

# Alternative Payments and the National Physician Database (NPDB)



The Status of Alternative Payment Programs  
for Physicians in Canada, 1999/2000



Canadian Institute  
for Health Information

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October 2001

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ISBN: 1-894766-22-9 (PDF)

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## Alternative Payments and the NPDB

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## Foreword

In 1999/2000 as part of the CIHI Road Map<sup>1</sup> activities to improve the availability of information on health human resources, CIHI was requested to provide a report on the status of alternative funding programs and payments in Canada. This report was prepared to assist CIHI in developing plans for collecting data on physicians services insured by the provinces and territories and paid through alternatives to fee-for-service. Specific objectives were:

1. Document alternative physician payment plans (APP) and alternative funding plans in Canada.
2. Quantify expenditure in APPs.
3. Assess impact of APPs on comprehensiveness and data quality in NPDB.
4. Document information collected by each province about utilization and payments in APPs.
5. Develop strategies and recommendations for incorporating alternative payments in NPDB.

Provincial representatives from nine provinces (except Ontario) on CIHI's Expert Group for Physician Resources provided detailed aggregate data, to the extent possible, on alternative payments and the number of physicians who received alternative payments in fiscal 1999/2000. These data have been supplemented by personal interviews carried out by CIHI's Department of Health Human Resources and through a review of historical documentation. Data for Ontario were requested but were unavailable for inclusion in this report, although some macro level expenditure data were obtained for Ontario from the National Health Expenditure Database at CIHI. The work was carried out over the later part of 1999 and through 2000. Data therefore, reflect the status of the programs in 1999/2000.

Provinces have been asked to update the information for 2000/01. This document will be updated on a regular basis.

## Definitions

*Alternative payment modes* are alternatives to fee-for-service used to pay physicians.

*Alternative payment plans* refer to actual arrangements to pay physicians by alternative modes. Salaried physicians in underserviced areas would be an example of an alternative payment plan.

*Alternative funding* refers to methods other than fee-for-service used to fund clinical departments (e.g. practice plans or academic medical centres) or specific programs. The agency that receives the funding is responsible for determining the nature and amount of payment to individual physicians.

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<sup>1</sup> The Roadmap Initiative is a national vision and four-year action plan to modernize Canada's health information system. Led by CIHI, it is a collaborative effort with Statistics Canada, Health Canada and many other groups at the national, regional and local levels. For additional information please see <http://www.cihi.ca/Roadmap/>.

*Clinical services* reported in NPDB include medical care by all specialties except radiology and pathology (these two specialties are not included in NPDB in its present stage of development).

*Clinical fee-for-service*: Payment of claims submitted for individual services.

*Alternative clinical*: All payments made for *clinical services* provided by physicians and not reimbursed on a fee-for-service basis. Classifications vary by province.

*Salary*: Physicians employed on a salary basis.

*Sessional*: Payments on an hourly or daily basis. Used by some provinces to fund services in hospital emergency departments, psychiatry clinics and clinics in rural areas.

*Capitation*: Monthly payments for clients rostered with a physician group.

*Block funding*: Annual budgets negotiated for a group of physicians, usually associated with an academic medical centre.

*Contract and Blended*

1. Funding to regional boards for clinical services under arrangements in which boards have discretion regarding specific uses of the funds.
2. Contractual payments.

*Psychiatry*: Some provinces have programs that provide psychiatric services with funding based on a blend of salary, sessional and contract payments.

*Northern and underserved areas*: Funding of provincial programs to provide services in northern or underserved areas. These programs might include a number of alternative modes of payments. Where provinces reported funding for underserved area programs no attempt was made to break down individual payment modes.

*Emergency on call*: Alternative payments for services in emergency departments or for physicians on-call in rural areas. These payments may supplement or replace fee-for-service.

*Non-clinical payments*—not included in NPDB:

*Rural incentives*: Special incentives in underserved areas and locum programs. Incentives are paid in addition to payments for clinical services. They would include moving expenses, recruitment or retention bonuses, etc.

*Hospital based physicians*: Funding provided to regions or hospitals for radiology and pathology. This category also may include funding for clinical chiefs of staff, medical health officers, cancer and TB programs in some provinces.

*Benefits*: Contributions by provinces for Canadian Medical Protective Assurance (CMPA) and continuing medical education.

## Executive Summary

NPDB was originally created with the objective of providing a database to support physician resource planning and utilization analysis. Phase 1 of NPDB is fully operational and contains data on virtually all clinical services provided in the Canadian provinces on a fee-for-service basis and funded by provincial medicare plans. Phase 2 of NPDB is expected to contain data on alternative payments. The greatest challenge to Phase 2 will be to find ways to collect provincial data from alternative payment or alternative funding plans that are not presently required to report services provided or physician payments.

Alternative payments have grown during the last half of the 1990's and now represent approximately one billion dollars annually—nine percent of the value of physicians clinical services in the ten provinces. The percentage of alternative payments varies considerably across the provinces, ranging from a low of 2% in Alberta to a high of 30% in Newfoundland. Alternative payment plans are diverse in terms of services provided and funding arrangements.

Over 20% of Canada's 55,000 physicians receive some payments for clinical care from alternative payment modes. The percentage that receives almost all payments from alternative modes is estimated to be approximately 8% in the nine provinces other than Ontario (Ontario did not provide data for this study). Newfoundland and Nova Scotia have the highest percentages of physicians who receive almost all payments through alternative modes. Physician full-time equivalents in alternative payment modes account for almost 12% of total FTEs in the nine provinces.

At present only Nova Scotia and Quebec have comprehensive reporting systems for most services provided in alternative payment plans. Both provinces use shadow billing with service definitions based on provincial fee schedules. Shadow billing is also used in certain APPs in other provinces but it is not a part of provincial information systems for physicians' services. The lack of information collection appears due to fragmented program structures in a number of provinces combined with a lack of enthusiasm for shadow billing by physicians in APPs.





## Background

The creation of the National Physician Database (NPDB) was originally recommended by the Advisory Committee on Health Human Resources (ACHHR) in 1985. The objective of creating NPDB was to provide a database to support physician resource planning and utilization analysis. This objective was policy relevant and timely, factors which helped gain widespread support for the initiative. Other factors that contributed to the successful establishment of NPDB included: (1) high level support and coordination was provided by the Conference of Deputy Ministers and two Federal Provincial Advisory Committees; (2) adequate resources were provided by the provinces and Health Canada to collect the data and create a central database; and (3) almost all data for the initial phase of NPDB were available from existing provincial information systems.

