

How much ambulatory surgery in the World in 1996–1997 and trends?

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1. Introduction

Health professionals and public authorities no longer dispute that ambulatory surgery as an alternative to inpatient hospitalisation responds positively to patient and health care personnel expectations. It provides an opportunity to improve quality and a better use of available resources. Professional control and policy incentives to ensure equity, efficiency and effectiveness require a solid factual base. At national and at international levels the information available has been very limited and, at a comparative level particularly, often based on a single individual's sample based on fragmentary records, multiple definitions and crude, uninformative ratios. The success of the first survey [1] on prevalence and trends launched by the International Association for Ambulatory Surgery (IAAS) among its members and by the Organisation for Economic Cooperation and Development (OECD) through its Health Policy Unit network of correspondents invited a repeat of the survey on a recurrent basis.

2. Definition of ambulatory surgery

An ambulatory procedure is a non-emergency procedure, traditionally performed on an inpatient basis with overnight stay, which is undertaken with all its con-

stituent elements (admission, operation and discharge home) during the period of a normal working day (not exceeding 12 h including post-surgical recovery). Ambulatory procedures may be undertaken in hospitals or other facilities which meet the criteria of medical safety.

The concept does not consider as ambulatory surgery procedures those that do not generally require the sophisticated facilities of a hospital operating theatre.

Operations and procedures requiring extended recovery, that is more than the usual time frame of a working day before discharge, should not be included. The so-called 23 h stays or operations followed by a stay in a recovery inn or in a medicalised hostel warrant distinct statistical treatment but do not qualify for inclusion in this survey.

Equivalent names used in some countries are same day surgery, day surgery, and ambulatory anaesthesia.

3. Method

Following an informal international consultation on the type of surgery frequently performed on an ambulatory basis, a limited but indicative list of reference procedures was adopted in 1997 to launch a survey on the prevalence of ambulatory surgery amongst participating countries (or changes in the prevalence when several observations were available). The multiplicity of recording procedures in use in the countries informally consulted induced a choice between three classifications for the international survey, intersecting at a broad level of aggregation: ICD9-CM, DRG, and nation-specific.

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Table 1
IAAAS International Survey, Australia

	Survey 1997			Survey 1999			National Trend		
	1995–1996			1996–1997			1995–1996 → 1996–1997		
	A	I	%	A	I	%	A (%)	I (%)	Total (%)
	ICD9CM			ICD9CM			ICD9CM		
Mode:	A	I	%	A	I	%	A (%)	I (%)	Total (%)
1	29920	15913	65.3	30053	13803	68.5	0.4	-13.3	-4.3
2	39190	16249	70.7	45367	13395	77.2	15.8	-17.6	6.0
3	44957	37788	82745	59280	33540	63.9	31.9	-11.2	12.2
4	8474	41216	49690	9415	41603	18.5	11.1	0.9	2.7
5	37094	7244	44338	33847	4943	87.3	-8.8	-31.8	-12.5
6	2415	16992	19407	2425	16569	12.8	0.4	-2.5	-2.1
7	530	31723	32253	394	30963	1.3	-25.7	-2.4	-2.8
8	2922	2663	5585	3738	2616	58.8	27.9	-1.8	13.8
9	27202	2915	30117	30038	2429	92.5	10.4	-16.7	7.8
10	12163	3045	15208	12225	2298	84.2	0.5	-24.5	-4.5
11	193	3302	3495	186	2997	5.8	-3.6	-9.2	-8.9
12	12690	8094	20784	11551	6624	63.6	-9.0	-18.2	-12.6
13	8847	15079	23926	9879	14481	40.6	11.7	-4.0	1.8
14	12107	3091	15198	12092	4629	72.3	-0.1	49.8	10.0
15	1247	2682	3929	1428	2589	40.7	14.5	-3.5	2.2
16	13416	6403	19819	12632	4884	72.1	-5.8	-23.7	-11.6
17	3607	3410	7017	3579	3184	52.9	-0.8	-6.6	-3.6
18	10741	9629	20370	12006	9250	56.5	11.8	-3.9	4.3
Total 1–18	267715	227438	495153	290135	210797	500932	8.4	-7.3	1.2
19	197	31340	31537	277	32837	0.8	40.6	4.8	5.0
20	8	14120	14128	10	15147	0.1	25.0	7.3	7.3
Total 19–20	205	45460	45665	287	47984	0.6	40.0	5.6	5.7

Table 2
IAAS International Survey, Belgium

	Survey 1997			Survey 1999			National trend		
	1995			1996			1995 → 1996		
	A	I	%	A	I	%	A (%)	I (%)	Total (%)
	ICD9CM			ICD9CM			ICD9CM		
Mode:	A	I	%	A	I	%	A	I	Total
1	19618	44590	30.6	28720	42366	40.4	46.4	-5.0	10.7
2	18197	11885	60.5	25793	10790	70.5	41.7	-9.2	21.6
3	18913	47996	28.3	28973	48543	37.4	53.2	1.1	15.9
4	1724	29785	5.5	2180	29473	6.9	26.5	-1.0	0.5
5	9874	13227	42.7	11571	11613	49.9	17.2	-12.2	0.4
6	4600	16127	22.2	6115	16387	27.2	32.9	1.6	8.6
7	8549	17802	32.4	9485	16214	36.9	10.9	-8.9	-2.5
8	17409	6212	73.7	18631	4845	79.4	7.0	-22.0	-0.6
9	20867	7480	73.6	23509	6220	79.1	12.7	-16.8	4.9
10	4063	7526	35.1	5514	6800	44.8	35.7	-9.6	6.3
11	234	5197	4.3	270	6025	4.3	15.4	15.9	15.9
12	977	5389	15.3	1130	5868	16.1	15.7	8.9	9.9
13	1755	8887	16.5	2154	9776	18.1	22.7	10.0	12.1
14	8442	5300	61.4	9773	4680	67.6	15.8	-11.7	5.2
15	628	1133	35.7	766	1125	40.5	22.0	-0.7	7.4
16	8284	3947	67.7	10346	3472	74.9	24.9	-12.0	13.0
17	1463	4509	24.5	1715	4218	28.9	17.2	-6.5	-0.7
18	8970	13766	39.5	10580	13236	44.4	17.9	-3.9	4.8
	154567	250758	38.1	197225	241651	44.9	27.6	-3.6	8.3
19	36	11493	0.3	6	12996	0.0	-83.3	13.1	12.8
20	1	7141	0.0	4	7268	0.1	300.0	1.8	1.8
Total 19–20	37	18634	0.2	10	20264	0.0	-73.0	8.7	8.6

