

# The NAPCRG Process Classification for Primary Care

Herbert L. Tindall, MD, Larry Culpepper, MD, Jack Froom, MD, Rugh A. Henderson, MD, A. Dewey Richards, MD, Walter W. Rosser, MD, and H. Thomas Wiegert, MD

An ad hoc committee of the North American Primary Care Research Group (NAPCRG) was appointed to develop a classification system for procedures in primary care. The committee developed and field tested a completely hierarchical four digit process code for primary care. It is hoped that with widespread use and further testing, the code will become a nucleus for an international companion volume to ICHPPC-2 (International Classification of Health Problems in Primary Care, second edition). This first version is being made available to interested potential users at this time.

Classification needs in the area of health care became evident as soon as physicians began to examine, record, and study their daily work. "Problems encountered" appear to have been the physician's first interest, followed by the recording and classification of health care "procedures." Development of procedural classification apparently began in earnest when physicians were first asked to define, explain, or charge for their services. Growth of third party payment mechanisms in various countries increased the need. As a result, numerous comprehensive classifications of procedures were developed to meet the needs of particular providers or third party payer organizations. Many of these systems have a relationship

to each other; but, because of the lack of a common organizing body, sufficient changes took place in the development of each classification system, so that effective comparisons are seldom possible. The comprehensiveness and unwieldy construction and arrangement made the systems ill-suited for the purposes of primary care.

## History

Primary care followed the historical pattern by first developing uniform problem classifications. Primary care physicians in North America, having a need for a uniform study and reporting system for problems, found existing codes much too comprehensive for their purposes in most areas and too restrictive in others, especially in the psychosocial sector. The frustrations in the problem coding area led to a general adoption in 1972 of the Royal College of General Practitioners' code,<sup>1</sup> which served until the development of the International Classification of Health Problems in Primary Care (ICHPPC).<sup>2</sup>

However, long before the development of ICHPPC was underway, the need for a procedural classification for primary care was evident to

---

Presented to the Classification Committee of WONCA at the Annual Meeting of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians, New Orleans, Louisiana, October 4-9, 1980. From an Ad Hoc Committee of the North American Primary Care Research Group. Requests for reprints should be addressed to Dr. Herbert L. Tindall, Lancaster General Hospital, PO Box 3555, Lancaster, PA 17603.



many, including members of the North American Primary Care Research Group (NAPCRG). The same problems encountered in trying to adapt existing comprehensive problem codes to the ambulatory setting were also encountered with the procedure codes. To solve these problems, abbreviated procedure codes were locally developed. The presentation of two of these coding systems at the 1977 NAPCRG meeting led to the decision to investigate the possibility of developing a uniform procedure or "process" code by the North American Primary Care Research Group.<sup>3,4</sup> A process coding committee was developed, consisting of a group of NAPCRG members interested in developing such a classification, to further define and classify the process of primary care.

### Development of the Classification

During the next year, the committee reviewed the known drug and process codes in use in 1978, but they found no thread of logic that provided the needed information for structuring a practical system which would maintain any close relationship to the existing codes.

The concept of a hierarchical code usable at a two-, three-, or four-digit level, depending on the degree of specificity required by the user, appealed to the committee as the most practical and flexible structure within which a process classification should be developed. In addition, the committee felt it should be designed to facilitate optional hierarchy by the user while still maintaining total comparability between reporting facilities. The desirability of a collapsible optional hierarchy has been detailed elsewhere.<sup>5</sup>

No such structure was found in existing process codes. It is impossible to truncate CPT-4 (Physicians' Current Procedural Terminology, fourth edition)<sup>6</sup> or any of its derivative codes without getting into a meaningless hodgepodge, even at the four-digit level. For example, in the "Chemistry and Toxicology" section of CPT-4, the following may be found:

- 82168= Antihistamines
- 8216 =Angiotensin II, RIA
  - Aniline
  - Antihistamines
- 821 =Alkaloids
  - Amino acids
  - Aminohippurate, para (PAH)
  - Aminolevulinic acid, delta (ALA)

- Aminophylline
- Amitriptyline
- Ammonia
- Amniotic fluid scan
- Amphetamine
- Amylase
- and seven other substances

82 =Contains everything alphabetically from acetaldehyde in the blood to gonadotropin, chorionic, RIA

In developing a hierarchical classification to these specifications, an attempt was made to have enough specificity at the two-digit level to provide value to some users. Much effort was expended to make the three-digit level of specificity adequate for most users' needs. Four-digit rubrics were required predominantly in the area of drug and diagnostic activities. Since more than 15,000 drug preparations are currently available in North America alone, surveys of prescribing patterns in family practice were examined, the results of which indicated that between 150 and 250 generic drugs and combinations are frequently prescribed. The committee chose to identify such a formulary.

