ADILABAD	66	73	73.00	26	26.00	1	1.00	10
20.	KARIMNAGAR	97	77	33.05	153	65.67	3	1.29	23
21.	WARANGAL	80	69	56.56	51	41.80	2	1.64	12
22.	KHAMMAM	76	68	33.83	132	65.67	1	0.50	20
23.	NALGONDA	71	75	45.45	87	52.73	3	1.82	16
	T O T A L .	99**	1691	34.54	3151	64.36	54	1.10	489

Table from APHIDB prepared at IHS as on 24/08/94

ISED* (Index of Socio-economic development) Source :

Profile of districts, Nov. 1993.

Centre for Monitoring Indian Economy, Bombay.

Dec 1993 pp 1-23.

** ISED. A.P. State average.

Table 6

District wise Share of bed strength of Pub / Pvt / Vol Health Instutions

S.No.	District	Public Hosp.		Private Hosp.		Voluntary		Total
		Beds.	%	Beds.	%	Beds.	%	Beds.
Coastal Andhra								
1.	SRIKAKULAM	552	50.09	510	46.28	40	3.63	1102
2.	VIZIANAGARAM	321	79.46	83	20.54	0	0.00	404
3.	VISAKHAPATNAM	2418	57.85	1602	38.33	160	3.83	4180
4.	EAST GODAVARI	1624	23.91	4765	70.15	404	5.95	6793
5.	WEST GODAVARI	638	12.93	4297	87.07	0	0.00	4935
6.	KRISHNA	1463	26.74	3182	58.16	826	15.10	5471
7.	GUNTUR	1764	25.56	4196	60.79	942	13.65	6902
8.	PRAKASAM	456	14.44	2601	82.39	100	3.17	3157
9.	NELLORE	1008	23.55	2957	69.09	315	7.36	4280
Rayalaseema								
10.	CHITTOOR	1351	48.11	932	33.19	525	18.70	2808
11.	CUDDAPAH	573	31.40	939	51.45	313	17.15	1825
12.	ANANTAPUR	1085	69.37	479	30.63	0	0.00	1564
13.	KURNOOL	1330	59.74	795	34.42	135	5.84	2310
Telengana								
14.	MAHBUBNAGAR	736	41.03	968	53.96	90	5.02	1794
15.	RANGAREDDY	709	31.43	1505	66.71	42	1.86	2256
16.	HYDERABAD	6946	43.15	9153	56.85	0	0.00	16099
17.	MEDAK	578	47.11	649	52.89	0	0.00	1227
18.	NIZAMABAD	642	35.65	1119	62.13	40	2.22	1801
19.	ADILABAD	688	59.36	446	38.48	25	2.16	1159
20.	KARIMNAGAR	641	25.97	1617	65.52	210	8.51	2468
21.	WARANGAL	1289	52.33	1077	43.73	97	3.94	2463
22.	KHAMMAM	521	24.44	1501	70.40	110	5.16	2132
23.	NALGONDA	557	29.98	1177	63.35	124	6.67	1858
T O T A L .		27940	35.37	46550	58.93	4498	5.69	78988

Table from APHIOB prepared at IHS as on 24/08/94

Table 8

District wise Rural-Urban Distribution of Health Care instituions and Bed strength

. Distirct	Private Hosp.				Public Hosp.				Voluntary Hosp.				Total			
	Rural		Urban		Rural		Urban		Rural		Urban		Rural		Urban	
	Inst.	Beds	Inst.	Beds	Inst.	Beds	Inst.	Beds	Inst.	Beds	Inst.	Beds	Inst.	Beds	Inst.	Beds
tal Andhra																
SRIKAKULAM	2	6	55	504	58	108	9	444	0	0	1	40	60	114	65	988
VIZIANAGARAM	0	0	18	83	58	80	7	241	0	0	0	0	58	80	25	324
VISAKHAPATNAM	4	47	102	1555	39	146	14	2272	0	0	2	160	43	193	118	3987
EAST GODAVARI	110	1354	217	3411	92	107	19	1517	1	24	2	380	203	1485	238	5308
WEST GODAVARI	155	1622	202	2675	76	622	2	16	0	0	0	0	231	2244	204	2691
KRISHNA	107	1066	326	2116	67	140	13	1323	1	25	7	801	175	1231	346	4240
GUNTUR	79	1070	195	3126	65	92	13	1672	1	110	7	832	145	1272	215	5630
PRAKASAM	65	672	74	1929	76	69	8	387	0	0	1	100	141	741	103	2416
NELLORE	58	682	131	2275	71	156	11	852	1	45	2	270	130	883	144	3397
ilaseema																
CHITTOOR	28	165	70	767	78	120	10	1231	1	20	4	505	107	305	84	2503
CUDDAPAH	6	37	54	902	59	40	9	533	2	43	1	270	67	120	64	1705
ANANTAPUR	12	126	26	353	77	127	14	958	0	0	1	0	89	253	41	1311
KURNOOL	33	795	0	0	77	161	12	1219	1	0	3	135	111	956	15	1354
engana																
MAHBUBNAGAR	46	686	22	282	73	196	12	540	0	0	2	90	119	882	36	912
RANGAREDDY	26	255	85	1250	35	611	13	78	0	0	1	42	61	866	99	1390
HYDERABAD	0	0	253	9153	0	0	50	6946	0	0	0	0	0	0	303	16099
MEDAK	20	204	32	445	56	145	7	433	0	0	0	0	76	349	39	878
NIZAMABAD	34	466	35	653	41	130	8	512	1	0	1	40	76	596	44	1205
ADILABAD	0	0	26	446	63	184	10	504	0	0	1	25	63	184	37	975
KARIMNAGAR	67	416	86	1201	68	215	9	426	0	0	3	210	135	631	98	1837
WARANGAL	24	626	27	451	61	178	8	1111	0	0	2	97	85	804	37	1659
KHAMMAM	19	123	113	1378	61	193	7	328	0	0	1	110	80	316	121	1816
NALGONDA	27	304	60	873	67	80	8	477	1	58	2	66	95	442	70	1416
O T A L ..	922	10722	2229	35823	1418	3900	273	24040	10	325	44	4173	2350	14947	2546	64041

'able from APHIDB prepared at IHS as on 06/08/94

Table 9

District wise distribution of PHIs and Bed strength by Place status

Sl. No.	District	District Hqrs.		Division Hqrs.		Mandal Hqrs.		Village Hqrs.		Total	
		Insti.	Beds	Insti.	Beds	Insti.	Beds	Insti.	Beds	Insti.	Beds
Coastal Andhra											
1	SRIKAKULAM	14	257	11	128	16	107	3	18	44	510
2	VIZIANAGARAM	10	73	0	0	0	0	1	10	11	83
3	VISAKHAPATNAM	45	745	1	8	47	702	13	147	106	1602
4	EAST GODAVARI	49	652	89	1561	126	2072	41	480	305	4765
5	WEST GODAVARI	33	372	6	181	226	3426	22	318	287	4297
6	KRISHNA	32	410	40	659	138	1707	29	406	239	3182
7	GUNTUR	0	0	39	628	192	3161	21	407	252	4196
8	PRAKASAM	29	689	13	273	63	1164	30	475	135	2601
9	NELLORE	54	1576	16	229	84	1122	5	30	159	2957
Rayalaseema											
10	CHITTOOR	27	268	10	361	40	253	2	50	79	932
11	CUDDAPAH	12	242	5	52	35	639	1	6	53	939
12	ANANTAPUR	11	189	0	0	23	268	1	22	35	479
13	KURNOOL	8	366	13	219	12	210	0	0	33	795
Telengana											
14	MAHBUBNAGAR	12	195	21	221	31	347	2	205	66	968
15	RANGAREDDY	0	0	3	29	34	417	68	1059	105	1505
16	HYDERABAD	251	9153	0	0	0	0	0	0	251	9153
17	MEDAK	2	25	4	33	42	538	4	53	52	649
18	NIZAMABAD	28	560	0	0	36	508	4	51	68	1119
19	ADILABAD	6	53	0	0	19	383	1	10	26	446
20	KARIMNAGAR	38	658	8	98	49	612	27	249	122	1617
21	WARANGAL	22	594	9	134	20	349	0	0	51	1077
22	KHAMMAM	52	912	1	22	66	567	0	0	119	1501
23	NALGONDA	11	275	1	2	37	505	31	395	82	1177
	T O T A L	746	18264	270	4838	1338	19057	306	4391	2680	46550

Table from APHID8 prepared at IHS as on 24/08/94

Note : Division in A.P. is an administrative unit under a district into which mandals are grouped