Table 3
IAAAS International Survey, Quebec, Canada

	Survey 1997					Survey 1999					National trend				
	1995–1996					1996–1997					1995–1996 → 1996–1997				
	DRG	A	I	Total	%	DRG	A	I	Total	%	DRG	A (%)	I (%)	Total (%)	%
1	Knee arthroscopy	8478	2395	10873	78.0	8800	1812	10612	82.9	3.8	3.8	–24.3	–2.4	5.0	
2	Extraction of teeth	7869	293	8162	96.4	7294	191	7485	97.4	–7.3	–7.3	–34.8	–8.3	1.0	
3	Cataract surgery	25863	6012	31875	81.1	28827	3567	32394	89.0	11.5	11.5	–40.7	1.6	7.8	
4	Hernia repair	7311	7702	15013	48.7	9113	5186	14299	63.7	24.6	24.6	–32.7	–4.8	15.0	
5	Dilatation and curettage uterus	6292	849	7141	88.1	5731	513	6244	91.8	–8.9	–8.9	–39.6	–12.6	3.7	
6	Vein ligation and stripping	3278	2059	5337	61.4	3132	1180	4312	72.6	–4.5	–4.5	–42.7	–19.2	11.2	
7	Tonsillectomy w or w/o ad	11519	1509	13028	88.4	10459	838	11297	92.6	–9.2	–9.2	–44.5	–13.3	4.2	
8	Adenoïtectomy														
8	Myringotomy	7887	249	8136	96.9	7172	153	7325	97.9	–9.1	–9.1	–38.6	–10.0	1.0	
9	Laparoscopic sterilization	4840	335	5175	93.5	4080	616	4696	86.9	–15.7	–15.7	83.9	–9.3	–6.6	
10	Squint surgery														
11	Submucous resection (ENT)	9358	3177	12535	74.7	9180	2210	11390	80.6	–1.9	–1.9	–30.4	–9.1	5.9	
12	Excision of breast lump	4844	558	5402	89.7	4550	285	4835	94.1	–6.1	–6.1	–48.9	–10.5	4.4	
13	Anal procedures	4008	3778	7786	51.5	3895	2921	6816	57.1	–2.8	–2.8	–22.7	–12.5	5.7	
14	Circumcision	3477	171	3648	95.3	3337	82	3419	97.6	–4.0	–4.0	–52.0	–6.3	2.3	
15	Dupuytren	6782	1131	7913	85.7	7031	879	7910	88.9	3.7	3.7	–22.3	0.0	3.2	
16	Carpal tunnel decompression	7058	156	7214	97.8	7264	84	7348	98.9	2.9	2.9	–46.2	1.9	1.0	
17	Orchidopexy-varicocele	2838	874	3712	76.5	2985	621	3606	82.8	5.2	5.2	–28.9	–2.9	6.3	
18	Implanted devices	6478	2146	8624	75.1	6546	1780	8326	78.6	1.0	1.0	–17.1	–3.5	3.5	
	Total 1–18	128180	33394	161574	79.3	129396	22918	152314	85.0	0.9	0.9	–31.4	–5.7	5.6	
19	Cholecystectomy laparoscopic	1598	13539	15137	10.6	2707	11730	14437	18.8	69.4	69.4	–13.4	–4.6	8.2	
20	Vaginal hysterectomy	22	1080	1102	2.0	20	1004	1024	2.0	–9.1	–9.1	–7.0	–7.1	0.0	
	Total 19–20	1620	14619	16239	10.0	2727	12734	15461	17.6	68.3	68.3	–12.9	–4.8	7.7	

Table 4
IAAS International Survey, Four Provinces, Canada

	Survey 1997			Survey 1999			National trend		
	1995–1996			1997–1998			1995–1996 → 1997–1998		
	A	I	%	A	I	%	A (%)	I (%)	Total (%)
Year:									
Codification:	CCP			CCP			CCP		
Mode:	A	I	%	A	I	%	A (%)	I (%)	Total (%)
1 Knee arthroscopy	27403	1007	96.5	24609	488	98.1	-10.2	-51.5	-11.7
2 Extraction of teeth	21857	1397	94.0	22483	731	96.9	2.9	-47.7	-0.2
3 Cataract surgery	175154	5595	96.9	117203	2475	97.9	-33.1	-55.8	-33.8
4 Hernia repair	21119	28086	42.9	23719	12831	64.9	12.3	-54.3	-25.7
5 Dilatation and curettage uterus	4904	355	93.2	21260	1309	94.2	333.5	268.7	329.2
6 Vein ligation and stripping	5677	3007	65.4	5327	1606	76.8	-6.2	-46.6	-20.2
7 Tonsillectomy w or w/o ad	17388	18218	48.8	19758	10548	65.2	13.6	-42.1	-14.9
Adenolectomy	5368	934	85.2						
8 Myringotomy	29453	311	99.0	24518	218	99.1	-16.8	-29.9	-16.9
9 Laparoscopic sterilization	16599	3361	83.2	22008	373	98.3	32.6	-88.9	12.1
10 Squint surgery									
11 Submucous resection (ENT)	2726	1229	68.9	1462	442	76.8	-46.4	-64.0	-51.9
12 Excision of breast lump	18989	2639	87.8	18778	2208	89.5	-1.1	-16.3	-3.0
13 Anal procedures	8710	5613	60.8	8337	4026	67.4	-4.3	-28.3	-13.7
14 Circumcision	11071	29483	27.3	8320	19692	29.7	-24.8	-33.2	-30.9
15 Dupuytren	3379	308	91.6	3273	158	95.4	-3.1	-48.7	-6.9
16 Carpal tunnel decompression	19103	572	97.1	17290	337	98.1	-9.5	-41.1	-10.4
17 Orchidopexy-varicocele	2428	1342	64.4	2435	972	71.5	0.3	-27.6	-9.6
18 Implanted devices	9030	2647	77.3	8444	1809	82.4	-6.5	-31.7	-12.2
Total 1–18	400358	106104	79.0	349224	60223	85.3	-12.8	-43.2	-19.2
19 Cholecystectomy laparoscopic	6468	31373	17.1	12449	22518	35.6	92.5	-28.2	-7.6
20 Vaginal hysterectomy	5	9604	0.1	29	8644	0.3	480.0	-10.0	-9.7
Total 19–20	6473	40977	13.6	12478	31162	28.6	92.8	-24.0	-8.0

The first two surveys reveal that ICD9-CM is the most used survey (nine responses out of 15). Only one response used DRG. Other classifications, including another international classification : NOMESCO (shared by five Nordic countries, potentially also the three Baltic countries), were used by the remaining third of respondents.

Two distinct lists of reference groups and procedures were proposed:

List 1: procedures eligible as ambulatory surgery.

This list has been established taking into account practice differences, which are at times sizeable, across the spectrum of countries for which data have already been obtained. It integrates 18 groups of interventions (1–18) which are still mostly performed in hospital inpatient settings in some countries and mostly in ambulatory surgery units or private practice offices in other countries.

List 2: intermediate and non eligible procedures.

This list includes two groups of procedures (19–20) which are only seldom undertaken as ambulatory surgery at present in most countries but which appear likely to join the first list before long.

The groups have been designed *sui generis* as provi-

ding a level at which ICD9-CM and other nomenclatures examined appear to best intersect. The reference groups do not designate the surgical procedures which are performed and do thus not correspond to the level at which procedures are coded and observed.

4. Results

The questionnaire was sent to the 29 OECD member countries. Twelve replies have been received : Australia, Belgium, Canada, Denmark, UK, Finland, France, Ireland, the Netherlands, New Zealand, Portugal, and USA. Two additional responses received relate to a region only : Veneto (Italy) and Andalusia (Spain) (Tables 1–15).