NPDB replaced the Medical Care Database (MCDB), which had existed since the 1970s. NPDB, as originally planned, involved three phases. Phase 1 added enhanced information about physician characteristics for HHR planning. Service utilization data remained the same as in MCDB except that a summary file of data by patient age group and sex was added to the database. Phase 2, as planned, would include data from services paid by alternative remuneration. Phase 3 would include information on physicians who do not provide clinical care.

Preliminary NPDB systems first became operational in late 1991. NPDB was transferred from Health Canada to CIHI in 1995. The transfer required additional developmental work. Phase 1 systems work was completed in 1997, and a series of reports has been produced annually since then.

Data collection will be the major difficulty in Phase 2. Most provinces do not have systems in place to collect and process information on services provided under alternative payment plans (APP). Efforts to obtain commitments for the submission of Phase 2 data have been underway since 1991. These efforts have not been successful despite endorsement of Phase 2 by the Conference of Deputy Ministers of health on two occasions since then.

## NPDB Systems Preparation

Planning for the collection and processing of Phase 2 data was carried out by CIHI concurrently with Phase 1 systems development. As a result, the present structure of NPDB can accommodate Phase 2 data and produce separate or integrated analyses of services and expenditure under both fee-for-service and alternative remuneration. With modest changes, the system can accommodate either service level data by physician or summary data on total payments to each physician. Milestones in NPDB systems development have included:

- An NPDB development plan was prepared in February 1995.
- Systems architecture and data models were developed in March 1995. Phase 2 and Phase 3 variables were included.
- A report on future development of NPDB was completed in October 1996. The report included recommendations on:

- NPDB data variables,
  - Phase 2 data collection strategies for ambulatory care, including a minimum data set based on a 'natural' classification system and linked to the CCI coding system. (Appendix 1 from report attached);
  - Phase 2 data collection strategies for institutional data with reporting based on procedures used for discharge abstract database (DAD); and
  - Recommendations for Phase 3 (file linkage to SMDB or medical association databases for defined purposes).
- Trial linkage of NPDB to SMDB is being planned.
- Trial linkage of NPDB and DAD data was planned in Saskatchewan. It has not been feasible to do the test to date due to resource limitations.

## NPDB Products and Indicators

The NPDB products and indicators consist of (1) the National Grouping System for inter-provincial comparisons of physicians' services utilization, (2) Physician Services Benefit Rates comparisons, (3) Physician Full Time Equivalence for supply analysis, (4) Average Payments per Physician comparisons and (5) Physician Services Price indexes. A report prepared for NPDB in April 1998 recommended collecting Phase 2 service-level data and assigning fee values by shadow pricing. The report also contained recommendations for including Phase 2 data in FTE and APP reports.

## Trends in Physician Payment Modes

During the first two decades of Medicare, most physicians were paid directly by provincial governments, mainly on a fee-for-service basis. Hospitals were responsible for most payments to the specialties of radiology (salary or fee-for-service) and pathology (usually salary). Sessional payments were used to varying degrees for certain types of care (e.g. emergency departments, psychiatry and clinics in rural areas in some provinces). Direct salary and contract arrangements were also used to fund care in rural underserved areas.

During the early 1990s, there was increasing interest in alternative funding for primary care and academic medical centres (AMC). In the case of AMCs, policy concerns focused on the desirability of developing new funding models that would recognize the dual roles of AMCs as educational institutions and providers of care. There was widespread agreement among government planners and academics that fee-for-service remuneration was not the most appropriate way in which to fund health care provided by AMCs. Block funding of AMCs was initiated for paediatrics at the Hospital for Sick Children in Toronto in the early 1990s and extended to all departments at the hospital in 1994. Subsequently, comprehensive AMC block funding was implemented in Southeastern Ontario (Queens, 1995) and the Children's Hospital of Eastern Ontario (Ottawa 1996). In Nova Scotia separate block funding agreements were struck with the departments of paediatrics (1995) and medicine (1998). Saskatchewan has a Clinical Service Fund which includes block funding for the departments of geriatrics and family medicine at University hospital.

Block funding emphasizes accountability of the AMC for health services. Physicians, in turn, are accountable to the AMC through traditional lines of authority in academic departments and practice plans. Agreements between governments and AMCs do not usually provide for reporting of remuneration to individual physicians. Agreements in Nova Scotia provide for shadow billing of services provided while those in Ontario do not.

Interest in alternative forms of payment for primary care grew with the advent of plans for health system reform in the early 1990s. Reform initiatives were largely pre-empted by cost control in the mid-1990s, however. Global budgets and fee rollbacks were implemented in most provinces. Cost control policies, downsizing in provincial government administrations and concerns within the medical profession about the share of budgets allocated to each specialty limited the possibilities of experimentation with alternative payment modes. Relationships between provincial governments and medical associations became more antagonistic, limiting the scope for co-operation in developing new payment modes.