Table 10

District wise Bed population for Private, Public & Voluntary Health Care Sector

Dist. wise PHI Bed Population Ratio

Ratio = Beds / 1000 Population

o. Distirct		Population (1991) (Census)	Pvt Hosp. Inst.	Pvt Hosp. Beds	Ratio (per) (1000)	Pub Hosp. Inst.	Pub Hosp. Beds	Ratio (per) (1000)	Vol Hosp. Inst.	Vol Hosp. Beds	Ratio (per) (1000)	Total Inst.	Total Beds	Ratio (per (1000
stal Andhra														
SRIKAKULAM		2322778	57	510	0.22	67	552	0.24	1	40	0.02	125	1102	0.47
VIZIANAGARAM		2110943	18	83	0.04	65	321	0.15	0	0	0.00	83	404	0.19
VISAKHAPATNAM		3280936	106	1602	0.49	53	2418	0.74	2	160	0.05	161	4180	1.27
EAST GODAVARI		4541222	327	4765	1.05	111	1624	0.36	3	404	0.09	441	6793	1.50
WEST GODAVARI		3450160	357	4297	1.25	78	638	0.18	0	0	0.00	435	4935	1.43
KRISHNA		3698833	433	3182	0.86	80	1463	0.40	8	826	0.22	521	5471	1.48
GUNTUR		4106999	274	4196	1.02	78	1764	0.43	8	942	0.23	360	6902	1.68
PRAKASAM		2759166	159	2601	0.94	84	456	0.17	1	100	0.04	244	3157	1.14
NELLORE		2392260	189	2957	1.24	82	1008	0.42	3	315	0.13	274	4280	1.79
alaseema														
CHITTOOR		3193699	98	932	0.29	88	1351	0.42	5	525	0.16	191	2808	0.88
CUDDAPAH		2267769	60	939	0.41	68	573	0.25	3	313	0.14	131	1825	0.80
ANANTAPUR		3183814	38	479	0.15	91	1085	0.34	1	0	0.00	130	1564	0.49
KURNOOL		2204924	33	795	0.36	89	1380	0.63	4	135	0.06	126	2310	1.05
engana														
MAHBUBNAGAR		3034945	68	968	0.32	85	736	0.24	2	90	0.03	155	1794	0.59
RANGAREDDY		2551966	111	1505	0.59	48	709	0.28	1	42	0.02	160	2256	0.88
HYDERABAD		3145939	253	9153	2.91	50	6946	2.21	0	0	0.00	303	16099	5.12
MEDAK		2269800	52	649	0.29	63	578	0.25	0	0	0.00	115	1227	0.54
NIZAMABAD		1987251	69	1119	0.56	49	642	0.32	2	40	0.02	120	1801	0.91
ADILABAD		2039461	26	446	0.22	73	688	0.34	1	25	0.01	100	1159	0.57
KARIMNAGAR		3037486	153	1617	0.53	77	641	0.21	3	210	0.07	233	2468	0.81
WARANGAL		2818832	51	1077	0.38	69	1289	0.46	2	97	0.03	122	2463	0.87
KHAMMAM		2170969	132	1501	0.69	68	521	0.24	1	110	0.05	201	2132	0.98
NALGONDA		2852092	87	1177	0.41	75	557	0.20	3	124	0.04	165	1858	0.65
OTAL ..	T	65422244	3151	46550	0.71	1691	27940	0.43	54	4498	0.07	4896	78988	1.21

able from APHIDB prepared at IHS as on 24/08/94

ote : T = Total, U = Urban, R = Rural

A.P. HEALTH INSTITUTIONS DATABASE
MANUAL FOR RESEARCH INVESTIGATORS

Private hospitals and nursing homes are important constituents of health care delivery system in India. As demand for health care services has increased, the institutions in this sector have expanded both in urban and rural areas. Besides this, a large number of physicians are practising privately. The strength of the private and voluntary organisations in India is both in terms of its size as well as the nature of their activities. The existence of health care institutions in private sector has profound implications for the existing character of the Indian health care system and its future course. The developments in this sector have raised a number of concerns like standards and quality systems, total quality management, consumer concerns etc. Unfortunately complete and reliable data on this sector is yet to be available. We do not have a complete enumeration of private small hospitals popularly known as nursing homes and even of the big hospitals.

In order to plan for development of the health care delivery infrastructure, estimates of coverage and size of existing health care facilities in both the public and private sector, is required from time to time. Information regarding the public sector medical and health institutions is usually available from the government, though with some difficulty. Information on private and NGO sector health institutions is not available. The directory of hospitals brought out by central health intelligence bureau of government of India does not cover many of the private sector hospitals. Hence, this Institute has taken up the task of developing a data base of Private Health care Institutions (PHI) in the state and to publish electronically a directory of these institutions regularly. The Government of Andhra Pradesh undertook a survey of private hospitals and nursing homes in Andhra Pradesh around Dec. 1992 / Jan 1993. The data collected by the directorate of health and APVVP was obtained by this institute. With this data on private hospitals our AP Health Institutions Data Base (Private hospitalscomponent) was started. The task now is to validate this data and improve the coverage of the data base. This data will be updated once a year.

In this connection your **primary task** would be:

- Validation of the existing data about the private nursing homes and
- collection of information about the new Private Health Institutions (PHI).

HOW TO VALIDATE : WHAT TO DO ?

You need to first understand how validation system works. We launch a validation campaign from time to time. The current validation campaign was launched in 1993 October. Validation Campaigns typically start with mailing of a letter to each private hospital or nursing home included in APHIDB. A print out of the information pertaining to the respective PHI is enclosed to the letter meant for it. Copy of the letter and a typical print out is enclosed in Annexure I. A request is made to the owner manager of the PHI to check the information furnished to them and make necessary corrections based on ground realities. Though we expect every one to respond to our request, in reality it doesn't happen that way. The response rate to the first letter was about 50%. The following table gives typical outcome of the first letter of the campaign.

No. to which validation request made	2,700
No .of replies received	1,280
No of authenticated replies received with corrections	427
No of replies received without any authentication	551
No of letters bounced back (undelivered)	3,02
No response	1,420

From the above table it is evident that we need to supplement the mailing effort with field work. We need to check a sample of the authenticated replies to ensure that the information we are receiving in mail can be relied upon. We need to check with those who did not sign their replies if the data is correct. We need to contact all those who didn't respond at all. In case of those for whom our letter returned undelivered we need to ascertain the exact postal address and do a validation through field enquiry as well. Thus, in summary the field enquiry and validation work would consist of the following activities.

1. Courtesy visit to the selected sample of PHIs who responded by mail and returned authenticated reports.
2. Courtesy and exploratory visit to PHIs who returned the printout unsigned and without any correction.
3. Collection of data about the PHIs who haven't responded.
4. Locate PHIs for which the letter returned undelivered.

You are provided with a sheet containing available information for each of the above categories. The printout contains information regarding the Name of the Nursing Home; Address; Year of establishement; Bed strength etc., These entries were made some time back. They need to be verified and corrected in the sheet itself. Later the existing information should be replaced with the new information acquired through the survey into the Andhra Pradesh Health Institutions Data Base (APHIDB) maintained at the Institute.

First you should approach the head of the hospital or administrative head and explain the purpose of the visit and about the validation which you are conducting. Here you will come across with certain questions from them, certain sample questions are given in the Annexure II for your ready reference.

In these types of situations what to do and how to proceed? You should try to gain the confidence of the hospital manager/owner by explaining the objectives of this whole exercise first and then proceed . Take out the covering letter, which was mailed already to nursing homes concerned, go through it carefully. You can find the objective and the need for this total exercise. Explain it to the person concerned and on behalf of the Institute you can give an assurance that this data will be used for only research purpose. The directory which we are planning to bring out will contain the information related to the speciality services that are being offered by the nursing home, which will enable mutual exchange of the services offered, for providing better health care to the needy. Verify the information provided , if possible go for physical count of the beds.

COLLECTION OF DATA ON NEW PHIs WHICH ARE NOT IN THE DATABASE

One of your primary responsibility would be to identify the new nursing homes. Apart from the validation forms, do carry sufficient blank survey forms and copies of the covering letters in order to collect data on nursing homes which do not figure in our data base.. Meet the person concerned (either hospital administrator or doctor who owns the nursing home) through the receptionist, introduce yourself, explain about the Institute of Health Systems, and the purpose of your visit. Ask them to fill the survey form and if they say they are busy and will send them later, please leave a self addressed stamped envelope with them and request them to mail it as early as possible. Later names of these nursing homes should be included in the data base.

HOW AND WHERE ?

- Contact the Municipal Office: The Municipal Officer would be granting some sort of licence for the private nursing homes and hospitals. Particularly the corporations of Hyderabad, Visakhapatnam and Vijayawada grant some kind of registration in their public health sections. Purpose of this registration is to pick up the garbage and hospital waste , give grant in aid for family planning operations etc. So check up with the Chief Medical Officer of the corporation and with other officials dealing with the subject. Obtain a copy of their latest list. These corporations are being addressed separately to send copies of the registration letters as and when it is granted to any private nursing home, hospital, clinic etc. Similarly copies of any other communication pertaining to grant of registration, withdrawal or variation of conditions of registration has also been requested for. Do check if the concerned section is actually sending them. Do remind them about this request of IHS and request them to cooperate.
- The Indian Medical Association's local branch would have a list of its members. The office bearers of the branch will be able to help identify the members who are affiliated to nursing homes or clinics. Request the IMA office bearers to introduce you to as many of the nursing homes and clinics as possible. Their introduction will help you in quickly collecting data from the concerned institutions. Please collect the names and addresses of these IMA members from the Institute before you leave to field. (Annexure III).
- Contact the office bearer's of the medical representatives association. They would usually maintain a list of all health care institutions including clinics for use of their members. Medical representatives invariably cover all prescribing physicians as well as institutions.For example,we had a meeting with the Medical RepresentativesAssociation for the twin cities situated at 4-1-689, Mahboopal Manzil, Jambagh, Hyderabad- 1. During the initial meeting with the president of their twin cities unit, we introduced the Institute, explained the purpose of visit and a request was made to transfer the information about the health institutions which they know and extend co-operation support to the IHS team. Similar request was made to their state president, who was present on that day. He was very much delighted with this type of exercise and assured help from his association's side for this vital task. Hence, keep regular touch with the medical representatives association and its members. District branches can also be contacted for this pupose (individual letters are being mailed.). Details of office bearers of the state association and local branches is furnished in Annexure IV.