Within this philosophical framework, the committee drafted a preliminary working classification, and presented its findings and suggestions to the NAPCRG meeting in April 1979. At that time the committee was directed to proceed with field trials and to present a final version of the classification to the membership at the April 1980 meeting.

Field trials took place in practices located in American and Canadian urban and rural areas, including isolated Indian communities of Northern Ontario, where primary care is provided by a dispensing nurse. Based on this experience, the classification was modified to its present form.

### Relationship of NAPCRG Process Code to Existing Classifications

During the developmental stage of the NAPCRG Process Classification, as many existing codes as could be identified were examined. Many of these coding systems were designed primarily for billing purposes, such as the various Blue Shield codes in use throughout the country. Most of them were derived from the fourth edition of the Physicians' Current Procedural Terminology. These coding systems do not classify the pharmaceuticals, probably because they are not usually reimbursable.



ble by third party payers. The pharmaceutical codes in common use are far too specific for the present purposes, often identifying the manufacturer, the physical form, color, and dosage of a drug, with the code numbers running as high as 12 digits. Those systems that had been modified for use in ambulatory care classification, such as the Richards Drug Classification<sup>4</sup> and the Ontario Health Insurance Plan Classification,<sup>7</sup> appeared to be derived from the American Society of Hospital Pharmacists' classification system.<sup>8</sup>

For these reasons the Current Procedural Terminology-4 and the American Society of Hospital Pharmacists' classification were used as parent codes for the NAPCRG Process Classification. "Parent code" means that the rubrics will be compatible with these codes, insofar as this is possible. It is impossible to keep the numbers compatible in any meaningful way. The best that could be hoped for was to make the NAPCRG Process Classification easily translatable into the parent codes or other codes in wide use.

### The Layout and Construction of the Classification

The sections of the classification system are numbered from 1 through 9 as follows:

- Section 1 Disposition
- Section 2 Preventive and Supportive Services
- Section 3 Procedures
- Sections 4-5 Drugs and Pharmaceuticals
- Section 6 Other Diagnostic Procedures
- Section 7 X-Ray and Ultrasound
- Section 8 Clinical Laboratory
- Section 9 Site of Service

At first glance, it would appear that the sections are numbered in reverse order. "Site of Service" is usually identified first, with diagnostic, therapeutic, and patient education processes following in that order, and finally the last item of management, "Disposition." Consistency with the first digit of CPT-4 dictated the order of the sections. In CPT-4, the 90,000 series contains the site and duration of service (NAPCRG section 9); the 80,000 section, clinical laboratory (NAPCRG section 8); and the 70,000 series, radiology (NAPCRG section 7). In an attempt to preserve at least this relationship to CPT-4, the NAPCRG section numbers were selected as shown.

The "Drugs and Pharmaceutical" sections, because of the large number of rubrics necessary,

require both sections 4 and 5. The two-digit code offers a relatively nonspecific classification and will probably be too broad for most users. However, it should prove useful in comparative studies where great specificity is not desirable. The three-digit code may prove the most useful for many users. The four-digit code was designed to follow the ICHPPC-2 format as much as possible. Bear in mind, however, that ICHPPC-2 is not a completely hierarchical code and cannot be collapsed into a three- and two-digit code, as can the NAPCRG Process Classification.

Residual categories in this code are designated by the terminal digit "0." Since residual categories are traditionally and logically placed at the end of each appropriate series, the classification numbers terminating in "0" will be out of normal numerical order, appearing after "9" instead of before "1."

Position numbers are assigned to all two-, three-, and four-digit code numbers in sequence. Where the four-digit code contains only three numbers, the position number is the same for both the three-digit and four-digit code numbers (eg, position number 5 refers both to 114 and 114-). Since position numbers are most certainly subject to change with subsequent revisions of the classification, caution should be exercised by users in substituting them for the assigned code numbers.

Many of the NAPCRG four-digit classification numbers are identical with ICHPPC-2 classification numbers. Providers integrating both sets of classification numbers into one system may want to provide a designator or other mechanism to separate the two classification systems.

The committee has developed a translation of the NAPCRG Process Classification to CPT-4, ICD-9-GM volume 3 (Procedures), and the Association of Hospital Pharmacists (ASHP) drug classification. In addition, an index is being developed for the system.