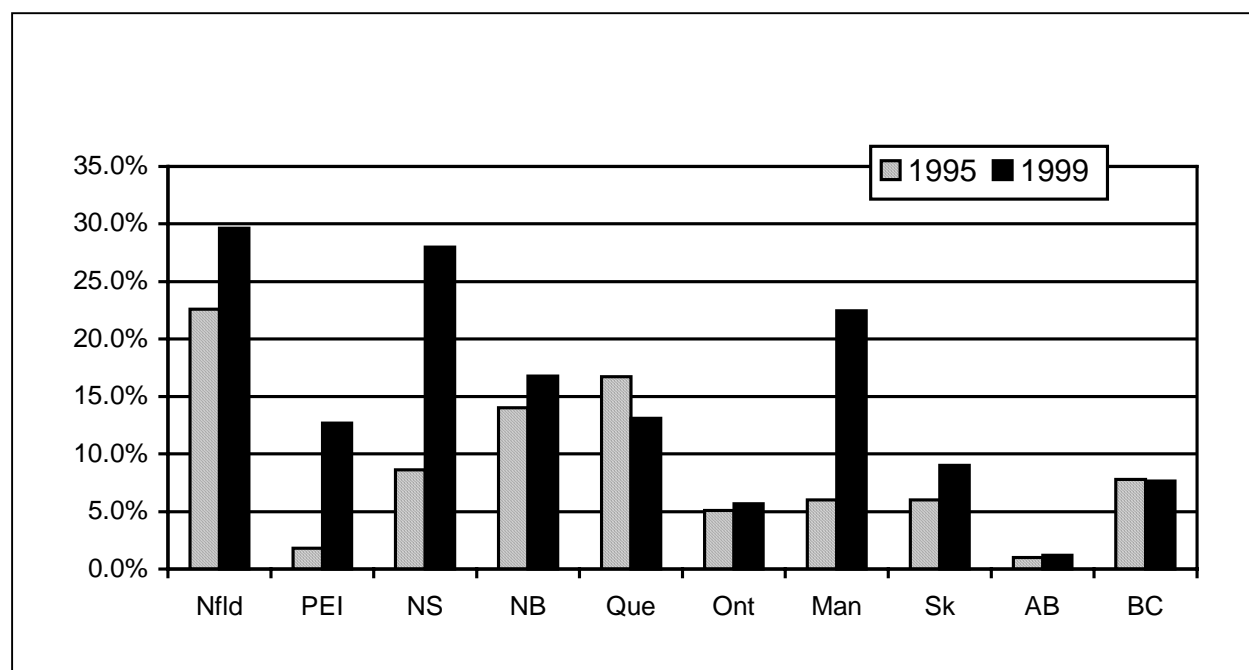
Regionalization provided increased scope for alternative payments. Regions in a number of provinces have acquired responsibility for hospital based physicians, especially radiology and pathology. Some regional administrations have sought alternative ways to provide services in venues such as primary or geriatric care centres and in programs managed by hospital administrations. Provinces continue to have responsibility for overall funding of physicians services and for payments to most physicians. Regional responsibility appears to be greatest in Manitoba, where program budgets or FTE funding are provided to regions by provincial governments for a number of programs.

## Alternative Payments in the Provinces

Fee-for-service continues to be the main form of remuneration for physicians' services. Nationally, alternative remuneration represents nine percent of payments for clinical physicians' services reported in NPDB. (Clinical services reported in NPDB include medical care by all specialties except radiology and pathology.) Newfoundland has the highest percentage of alternative payments, followed by Nova Scotia and Manitoba (Figure 1, Table 1). Alberta has the lowest percentage. Nova Scotia, Manitoba and Prince Edward Island have experienced the largest increases in expenditure made through alternative payment modes during the last four years<sup>2</sup>. Quebec, which had the second highest percentage of alternative payments in 1995, shows a decrease of 3.6 percentage points. The eastern provinces and Quebec all have higher percentages of alternative payments than Ontario and the western provinces—with the exception of Manitoba.

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<sup>2</sup> Estimates for 1999/2000 were provided by the provinces except for Ontario, where estimates were obtained from Public Accounts. Estimates for 1995 are from a paper titled, *Alternative Payment Programs and Data Collection*, April 1995. Some of the estimates were for 1994.



**Figure 1. Percent Alternative Payments by Province, 1995 and 1999**

Table 1 groups alternative forms of funding for clinical services and also shows types of physician payment that are not for clinical services reported in NPDB. In some cases, these other categories may contain relatively small amounts for clinical services. Table 2 provides details of different types of alternative remuneration used in the provinces.

Provincial governments and medical societies adopt different approaches to funding particular programs or medical expenses. Funding approaches also reflect attempts to redress perceived inequities in fee-for-service or new approaches to service delivery. In some cases, provinces take a pragmatic approach to funding specific projects and combine funding for alternative remuneration with an existing budget envelope. Funding for regional boards may be increased to include primary care projects, for example.

**Box 1—Provincial Notes About Clinical and Non-clinical Payments**

*Alternative clinical* payments in Table 1 include salary, sessional, capitation, contract services and block funding (see Table 2 and definitions at the beginning of this report for details). Northern or underserved area programs and most emergency or on-call payments are also included with clinical payments to enhance comparability (see details in next paragraph).

*Rural incentives* refer to special incentives in underserved areas and locum programs. A number of provinces have enhanced alternative payments for services in emergency departments or for physicians on-call in rural areas. Enhanced payments have been grouped with clinical payments in arrangements where physicians who receive these payments do not bill fee-for-service for emergency and on-call services. Arrangements vary—for example, in Manitoba alternative payments are made to top-up fee-for-service emergency room billings in the Winnipeg teaching hospitals while they substitute for fee-for-service in rural areas and urban community hospitals. In New Brunswick, special on-call premiums supplement normal remuneration for emergency services (which is made through alternative remuneration). In Saskatchewan, premiums for rural on-call are billed on a fee-for-service basis. In British Columbia, on-call payments were introduced in 2000, after the end of the 1999/2000 fiscal year, the period covered by these estimates.

*Hospital based physicians* consist mainly of payments to regions or hospitals for hospital-based radiology and pathology. In Ontario, Independent Health Facilities are included. The category may also include relatively small amounts of funding for salaried FTE positions in Prince Edward Island and Saskatchewan (i.e. block funding to the Saskatchewan College of Medicine for the departments of geriatrics and family medicine (paid through the Clinical Services Fund) and for university based obstetrical anaesthetists and neurosurgeons. In this respect, it might include some clinical care transferred from fee-for-service remuneration.

*Benefits* include contributions by provinces for Canadian Medical Protective Assurance (CMPA) and continuing medical education. In British Columbia, this category also includes disability insurance and provincial contributions to physicians' retirement fund. This information was not included in the original request to provinces for this project but it has been included for provinces that reported it.

**Table 1. Summary of Physician Payments by Type of Payment—  
Fiscal 1999/2000, (\$000)****1. Clinical (NPDB)**

	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	10 Provinces
Fee for Service	119,553	28,850	216,838	177,753	1,983,999	4,456,990	295,891	259,804	905,339	1,586,000	10,031,017
Percent of Clinical	70.4%	87.3%	72.0%	84.0%	86.9%	94.1%	77.6%	91.0%	98.8%	92.4%	91.0%
Alternative Clinical	50,384	4,191	84,280	33,798	298,624	277,824	85,626	25,796	10,900	131,200	1,002,624
Percent of Clinical	29.6%	12.7%	28.0%	16.0%	13.1%	5.9%	22.4%	9.0%	1.2%	7.6%	9.1%
Sub-total - Clinical	169,937	33,042	301,118	211,551	2,282,623	4,734,814	381,517	285,600	916,239	1,717,200	11,033,641

**2. Non-clinical**

Rural Incentives	366		397	2,037				1,640	1,200	1,116	6,756
Hospital Based Physicians	0	2,597	27,830	20,727	0	505,390	19,857	48,810	0	0	625,211
Benefits	2,008	722	9,289	4,835			9,610	9,300	18,050	65,536	119,350
<b>Total Payments</b>	<b>172,311</b>	<b>36,361</b>	<b>338,634</b>	<b>239,150</b>	<b>2,282,623</b>	<b>5,240,205</b>	<b>410,983</b>	<b>345,349</b>	<b>935,489</b>	<b>1,783,852</b>	<b>11,784,957</b>

Sources: Estimates for all provinces except Ontario were reported by provincial representatives on the NPDB Expert Group.