- A contact has been made with the A.P. Association of Chemists and Druggists, situated at King Koti road in providing the information regarding PHIs and pharmaceuticals. This association is mainly active in Nalgonda, Palakol, Visakhapatnam and Warangal. Separate list of their district branches is enclosed in Annexure V. List of Chemists and Drug companies located in the twin cities and Rangareddy district was collected from their association and the same has been entered in a database, which is ready for reference. A formal request has also been made to the state president to extend full co-operation to the IHS team during their visit.
- Distributors of IV fluids are another good source of information about nursing homes and hospitals in the area. You can carry a list of all major IV fluid dealers in the state from IHS, before going on field work. The pharmaceutical manufacturers section of APHIDB contains information about IV fluid manufacturers in the state. (Annexure VI)
- The next source is the medical shops. For this purpose first you need to have a list of all medical shops in the area. Any shop in order to deal with pharmaceutical products has to have a licence under the Drug Control Act. So the drug control department would have a list of all licence holders. A list of licence holders is available with the institute, which was collected from the office of the Drug Controller,AP. The drug control inspectors will be able to give information regarding medical shops who in turn will give an idea about nursing homes, etc, in the locality. List of drug Inspectors and their respective jurisdictions is provided in the Annexure VII.
- Another source is the Telephone Directory

Expected outcome from mailed questionnaires and field survey:

a) Validation report :
Mainly based on the responses to mailed questionnaries.

b) Survey report :
Validation of information on PHIs existing alreary on the database and additional information about new PHIs.

c) Encounter notes

Encounter Notes

Your encounter with persons associated with PHIs will be an occasion to understand various issues about which they are concerned. One of our objectives is to understand these issues and concerns. At a later stage we will address them and try to develop a consensus on major areas of concern. While probing various issues and concerns of the PHI functionaries remember to find out about their concern for quality of care, standards and safety measures. Questions such as how they set up their labour room; did they follow any written standards or list of items; did they consult any other hospital for that purpose are good starters to build up a conversation.

Additional topics for conversation are the involvement of PHIs in public health activities, prevention and control of communicable diseases and any other additional community services. How do they deal with very poor patients who can not afford to pay ?

It will not be possible to document such qualitative data unless you maintain a record of your experience with PHI owners, and managements and others as well their own views. So develop the habit of taking short notes when you are talking to them. Immediately after the meeting, add to the notes the points which you could not write, at the end.

Please note that this encounter note is useful for research purpose. This note will be used for statistical and qualitative analysis. You should collect encounter information from atleast two functionaries/management of each PHI and also record your observations about the the quality standards of the PHI concerned which in addition to the quality of the facilities and personnel should cover such aspects as availability of drinking water, sanitation, waste disposal etc. For these observations you should also contact some patients.

Thus the encounter note should contain a record of your conversation with the PHI owners/ managers, functionaries and your own observations. Feel free while recording your observations / opinions / comments about the PHI concerned.

Remember to note down immediately after the encounter the information collected during the validation exercise. First complete the validation of the data on the nursing homes available. Then proceed to collect data on any remaining nursing homes so as to exhaust all those confined in that area. Record in detail how you proceeded with this task, e.g. what were the feelings of the nursing homes personnel or IMA members, their reactions to this exercise etc. Finally, you should convey your inferences from this exercise to the project-in-charge.

ANNEXURE I

Andhra Pradesh Health Institutions Data Base

Health care delivery institutions survey

Date of survey :

Name of Health Institution :			
Address Phone:			
Village/ City	Mandal		Pin
	District		
	Location Code		
Year Established			
Bed Capacity when established	Present bed capcity		
Type of Ownership	**Type of Cases Handled during a Year[1]**	**No.**	**%**
rivate Proprietory	Medical		
rivate Partnership	Surgical		
rivate Corporate	Obstetric/Maternity		
oluntary/ Charitable	Others		
	Total		
er Class			
tegory			
marks if any :			
nes of ages/Areas n where most our patients e?			
e of the surveyor:	Signature :		
Approximate numbers may be furnished.			

Encounter Note

Owner /Manager
Other functionary
Observations

ANNEXURE II

Some tips which can be of help during the conversation wit h PHI managers in the validation process, and the questions frequently raised :

1. How to identify the PHI ?

Majority of the PHIs will find place in our data base with some small information, on which you are expected to develop. You can collect the address and location of the PHI from the data base and identify the location.

2. How to approach the PHI ?

Reach the PHI with all required materials and information, for eg. data sheet of that PHI, and a note book to make a note of the relevant information.

3. Whom to contact first?

Find out from the receptionist about the administrative -in - charge (AIC)of the PHI. Please remember the name and designation of that particular person, because he will be the person on whom we focus more. Write the name in one corner of the data sheet.

4. How to initiate the dialogue ?

First introduce yourself and the Institute (carry the background information note available with the Institute) and explain the purpose of this exercise. Slowly, ,depending on the AIC's free time you focus on the required information, that you are supposed to collect.

5. Whether to go for discussion or just adopt the interview method ?

There is no fixed procedure. That is totally left to you and the time schedule of the hospital person. The main objective is to get the information and establish contact.

6. Whether to note down the data during or after completing the interview ?

There are two methods here, the ideal one would be take note of statistical information and the detailed note can be written immediately after completing the exercise.

Questions and their Concerns:

1. What is your intention behind this study?

2. Why do you wnat to conduct this study?

3. What are you going to do with this data?

Ans: You can tell them that the collected data will be published as a Dictionary, which will be made availabe to all those who are interested in knowing about the facilities provided. The Database will be of more use for individual researchers and institutions, who are interested in Health Systems Research.

4. What if this information goes to the notice of the Income Tax department ?

Ans: You can remind them that we will be using this data for research only. If at all the income tax depatment people want to know about the details of the private health care institutions, they have their mechnisms of collecting the information. They wouldn't have to depend on the Institute's data.

NOTE ON ANNEXURES III, IV,V, VI &VII

These annexures refer to the lists of names and addresses of :State wide IMA unit Presidents and secretaries, District level office bearers of Medical Representative Association, District level office bearers of A.P Chemists &Druggists Association, Major I.V Fluid suppliers in A.P and the Drug Inspectors. Since these lists as such are only of indirect relevance in a report and run into a number of pages we are not presenting them here.

Scheme for Content Analysis of Encounter Notes

Organasing and simlplifying the complexity of (qualitative) data into some meaningful and managaeble themes or categories is the basic purpose of content analysis (Patton M.Q 1987).The most common uses of content analysis is to know the frequency and the intensity with which certain items, symbols or themes appear in a document (Williamson, Karp and Darphin 1977). The content analyst also looks into the context in which a concept appears in the text (Fetterman D.M 1989). In our case the encounter notes of investigators with PHN Owners/managers,functionaries and their observations will take the place of texts / documents.

Before the advent of computer application packages for content analysis the analyst used to go through the entire lot of information which he wanted to subject to this method and made notes in the margins classifying them into various topics (Patton Q.M op.cit). Information thus grouped into topics were later pooled together for anlysis by certain frequencies or for more sophisticated interpretative analysis. The packages for content analysis has considerably reduced the manual processes involved . Yet the sheer sophisticated nature of qualitative data demands human involvement particularly for interpretative analysis to bring out the subtleties of the data. The packages help in providing frequency of occurence of certain code words in the text, the contexts in which these code words appear in the text and in pooling related sections of the text in one place. But code mapping which involves reflective coding of the text and linking up related codes and the interpretative between the lines analysis to which complex texts are to be subjected to are essentially human tasks .

The framework for content analysis is based on the construction of categories into which the data can be grouped. These categories should reflect the theoretical concepts on which the study is based and bear close relation to the research problem.

In this study our intention in doing the content analysis of encounter notes is to identify policy issues which are of concern to the PHN owner- managers and other functionaries and to identify the items and facilities that are relevant for inclusion in standard formulation.

Another aspect we are looking into is the PHNs' concern for the society. These three will remain the categories for content analysis. Under identification of policy issues of concern to PHNs will come their concern for quality, standards and safety measures. The specifics of items and facilities relevant for standard formulation will depend largely on how much information the PHNs part with overcoming the existing apprehensions about regulatory authorities. Mostly the analysis on this category will be restricted to frequency count, since the nature of this data is suited to such analysis. The category on concern for society will cover the PHNs concern for the poor, concessional rates if any for the poor, interest in public health activities and prevention of communicable diseases.

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ASSESSMENT OF DEMAND FOR ACCREDITATION SERVICES IN HYDERABAD
A PILOT STUDY

INTRODUCTION :

Accreditation is a professional and national recognition to facilities that provide high quality of care. It is implicit that the particular health facility has voluntarily sought to be measured against high professional standards and is in substantial compliance with them (C.E.Lewes 1984). It is a vehicle for systematic external reviews of procedures, managerial systems, physical infrastructure and resources. This compares with professionally agreed standards of procedures and resources. Accreditation is a useful indicator of quality of care as it implies comparison of the health facility with certain minimum standards.