Condensed rubrics, consisting of no more than 35 characters, have been developed for computer and machine processing. Potential users of the code may contact the committee chairman for further details regarding the supplements.

### Discussion

The NAPCRG Process Classification is intended as a companion classification system to ICHPPC-2, and as such it is hoped that it will be a



major step toward the long-term goal expressed in ICHPPC-2, ie, "to provide agreement on classification for . . . the process—what the provider does for the patient."<sup>9</sup> Although labeled as "process," which implies that the classification is restricted to management, there is a section devoted to "Site and Duration of Service." In conjunction with ICHPPC-2, the NAPCRG Process Classification is intended to provide a simple classification system for all of the items normally monitored in primary care, other than direct outcome items such as laboratory results. The two classification systems used together should afford the user a method of recording what problems health providers see, where the encounter occurred, the length of time involved, the management of the problem, and the disposition of the patient. If there is interest in the patient's reason for visit, one of the several codes developed for this purpose may be used in conjunction with these two compendia.<sup>10-12</sup>

The same philosophy that promoted the development of ICHPPC has been adopted for the NAPCRG Process Classification. Like ICHPPC, the rubrics to be included were selected after considerable experience and field trials in the United States and Canada. The development of the NAPCRG Process Classification is seen as the first step of a dynamic process of user feedback and updating which started with the first field trial, and it is hoped that it will continue as long as this process-of-care classification is useful. Users are urged to report their experience to the committee so that future groups will have data to update the classification to insure continued usefulness. The committee and its supporting organization, the North American Primary Care Research Group, designed this classification to provide a uniform method for describing the process of primary care, leading to more understanding of what primary care physicians do, in the hope that such information will result in the development of methods of providing more efficient and effective patient care, and more effective medical education.

In October 1980, the NAPCRG Process Classification was presented to the Classification Committee of WONCA, during the meeting in New Orleans of the American Academy of Family Physicians and the World Organization of National Colleges, Academies and Academic Associations, where it received an enthusiastic reception. The North American Primary Care Research

Group hopes that making this first version of the classification available for general use will stimulate widespread interest, leading eventually to the development of an international instrument such as ICHPPC-2.

Space does not permit publication of the entire four-digit classification in this journal. The two-digit code rubrics are presented in their entirety (Appendix 1) with sample pages of the three- and four-digit classifications for each section (Appendix 2). NAPCRG is making the entire classification available at cost.\*

## References

1. Metcalfe DH: A problem-oriented adaption of the Royal College of General Practitioners Classification. Rochester, NY, Family Medicine Program, The University of Rochester School of Medicine and Dentistry, and Highland Hospital, undated
2. International classification of health problems in primary care. Report of the Classification Committee of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians. Chicago, American Hospital Association, 1975
3. Tindall HL: Development of a process coding system for family medicine. Presented at the 5th Annual NAPCRG Meeting, Williamsburg, Virginia, March 25, 1977
4. Richards AD, Mitchell D, Kent E: The Richards Drug Classification. Presented at the 5th Annual NAPCRG Meeting, Williamsburg, Virginia, March 25, 1977
5. Anderson JE, Lees REM: Optional hierarchy as a means of increasing the flexibility of a morbidity classification system. *J Fam Pract* 6:1271, 1978
6. Finkel AJ (ed): Physicians' Current Procedural Terminology, ed 4. Chicago, American Medical Association, 1977
7. Drug Benefit Formulary No. 8/Parcost Comparative Drug Index. Ottawa, Ministry of Health, Province of Ontario, 1978
8. Raily MJ (ed): American Hospital Formulary Service. Washington, DC, American Society of Hospital Pharmacists, 1978, pp ix-xii
9. ICHPPC-2: International classification of health problems in primary care, 1979 revision. Report of the Classification Committee of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians. Oxford, Oxford University Press, 1979
10. Reasons for Contact with Primary Health Care Services: A Model Classification, Geneva, Switzerland. Department of Health, Education, and Welfare, National Center for Health Statistics (Hyattsville, Md). Government Printing Office, 1979
11. Renner JH, Bauman EA: Problem-specific coding systems. *J Fam Pract* 2:279, 1975
12. Meads S: National ambulatory medical care survey: Symptoms classification. In National Center for Health Statistics (Rockville, Md): Vital and Health Statistics, series 2, No. 63. DHEW publication No. (HRA) 74-1337. Government Printing Office, 1974

\*Potential users of the classification system are invited to contact Dr. Herbert L. Tindall, Lancaster General Hospital, PO Box 3555, Lancaster, PA 17603, for further information about or copies of the complete (four-digit) NAPCRG Process Classification, translation codes, and indices.