Ontario estimates are from Public Accounts, as compiled for the National Health Expenditures Database.

Note: In Alberta, there are 25 Alternative Payment Program projects whereby funding was transferred to Regional Health Authorities and are not funded through Alberta's medical services budget. Information for these projects is not available and not part of this analysis.

**Table 2. Estimated Alternative Clinical Payments by Type of Payment—  
Fiscal 1999/2000, (\$000)**

	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	10 Provinces
Salary	41,194		10,077	17,020	213,180		5,168			9,100	295,739
Sessional	8,542		1,479	15,458	65,658			1,211		45,000	136,137
Capitation										2,100	2,100
Block Funding	647		38,620			N/A		4,614			39,267
Psychiatry			11,995				3,381	6,502			21,878
Contract and Blended		4,191		1,319	19,786	267,617	26,589	10,739	1,600	75,000	412,667
Northern and Underserved Areas						10,207	22,766	2,730			35,704
Emergency on Call			22,110				27,722		9,300		59,132
<b>Total</b>	<b>50,384</b>	<b>4,191</b>	<b>84,280</b>	<b>33,798</b>	<b>298,624</b>	<b>277,824</b>	<b>85,626</b>	<b>25,796</b>	<b>10,900</b>	<b>131,200</b>	<b>1,002,624</b>

Notes: Contract and Blended includes:

A special program of blended remuneration in Quebec for specialists introduced at the end of 1999.

Funding to regional boards for hospital-based programs (including emergency services) in Prince Edward Island, Manitoba and Saskatchewan.

Contract payments in New Brunswick and Saskatchewan.

Service Agreements in British Columbia.

N/A = not available



## Physicians in Alternative Payment Plans

Over 22% of physicians in Canada received some remuneration for insured services in the form of alternative payments in 1999/2000. The percentage ranges from under 2% in Alberta to 60% in Manitoba (Table 3). Many physicians who received one form of alternative payment also received fee-for-service payments and/or other types of alternative payment. Nova Scotia and Quebec were the only provinces able to provide unduplicated counts of physicians who received only alternative payments from each type of program<sup>3</sup>. Quebec reported the number who received any payments, those who had a majority of payments and those who had 95% or more of payments in fee-for-service, salary, sessional or blended modes.

The number of physicians who receive payments mainly through alternative payment modes was estimated for each province by a number of methods, depending on the extent of information available from the province. The intent was to estimate the number for whom *almost all* clinical income from provincial sources was obtained from alternative funding<sup>4</sup>. When interpreting these data it is important to note that it was not possible to apply a single criterion to all provinces.

Nationally, almost eight percent of physicians receive payments mainly through alternative payment modes (Table 3). Newfoundland had the highest percent, reflecting the tendency for rural family practitioners to be paid through salaried arrangements. Nova Scotia ranked second, mostly due to the relatively large number of physicians in block funding arrangements. In the other provinces, physicians who receive mainly alternative payments represented 10% or less of total physicians. An estimate was not available for Ontario in 1999/2000.

A comparison of Tables 1 and 3 shows that in most provinces the percentage of physicians who receive some remuneration for insured services in the form of alternative payments is considerably higher than the percentage of alternative payments for clinical services reported in NPDB. In Newfoundland, Nova Scotia and Quebec it was possible to compare the amounts billed by those who receive mainly alternative payments to the amounts billed by other physicians.

- In Newfoundland, salary payments to rural family practitioners and certain specialists account for approximately 82% of alternative payments for clinical care. Newfoundland has a separate budget for salaried physicians with provisions for a transfer of funding between budgets to account for transfers of physicians to or from salaried remuneration.
- In Nova Scotia, physicians who billed mainly through alternative modes accounted for approximately 60% of alternative billings. This estimate is based on total payments for block funding and institutional psychiatry, where most physicians do not bill in other alternative modes.

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<sup>3</sup> Some of those in Nova Scotia block funding may also have received other forms of remuneration. Block funding arrangements normally preclude the possibility of fee-for-service billings, however, and duplicate counts may reflect the phasing in of block funding or other special circumstances.

<sup>4</sup> Alternative funding refers to the way in which clinical services were funded by provincial governments, not the way in which physicians were paid individually.

- In Quebec, physicians who received the majority of their payments through alternative modes accounted for 17% of total physicians and 63% of all alternative payments. Physicians who received 95% of payments from alternative modes accounted for 24% of total alternative payments.

Based on these findings, it seems that the majority of alternative payments are accounted for by physicians who bill for most of their services in alternative modes. The larger number of physicians who have lesser proportions of total remuneration through alternative modes account for a much smaller percent of the total.