Sustainability of voluntary accreditation system is closely linked to the demand for it. The ultimate source of demand for accreditation are the consumers of private hospital and nursing home services. Though the size of private sector and its coverage has been increasing in India, there has not been any effort to accreditate services offered by them. The purpose of this pilot study is to make a rapid assessment of the demand for the accreditation services by the users of private sector of health care institutions, and to develop a methodology for full scale studies.

MATERIALS & METHODS

Ten private hospitals / nursing homes in the twin cities of Hyderabad and Secunderabad were picked up from the A.P. Health Institutions Database (APHIDB) maintained by IHS. An exit poll of the patients who are discharged from the selected hospitals / nursing homes was done. The data was collected from the patients discharged from the selected hospitals / nursing homes. A quick interview was done with the discharged patients within the hospital. Follow up visits were made to their homes for the main interview. In addition to the patient, one attendant was interviewed to asses his/her perception of the standard quality of care. A semi-structured interview format was introduced [Annexure - 1]. A short format was used for the primary exit poll for patients [Annexure - 2] . A separate format was used to interview the attendants at home [Annexure - 3].

RESULTS

Each respondent was asked if the facilities in the hospital / nursing home were adequate. Majority (96 %) of the respondents have said that the facilities were adequate in the hospitals. Describing their points of satisfaction they spoke about the basic ones like the water facilities and the toilet facilities. They have also mentioned about the canteen, electricity, transport, availability of fruits, telephone (local and STD), proper ventilation ,quality of food and also the accommodation. Some of them have appreciated that they have facilities like a generator when the power got cut and canteen facility which was very convenient. The distance of the bus stop from the hospital / nursing home is also one of the factors to look into because few respondents have mentioned that it was convenient for them to visit the patient.

A very small number (4%) of the respondents have mentioned that the facilities provided in the hospital / nursing home are not adequate. Though some of them have a canteen facility, the quality of the food is not good according to some of the respondents. While some hospitals are far away from the bus stop, still others do not have an STD facility. They have spoken about the facilities which are essential in a hospital. They feel that these are some of the facilities which every hospital / nursing home should see that they have.

There are a number of varied factors which have impressed the respondents about the hospital. Most of them have said that they were impressed by the treatment of the doctors. Some of them were impressed by the care taking of the nurses, while still others were impressed by the maintenance of the hospital / nursing home. Elaborating about the doctors approach, one of the respondents expressed that she was very patient and gentle and this itself half heals the patient. This shows that they do not mind about the other factors. They are ready to compromise with the other factors if the they are satisfied with the treatment of the doctors. While the rest were not impressed by anything in the hospital / nursing home and feel that everything was at an average level only.

The most beneficial factor for the recovery of the patients' health was said to be the treatment of the doctors. They feel that the doctors are specialised in their own respective fields. By this it is clear that most of the patients go in for a particular hospital if the doctors and their treatment is good.

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They feel it is the primary factor and the rest is secondary. Some of the respondents have given the credit to everything that the hospital has done and said that the treatment is just part of the whole process, unlike those who go in if they are satisfied with the performance. They say that everything has its own contribution for the recovery of their health. Everything includes the care taking of the nurses, the maintenance of the hospital / nursing home, the attitude of the others towards them and also the facilities provided.

All the respondents (100%) have said that they had benefited from the stay in the hospital / nursing home. Here they have explained the reasons for their admission i.e., their health problem. We had 72.5% female respondents and 27.5% male respondents. When asked about the comforts in the hospital 92% of them have said that they were comfortable. Most of them were satisfied with the facilities provided. They did not have any major problems, at the same time some of them were impressed by the gentle behaviour of the doctors and nurses which made them more comfortable.

A small sector (8%) of them have said that they were not comfortable because of some reasons like the borewell water which they were not used to, the lack of generators when the current was off while it was too hot which they could not bear. Some of them were uncomfortable with the smell of the hospital. While the others were uncomfortable because of the strict rules in the hospital.

Speaking about the living rules we can say that the private hospitals do not have any particular living rules except for the general rules for maintenance of silence , cleanliness and in some hospitals the visitors have to enter the room bare foot.

Most of the private hospitals / nursing homes do not have any particular rule for the attenders or the visitors. They can visit the patient at any time unlike some other hospitals which are very strict about the same. They keep the gate locked always and allow the visitors only during the visiting hours. Some of the respondents have commented about such rules saying that it is very convenient for them to visit the patient at their convenience in the hospital while the others had said that they should be strict so that the patient is not disturbed most of the time.

Most of the hospitals have "*good* " doctors who are specialised in their own fields. Some of them explain to the patient about his or her problem in detail which some of the respondents appreciated highly. 80% of the respondents have said that the hospitals are good

in terms of doctors. 10% have said that they are excellent while the remaining 10% said they are at an average level. The hospitals in terms of nurses are as follows: 5% have said that the hospital / nursing homes are excellent in terms of the nurses, 45% of them are good and 50% of them are at an average level.

The reasons for the above mentioned are that their service is at an average level. Some of the respondents were not satisfied with the service of the nurses. They said that they are either not well qualified or not very experienced. They do not bother about the patient. They said that the attender of the patient has to go and remind them if the glucose in the bottle was being given to the patient got over.

In terms of medical and surgical equipment half of the hospitals have the basic equipment like an X-Ray Unit and a Laboratory .Around 40% of the respondents have said that the hospitals are good in terms of medical and surgical equipment while the remaining 10% said they are excellent with some advance and latest equipment.

In terms of living comforts more than half (60%) of the hospitals are on an average level with the basic facilities. While 30% of the hospitals are good with some more facilities like canteen, generators, STD facility within the premises and so on. One tenth of the hospitals are excellent in terms of living comforts because they have facilities like aircoolers, refrigerators and coloured televisions.

Regarding the patients visiting the same hospital again if needed most of them (80%) have given a positive response saying that they would because of various reasons like the good treatment in the hospital, the maintenance of the hospital, the care taken by the nurses and most of all the convenience in terms of the distance from their house ,and the flexibility in rules for visiting.

While the remaining 20% said that they would not visit the same hospital again if needed because of reasons like inconvenience in terms of distance. They had been there because they were referred by some other hospital.

The respondents have given a number of reasons for choosing that particular hospital such as personality reasons, information reasons, social influence reasons, economic reasons, personal motivation reasons and philosophical reasons.

Most of the respondents perceived repressed concern by the staff like the doctors and the nurses. The rest of the staff is not taken so much into consideration. Some of them have compared the doctors and the nurses of the government hospitals with the private hospitals. They have said that the staff in the private hospitals do show their concern to the patients much more unlike the government hospitals where they do not bother much.

Regarding the third party inspection of standardization of medical and surgical equipment the vast majority (86%) of the respondents agreed . They felt that by doing so the quality of the services in the hospitals / nursing homes would increase because they would be conscious of the quality of facilities provided and the equipment present. They would be more accountable and would be aware of the monitoring and evaluation of the same. While 14% of the remaining respondents felt that there is no need for such an inspection because irrespective of it, the hospitable is accountable for every thing they do. They are aware of the needs of the patients and to meet those needs they should render the best of their services. Therefore they disagree with the idea of a third party inspection of standardisation of the medical and surgical equipment.

When asked whether the quality control should be met within the existing fees , the overwhelming majority (97%) of them agreed to it saying that they already charge quite high and they should be able to meet the quality within the charged fees. While 3% say that they are ready even to pay more than they are actually paying but would need the best quality of service.

Large majority (72%) of the respondents feel that the billing was rational while 28% feel that it was high. This again depends on the economic background of the respondent. Regarding the standard code for billing more than half(62%) feel that they should have a standard code so that people would be prepared to pay. They would know how much it would cost and they need not keep guessing their bill till the last day. While the 38% of them think that the billing depends on the patient's treatment, his duration of stay in the hospital, the place of his stay, general ward or a special room and his economic background. Therefore it varies from patient to patient.

Most of them (77%) did not have any problem in accessing the patient while 23% had some problem due to the rigid rules in the hospital. None of them had any problem in securing medicines for their patients.

SUMMARY AND CONCLUSION

This study has revealed some of the important factors that contribute to the assessment of a private hospital / nursing home by the patients. The quality of the doctor was found to be the single most important consideration. It was found that the patients took a lot of care to asses professional competence and empathy rating of the doctors. There seems to be a relatively better flow of information in the market place about the doctors competence.

Next to the quality of doctors, patients and their attendents had done assessment of the living conditions and facilities in the nursing home. However in respect of quality of nurses and nursing care, professional equipments and diagnostic facilities of the hospital, availability of information to the patients was relatively less. Thus in these areas a larger proportion of the respondents perception was either average or less than average.

Majority (86 %) of the respondents felt the need for a third party inspection of the hospitals / nursing homes for compliance to standards. Most of them also felt that it should be possible for the nursing homes to get their facilities assessed within their fee structure.

Thus there is a perceived need among the private hospitals / nursing homes for an accreditation system. Among the various components of facilities those that do not get adequately assessed through the market mechanism need to be emphasised by the accreditation system i.e. the qualification of the nurses, quality and adequacy of nursing services, diagnostic, medical and surgical equipment.