### Appendix 1. The Two-Digit Rubrics in the NAPCRG Process Classification

#### Section 1—Disposition

- 11—No return appointment
- 12—Planned telephone contact
- 13—Return appointment
- 14—Consultation with a physician for evaluation or service
- 15—Referral to a physician for continuing care of problem(s)
- 16—Referral to a non-physician or agency
- 17—Hospitalization
- 18—Non-hospital or domiciliary care
- 10—Disposition NEC\*

#### Section 2—Preventive and Supportive Services

- 21—Complete health evaluation
- 22—Health evaluation directed to specific system or organ(s)
- 23—Counseling
- 24—Education
- 25—Screening and risk approval
- 26—Immunizations—individual (single) agents, active
- 27—Immunizations—combined agents, active
- 28—Passive immunization
- 20—Preventive and supportive services NEC

#### Section 3—Procedures

- 31—Repair
- 32—Excision, biopsy, debridement, or removal
- 33—Incision
- 34—Destruction or cauterization
- 35—Injection (by tubation, catheterization, or needle)
- 36—Aspiration or collection of body fluids (by intubation, catheterization, needle, or natural drainage)
- 37—Pressure, compression, dilatation, tamponade, or dressings
- 38—Physical modalities
- 39—Miscellaneous procedures
- 30—Other miscellaneous procedures

#### Sections 4-5—Drugs and Pharmaceuticals

- 41—Antihistamine
- 42—Antibiotics
- 43—Anti-infectives
- 44—Antineoplastics
- 45—Autonomics
- 46—Hematologic
- 47—Cardiovascular drugs
- 48—Pain and anti-inflammatory agents
- 49—Psychotherapeutic
- 51—Diagnostic and antitoxic
- 52—Metabolic
- 53—Enzymes
- 54—Respiratory drugs

#### Sections 4-5—Drugs and Pharmaceuticals, continued

- 55—Vitamins and minerals
- 56—Gastrointestinal drugs
- 57—Endocrine drugs
- 58—Topical, skin, vaginal, and rectal
- 59—Topical EENT
- 50—Drugs and pharmaceuticals NEC

#### Section 6—Other Diagnostic Procedures

- 61—Allergy testing
- 62—Electrical tracings
- 63—Endoscopy
- 64—Vision testing
- 65—Hearing and vestibular testing
- 66—Pulmonary function tests
- 60—Other diagnostic procedures NEC

#### Section 7—X-Ray, Nuclear Scanning, and Ultrasound

- 71—Plain x-ray, bone
- 72—Plain x-ray, soft tissue
- 73—Contrast x-ray
- 74—Computerized tomography
- 75—Xeroradiography
- 76—Nuclear scanning
- 77—Diagnostic ultrasound
- 70—Diagnostic radiology or imaging NEC

#### Section 8—Clinical Laboratory

- 81—Urine, physical, and chemical tests
- 82—Blood chemistry
- 83—Automated blood chemistry profiles
- 84—Hematology
- 85—Immunology
- 86—Tests on spinal fluid
- 87—Microbiology culture
- 88—Microscopic examination
- 89—Cytology and tissue pathology
- 80—Miscellaneous and unclassified lab tests

#### Section 9—Site and Duration of Service

- 91—Office visit
- 92—Hospital visit
- 93—Skilled nursing, intermediate care, or long-term facility visit
- 94—Nursing home, boarding home, domiciliary or custodial care facility visit
- 95—Emergency department visit
- 96—Patient's home visit
- 97—School visit
- 98—Other community facility or site: factory, jail, restaurant, social gathering, etc
- 99—Non-attending
- 90—Site and duration of service NEC

\*NEC=Not elsewhere classified



**Appendix 2. Examples of the Complete Four-Digit NAPCRG Process Classification**

**Section 1—Disposition**

The "disposition" of a patient is a record of the most basic communication between the individual and the provider of care. Effective recording of dispositions will provide valuable information relating to actual patterns of health care. Many will find that the two-digit level provides enough specificity, but three-digit rubrics are available to provide more complete information.