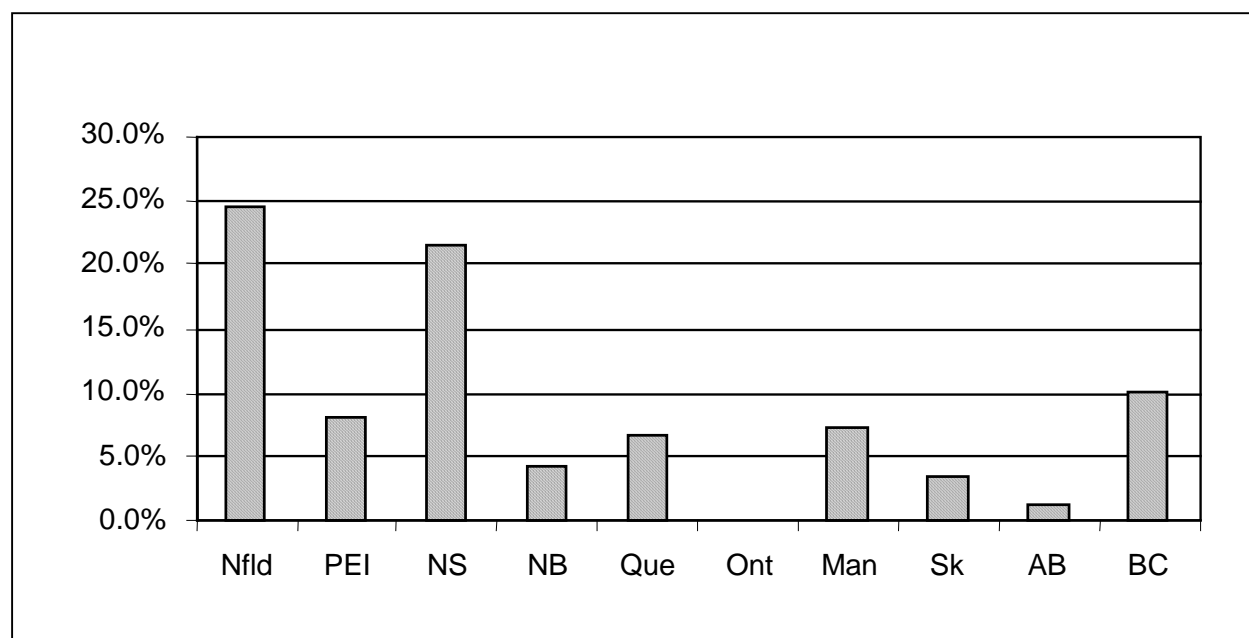
**Table 3. Total Physicians and Physicians Who Received Alternative Payments  
Fiscal 1999/2000**

Prov.	Total Phys.	Alt Pay	%	Mainly Alt Pay	%
Nfld.	987	532	53.9%	241	24.4%
P.E.I.	197	75	38.0%	16	8.0%
N.S.	1,795	679	36.9%	387	21.6%
N.B.	1,328	554	41.7%	56	4.2%
Que.	14,112	5,515	39.1%	939	6.7%
Ont.	20,868	1,461	7.0%	N/A	N/A
Man.	2,100	1,260	60.0%	152	7.2%
Sask.	1,533	282	18.4%	54	3.5%
Alta.	4,762	93	2.0%	52	1.0%
B.C.	7,752	2,000	21.3%	790	10.2%
<b>9 Provs</b>	<b>34,566</b>	<b>10,989</b>	<b>31.8%</b>	<b>2,686</b>	<b>7.8%</b>
<b>Canada</b>	<b>55,434</b>	<b>12,450</b>	<b>22.5%</b>		

Notes to Table 3:

1. Total physicians are reported to CIHI annually by the provinces. The number reported usually reflects those registered with provincial medicare plans and may exceed the number actually paid. Physicians receiving alternative payments were estimated from these annual reports (total physicians less the percentage who receive only fee-for-service payments) except in Newfoundland, Nova Scotia, Quebec and British Columbia, where information collected for this report allowed a more specific estimate.
2. The 9 Provinces sub-total excludes Ontario. Estimates of physicians mainly receiving alternative payments were not available for Ontario.

N/A = not available



**Figure 2. Percent of Clinical Physicians with Mainly Alternative Funding, by Province, 1999/2000**

### Estimated Full Time Equivalents

An approximate estimate of FTEs in alternative payment modes is shown in Table 4. Overall, physician activities in alternative payment modes represent approximately 4,000 FTEs. Alternative payment FTEs are equivalent to 8.3% of estimated total FTEs in Canada and 11.7% in the provinces other than Ontario (where the uncertainty of the estimate is greatest due to lack of information). Alternative payment FTEs range from less than one percent of total FTEs in Alberta to approximately thirty percent in Newfoundland. Nova Scotia and Manitoba rank second and third in the percent of physician FTEs in alternative payment modes. Five provinces have FTEs in alternative payment modes equal to over ten percent of total FTEs.

When FTEs from fee-for-service and alternative payment modes are combined, the distribution of physicians per 100,000 population is quite different from the distribution when only fee-for-service physicians are included (Figure 3). Ontario has over 160 fee-for-service FTEs per 100,000 population, followed by Quebec and British Columbia with over 140. Physician supply appears to be similar in six of the remaining provinces, at approximately 120 per 100,000. When payment modes are combined, however, physician supply is quite similar in five provinces (Newfoundland, Nova Scotia, Quebec, Ontario and British Columbia), all of which have over 160 FTEs per 100,000. This finding emphasizes the importance of including the activities of physicians in alternative payment plans in analyses of physician supply and in health human resource planning.

Table 4. Estimated FTEs in Alternative Payment by Province, Canada, Fiscal 1999/2000

Prov.	FFS	Full Time Equivalents		Distribution	
		APP	Total	Fee-for-Service	Alt Pay
Nfld.	659	267	926	71.2%	28.8%
P.E.I.	162	12	174	93.2%	6.8%
N.S.	1,126	362	1,488	75.7%	24.3%
N.B.	914	87	1,001	91.3%	8.7%
Que.	10,844	1,386	12,230	88.7%	11.3%
Ont.	18,691	583	19,273	97.0%	3.0%
Man.	1,343	275	1,619	83.0%	17.0%
Sask.	1,270	125	1,395	91.1%	8.9%
Alta.	3,844	23	3,867	99.4%	0.6%
B.C.	5,625	886	6,511	86.4%	13.6%
<b>9 Provs</b>	<b>25,789</b>	<b>3,422</b>	<b>29,211</b>	<b>88.3%</b>	<b>11.7%</b>
<b>Canada</b>	<b>44,479</b>	<b>4,005</b>	<b>48,484</b>	<b>91.7%</b>	<b>8.3%</b>

Notes: FFS FTEs are from CIHI's FTE report for 1998–1999.

APP FTEs were estimated from data supplied by all provinces except Ontario.

Ontario FTEs were estimated from data in Public Accounts.