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Annexure - 1

QUESTIONNAIRE FOR THE PATIENTS IN THE HOSPITAL

1. NAME OF THE HOSPITAL:
2. INSTITUTION ID (CODE):
3. NAME OF THE PATIENT:
4. ADDRESS:
5. AGE:
6. SEX:
7. WERE THE FACILITIES IN THE HOSPITAL ADEQUATE:
8. WHAT IMPRESSED YOU THE MOST ABOUT THE HOSPITAL MOST?
9. WHICH PART OF THE HOSPITAL WAS THE MOST BENEFICIAL FOR THE RECOVERY OF YOUR HEALTH?

Annexure - 2

QUESTIONNAIRE FOR THE HOME VISIT

INTERVIEW WITH THE HEAD OF THE HOUSEHOLD

1. WHO ALL ATTENDED ON THE PATIENT WHEN HE/ SHE WAS IN THE HOSPITAL ? (Any two)

2. ADDRESSES:

a)

b)

INTERVIEW WITH THE PATIENT

1.a)DID YOU BENEFIT FROM THE STAY IN THE HOSPITAL?

b) HOW?

2. IDENTIFY THE MOST IMPORTANT THINGS THAT THE HOSPITAL DID FOR YOU TO IMPROVE YOUR HEALTH?

3. WERE YOU COMFORTABLE DURING THE STAY IN THE HOSPITAL? IF YES/ NO, WHY?

4. WHAT ARE THE LIVING RULES IN THE HOSPITAL?

5. WHAT ARE THE RULES FOR THE ATTENDERS OF THE PATIENTS?

6. HOW WOULD YOU RATE THE HOSPITAL IN TERMS OF THE FOLLOWING FACILITIES:

a) DOCTORS:

b) NURSES:

c) MEDICAL AND SURGICAL EQUIPMENT :

d) LIVING COMFORTS:

7. WHO ARE THE DOCTORS WHO ATTENDED ON YOU?

8.a) WOULD YOU GO TO THE SAME HOSPITAL AGAIN IF YOU NEED?

b) WOULD YOU SEND SOMEONE ELSE WHO GETS SICK IN THE HOUSE TO THE SAME HOSPITAL ? WHY?

9. WAS THE BILLING IN THE HOSPITAL RATIONAL?

10. DO YOU THINK THERE IS ANY NEED TO HAVE SOME STANDARD CODE FOR BILLING?

11. IS A 3rd PARTY INSPECTION OF STANDARDIZATION OF SURGICAL AND MEDICAL FACILITIES NEEDED?

12. DO YOU FEEL THE HOSPITAL SHOULD MEET THE QUALITY CONTROL WITHIN THE EXISTING FEES OR SHOULD IT CHARGE A LITTLE EXTRA?

13. DID THE STAFF SHOW CONCERN TO YOU? WHO?

14. HOW MUCH DID YOU SPEND IN THIS WHOLE EPISODE?

Annexure - 3

QUESTIONNAIRE FOR THE ATTENDERS

1.a) DID YOUR PATIENT BENEFIT FROM THE STAY IN THE HOSPITAL? HOW?

2. IDENTIFY THE MOST IMPORTANT THINGS THAT THE HOSPITAL DID FOR YOUR PATIENT TO IMPROVE HIS/HER HEALTH.

3. WAS YOUR PATIENT COMFORTABLE DURING THE STAY IN THE HOSPITAL? IF YES/NO ,WHY?

4. WHAT ARE THE LIVING RULES IN THE HOSPITAL?

5. WHAT ARE THE RULES FOR THE ATTENDERS OF THE PATIENTS?

6. HOW WOULD YOU RATE THE HOSPITAL IN TERMS OF THE FOLLOWING FACILITIES:

DOCTORS :

NURSES :

MEDICAL AND

SURGICAL EQUIPMENT :

LIVING COMFORTS :

7. WHO ARE THE DOCTORS WHO ATTENDED ON YOUR PATIENT?

8.a) WOULD YOU GO TO THE SAME HOSPITAL IF YOU NEED?

b)WOULD YOU SEND SOMEONE ELSE WHO GETS SICK IN THE HOUSE TO THE SAME HOSPITAL? WHY?

9. WAS THE BILLING IN THE HOSPITAL RATIONAL?

10. DO YOU THINK THERE IS ANY NEED TO HAVE SOME STANDARD CODE FOR BILLING?

11. IS A 3rd PARTY INSPECTION OF STANDARDIZATION OF SURGICAL AND MEDICAL FACILITIES NEEDED?

12. DO YOU FEEL THE HOSPITAL SHOULD MEET THE QUALITY CONTROL WITHIN THE EXISTING FEES OR SHOULD IT CHARGE A LITTLE EXTRA?

13. DID THE STAFF SHOW CONCERN TO YOUR PATIENT? WHO?

14. DID YOU HAVE ANY PROBLEM IN ACCESSING YOUR PATIENT?

15. DID YOU FIND ANY PROBLEM IN SECURING MEDICINES FOR YOUR PATIENT?

Annexure - 4

Table : 1.1

Andhra Pradesh Health Institutions Database[1]

Quantitative results of APHIDB Exit Poll - [Patients & Attendants]

Parameter	Y M	Y F	Y T	N M	N F	N T	M T	F T	T T
Adequate facilities	8 [32.00]	16 [64.00]	24 [96.00]	0 [0.00]	1 [4.00]	1 [4.00]	8 [32.00]	17 [68.00]	25
Benefit from the stay	11 [27.50]	29 [72.50]	40 [100.0]	0 [0.00]	0 [0.00]	0 [0.00]	11 [27.50]	29 [72.50]	40
Comfort	11 [27.50]	26 [65.00]	37 [92.50]	0 [0.00]	3 [7.50]	3 [7.50]	11 [27.50]	29 [72.50]	40
Visit again if needed	7 [17.50]	25 [62.50]	32 [80.00]	4 [10.00]	4 [10.00]	8 [20.00]	11 [27.50]	29 [72.50]	40
Recommend the hospital	7 [17.50]	26 [65.00]	33 [82.50]	4 [10.00]	3 [7.50]	7 [17.50]	11 [27.50]	29 [72.50]	40
Concern shown by the staff	11 [27.50]	28 [72.50]	39 [100.0]	0 [0.00]	0 [0.00]	0 [0.00]	11 [27.50]	28 [72.50]	39
Third party inspection	9 [23.68]	24 [63.16]	33 [86.84]	1 [2.63]	4 [10.53]	5 [13.16]	10 [26.32]	28 [73.68]	38
Quality control [Within fee]	10 [26.32]	27 [71.05]	37 [97.37]	1 [2.63]	0 [0.00]	1 [2.63]	11 [28.95]	27 [71.05]	38
Rational billing	9 [22.50]	20 [50.00]	29 [72.50]	2 [5.00]	9 [22.50]	11 [27.50]	11 [27.50]	29 [72.50]	40
Standard code for billing	4 [10.81]	19 [51.35]	23 [62.16]	7 [18.92]	7 [18.92]	14 [37.84]	11 [29.73]	26 [70.27]	37
Problem in accesing the patient	0 [0.00]	5 [22.73]	5 [22.73]	5 [22.73]	12 [54.55]	17 [77.27]	5 [22.73]	17 [77.27]	22
Problem in securing medicines	0 [0.00]	2 [9.09]	2 [9.09]	5 [22.73]	15 [68.18]	20 [90.19]	5 [22.73]	17 [77.27]	22
Overall Response Distribution	(20.62)	(58.77)	(79.38)	(6.87)	(13.74)	(20.62)	(27.49)	(72.51)	(100.00)

(Report generated at IHS as on : 24/06/94, data as on : 10/06/94)

* Note : Y = Yes, N = No, M = Male, F = Female and T = Total. [] = Percentage

All percentages expressed in terms of total respondents.

[1] Report generated through the EXITPOLL computerised database in Foxpro 2.0 at IHS.

Table : 2.1

Andhra Pradesh Health Institutions Database

APHIDB Exit Poll : Rating of hospitals in terms of personnel & facilities [Patients & Attendants]

Parameter	Male	Female	Total
Doctor rating			
Excellent	1 [33.33]	2 [66.67]	3 [7.50]
Good	8 [25.81]	23 [74.19]	31 [77.50]
Fair	0 [0.00]	3 [100.00]	3 [7.50]
Average	2 [66.67]	1 [33.33]	3 [7.50]
Below average	0 [0.00]	0 [0.00]	0 [0.00]
Nurses rating			
Excellent	0 [0.00]	2 [100.00]	2 [5.00]
Good	3 [23.08]	10 [76.92]	13 [32.50]
Fair	3 [60.00]	2 [40.00]	5 [12.50]
Average	5 [25.00]	15 [75.00]	20 [50.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]
Med. & sur. equipment rating			
Excellent	2 [50.00]	2 [50.00]	4 [10.00]
Good	5 [29.41]	12 [70.59]	17 [42.50]
Fair	1 [14.29]	6 [85.71]	7 [17.50]
Average	3 [25.00]	9 [75.00]	12 [30.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]
Living comforts rating			
Excellent	1 [20.00]	4 [80.00]	5 [12.50]
Good	3 [27.27]	8 [72.73]	11 [27.50]
Fair	3 [37.50]	5 [62.50]	8 [20.00]
Average	4 [25.00]	12 [75.00]	16 [40.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]

(Report generated at IHS as on 24/06/94, data as on 10/06/94)

* Note : Y = Yes, N = No, M = Male, F = Female and T = Total. [] = Percentage

All percentages expressed in terms of total respondents.