The analysis of the data from the two surveys (1997 and 1999) when available, allows assessment of the position of a country and comparison of countries and trends in surgical practice within each country.

In some countries modifications in the coding system between the two surveys weaken some of the comparisons and even makes some of them impossible (Den-

Table 5
IAAS International Survey, Denmark

		Survey 1999			
Year:		1997			
Codification:		NCSP			
Mode:		A	I	Total	%
1	Knee arthroscopy	14550	3226	17776	81.9
2	Extraction of teeth	2766	592	3358	82.4
3	Cataract surgery	23144	4221	27365	84.6
4	Hernia repair	7844	6826	14670	53.5
5	Dilatation and curettage uterus	19845	3459	23304	85.2
6	Vein ligation and stripping	41594	2428	44022	94.5
7	Tonsillectomy w or w/o ad	1790	6113	7903	22.6
	Adenoitectomy	419	398	817	51.3
8	Myringotomy	1526	292	1818	83.9
9	Laparoscopic sterilization	3179	1169	4348	73.1
10	Squint surgery				
11	Submucous resection (ENT)				
12	Excision of breast lump	4122	2603	6725	61.3
13	Anal procedures	11120	2864	13984	79.5
14	Circumcision	3076	432	3508	87.7
15	Dupuytren	2781	851	3632	76.6
16	Carpal tunnel decompression				
17	Orchidopexy-varicocele	615	537	1152	53.4
18	Implanted devices	5512	3507	9019	61.1
	Total 1–18	143883	39518	183401	78.5
19	Cholecystectomy laparoscopic	131	3754	3885	3.4
20	Vaginal hysterectomy	8	630	638	1.3
	Total 19–20	139	4384	4523	3.1

Table 6
IAAS International Survey, Finland

		Survey 1999			
Year:		1997			
Codification:		NOMESCO			
Mode:		A	I	Total	%
1	Knee arthroscopy	3761	3499	7260	51.8
2	Extraction of teeth				
3	Cataract surgery	17913	12279	30192	59.3
4	Hernia repair	3779	8570	12349	30.6
5	Dilatation and curettage uterus	5185	879	6064	85.5
6	Vein ligation and stripping	2195	330	2525	86.9
7	Tonsillectomy w or w/o ad	1298	9411	10709	12.1
	Adenoitectomy	11927	945	12872	92.7
8	Myringotomy				
9	Laparoscopic sterilization	4973	2128	7101	70.0
10	Squint surgery				
11	Submucous resection (ENT)				
12	Excision of breast lump	650	2553	3203	20.3
13	Anal procedures	254	2662	2916	8.7
14	Circumcision	1781	307	2088	85.3
15	Dupuytren	833	670	1503	55.4
16	Carpal tunnel decompression	2640	870	3510	75.2
17	Orchidopexy-varicocele	165	389	554	29.8
18	Implanted devices	3941	1952	5893	66.9
	Total 1–18	61295	47444	108739	56.4
19	Cholecystectomy laparoscopic	7	5822	5829	0.1
20	Vaginal hysterectomy	3	3968	3971	0.1
	Total 19–20	10	9790	9800	0.1

mark and Finland). This has resulted in an abandonment of the data extracted from the first survey for these countries.

The data from the first survey have been corrected in full for Australia (a transcription error had occurred) or partially after a new check of the codes used for the various reference groupings in the case of Belgium, the Netherlands and the USA.

Group 10 (squint surgery) has been deleted on account of inadequacies in the codings available for this group which became apparent after the 1997 survey.

5. Discussion

The analysis confirms persistent huge intercountry disparities in the prevalence of ambulatory surgery first highlighted in the 1997 survey (Table 16).

With the exception of Portugal (stagnation), a rising trend in ambulatory surgery may be perceived (Table 17). It is accompanied:

Type 1: in a few cases by a relative stability in the total

number of surgical interventions (–1.2 to +3.2%) with a transfer of hospital activity towards an ambulatory mode (Australia, the Netherlands, New Zealand); Type 2: in other cases, by an increase in the total number of surgical interventions (+3.2 to +8.3%) following mainly an increase in the number of ambulatory surgery cases (+27.6 to +30.8%) and a relative stability of hospital activity (–3.6 to +5.8%) (Belgium and Ireland);

Type 3: finally in other countries, by a great or lesser decrease in the total number of surgical interventions (–5.7 to –22.8%) at the expense mainly of hospital activity (–31.4 to 43.2%) combined with a stagnation (–0.1 to 0.9%) (Quebec, Canada, UK) or even a reduction (–12.8%) in the number of ambulatory surgery cases being registered (Canada, four Provinces).

The different scenarios observed above deserve further investigation given the divergent economic conditions liable to affect, on the one hand, the ambulatory surgery performance index and, on the other hand, varying trends in total surgical activity across countries.

5.1. Australia (Table 1)

The 1995–1996 data compiled in the first survey [1] included a transcription error that has been corrected in the current tables. The second survey exhibits a quasi aggregate stability: a 1.2% overall growth in activity masking a 7.3% slide in surgery with ‘conventional’ hospitalisation and an 8.4% increase in ambulatory surgery. The overall performance index gains 3.9%, above the average for the countries in this survey, but exhibits a mediocre level for tonsillectomies (1.3%).

Comprehensive case records covering public and private hospitals and freestanding centres.

Source: Australian Institute of Health and Welfare (Australian Hospital Statistics 1996–1997).

5.2. Belgium (Table 2)

The general increase in total surgical activity (+8.3%) reflects primarily a surge in ambulatory surgery (+27.6%) with a moderate decrease in traditional hospital activity (−3.6%). There is a general improvement in the performance of ambulatory surgery (+6.8%).

Comprehensive case records covering public and private hospitals. No freestanding centres.

A number of entries related to groups 4 (hernia repair) and 9 (laparoscopic sterilization) omitted in the first survey (statistics for 1995) have been corrected in this Table.

Source: Ministère des Affaires Sociales, de la Santé Publique et de l’Environnement (Commission RCM) (Ministry of Social Affairs, Public Health and Environment).

5.3. Canada — Province of Quebec (Table 3)

The reduction in total surgical activity (an aggregate decline in the number of operations of 5.7%) reflects primarily a reduction in surgical activity on hospitalised patients (a decline of 31%). The already high share of ambulatory surgery (85% for the procedures deemed eligible for day treatment) inched further upwards without a considerable increase in the number of ambulatory surgery procedures. The performance index surged particularly regarding cholecystectomies (18.8%).