(An example of the four-digit code from Section 1)

Position No.	2 Digit	3 Digit	4 Digit	Rubrics
36	16			<b>Referral to a nonphysician or agency</b>
37		161	161-	<i>Social worker referral</i>
38		162	162-	<i>Mental health referral</i> (includes psychologist)
39		163	163-	<i>Home health referral</i> (including community nurse, Visiting Nurse Association [VNA], etc)
40		164	164-	<i>Nutrition referral</i>
41		165	165-	<i>Rehabilitation referral</i>
42		166	166-	<i>Referral to other community agency or volunteers</i>
43		167	167-	<i>Dentist, oral surgeon referral</i>
44		168	168-	<i>Physiotherapist referral</i>
45		160	160-	<i>Referral to nonphysician or agency NEC</i>

**Section 2— Preventive and Supportive Services**

Preventive and supportive services cover a wide range of health care activities, including the traditional immunizations, collection of complete and directed data bases, health screening, risk appraisal, education, and counseling. In addition, the stimulus for seeking such services may be identified at the four-digit level. The user should be careful to differentiate between the terms "directed health examination" (DHE) and "complete health examination" (CHE). The differentiation between educating a patient to provide information and counseling to modify behavior should be considered. This section of the classification will expand as techniques of primary and secondary prevention and health promotion are developed to deal with an increasing knowledge of the natural history of the problems dealt with in primary care settings.

(An example of the four-digit code from Section 2)

Position No.	2 Digit	3 Digit	4 Digit	Rubrics
79	22			<b>Health examination directed to specific system or organ(s)</b>
80		221		<i>DHE patient initiated</i>
81			2211	DHE patient initiated, signs and symptoms absent
82			2212	DHE patient initiated, signs and symptoms present



**Appendix 2. Examples of the Complete Four-Digit NAPCRG Process Classification, continued**

Position No.	2 Digit	3 Digit	4 Digit	Rubrics
<b>Section 2—Preventive and Supportive Services, continued</b>				
83		222		<i>DHE provider initiated</i>
84			2221	DHE provider initiated, signs and symptoms absent
85			2222	DHE provider initiated, signs and symptoms present
86		223	223-	<i>DHE medical referral (consultation)</i>
87		224		<i>DHE administratively initiated</i>
88			2241	DHE administratively initiated, school
89			2242	DHE administratively initiated, athletic
<b>Section 3—Procedures</b>				
<p>The area of procedures, if defined exhaustively, would be less useful than the schema presented. The three-digit specificity identified should be adequate for most users. Certain commonly performed procedures not readily classified under the two-digit headings have been given three-digit rubrics in the 39 category. The fourth digit is available for optional expansion. It is intended that these procedures be done "on site," usually by the attending physician in the ambulatory setting. It is not intended for documentation of procedures done by providers to whom the patient has been referred.</p> <p>(An example of the four-digit code from Section 3)</p>				
Position No.	2 Digit	3 Digit	4 Digit	Rubrics
221	32			<b>Excision, biopsy, debridement or removal</b>
222		321	321-	<i>Excision/biopsy of cysts</i>
223		322	322-	<i>Removal of foreign bodies or calculi (excluding removal of ear wax, 394-)</i>
224		323	323-	<i>Removal of redundant skin (including circumcision)</i>
225		324	324-	<i>Excision/biopsy of superficial lesions, including warts</i>
226		325	325-	<i>Excision/biopsy of benign tumors or tumors not yet diagnosed</i>
227		326	326-	<i>Excision/biopsy of malignant tumors</i>
228		327	327-	<i>Excision/biopsy of scar tissue</i>
229		328	328-	<i>Excision of ulcers</i>
230		329		<i>Miscellaneous excision, biopsy, debridement, or removal</i>
231			3291	Abortion by dilatation and curettage or suction
232			3292	Endometrial biopsy
233			3293	Fallopian tube (tubal ligation)



**Appendix 2. Examples of the Complete Four-Digit NAPCRG Process Classification, continued**

**Sections 4-5—Drugs and Pharmaceuticals**

These two sections are devoted to the drugs commonly used in primary care. The parent classification is the American Society of Hospital Pharmacists (ASHP) code, and the rubrics are consistent with their main and subclassifications. The requirements of primary care had previously been addressed by the Richards Drug Classification (derived from the same parent code), the Lancaster-Hershey Drug code, and the Ontario Health Insurance Plan (OHIP) code, widely used in Ontario, Canada. The NAPCRG classification is consistent with and translatable to these systems. The two-digit classification, containing 19 rubrics, divides the drugs into broad classifications, while the three-digit code (114 rubrics) contains more specific classifications. The four-digit code contains 326 rubrics, consisting of the most commonly used drugs and specific residual categories. In each four-digit group, space has been left for coding those specific drugs within that classification which individual practices may find useful. Other information about specific drugs, such as route of administration, can be classified at the five-digit level.