Report generated through the EXITPOLL computerised database in Foxpro 2.0 at IHS.

Table : 1.2

Andhra Pradesh Health Institutions Database[1]

Quantitative results of APHIDB Exit Poll - [Patients]

Parameter	Y M	Y F	Y T	N M	N F	N T	M T	F T	T T
Adequate facilities	6 [30.00]	14 [70.00]	20 [100.00]	0 [0.00]	0 [0.00]	0 [0.00]	6 [30.00]	14 [70.00]	20
Benefit from the stay	6 [30.00]	14 [70.00]	20 [100.0]	0 [0.00]	0 [0.00]	0 [0.00]	6 [30.00]	14 [70.00]	20
Comfort	6 [30.00]	13 [65.00]	19 [95.00]	0 [0.00]	1 [5.00]	1 [5.00]	6 [30.00]	14 [70.00]	20
Visit again if needed	4 [20.00]	12 [60.00]	16 [80.00]	2 [10.00]	2 [10.00]	4 [20.00]	6 [30.00]	14 [70.00]	20
Recommend the hospital	4 [20.00]	13 [65.00]	17 [85.00]	2 [10.00]	1 [5.00]	3 [15.00]	6 [30.00]	14 [70.00]	20
Concern shown by the staff	6 [30.00]	14 [70.00]	20 [100.0]	0 [0.00]	0 [0.00]	0 [0.00]	6 [30.00]	14 [70.00]	20
Third party inspection	5 [26.32]	11 [57.89]	16 [84.21]	1 [5.26]	2 [10.53]	3 [15.79]	6 [31.58]	13 [68.42]	19
Quality control [Within fee]	6 [31.58]	13 [68.42]	19 [100.00]	0 [0.00]	0 [0.00]	0 [0.00]	6 [31.58]	13 [68.42]	19
Rational billing	5 [25.00]	10 [50.00]	15 [75.00]	1 [5.00]	4 [20.00]	5 [25.00]	6 [30.00]	14 [70.00]	20
Standard code for billing	2 [11.11]	9 [50.00]	11 [61.11]	4 [22.22]	3 [16.67]	7 [38.89]	6 [33.33]	12 [66.67]	18
Problem in accesing the patient	0 [0.00]	2 [100.0]	2 [100.00]	0 [0.00]	0 [0.00]	0 [0.00]	0 [0.00]	2 [100.0]	2
Problem in securing medicines	0 [0.00]	2 [100.0]	2 [100.00]	0 [0.00]	0 [0.00]	0 [0.00]	0 [0.00]	2 [100.0]	2
Overall Response Distribution	(25.00)	(63.50)	(88.50)	(5.00)	(6.50)	(11.50)	(30.00)	(70.00)	(100.00)

(Report generated at IHS as on : 24/06/94, data as on : 10/06/94)

* Note : Y = Yes, N = No, M = Male, F = Female and T = Total. [] = Percentage

All percentages expressed in terms of total respondents.

[1] Report generated through the EXITPOLL computerised database in Foxpro 2.0 at IHS.

Table : 2.2

Andhra Pradesh Health Institutions Database

APHIDB Exit Poll : Rating of hospitals in terms of personnel & facilities [Patients]

Parameter	Male	Female	Total
Doctor rating			
Excellent	0 [0.00]	1 [100.00]	1 [5.00]
Good	5 [29.41]	12 [70.59]	17 [85.00]
Fair	0 [0.00]	1 [100.00]	1 [5.00]
Average	1 [100.00]	0 [0.00]	1 [5.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]
Nurses rating			
Excellent	0 [0.00]	1 [100.00]	1 [5.00]
Good	2 [25.00]	6 [75.00]	8 [40.00]
Fair	1 [50.00]	1 [50.00]	2 [10.00]
Average	3 [33.33]	6 [66.67]	9 [45.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]
Med. & sur. equipment rating			
Excellent	2 [66.67]	1 [33.33]	3 [15.00]
Good	2 [28.57]	5 [71.43]	7 [35.00]
Fair	0 [0.00]	2 [100.00]	2 [10.00]
Average	2 [25.00]	6 [75.00]	8 [40.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]
Living comforts rating			
Excellent	1 [33.33]	2 [66.67]	3 [15.00]
Good	2 [28.57]	5 [71.43]	7 [35.00]
Fair	0 [0.00]	1 [100.00]	1 [5.00]
Average	3 [33.33]	6 [66.67]	9 [45.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]

(Report generated at IHS as on 24/06/94, data as on 10/06/94)

* Note : Y = Yes, N = No, M = Male, F = Female and T = Total. [] = Percentage

All percentages expressed in terms of total respondents.

Report generated through the EXITPOLL computerised database in Foxpro 2.0 at IHS.

Table : 1.3

Andhra Pradesh Health Institutions Database[1]

Quantitative results of APHIDB Exit Poll - [Attendents]

Parameter	Y M	Y F	Y T	N M	N F	N T	M T	F T	T T
Adequate facilities	2 [40.00]	2 [40.00]	4 [80.00]	0 [0.00]	1 [20.00]	1 [20.00]	2 [40.00]	3 [60.00]	5
Benefit from the stay	5 [25.00]	15 [75.00]	20 [100.0]	0 [0.00]	0 [0.00]	0 [0.00]	5 [25.00]	15 [75.00]	20
Comfort	5 [25.00]	13 [65.00]	18 [90.00]	0 [0.00]	2 [10.00]	2 [10.00]	5 [25.00]	15 [75.00]	20
Visit again if needed	3 [15.00]	13 [65.00]	16 [80.00]	2 [10.00]	2 [10.00]	4 [20.00]	5 [25.00]	15 [75.00]	20
Recommend the hospital	3 [15.00]	13 [65.00]	16 [80.00]	2 [10.00]	2 [10.00]	4 [20.00]	5 [25.00]	15 [75.00]	20
Concern shown by the staff	5 [25.00]	15 [75.00]	20 [100.0]	0 [0.00]	0 [0.00]	0 [0.00]	5 [25.00]	15 [75.00]	20
Third party inspection	4 [21.05]	13 [68.42]	17 [89.47]	0 [0.00]	2 [10.53]	2 [10.53]	4 [21.05]	15 [78.95]	19
Quality control [Within fee]	4 [21.05]	14 [73.68]	18 [94.74]	1 [5.26]	0 [0.00]	1 [5.26]	5 [26.32]	14 [73.68]	19
Rational billing	4 [20.00]	10 [50.00]	14 [70.00]	1 [5.00]	5 [25.00]	6 [30.00]	5 [25.00]	15 [75.00]	20
Standard code for billing	2 [10.53]	10 [52.63]	12 [63.16]	3 [15.79]	4 [21.05]	7 [36.84]	5 [26.32]	14 [73.68]	19
Problem in accesing the patient	0 [0.00]	3 [15.0]	3 [15.00]	5 [25.00]	12 [60.00]	17 [85.00]	5 [25.00]	15 [75.00]	20
Problem in securing medicines	0 [0.00]	0 [0.00]	0 [0.00]	5 [25.00]	15 [75.00]	20 [100.0]	5 [25.00]	15 [75.00]	20
Overall Response Distribution	(16.67)	(54.50)	(71.17)	(8.56)	(20.27)	(28.83)	(25.23)	(74.77)	(100.00)

(Report generated at IHS as on : 24/06/94, data as on : 10/06/94)

* Note : Y = Yes, N = No, M = Male, F = Female and T = Total. [] = Percentage

All percentages expressed in terms of total respondents.

[1] Report generated through the EXITPOLL computerised database in Foxpro 2.0 at IHS.

Table : 2.3

Andhra Pradesh Health Institutions Database

APHIDB Exit Poll : Rating of hospitals in terms of personnel & facilities [Attendents]

Parameter	Male	Female	Total
Doctor rating			
Excellent	1 [50.00]	1 [50.00]	2 [10.00]
Good	3 [21.43]	11 [78.57]	14 [70.00]
Fair	0 [0.00]	2 [100.00]	2 [10.00]
Average	1 [50.00]	1 [50.00]	2 [10.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]
Nurses rating			
Excellent	0 [0.00]	1 [100.00]	1 [5.00]
Good	1 [20.00]	4 [80.00]	5 [25.00]
Fair	2 [66.67]	1 [33.33]	3 [15.00]
Average	2 [18.18]	9 [81.82]	11[55.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]
Med. & sur. equipment rating			
Excellent	0 [0.00]	1 [100.00]	1 [5.00]
Good	3 [30.00]	7 [70.00]	10 [50.00]
Fair	1 [20.00]	4 [80.00]	5 [25.00]
Average	1 [25.00]	3 [75.00]	4 [20.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]
Living comforts rating			
Excellent	0 [0.00]	2 [100.00]	2 [10.00]
Good	1 [25.00]	3 [75.00]	4 [20.00]
Fair	3 [42.86]	4 [57.14]	7 [35.00]
Average	1 [14.29]	6 [85.71]	7 [35.00]
Below average	0 [0.00]	0 [0.00]	0 [0.00]

(Report generated at IHS as on 24/06/94, data as on 10/06/94)

* Note : Y = Yes, N = No, M = Male, F = Female and T = Total. [] = Percentage

All percentages expressed in terms of total respondents.