Table 7
IAAS International Survey, France

		Survey 1999			
Year:		1997			
Codification:		PMSI			
Mode:		A	I	Total	%
1	Knee arthroscopy	32488	128141	160629	20.2
2	Extraction of teeth	74741	128894	203635	36.7
3	Cataract surgery	59380	257824	317204	18.7
4	Hernia repair	9904	154212	164116	6.0
5	Dilatation and curettage uterus	26622	60553	87175	30.5
6	Vein ligation and stripping	20028	151289	171317	11.7
7	Tonsillectomy w or w/o ad	22135	77184	99319	22.3
	Adenoitectomy	123073	16964	140037	87.9
8	Myringotomy	65638	9284	74922	87.6
9	Laparoscopic sterilization	602	20832	21434	2.8
10	Squint surgery				
11	Submucous resection (ENT)	4564	51437	56001	8.1
12	Excision of breast lump	5689	65557	71246	8.0
13	Anal procedures	6150	67125	73275	8.4
14	Circumcision	42255	19642	61897	68.3
15	Dupuytren	5332	8107	13439	39.7
16	Carpal tunnel decompression	45789	24463	70252	65.2
17	Orchidopexy-varicocele	3497	13190	16687	21.0
18	Implanted devices	26657	57912	84569	31.5
	Total 1–18	574544	1312610	1887154	30.4
19	Cholecystectomy laparoscopic	65	60490	60555	0.1
20	Vaginal hysterectomy	28	21300	21328	0.1
	Total 19–20	93	81790	81883	0.1

Table 9
IAAS International Survey, Italy-Veneto

		Survey 1999			
Year:		1997			
Codification:		ICD9CM			
Mode:		A	I	Total	%
1	Knee arthroscopy	1269	8360	9629	13.2
2	Extraction of teeth				
3	Cataract surgery	3264	12536	15800	20.7
4	Hernia repair	3037	6994	10031	30.3
5	Dilatation and curettage uterus	995	3726	4721	21.1
6	Vein ligation and stripping	2251	5708	7959	28.3
7	Tonsillectomy w or w/o ad	776	3179	3955	19.6
	Adenolectomy	1492	2471	3963	37.6
8	Myringotomy	107	77	184	58.2
9	Laparoscopic sterilization	0	29	29	0.0
10	Squint surgery				
11	Submucous resection (ENT)				
12	Excision of breast lump	1	631	632	0.2
13	Anal procedures	610	2545	3155	19.3
14	Circumcision	0	706	706	0.0
15	Dupuytren	213	403	616	34.6
16	Carpal tunnel decompression				
17	Orchidopexy-varicocele	197	1647	1844	10.7
18	Implanted devices	265	2629	2894	9.2
	Total 1–18	14477	51641	66118	21.9
19	Cholecystectomy laparoscopic				
20	Vaginal hysterectomy				
	Total 19–20				

Comments of the correspondent (Pauline Begin-Brosseau):

“According to our analysis, in a number of cases, it is possible to attribute the reductions observed to the existence of an alternative medical treatment approach (e.g. ulcers), to the transfer of certain types of interventions to freestanding centers (e.g. dilatation and curettage without benign tumour, to a questioning by specialists of the appropriateness of surgery in some instances, or to the adoption of new intervention techniques (e.g. varicose veins).”

Comprehensive case records covering public hospitals.

The data of the first survey [1] comprised the records of the Quebec Province (DRG) and those of four English speaking Provinces (CCP): Alberta, New Brunswick, Ontario, British Columbia.

Source: Ministère de la Santé et des Services Sociaux. Direction Générale de la Planification Stratégique et de l'Évaluation (Ministry of Health and Social Services,

General Directorate of Strategic Planning and Evaluation).

5.4. Canada — Four Provinces (New Brunswick, Nova Scotia, Ontario, British Columbia) (Table 4)

The aggregate reduction in surgical activity (a year to year decline of 19.2%) translates into a massive drop in inpatient surgery (–43.2%) and a sizeable reduction of ambulatory surgery (–12.8%), enhancing the latter's ‘performance’ index. The overall reduction in surgical activity, particularly that of traditional hospitalisation begs questioning, all the more that some classes exhibit an opposite sharp increase: dilatations and curettage of uterus (group 5) shows an increase of 17 310 operations (+329.2%).

Requests to the correspondent in order to explain the large reductions in overall activity have remained unanswered.

In the first survey (years 1995–1996), the data related to the Provinces of Alberta – replaced in the second survey by Nova Scotia — New Brunswick, Ontario and British Columbia.

Table 10
IAAS International Survey, the Netherlands

	Survey 1997			Survey 1999			National trend			
	1995			1997			1995 → 1997			
	A	I	%	A	I	%	A (%)	I (%)	Total (%)	
1	43736	12862	77.3	46455	8926	83.9	6.2	-30.6	-2.2	6.6
2	1895	339	84.8	2235	341	86.8	17.9	0.6	15.3	1.9
3	18058	42876	29.6	40018	33282	54.6	121.6	-22.4	20.3	25.0
4	8179	29296	21.8	9346	28494	24.7	14.3	-2.7	1.0	2.9
5	16143	4502	78.2	12666	3143	80.1	-21.5	-30.2	-23.4	1.9
6	7679	10582	42.1	9400	10017	48.4	22.4	-5.3	6.3	6.4
7	31152	17792	63.6	28816	16591	63.5	-7.5	-6.8	-7.2	-0.2
8	28553	921	29474	27089	859	96.9	-5.1	-6.7	-5.2	0.1
9	47152	743	47895	39675	638	98.4	-15.9	-14.1	-15.8	0.0
10	13749	1356	15105	12465	1022	92.4	-9.3	-24.6	-10.7	1.4
11	1093	9530	10.3	1254	8555	12.8	14.7	-10.2	-7.7	2.5
12	5052	10330	32.8	4948	9509	34.2	-2.1	-7.9	-6.0	1.4
13	2239	4024	35.7	2263	4669	32.6	1.1	16.0	10.7	-3.1
14	14713	1254	15967	14635	1024	93.5	-0.5	-18.3	-1.9	1.3
15	3076	1773	4849	3423	1480	69.8	11.3	-16.5	1.1	6.4
16	10039	1572	11611	11927	1142	91.3	18.8	-27.4	12.6	4.8
17	3048	2371	56.2	3197	1952	62.1	4.9	-17.7	-5.0	5.8
18	8942	8488	51.3	10075	8387	54.6	12.7	-1.2	5.9	3.3
Total 1–18	264498	160611	425109	279887	140031	66.7	5.8	-12.8	-1.2	4.4
19	3	10553	0.0	56	11275	0.5	1766.7	6.8	7.3	0.5
20	0	162	0.0	0	116	0.0		-28.4	-28.4	0.0
Total 19–20	3	10715	0.0	56	11391	0.5	1766.7	6.3	6.8	0.5