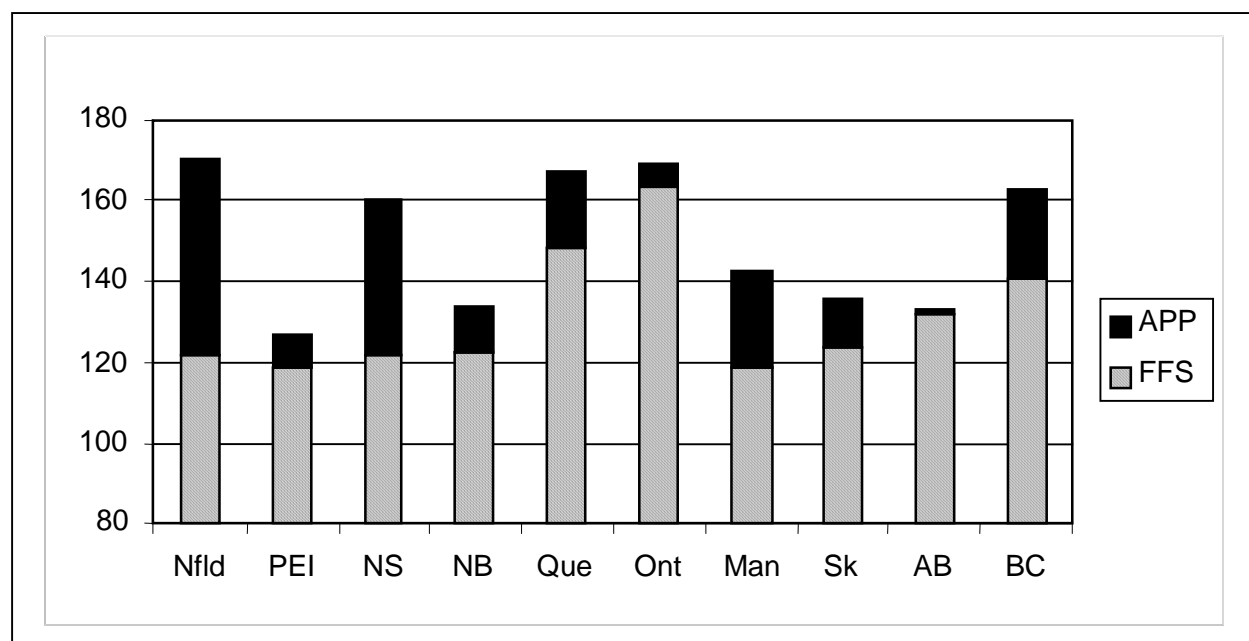


Figure 3. Total FTEs per 100,000 Population, by Type of Payment and Province, 1999/2000

**Box 2—Estimating FTEs in Fee-for-service and in Alternative Payment Plans**Fee-for-service

CIHI's FTE methodology calculates benchmark payment levels for physicians in each of 18 specialties in a base year. Physicians below the lower benchmark are assigned a proportion of one FTE, those between the lower and upper benchmarks are assigned a count of one and those above the benchmark are counted by a log-linear methodology. Approximately 40% of physicians are below the benchmarks, 20% are within the benchmarks and 40% are above during the base year. In subsequent years the benchmarks are indexed to fee changes and FTE counts are recalculated.

Alternative payments

Four criteria were used to estimate FTEs in alternative payment plans, with the choice of criteria depending on the availability of information:

1. Actual counts of funded FTEs for specific programs were used where these data were available. In Nova Scotia, the majority of alternative FTEs are in block funding arrangements and FTE status is based on the CIHI methodology. Manitoba and Saskatchewan provide FTEs funding in northern locations and certain programs administered by regional boards.
2. Where physicians received most of their remuneration through alternative funding, amounts paid were divided by average paid per family practice or internal medicine FTE (1998/99 averages were adjusted to account fee changes in 1999/2000). This method was used in Nova Scotia for institutional psychiatry and in Quebec for physicians who receive the majority of their remuneration from alternative funding.
3. A proportional estimate was used in other programs. This methodology assumed that the increase in FTEs from including alternative payments would be one-half the increase in payments.
4. In Newfoundland, 241 full-time salaried physicians (excluding radiology and pathology) were each counted as one FTE. FTEs in other modes of payment were estimated using the proportional method.

Precise estimates are not possible from aggregate data as FTEs are calculated from individual physician level data. A precise count would require individual level data from all payment modes to be combined as FTEs from different payment modes are not additive due to the fact that physicians with payments anywhere in between the benchmarks are counted as one and those above are counted by a log-linear methodology. The aggregate estimates are useful, however, in order to appreciate the effects of alternative FTE estimates on overall physician supply.

## Reporting of Alternative Payments

Provinces have not followed consistent approaches to reporting services provided under alternative payment programs. Shadow billing (using the entire set of codes in provincial fee schedules) is used for all services in Quebec. Shadow billing is prevalent in Nova Scotia although the extent of reporting varies, especially in rural emergency care. Saskatchewan uses shadow billing in certain programs and has developed a set of information codes designed to capture related information from family physicians practising under alternate payment. New Brunswick intends to implement shadow billing for all APP programs in October 2001. There is some shadow billing in Prince Edward Island and its extension is being considered as part of provincial fee negotiations. In Quebec and the Atlantic Provinces, responsibility for both fee-for-service and alternative payments tends to be centralized within Ministries of Health, a situation that can facilitate common policies within a province for information collection from fee-for-service and different forms of alternative payment.

Ontario and the Western Provinces use shadow billing in some forms for some programs, but none of these provinces has policies requiring information collection from alternative payment plans in standard formats. Responsibility for individual APPs tends to be spread across different units within health ministries and in most provinces each administrative unit is responsible for setting its own information requirements.

Physicians often tend to associate shadow billing with fee-for-service and resist it even though office management software routinely reports services provided—it is required for clinical records if not for billing. Provinces have sometimes cited the lack of a necessity to report as a benefit when 'marketing' alternative funding plans to physicians.

CIHI has developed systems and methodologies to accommodate alternative payment data. The future availability of information about services provided in alternative funding arrangements will depend on initiatives by the provinces to develop and implement a process for information collection. CIHI will undertake additional discussions with the Advisory Committee on Health Human Resources (ACHHR) to determine if it will be possible to undertake coordinated planning of such a process.

## Alternative Reimbursement in Each Province

This section contains details of alternative reimbursement in each province. It is a revised version of a section in the 1996 report: *Alternative Payment Programs and Data Collection*.

### Newfoundland

Salary: Most GPs in rural areas practice on a salaried basis in community hospitals. Salaried physicians are employed by regional health boards and funded by the Medical Care Plan (MCP). The most recent agreement between MCP and the Newfoundland Medical Association (NMA) has a provision that allows physicians to convert to salaried status with regional boards if they wish to do so. A number of academic physicians have taken advantage of this option.