Report generated through the EXITPOLL computerised database in Foxpro 2.0 at IHS.

CONTENT ANLYSIS OF VOLUNTARY DISCLOSURES PROVIDED BY THE PRIVATE HEALTH INSTITUTIONS

INTRODUCTION :

Content analysis of voluntary disclosures provided by the functionaries of private HOspitals and nursing homes (PHN) through mailed questionnaire survey and the personal disclosure to the investigators when they visited them is made. The basic idea of collecting this type of information in the 'remarks' column of the questionnaire is to understand the concerns of the PHN owners/managers. These remarks will be used alongwith the information collected through encounter notes for identifying issues for the policy delphi exercise and also to identify experts to arrive at a consensus on specific standards. There are all together 386 responses to the remarks column, out of which only 145 were found to be of relevance to our study. The percentages are however calculated on the total 386. The following categorisation emerged out of our analysis.

1. Eagerness to improve quality standards
2. Round the clock emergency services
3. Treatment of medico-legal cases
4. Information about the staff
5. Concern about Consumer Protection Act
6. Attitudes about financing
7. Free / concessional treatment
8. Information about medical camps and their periodicity
9. Immunisation services offered
10. Preventive and promotive services offered
11. Perception of local health problems
12. Involvement in control of communicable diseases
13. Information about usage of alternate systems of medicine
14. Information about family planning services

Eagerness to improve quality standards

Some (2.07%) of the PHNs expressed the opinion that they were eager to improve their quality of care. One was frank enough to admit that they lacked facilities for diagnostic investigations though they wished to have it.

Treatment of medico-legal cases

Few PHNs (0.77%) are accepting medico -legal cases, in spite of the possible legal problems involved. The cases accepted are mostly accident.

Information about staff

Some of the PHNs (2.33%) gave certain information about their staff. They could mention how many persons, especially, nurses and other technical staff, are trained. Some gave the number of surgeons associated with their PHIs.Some also gave information about the untrained nursing staff of their institutions.

Concern about Consumer Protection Act

Some amount of concern (O.51%) about the CPA was found in the responses of the PHNs.They were of the view that if doctors wrere brought under the purview of CPA they may shirk off from taking difficult cases.

Attitudes towards financing

The general attitude of this group of responses (0.77%) was that there should be concessional financing to PHNs. One of them divulged its source of finance.

Free / concessional treatment

Some of the private nursing homes are providing treatment on concessional rates to the poor people. Though the percentage (4.92) of this type of PHNs are small, they are offering 20 to 50% concession. One PHN information says they give total free treatment to as many as 40% of the cases they receive.

Information about medical camps and their periodicity :

Private hospitals (5.18%) are also conducting free medical camps in rural areas around them. They have not provided information on the periodicity of such camps. Few PHNs mentioned that they are conducting free camps every year while most did not mention any

period. These camps are to provide some sort of general medical relief and basic opthalmic care.

Immunisation services offered

Some (5.69%) of the PHNs are providing immunisation services. But the information on which diseases were immunised against was not provided. PHIs haven't mentioned whether this is a free service or a charged one.

Preventive and promotive services offered

Very few (0.77%) PHNs recorded about the preventive and promotive services offered by their institutions. Details of information about this is not available.

Perception of local health problems

Some private hospitals(1.29%) showed an understanding about their local health problems. They were aware of the major local health problems such as malaria and gastro-entreritis which were widely prevalent in their areas at the time of validation/ field survey.

Involvement in treatment of communicable diseases

Few of these PHIs (0.51%) are also involved in the treatment of communicable diseases such as Leprosy and TB.

Usage of alternative systems of medicine

Few PHNs (1.03%) report that in addition to allopathic care they also provide care in Ayurveda and Homoeopathy.

Information about family planning services :

Family planning services was recorded as one of the activities of the PHNs. The government has recognised these institutions for carrying out family planning activities and also reimbursing an amount to these institutions. There was lot of enthusiasm expressed by these PHNs to carry out family planning activities. As many as 10.10 % of these nursing homes are involved FP activities..

TECHNICAL NOTE ON APHIDB ON FOXPRO

Andhra Pradesh Health Institutions Database (APHIDB) is a full-fledged database with a sophisticated query & retrieval system.

This database comprises of :

- **Public sector health care** delivery institutions in the state of Andhra Pradesh, **upto the level of PHCs / Sub-centres and with linkage to 1991 primary census abstract**
.
- **Private sector health care delivery institutions** in the state of Andhra Pradesh, with a linkage to 1991 primary census abstractct.

The database stores information regarding

1. Address with phone, fax & telex details
2. Tier classification as Primary, Secondary & Tertiary etc.
3. Location of the place where located (place status)
4. Management, Ownership & Category
5. Bed capacity Services (type & no. of cases in a year), Clientele Served

The retrieval system offers reports, abstracts, summaries & queries with respect to the above mentioned information classes, with analysis reports & census details. Efforts are underway to develop graphical outputs. Also plans are underway for a true PC Geographical mapping of the available information.

Plans for further development:

Graphic data representation & analysis charts generation will be undertaken.

List of appendix.

I - Data dictionary of APH IDB system of programmes developed by IHS.

II - Sample reports of APH IDB system of programmes developed by IHS.

APHIDB DATABASE STRUCTURE

Andhra Pradesh Health Institutions Database (APHIDB) data structure consists of a set of tables and dictionaries. The definitions of which are given as

Tables : Each table is an actual representation of one table in the relational database, and will have both key field(s) and data fields.

Dictionaries : Dictionaries can be viewed logically as a table containing a definition field and a code field. This is used to standardise definitions through use of codes.

DATA STRUCTURE

The following describes the tables and their relationship in detail. The name of the dictionary used within the table is also given. The database consists of 6 tables.

- *Health institutions table*
- *Health institutions additional information table*
- *Census table*
- *Validation table*
- *Validation additional information table*
- *On-line help table*

1. Health institutions table : Standard information pertaining to health institutions (HIs) is stored in this table. Each HIs is given a unique code called HOSP_CODE, which is the key field to this table. A HOSP_CODE is made up of 3 parts

1. Two character code representing the type of management to which the HIs belongs.
2. Two character code representing the revenue district to which the HIs belongs.
3. Three character code representing the serial number of the HI.

2. Health institutions additional information table : Any other relevant, additional and non standard information regarding an HIs is stored in this table. The key to this table is also the HOSP_CODE.

3. Census table : Contains the population details of each of the revenue districts.

4. Validation table : Validation campaign details are stored in this table. Each HIs for which validation is under validation is given a code called VALICODE, which is the key field to this table. It is made up of (i) the year of validation & (ii) the HIs code.

5. Validation additional information table : Any other relevant additional information regarding an HIs under validation is stored in this table in the form of standard remarks. The key to this table is also the VALICODE.

6. On-line help table : Details of using the query module , and each procedure are stored for providing on-line help.

HEALTH INSTITUTIONS TABLE

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH	DICTIONARY
HOSP_CODE	Unique key code assigned to a HIs.	C	7	
NAME	Name of the health institution	C	25	
ADDRESS1	Address of the health institution	C	25	
ADDRESS2	Address of the health institution	C	20	
CITY	City where the HIs is located	C	16	
PHONE	Phone number of the HIs, if any	N	7	
DISTRICT	Revenue district code	C	2	DIST
PIN	Pin code of the location	C	6	
ESTA_YEAR	Year of establishment of the HIs	N	4	
BEDS	Number of beds in the HIs	N	4	
MGMT	Code for type of management to which the HIs belongs	C	2	MGMT
TC_CLASS	Code for the Tier class the HI belongs to	C	2	TIER
OWNER_TYPE	Type of owner ship to which the HIs belongs, only for private HIs.	C	2	
CATG	Code for primary category of diseases handled by the HIs	C	2	CATG
CLIENT	Code for the type of clientele being catered to by the HIs	C	2	CLIENT
PL_STAT	Code designating the revenue status of the place, where HIs is located	C	2	PLSTAT
MED	No. of medical cases handled in a year	N	5	
MED1	%. of medical cases handled in a year	N	3	
SUR	No. of surgical cases handled in a year	N	4	
SUR1	%.. of surgical cases handled in a year	N	3	
OBS	No. of obstetric cases handled in a year	N	4	
OBS1	%.. of obstetric cases handled in a year	N	3	

OTHER	No. of general cases handled in a year	N	4	
OTHER1	%.. of general cases handled in a year	N	3	
TOTAL	Total no of cases handled in a year	N	6	
SINSTI	Name of the surveying institutions	C	30	
SURVEYOR	Name of the surveyor	C	25	
PHASE	The phase of development of HIs	N	1	
LAND	The land under the HIs	N	7.3	
RES_LAND	Residential land under the HIs	N	7.3	
BLDG	The building area of the HIs	N	9.3	
RES_BLDG	The residential building area of the HIs	N	9.3	
CENCODE	The census code of the location of HIs	C	18	
URBANCODE	The urban code of the location of HIs	C	16	
STAT	The urban/rural status of HIs location	C	1	

HEALTH INSTITUTIONS ADDITIONAL INFORMATION TABLE

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
HOSP_CODE	key code assigned to a HIs.	C	7
ADDINFO	Relevant, additional and non standard information regarding an HIs	C	250

CENSUS TABLE

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
DIST_CODE	Code for revenue district	N	2
POPL	Population of the revenue district	N	12

VALIDATION TABLE

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
VALICODE	HIs validation campign code	N	19
DISPATCH	Date of dispatch of validation request	D	8
RECEIVED	Date of receipt of validation request letter	D	8

VALIDATION ADDITIONAL INFORMATION TABLE

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH	DICTIONARY
VALICODE	HIs validation campaign code	C	19	
REMCODE	Standard codified remarks	C	2	REMDICT

ON-LINE HELP TABLE

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
TEXT	Text of on-line help	C	70

DICTIONARIES IN APHIDB

APHIDB database implementation owes its compactness and flexibility to the extensive use of the dictionaries. These dictionaries code various descriptions to allow standardisation and ensure compatibility. The dictionaries assign code for common descriptions, thereby reducing data entry errors as well as making it compact. The other advantage of dictionaries is on-line addition of new categories into the database. The following are the dictionaries in APHIDB.