Table 11
IAAAS International Survey, New Zealand

	Survey 1997				Survey 1999				National trend			
	1995		1997		1997		1999		1995 → 1997		1995 → 1997	
	A	I	Total	%	A	I	Total	%	A (%)	I (%)	Total (%)	%
	ICD9CMA (1)				ICD9CMA (2)				ICD9CM			
Mode:	A	I	Total	%	A	I	Total	%	A (%)	I (%)	Total (%)	%
1	1547	1073	2620	59.0	2668	1167	3835	69.6	72.5	8.8	46.4	10.5
2	789	371	1160	68.0	229	58	287	79.8	-71.0	-84.4	-75.3	11.8
3	4911	6428	11339	43.3	10691	2761	13452	79.5	117.7	-57.0	18.6	36.2
4	1522	2621	4143	36.7	2070	3374	5444	38.0	36.0	28.7	31.4	1.3
5	5975	4439	10414	57.4	4005	1151	5156	77.7	-33.0	-74.1	-50.5	20.3
6	410	610	1020	40.2	329	661	990	33.2	-19.8	8.4	-2.9	-7.0
7	1059	3415	4474	23.7	1571	2966	4537	34.6	48.3	-13.1	1.4	11.0
	1222	201	1423	85.9	1411	185	1596	88.4	15.5	-8.0	12.2	2.5
8	8610	1308	9918	86.8	12260	1289	13549	90.5	42.4	-1.5	36.6	3.7
9	2388	539	2927	81.6	2688	398	3086	87.1	12.6	-26.2	5.4	5.5
10												
11	6	186	192	3.1	12	179	191	6.3	100.0	-3.8	-0.5	3.2
12	1139	930	2069	55.1	1237	757	1994	62.0	8.6	-18.6	-3.6	7.0
13	688	2142	2830	24.3	373	992	1365	27.3	-45.8	-53.7	-51.8	3.0
14	552	240	792	69.7	614	170	784	78.3	11.2	-29.2	-1.0	8.6
15	179	288	467	38.3	290	297	587	49.4	62.0	3.1	25.7	11.1
16	1255	415	1670	75.1	1629	348	1977	82.4	29.8	-16.1	18.4	7.2
17	377	593	970	38.9	609	585	1194	51.0	61.5	-1.3	23.1	12.1
18	1290	1511	2801	46.1	1672	1517	3189	52.4	29.6	0.4	13.9	6.4
	33919	27310	61229	55.4	44358	18855	63213	70.2	30.8	-31.0	3.2	14.8
20	5	1159	1164	0.4	16	2797	2813	0.6	220.0	141.3	141.7	0.1
	3	1116	1119	0.3	1	1075	1076	0.1	-66.7	-3.7	-3.8	-0.2
Total 19–20	8	2275	2283	0.4	17	3872	3889	0.4	112.5	70.2	70.3	0.1

Table 12
IAAS International Survey, Portugal

	Survey 1997			Survey 1999			National trend					
	1995			1998			1995 → 1998					
	A	I	Total	%	A	I	Total	%	A (%)	I (%)	Total (%)	%
1	54	2118	2172	2.5	64	3354	3418	1.9	18.5	58.4	57.4	-0.6
2	190	257	447	42.5	269	308	577	46.6	41.6	19.8	29.1	4.1
3	46	15015	15061	0.3	531	16464	16995	3.1	1054.3	9.7	12.8	2.8
4	877	13918	14795	5.9	1117	14805	15922	7.0	27.4	6.4	7.6	1.1
5	2675	5257	7932	33.7	1965	4712	6677	29.4	-26.5	-10.4	-15.8	-4.3
6	69	2912	2981	2.3	104	4101	4205	2.5	50.7	40.8	41.1	0.2
7	76	3689	3765	2.0	127	3894	4021	3.2	67.1	5.6	6.8	1.1
8	145	3269	3414	4.2	264	2422	2686	9.8	82.1	-25.9	-21.3	5.6
9	66	1695	1761	3.7	265	2514	2779	9.5	301.5	48.3	57.8	5.8
10	322	1035	1357	23.7	220	1506	1726	12.7	-31.7	45.5	27.2	-11.0
11	11	166	177	6.2	6	134	140	4.3	-45.5	-19.3	-20.9	-1.9
12	338	2011	2349	14.4	316	1984	2300	13.7	-6.5	-1.3	-2.1	-0.6
13	160	1646	1806	8.9	156	1790	1946	8.0	-2.5	8.7	7.8	-0.8
14	1083	2182	3265	33.2	828	1882	2710	30.6	-23.5	-13.7	-17.0	-2.6
15	122	375	497	24.5	118	805	923	12.8	-3.3	114.7	85.7	-11.8
16	399	1281	1680	23.8	688	2977	3665	18.8	72.4	132.4	118.2	-5.0
17	314	1501	1815	17.3	360	1797	2157	16.7	14.6	19.7	18.8	-0.6
18	267	3996	4263	6.3	295	4252	4547	6.5	10.5	6.4	6.7	0.2
Total 1–18	7214	62323	69537	10.4	7693	69701	77394	9.9	6.6	11.8	11.3	-0.4
19	5	2601	2606	0.2	9	4220	4229	0.2	80.0	62.2	62.3	0.0
20	4	1270	1274	0.3	2	1179	1181	0.2	-50.0	-7.2	-7.3	-0.1
Total 19–20	9	3871	3880	0.2	11	5399	5410	0.2	22.2	39.5	39.4	0.0

Code: ICD9CM

Code: ICD9CM

Code: ICD9CM

Comprehensive case records covering public hospitals.

The data of the first survey [1] included the records of the Province of Quebec (DRG) and those of four English-speaking Provinces (CCP): Alberta, New Brunswick, Ontario, British Columbia.

Source: Canadian Institute for Health Information.

5.5. Denmark (Table 5)

The performance level is very high for all groups.

Comments from the correspondent (Claus Toftgaard):

“The Nordic Classification of Surgical Procedures (NCSP) has been used to answer the questionnaire. Dupuytren procedures and carpal tunnel decompression could not be identified separately and are lumped together. Many ENT surgeons are performing surgery in their office with the assistance of an anaesthesiologist, e.g. tonsillectomies. These cases are included in the data”.

A comparison with the 1995 performance is difficult. In the former survey [1] so called DRG based data were submitted. There was, however, no DRG system in use in Denmark at that time.

Source: Ministry of Health.

5.6. Finland (Table 6)

Comments from the correspondents (Mikko Nenonen and Oleg Nikiforov):

A new classification (Finnish version of the Nomesco classification) has been adopted in 1997. The comparisons with data collated for earlier years [1] based on older classifications (FINDRG, Finnish Classification of Surgical Operations FCSO) are risky and have been abandoned.

The national data are special records established solely to monitor ambulatory surgery.

The data refer to the entire country and include all day surgery performed in institutions having beds. A small number of centres without established beds perform a little cataract surgery; these are not included in the figures shown.