Salary has been the predominant model for rural physicians for two reasons: (1) a relatively small population base in isolated areas, which makes fee-for-service practice not viable; and (2) many physicians in rural areas are international medical graduates (IMGs) who are not fully licensed in Canada, and therefore not able to practice on a fee-for-service basis.

Sessional: Sessional payments are an option for fee-for-service physicians who staff hospital emergency departments. Sessional tends to be favoured during the midnight to eight shifts.

Block Funding: No programs.

Population Based Funding and Primary Care: Capitation is not used as a form of remuneration at present.

Information Collection: Alternative payments to individual physician are not reported in the provincial database.

### Prince Edward Island

Salary: Prince Edward Island has hospital-based salaried physicians in the specialties of paediatrics, physical medicine, oncology, radiation oncology and laboratory.

Sessional: Sessional reimbursement is used in emergency medicine.

Block Funding: Not used. The province does not have a medical school.

Population Based Funding and Primary Care: Capitation is not used to fund primary care.

Information Collection: Shadow billing is used with some salaried Physicians.

**Nova Scotia**

Salary: Approximately 30 psychiatrists practice on a salaried basis in provincial mental health hospitals or centres. Most physicians in these centres practice on a sessional basis, however. Salary arrangements are available to general practitioners in certain rural areas. Income guarantees are also available as part of an incentive package for GPs in designated underserved areas. About 10 GPs practice under one or the other of the rural arrangements.

Rural Emergency and On-call Payments: During the late 1990s the province agreed to provide lump sum payments to physicians who staff emergency departments in rural areas or provide on-call services where emergency departments do not exist. These programs provide approximately \$45,000 per year to physicians who qualify. Almost all physicians who receive payments have fee-for-service practices in the communities where they are located.

Sessional: Most physicians who provide services in provincial mental health centres are on a contract arrangement that incorporates hourly payments. Many of these physicians also have fee-for-service practices in their local communities.

Block Funding: The Department of Pediatrics at Dalhousie University (appx. 45 physicians) is being block funded under a two year pilot project that began in July, 1994. The entire Department of Medicine became block funded in January 1999 (120 physicians). A number of smaller arrangements also exist. In total, 256 physicians were funded exclusively through this payment mode in 1999/2000.

Population Based Funding and Primary Care: Capitation is not used.

Information Collection: Shadow billing is used to collect information on services provided under block funding and GP salaried services in rural areas. The data do not identify individual physician. An activity reporting system, which is not based on encounters, is used in mental health centres.

**New Brunswick**

Salary: Most physicians in provincial mental health institutions are salaried. Many of these physicians have restricted licenses, which do not permit fee-for-service practice. Pathologists are salaried. Two of the five neurosurgeons in New Brunswick are salaried.

Sessional: Emergency departments in eight regional hospitals use sessional reimbursement. Community hospitals operate their emergency departments on a fee-for-service basis. Sessional fees are also used in nursing homes.

Block Funding: Three physicians at the University of New Brunswick campus of the Dalhousie University Medical School are block funded.

Population Based Funding and Primary Care: Capitation is not used.

Information Collection: Information is collected through shadow billing for physicians who have moved from fee-for-service to alternative reimbursement. New Brunswick has plans to collect shadow billing information on all physicians as of the third quarter of 2001.



**Quebec**

Salary: Most physicians employed in Local Community Service Centres (CLSC) are salaried. Public health physicians are also salaried. Almost half of payments for care by psychiatrists are made in the form of salary.

Sessional: Sessional payments are used to reimburse physicians in community health programs, long term geriatric care and some psychiatric institutions.

Blended: This is a new program introduced in late 1999. During the first six months of fiscal 2000/01 blended payments accounted for 16.4% of alternative payments and 2.6% of total payments. The blended payment option is only available to specialists.

Block Funding: This form of reimbursement is not used. Physicians in academic health sciences centres bill fee-for-service.

Population Based Funding and Primary Care: Capitation is not used.

Information Collection: All programs are administered by the Régie de l'assurance maladie. Reporting systems incorporate encounter level data.

**Ontario**

Depending on the availability of information from the Ontario Ministry of Health and Long-Term Care, documentation will be provided in the next version of this report.

**Manitoba**

Salary: Physicians in hospital emergency departments practice on salary, except in one Winnipeg hospital (St. Boniface). Emergency services in Winnipeg are funded through a mixture of fee-for-service topped up by alternative payments. Emergency services in regions outside Winnipeg are funded through alternative payments. Physicians in mental health centres in Brandon and Selkirk are on salary. Some physicians in remote areas receive salary through the medicare plan or the Northern Medical Unit.

Sessional: Sessional reimbursement is used in special circumstances, such as itinerant physicians who service rural areas and personal care homes, some psychiatry and specialist diagnostic services in hospital.

Block Funding: The Department of Family Medicine at the University of Manitoba is block funded. Physicians in the department have expressed a desire to revert to fee-for-service, however. Consideration is being given to block funding for other departments.

Population Based Funding and Primary Care: Capitation is not used by Manitoba Health, but has not been ruled it out as an option.

Information Collection: Encounter level data is collected by the medicare program for salaried GPs in remote areas. Each paying agency is responsible for information from other modalities. Encounter level data is not available.

## Saskatchewan

Salary: Salary reimbursement is used in community clinics and hospital-based specialists such as pathology, radiology or community medicine. Hospital emergency departments in Regina and Saskatoon employ approximately ten salaried FTEs as well as fee-for-service physicians. A Northern Medical Services agreement with the University of Saskatchewan provides salaried reimbursement for eight GPs in remote northern areas.

Sessional: Many psychiatrists practice on a contract basis, with reimbursement on an hourly or sessional basis. Intensive care services in several tertiary hospitals are funded through sessional payments.

Block Funding: Saskatchewan Health has a Clinical Services Fund, which provides funding for academic physicians. This funding covers radiology, pathology and services by the departments of geriatrics and family medicine. The fund also supports academic salaries and provides stipends to post-graduate residents. Saskatchewan also has agreements with the College of Medicine for block funding of faculty neurologists and surgical anaesthetists.

Four community clinics are block funded. Saskatchewan Health also has several contracts with regional boards under which FTE allowances are provided to fund the services of salaried specialists in hospitals, or special programs that involve both primary and specialist care (e.g. geriatrics).