1. *District*
2. *Management*
3. *Tier class*
4. *Clientele*
5. *Place status*
6. *Disease category and*
7. *Remarks*

DISTRICT DICTIONARY

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
DIST_CODE	Code for revenue district	C	2
DIST_NAME	Descriptive name of the revenue district	C	20

MANAGEMENT DICTIONARY

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
MGMT	Code for type of management of HIs	C	2
DESCR	Management description	C	25

TIER CLASS DICTIONARY

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
TC_CLASS	Code for tier class to which HIs belongs	C	2
DESCR	Tier class description	C	25

CLIENTELE DICTIONARY

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
CLIENT	Code for clientele being catered to by HIs	C	1
DESCR	Clientele description	C	25

PLACE STATUS DICTIONARY

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
PL_STAT	Code for location status of HIs	C	2
DESCR	Place status description	C	25

DISEASE CATEGORY DICTIONARY

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
CATG	Code for type of disease specialisation of HIs	C	2
DESCR	Disease category description	C	25

REMARKS DICTIONARY

FIELD NAME	FIELD DESCRIPTION	FIELD TYPE	FIELD LENGTH
REMCODE	Code for remark	C	2
DESC	Remark text/description	C	50

PHYSICAL IMPLEMENTATION OF THE DATABASE TABLES AND DICTIONARIES AND INDICES

NAME	PHYSICAL NAME	INDEX NAME	INDEX EXPRESSION
TABLES			
Health institutions	APHIDB.DBF	APHCODE.IDX	HOSP_CODE
		APHI.IDX	val(DISTRICT)
		APHDS.IDX	DISTRICT + SUR_BY
		APUSORT.IDX	URBANCODE
		APCT.IDX	CITY
Health institutions additional information	COMMINFO.DBF		
Census	CENSUS91.DBF	CENSUS91.IDX	DIST_CODE
Validation	VALICAMP.DBF	VALICAMP.IDX	VALICODE
Validation additional information	VALINFO.DBF	VALINFO.IDX	VALICODE
On-line help	HELP.DBF		
DICTIONARIES			
District	DIST.DBF	DNAME.IDX	DIST_NAME
		DIST.IDX	DIST_CODE
Management	MGMT.DBF	MGMT.IDX	MGMT
Tier class	TIER.DBF	TIER.IDX	TC_CLASS
Client	CLIENT.DBF	CLIENT.IDX	CLIENT
Place status	PLSTAT.DBF	PLSTAT.IDX	PL_STAT
Disease category	CATG.DBF	CATG.IDX	CATG
Remarks	REMDICT.DBF	REMDICT.IDX	REMCODE

LIST OF REPORTS GENERATED BY THE SYSTEM[1]

List dictionary standards [*for all dictionaries*]
Progress of private hospitals survey
List by services

Obsterics services only,
Medical services only,
Obsterics & surgical services only,
Surgical & medical services only,
Medical, obsterics & others,
All types of services
Surgical services only,
Other services only
Obsterics & medical services only
Medical, surgical & obsterics
Obsterics, surgical & others

List by selected criteria

Management,
Tier class,
Place status,
Revenue district
Clientele
Disease category

Query by health instution code
List by place status
Public/ private / voluntary abstract
Abstract by size / class [beds]
Bed population ratio.
Share of public, private & Voluntary Institutions.
Share of public, private & Voluntary beds
2ndry general hospitals for 3 selected managements
2ndry general hospitals for 6 selected managements
Rural - Urban Abstract
Geographical regions abstract.
Mandal wise list of health instutions
District summary
Location wise summary
Hospital name wise query
Network of instutions by management
Self query

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1 Not the complete list of reports being generated.

TECHNICAL NOTE ON APHIDB ON UNIX

The Andhra Pradesh Health Institutions Database on Unix is at present being developed sing the 'C' Language. To reduce development time, the table structure of the APH Database eveloped by the APVVP was followed. The APHIDB on Unix is also linked with the rimary Census Abstruct '91.

The development of the APHIDB on Unix can be demarcated into 3 phases :

Phase 1 : Study of the existing database and tables of the AP Hospitals database

Phase 2 : Design of the Data Structure, particularly keeping in view for its utility under a Iulti-User concurrent environment. The datastructure and the data tables used is enclosed in nnexure - I.

Phase 3 : Program Design and Development

Under this phase the task of creating necessary indexes which forms the backbone for rther development also called the BACKEND was taken up

The presentation of the data is done through a set of screen libraries which are used by ie Menu utilities was developed for the DOS environment and at present is being developed or the UNIX environment.The advantage of such a design is that the 'BACKEND' remains ie same and only the FRONT END need to be changed for incorporating the software in ifferent environments.The software developed was first implemented on the LAN nvironment and certain changes were made into the program designed to use the Multi-user apability of the LAN environment.

The APHIDB on UNIX is necessiated by the following :

1. Memory limitations in the DOS/LAN environment. The Unix OS offers Virtual Memory.

2. Ease of Wide Area Networking with the Unix OS. This will help in data dessimination and wide spread use of data.

3. Multi user capability and concurrency associated with the Unix System.

SUMMARY

The AP Health Institutions Database on UNIX in 'C' Language consists of 10 data files, 3 program files, 7 sub program files. The total program code is 1406 lines and 7 graphics drawing functions. The present APHIDB in 'C' runs on MS DOS 3.1 or above with atleast 640 KB of RAM and in Unix. Adaptation for Multi user query is also provided. The database is projected to grow at a very fast rate and the no. of records estimated is 40,000. Such a database will cover atleat 40 MB of disk space apart from the maintenance and reporting and query software.

USAGE

The program was used to generate a list of mandals where no health institutions data was recorded/found. This list was used to validate the extent of coverage of the database mandal wise.

Table 7

District wise distribution of PHIs by bed strength

S.No.	District	BED STRENGTH (in private health institutions)											
		'0' Beds	1 to 9		10 to 19		20 to 29		30 to 99		100 to 249		250 & above	
		Inst.	Inst.	Beds	Inst.	Beds	Inst.	Beds	Inst.	Beds	Inst.	Beds	Inst.	Beds
Coastal Andhra														
1.	SRIKAKULAM	13	20	104	16	176	5	110	3	120	0	0	0	0
2.	VIZIANAGARAM	7	6	30	5	53	0	0	0	0	0	0	0	0
3.	VISAKHAPATNAM	0	43	232	37	474	14	320	11	476	1	100	0	0
4.	EAST GODAVARI	22	100	511	131	1628	46	1008	26	1268	2	350	0	0
5.	WEST GODAVARI	70	116	570	111	1365	40	866	15	680	4	520	1	296
6.	KRISHNA	194	89	490	94	1122	43	926	11	424	2	220	0	0
7.	GUNTUR	22	72	385	105	1325	49	1009	23	985	3	492	0	0
8.	PRAKASAM	24	29	140	56	721	23	514	25	976	2	250	0	0
9.	NELLORE	30	54	289	68	834	17	375	15	654	5	805	0	0
Rayalaseema														
10.	CHITTOOR	19	44	208	26	309	6	125	2	70	1	220	0	0
11.	CUDDAPAH	7	22	123	12	160	7	159	11	397	1	100	0	0
12.	ANANTAPUR	3	12	67	12	135	10	227	1	50	0	0	0	0
13.	KURNOOL	0	4	23	13	164	5	103	10	405	1	100	0	0
Telengana														
14.	MAHBUBNAGAR	2	31	184	25	309	5	115	4	160	1	200	0	0
15.	RANGAREDDY	6	46	284	36	436	10	220	13	515	0	0	0	0
16.	HYDERABAD	2	13	78	43	549	74	1671	107	4425	11	1568	3	862
17.	MEDAK	0	17	99	24	308	11	242	0	0	0	0	0	0
18.	NIZAMABAD	1	14	92	35	456	11	245	7	226	1	100	0	0
19.	ADILABAD	0	10	54	11	135	4	83	0	0	1	174	0	0
20.	KARIMNAGAR	31	36	190	54	674	26	558	6	195	0	0	0	0
21.	WARANGAL	0	8	43	23	277	10	217	9	420	1	120	0	0
22.	KHAMMAM	13	56	276	33	393	20	440	10	392	0	0	0	0
23.	NALGONDA	5	29	149	29	360	17	378	7	290	0	0	0	0
	Total ...	471	871	4621	999	12413	453	9911	316	13128	37	5319	4	1158

Table from APHIDB prepared at IHS as on 24/08/94

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