Table 13
IAAS International Survey, Spain-Andalucia

		Survey 1999			
Year:		1997			
Codification:		ICD9CM			
Mode:		A	I	Total	%
1	Knee arthroscopy	915	1832	2747	33.3
2	Extraction of teeth	0	413	413	0.0
3	Cataract surgery	4061	4948	9009	45.1
4	Hernia repair	2999	9684	12683	23.6
5	Dilatation and curettage uterus	1304	4146	5450	23.9
6	Vein ligation and stripping	301	1146	1447	20.8
7	Tonsillectomy w or w/o ad	493	3005	3498	14.1
	Adenoitectomy	3041	2319	5360	56.7
8	Myringotomy	0	331	331	0.0
9	Laparoscopic sterilization	770	702	1472	52.3
10	Squint surgery				
11	Submucous resection (ENT)	0	309	309	0.0
12	Excision of breast lump	613	1165	1778	34.5
13	Anal procedures	411	2541	2952	13.9
14	Circumcision	1571	940	2511	62.6
15	Dupuytren	217	286	503	43.1
16	Carpal tunnel decompression	597	558	1155	51.7
17	Orchidopexy-varicocele	81	1486	1567	5.2
18	Implanted devices	1393	2249	3642	38.2
	Total 1–18	18767	38060	56827	33.0
19	Cholecystectomy laparoscopic	0	2567	2567	0.0
20	Vaginal hysterectomy	0	986	986	0.0
	Total 19–20	0	3553	3553	0.0

Table 14
IAAS International Survey, UK

Mode:	Survey 1997						Survey 1999						National trend							
	1994–1995			1996–1997			1997–1998			1994–1995 → 1997–1998			1994–1995 → 1997–1998			1994–1995 → 1997–1998				
	A	I	Total	%	A	I	Total	%	A	I	Total	%	A (%)	I (%)	Total (%)	A (%)	I (%)	Total (%)		
1	45193	30395	75588	59.8	44679	21809	66488	67.2	43405	21749	65154	66.6	-4.0	-28.4	-13.8	-4.0	-28.4	-13.8	6.8	
2	92771	44862	137633	67.4	98775	28367	127142	77.7	88142	24241	112383	78.4	-5.0	-46.0	-18.3	-5.0	-46.0	-18.3	11.0	
3	60435	102396	162831	37.1	97309	66422	163731	59.4	114332	55686	170018	67.2	89.2	-45.6	4.4	89.2	-45.6	4.4	30.1	
4	23003	68000	91003	25.3	25302	45743	71045	35.6	25245	41890	67135	37.6	9.7	-38.4	-26.2	9.7	-38.4	-26.2	12.3	
5	50207	37003	87210	57.6	30979	12654	43633	71.0	21334	8260	29594	72.1	-57.5	-77.7	-66.1	-57.5	-77.7	-66.1	14.5	
6	16023	30344	46367	34.6	21345	26050	47395	45.0	19346	23282	42628	45.4	20.7	-23.3	-8.1	20.7	-23.3	-8.1	10.8	
7	5581	91712	97293	5.7	6699	75894	82593	8.1	6396	64917	71313	9.0	14.6	-29.2	-26.7	14.6	-29.2	-26.7	3.2	
8	42698	13836	56534	75.5	40463	9742	50205	80.6	37451	8355	45806	81.8	-12.3	-39.6	-19.0	-12.3	-39.6	-19.0	6.2	
9	37061	14404	51465	72.0	36468	8981	45449	80.2	31403	6972	38375	81.8	-15.3	-51.6	-25.4	-15.3	-51.6	-25.4	9.8	
10																				
11	512	12427	12939	4.0	663	8785	9448	7.0	571	6986	7557	7.6	11.5	-43.8	-41.6	11.5	-43.8	-41.6	3.6	
12	15251	16815	32066	47.6	13909	12726	26635	52.2	13098	12091	25189	52.0	-14.1	-28.1	-21.4	-14.1	-28.1	-21.4	4.4	
13	21592	30360	51952	41.6	22727	21703	44430	51.2	22618	19825	42443	53.3	4.8	-34.7	-18.3	4.8	-34.7	-18.3	11.7	
14	20145	10376	30521	66.0	17338	6427	23765	73.0	15922	5776	21698	73.4	-21.0	-44.3	-28.9	-21.0	-44.3	-28.9	7.4	
15	2525	7693	10218	24.7	2844	6672	9516	29.9	2902	6337	9239	31.4	14.9	-17.6	-9.6	14.9	-17.6	-9.6	6.7	
16	22404	7220	29624	75.6	22800	5060	27860	81.8	23234	5069	28303	82.1	3.7	-29.8	-4.5	3.7	-29.8	-4.5	6.5	
17	6555	6225	12780	51.3	5525	3164	8689	63.6	4952	2662	7614	65.0	-24.5	-57.2	-40.4	-24.5	-57.2	-40.4	13.7	
18	9047	20541	29588	30.6																
Total 1–18	471003	544609	1015612	46.4	487825	360199	848024	57.5	470351	314098	784449	60.0	-0.1	-42.3	-22.8	-0.1	-42.3	-22.8	13.6	
19	101	21207	21308	0.5	159	19234	19393	0.8	241	19723	19964	1.2	138.6	-7.0	-6.3	138.6	-7.0	-6.3	0.7	
20	68	15460	15528	0.4	17	12903	12920	0.1	15	11519	11534	0.1	-77.9	-25.5	-25.7	-77.9	-25.5	-25.7	-0.3	
Total 19–20	169	36667	36836	0.5	176	32137	32313	0.5	256	31242	31498	0.8	51.5	-14.8	-14.5	51.5	-14.8	-14.5	0.4	

Table 15
IAAAS International Survey, USA

	Survey 1997			Survey 1999			National trend							
	1994			1996			1994 → 1996							
	A	I	%	A	I	%	A (%)	I (%)	Total (%)					
	ICD9CM			ICD9CM			ICD9CM							
Mode:														
1	947 266	110 531	89.6	1 057 797	110 531	89.6	1 084 292	51 736	1 136 028	95.4	14.5	-53.2	7.4	5.9
2	34 331	16 713	67.3	51 044	16 713	67.3	32 371	15 731	48 102	67.3	-5.7	-5.8	-5.8	0.0
3	3 230 133	111 058	96.7	3 341 191	111 058	96.7	3 785 715	47 386	3 833 101	98.8	17.2	-57.3	14.7	2.1
4	594 465	156 622	79.1	751 087	156 622	79.1	672 829	133 797	806 626	83.4	13.2	-14.6	7.4	4.3
5	509 151	63 926	88.8	573 077	63 926	88.8	469 372	43 321	512 693	91.6	-7.8	-32.2	-10.5	2.7
6	34 469	9 594	78.2	44 063	9 594	78.2	45 372	6 360	51 732	87.7	31.6	-33.7	17.4	9.5
7	367 708	50 599	87.9	418 307	50 599	87.9	382 938	35 726	418 664	91.5	4.1	-29.4	0.1	3.6
8	149 972	5 249	96.6	155 221	5 249	96.6	132 391	3 233	135 624	97.6	-11.7	-30.6	-12.6	1.0
9	575 298	33 236	94.5	608 534	33 236	94.5	524 358	23 056	547 414	95.8	-8.9	-30.6	-10.0	1.2
10	227 147	16 867	93.1	244 014	16 867	93.1	310 268	18 528	328 796	94.4	36.6	9.8	34.7	1.3
11	71 861	6 684	91.5	78 545	6 684	91.5	58 690	6 905	65 595	89.5	-18.3	-16.5	-16.5	-2.0
12	353 233	29 405	92.3	382 638	29 405	92.3	340 747	24 973	365 720	93.2	-3.5	-15.1	-4.4	0.9
13	134 670	41 825	76.3	176 495	41 825	76.3	180 008	28 503	208 511	86.3	33.7	-31.9	18.1	10.0
14	115 947	32 735	78.0	148 682	32 735	78.0	114 812	26 903	141 715	81.0	-1.0	-17.8	-4.7	3.0
15	19 056	1 171	91.7	20 773	1 171	91.7	19 971	284	20 255	98.6	4.8	-2.5	-2.5	6.9
16	346 541	12 236	96.6	358 777	12 236	96.6	358 111	7 772	365 883	97.9	3.3	-36.5	2.0	1.3
17	106 306	13 512	88.7	119 818	13 512	88.7	106 054	7 206	113 260	93.6	-0.2	-5.5	-5.5	4.9
18	163 128	66 384	71.1	229 512	66 384	71.1	170 547	60 002	230 549	74.0	4.5	-9.6	0.5	2.9
	7 980 682	778 893	91.1	8 759 575	778 893	91.1	8 788 846	541 422	9 330 268	94.2	10.1	-30.5	6.5	3.1
19	174 257	313 747	35.7	488 004	313 747	35.7	321 267	306 521	627 788	51.2	84.4	-2.3	28.6	15.5
20	8 799	177 774	4.7	186 573	177 774	4.7	11 942	183 323	195 265	6.1	35.7	3.1	4.7	1.4
	183 056	491 521	27.1	674 577	491 521	27.1	333 209	489 844	823 053	40.5	82.0	-0.3	22.0	13.3