Population Based Funding and Primary Care: Several group and solo practices comprising approximately twenty-four physicians are funded through contractual agreements. Although not funded on a per-capita/roster (capitation) basis, the physicians receive funding to provide service to a geographic area or principle practice.

Information Collection: Encounter level data are collected on all alternative payment plans that have been implemented since the early 1990s. Claims are submitted through a shadow billing process that uses provincial fee schedule codes. Additional codes have been established for services not insured on a fee-for-service basis, such as telephone advice and family consultations. Data are in electronic format. Approximately 70 physicians participate.

Encounter data are not available on services provided through Clinical Services Funds, salaried emergency physicians and specialist FTE allowances that were established more than four years ago.

**Alberta**

Salary: Salary is used in pediatric and cardiology intensive care facilities.

Sessional: There are two sessional funding projects operating in Alberta, both of which are part of regional health authority programs dedicated to the treatment of chronic pain, and others in development.

Block Funding: No block funding payment plans have been implemented in Alberta as yet, however a model for future use is in development.

Population Based Funding and Primary Care: There are four capitation projects currently operating in Alberta. Three of them have geographically or "virtually" rostered populations, and one is an urban medical practice which requires its patients to en-roll. Capitation payments are calculated on the basis of patient age, gender, and the set of services offered by the practice.

Contractual: The first contractual payment project, which is within a community health centre, is expected to become operational within the next few months. Participating physicians will receive a pre-set amount for a pre-determined volume of services over a year.

Information Collection: Alternative payment service information is currently being collected for two of the above modes of payment using the existing fee-for-service codes (but without service counts or dollar amounts). In addition, evaluation activities for all operational projects are ongoing. They include personal interviews and monitoring. A new information system is being developed to facilitate alternative payment data reporting.

**British Columbia**

Salary: This is an alternative method of payment for physician services is currently being phased-out by the Alternative Payment Program (APP) and replaced by less administratively expensive service agreements or sessional payments. Salaried physicians are paid by their health care agency employer, who in turn receives funding from the APP. Conditions for salaried physician payments are negotiated on a province-wide basis and set out in *An Agreement Between the Government of British Columbia and the British Columbia Medical Association (BCMA) with Respect to Salaried Physicians in Government Service*.

Sessional: This alternative method of payment for physician services, is made by the APP based on an employing agency's submission of services summarizing the amount of time required to deliver care services and completion for a claim for reimbursement. Payment is made based on a proration of the standard 3.5 hour session, rounded down to the nearest quarter hour. Rates are set out in an agreement between the government of British Columbia and the BCMA.

Block Funding: Block funding, known as service agreements, is an alternative method of payment for physician services, where APP payment is made via an agreement and pays practitioners employed or under contract to the agency in accordance with the conditions set out in the agency's agreement with APP.

**Population Based Funding and Primary Care:** Capitation is used as a method of reimbursement in APP relative to the Primary Care Demonstration Project (PCDP). Family physicians participating in the PCDP are funded through a blended funding modality in which they receive a capitation payment for core services for patients registered with the practice and bill fee-for-service for core services provided to patients who are not registered with the practice and for non-core services provided to all patients. Core services are those services that all family practices normally provide. PCDP practices receive approximately 80% of their practice income for core services provided to registered patients and 20% fee-for-service payments for non-core services to registered patient as well as services to non-registered patients.

**Information Provision:** Programs funded through service agreements provide encounter data using MSP fee schedule codes, but few provide it in an acceptable format. Encounter data is not available for salaried and sessional services. Reporting arrangements are being developed. The fee-for-service information system has been modified to allow practices in the Primary Care Demonstration Project (PCDP) to submit core capitation encounters.

### **Northwest Territories**

Regional health boards are responsible for services. Most physicians practice on salary or on sessional contracts. They are employed directly by the regional boards. In 43 small communities, community health centres are staffed by nurse practitioners who provide primary care and triage services. Physicians provide visiting services and back-up for the nurses. In larger centres physicians practice from private offices or institutions; most are salaried. All specialist services, which operate from the Yellowknife hospital, are salaried.

Physicians report services through a shadow billing process. Regions are responsible for data collection. A health and social services information system is currently being redesigned by the Department of Health and Social Services. Physician data, including both registration information and utilization data, should be available by the fall of 1996.

The division of the Territories is not expected to affect the availability of physician data as the new Territory, Nunavut, will use the health and social services information system.

### **Yukon**

Yukon does not have alternative reimbursement, except for one physician in a remote area who bills fee-for-service and has an income guarantee.



# Appendix A



## Appendix A (October, 1996)

**Table 1. CCP Based Encounter Codes and Modifiers for NDPB Minimum Data Set**

CCP Code and Definition

03.03 Limited interview and evaluation

03.04 Comprehensive interview and evaluation

03.07 Consultation—limited

03.08 Consultation—comprehensive

08.49 Psychotherapy

08.44 Group therapy

08.19 Other psychiatric evaluation and interview

09.02 Eye Exam

Modifiers

O—Office

Hospital

I—Inpatient

A—Ambulatory or outpatient

N—Newborn

D—Daily care

L—Long term or chronic care facilities

U—Other location (or unspecified)

E—Emergency or out-of-hours

Note: Modifiers identify site of service. Physician specialty will be available in NPDB, and does not need to be identified by a modifier in service coding.



Table 2. Procedure Codes in Minimum Data Set for Office Based Services

National Grouping System Category	NGS Code
Diagnostic/Therapeutic Services	
Electrocardiogram	035
Papanicolaou Smear	053
Allergy/Hyposensitization	134
Injections/Immunization	133
Operations on Nose, Mouth, Pharynx	
Other D&T Operations on nose (endoscopy)	D33
Other D&T Operations on pharynx (pharyngoscopy)	
Minor Operations Male/Female	
Vasectomy	756
Insertion of I.U.D.	818
Musculoskeletal System	
No Reduction Fracture:	
Shoulder, Arm and Chest	N10
Elbow and Forearm/Radius/Ulna	N11
Hand, Wrist and Phalanx	N12
Pelvis and Hip	N13
Femur	N14
Tibia and Fibula	N15
Patella	N16
Ankle	N17
Skin and Subcutaneous Tissue	
Excision Nail, Nail Bed or Nail Fold	988
Incision Abscess	980
Removal Foreign Body	R17
Suture Wound	982

Note: This is a preliminary list of procedure codes covering care in offices or clinics. The full range of CCP codes would apply to care in hospital settings.

Source: Future Development of the NPDB, October 1996.