Table 16
Comparisons of national performances in ambulatory surgery (%)

Country:	Australia	Belgium	CanadaQ	Canada4	Denmark	Finland	France	Ireland	Italy V	NL	NZ	Portugal	Spain V	UK	US
Year:	1995–1996	1996	1996–1997	1997–1998	1997	1997	1997	1997	1997	1997	1997	1998	1997	1997–1998	1996
Codification:	ICD9CM	ICD9CM	DRG	ICD9CM	NCSF	NOMESCO	PMSI	ICD9CM	ICD9CM	CVV-codes	ICD9CM	ICD9CM	ICD9CM	OPCS	ICD9CM
1	Knee arthroscopy	65.3	70.7	82.9	98.1	81.9	20.2	56.5	13.2	83.9	69.6	1.9	33.3	66.6	95.4
2	Extraction of teeth	70.7	70.5	97.4	96.9	82.4	36.7	77.8		86.8	79.8	46.6	0.0	78.4	67.3
3	Cataract surgery	54.3	37.4	89.0	97.9	84.6	18.7	23.8	20.7	54.6	79.5	3.1	45.1	67.2	98.8
4	Hernia repair	17.1	6.9	63.7	64.9	53.5	6.0	14.0	30.3	24.7	38.0	7.0	23.6	37.6	83.4
5	Dilatation and curettage uterus	83.7	49.9	91.8	94.2	85.2	30.5	43.3	21.1	80.1	77.7	29.4	23.9	72.1	91.6
6	Vein ligation and stripping	12.4	27.2	72.6	76.8	94.5	11.7	20.0	28.3	48.4	33.2	2.5	20.8	45.4	87.7
7	Tonsillectomy w or w/o ad	1.6	36.9	92.6	65.2	22.6	22.3	0.6	19.6	63.5	34.6	3.2	14.1	9.0	91.5
	Adenotomomy	52.3	79.4			51.3	87.9	5.4	37.6	96.9	88.4	9.8	56.7	97.6	
8	Myringotomy	90.3	79.1	97.9	99.1	83.9	87.6	82.1	58.2	98.4	90.5	9.5	0.0	81.8	95.8
9	Laparoscopic sterilization	80.0	44.8	86.9	98.3	73.1	2.8	48.3	0.0	92.4	87.1	12.7	52.3	81.8	94.4
10	Squint surgery														
11	Submucous resection (ENT)	5.5	4.3	80.6	76.8		8.1	4.9		12.8	6.3	4.3	0.0	7.6	89.5
12	Excision of breast lump	61.1	16.1	94.1	89.5	61.3	8.0	66.7	0.2	34.2	62.0	13.7	34.5	52.0	93.2
13	Anal procedures	37.0	18.1	57.1	67.4	79.5	8.4	36.0	19.3	32.6	27.3	8.0	13.9	53.3	86.3
14	Circumcision	79.7	67.6	97.6	29.7	87.7	68.3	61.1	0.0	93.5	78.3	30.6	62.6	73.4	81.0
15	Dupuytren	31.7	40.5	88.9	95.4	76.6	39.7	9.6	34.6	69.8	49.4	12.8	43.1	31.4	98.6
16	Carpal tunnel decompression	67.7	74.9	98.9	98.1		65.2	42.9		91.3	82.4	18.8	51.7	82.1	97.9
17	Orchidopexy-varicocele	51.4	28.9	82.8	71.5	53.4	21.0	33.8	10.7	62.1	51.0	16.7	5.2	65.0	93.6
18	Implanted devices	52.7	44.4	78.6	82.4	61.1	31.5	57.5	9.2	54.6	52.4	6.5	38.2	74.0	
	Total 1–18	54.1	44.9	85.0	85.3	78.5	30.4	40.1	21.9	66.7	70.2	9.9	33.0	60.0	94.2
19	Cholecystectomy laparoscopic	0.6	0.0	18.8	35.6	3.4	0.1	0.1		0.5	0.6	0.2	0.0	1.2	51.2
20	Vaginal hysterectomy	0.1	0.1	2.0	0.3	1.3	0.1	0.6		0.0	0.1	0.2	0.0	0.1	6.1
	Total 19–20	0.4	0.0	17.6	28.6	3.1	0.1	0.3		0.5	0.4	0.2	0.0	0.8	40.5

Table 17
Trends in total surgical ambulatory and inpatient activity

Total 1–18	1994–1995				1996–1997				National trend			
	A	I	Total	%	A	I	Total	%	A (%)	I (%)	Total (%)	%
Australia	267 715	227 438	495 153	54.1	290 135	210 797	500 932	57.9	8.4	–7.3	1.2	3.9
Belgium	154 567	250 758	405 325	38.1	197 225	241 651	438 876	44.9	27.6	–3.6	8.3	6.8
Canada	128 180	33 394	161 574	79.3	129 396	22 918	152 314	85.0	0.9	–31.4	–5.7	5.6
Quebec												
Canada, 4 provinces	400 358	106 104	506 462	79.0	349 224	60 223	409 447	85.3	–12.8	–43.2	–19.2	6.2
Denmark					143 883	39 518	183 401	78.5				
Finland					61 295	47 444	108 739	56.4				
France					574 544	1 312 610	1 887 154	30.4				
Ireland	16 626	27 565	44 191	37.6	19 485	29 158	48 643	40.1	17.2	5.8	10.1	2.4
Italy					14 477	51 641	66 118	21.9				
Netherlands	264 498	160 611	425 109	62.2	279 887	140 031	419 918	66.7	5.8	–12.8	–1.2	4.4
New Zealand	33 919	27 310	61 229	55.4	44 358	18 855	63 213	70.2	30.8	–31.0	3.2	14.8
Portugal	7 214	62 323	69 537	10.4	7 693	69 701	77 394	9.9	6.6	11.8	11.3	–0.4
Spain					18 767	38 060	56 827	33.0				
UK	471 003	544 609	1 015 612	46.4	470 351	314 098	784 449	60.0	–0.1	–42.3	–22.8	13.6
USA	7 980 682	778 893	8 759 575	91.1	8 788 846	541 422	9 330 268	94.2	10.1	–30.5	6.5	3.1

Extraction of teeth and submucous resections are defined and performed in Finland mainly as office surgery. Data is collected as comprehensive discharge records (not case records, but structured and coded records).

Source: National Research and Development Centre for Welfare and Health.

5.7. France (Table 7)

Comprehensive case records.

Data covers public and private hospitals and some freestanding centres.

The records collated indicate a below international average performance.

Source: Centre de Traitement de l'Information du PMSI. Ministère de l'Emploi et de la Solidarité (Direction des Hôpitaux) et Caisse Nationale de l'Assurance Maladie (CNAMTS) (Hospital Activity Information Treatment Centre, Ministry of Labour and Solidarity (Hospital Directorate) and National Health Insurance Scheme).

5.8. Ireland (Table 8)

Over 3 years a light to moderate increase in the number of operations and ambulatory performances is perceptible, distributed across the groups.

Comprehensive case records covering public hospitals.

Source: Department of Health and Children. Economic and Social Research Institute (ESRI).

5.9. Italy (Region of Veneto) (Table 9)

The data collated refer to the Veneto region whose population of 4.47 million inhabitants in 1997 represented 7.7% of the Italian population.

The overall performance is low, concerning total surgery as well as ambulatory surgery. No data is provided for several groups.

Comments of the correspondent (Carlo Castoro):

“Ambulatory surgery is regulated since 1996, notably in respect of the procedures authorised to be performed in a day setting, the only ones for which records are included. A number of procedures have been added to the list since then.”

Comprehensive case records covering all types of institution: public and private hospitals, freestanding centres, physician offices.

Source: Health Care Council. Veneto Region.

5.10. The Netherlands (Table 10)

Surgical activity has been declining slightly overall (1.2%) with a transfer of conventional hospital based surgery (–12.8%) in favour of ambulatory surgery

(+ 5.8%) and an improvement of an already high overall (66.7%) performance in ambulatory surgery (+ 4.4%). The improvement is particularly spectacular for cataract surgery (+ 25%).

The data related to the year 1995 [1] have been thoroughly revised given the omission of several procedure codes in the first survey.

Comprehensive case records covering public hospitals. Procedures performed in the few private hospitals, usually done under local anaesthesia are not included.

Source: S.I.G. Healthcare Information.:

5.11. New Zealand (Table 11)

The data related to groups 2 (extraction of teeth) and 3 (cataract surgery) for the year 1995 [1] published with the results of the first survey have been amended. Group 2 remains, however, overestimated for that year (use of code 231 instead of 2319).

The overall performance level in ambulatory surgery (70.2%) is high and increased (+ 14.5% in 2 years). A moderate increase in aggregate activity (+ 3.2%), with a distinct increase in ambulatory surgery activity (+ 30.8%) matches a distinct reduction in conventional hospitalisation (− 31%). There are disparities between 1995 and 1997 for groups 5 (dilation and curettage of uterus), 8 (myringotomy) and 13 (anal procedures).

Comments from the correspondent (Rodney Butler):

“In general there has been an apparent rise in the number of procedures due to changes in the number of procedures recorded for each patient discharged. The introduction of a waiting times fund produced an increase in the number of procedures performed. A change of structure from Area Health Boards to Regional Health Authorities generated a different emphasis on the types of surgery funded. And, in September 1996, ICD9-CMA version 2 was implemented resulting in some additional ICD9 codes being used”.

Comprehensive case records covering public hospitals and publicly funded procedures in private hospitals.

Source: Ministry of Health. N.Z. Health Information Service.

5.12. Portugal (Table 12)

There is no progression in the performance of ambulatory surgery—the lowest in the sample studied. The figures representing general activity (ambulatory + hospitalised) appear to be very low: eight times lower than in Belgium and in The Netherlands for more or less the same population size.

Comprehensive case records covering public hospitals.

Source: Instituto de Gestao Informatica & Financieira da Saude (I.G.I.F.). (Institute of Health Management of Informatics and Finance).

5.13. Spain (Region of Andalusia) (Table 13)

The data supplied refer to 94% of the Region, approximately 8 million people subject to the National Health Service (Sistema Nacional de Salud).

The overall surgical activity level appears to be very low. The performance regarding ambulatory surgery varies according to groups but stands typically below the average international stance. The absence of records on ambulatory surgery in groups 2 (extraction of teeth), 8 (myringotomy) and 11 (submucous resection) requires complementary documentation.

Source: Unidad de Informacia. Servicios Centrales. Servicio Andaluz de Salud. Junta de Andalucia. (Information Unit. Central Administration. Health Department. Government of Andalucia).

5.14. UK (Table 14)

The general performance in ambulatory surgery shows a distinct growth from 46.4% (1994–1995) to 60.0% (1997–1998). However, the analysis of the raw results reveals that this improvement in performance results primarily from a considerable reduction in traditional hospital activity (− 42.3%) while the activity in ambulatory surgery stagnates (− 0.1%). There is a reduction in overall activity (ambulatory + hospitalised) of 22.8% in 3 years: 1 015 612 operations in 1994–1995 and 784 449 operations in 1997–1998.

Comments provided by P.E.M. Jarrett:

“The reasons for the changes in activity are multifactorial and include:

Elderly patients blocking inpatient surgical beds.

N.H.S. funding increases not matching health index inflation.

Increasing resources devoted to the process of health-care management rather than actual patient treatment.

Dilatation and curettage uterus and arthroscopy being replaced by newer less invasive outpatient procedures. Push by health authorities to reduce unnecessary 8th molar surgery and tonsillectomy.

Political target to reduce waiting list time for cataract surgery — hence increase.”

Comprehensive case records covering all public hospitals.

Source: Department of Health. Statistics Division. Hospital Episode Statistics (H.E.S.). The USA (Table 15)

The data related to the first survey [1] have been entirely reviewed and corrected by the correspondent.

In the 2 years elapsed, a moderate growth in the total number of procedures is observable (+7.6%) with sizeable variations depending on the category of procedures.

The exceptional ambulatory surgery performance level of 1994 (91.1%) records further gains (94.2%). The increase is noteworthy for laparoscopic cholecystectomy with an increase in procedures of 28.6% mainly directed towards ambulatory surgery (+84.4%).

The comments made on the occasion of the first survey relating to the conformity of the American definition used with that adopted in this survey cannot be lifted, notably in respect of the length of stay in the surgical units or in auxiliary facilities before the patient's discharge to go home.

National probability samples covering all not federal hospitals and freestanding centres licensed for ambulatory surgery.

Source: Department of Health and Human Services, National Center for Health Statistics. National Survey

of Ambulatory Surgery (N.S.A.S.) and National Hospital Discharge Survey (N.H.D.S.).

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