(An example of the four-digit code from Sections 4-5)

Position No.	2 Digit	3 Digit	4 Digit	Rubrics
478	49			<b>Psychotherapeutic</b>
479		491		<i>Antidepressants</i>
480			4911	Amitriptyline
481			4912	Desipramine
482			4913	Doxepin
483			4914	Imipramine
484			4915	Monoamine oxidase inhibitors
485			4916	Nortriptyline
486			4917	Protriptyline
487			4918	Tranlycypromine
488			4919	Trimipramine
489			4910	Other antidepressants NEC

**Section 6—Other Diagnostic Procedures**

Section 6 deals with diagnostic procedures other than clinical laboratory, x-ray, and ultrasound. As with other diagnostic sections, it is intended that these will be coded as ordered or performed, regardless of whether the performance is on site, or done elsewhere. In section 63, "Endoscopy," it is suggested that the fourth level modifier "1" be used to designate "without biopsy" and "2" to designate "with biopsy."

(An example of the four-digit code from Section 6)

Position No.	2 Digit	3 Digit	4 Digit	Rubrics
724	62			<b>Electrical tracings</b>
725		621	621-	<i>Electrocardiogram, standard</i>
726		622		<i>Electrocardiogram, exercise</i>
727			6221	Electrocardiogram, exercise Masters two step
728			6222	Electrocardiogram, exercise, Treadmill
729			6223	Electrocardiogram, exercise, Bicycle



**Appendix 2. Examples of the Complete Four-Digit NAPCRG Process Classification, continued**

**Section 6—Other Diagnostic Procedures, continued**

730		6220	Electrocardiogram, exercise NEC
731	623	623-	<i>Ambulatory electrocardiographic monitoring</i> (including Holter Monitor)
732	624	624-	<i>Electroencephalogram</i>
733	625	625-	<i>Electromyography and nerve conduction studies</i>
734	626	626-	<i>Fetal monitoring</i>
735	620	620-	<i>Electrical tracings</i> (including vectorcardiogram, reflex times, etc) (excluding echocardiography 722-)

**Section 7—X-Ray, Nuclear Scanning, and Ultrasound**

As in the other diagnostic sections, it is intended that these tests be coded regardless of site of performance. Whether or not "tests ordered" or "tests reported" should be coded will depend on local requirements, but since most coding is done at the time of the visit, "tests ordered" will be the usual procedure. Some facilities may have reason to identify x-ray procedures in much more detail. Either the fourth digit of this code may be used, or another more detailed code such as CPT-4 or local Blue Shield codes may be needed. In this section, modifiers may be used for specialized techniques, such as tomography.

(An example of the four-digit code from Section 7)

Position No.	2 Digit	3 Digit	4 Digit	Rubrics
--------------	---------	---------	---------	---------

771	72			<b>Plain x-ray, soft tissue</b>
772		721	721-	<i>Chest x-ray</i>
773		722	722-	<i>Abdomen x-ray</i>
774		720	720-	<i>Plain x-ray, soft tissue, NEC</i>
775	73			<b>Contrast x-ray</b>
776		731	731-	<i>Upper GI x-ray</i> (including small bowel and barium swallow)
777		732	732-	<i>Lower GI x-ray</i> (barium enema)
778		733	733-	<i>Contrast x-ray—gallbladder and ducts, liver and ducts</i> (cholecystogram)
779		734	734-	<i>Contrast x-ray—genitourinary tract</i>
780		735	735-	<i>Contrast x-ray—cardiovascular system, bronchogram, or central nervous system</i>
781		730	730-	<i>Contrast x-rays NEC</i>

**Section 8—Clinical Laboratory**

It is intended that clinical laboratory tests be classified as part of the process of medical care when ordered (or reported), regardless of the site of performance. In most subsections there is sufficient latitude at the four-digit level to add specific tests which by reason of frequency of use or other reason should be



**Appendix 2. Examples of the Complete Four-Digit NAPCRG Process Classification, continued**

**Section 8—Clinical Laboratory, continued**

identified by individual users. Section 8 is devoted to clinical laboratory procedures. In general, those procedures listed in the 80,000 section of CPT-4 will be found in this section.

(An example of the four-digit code from Section 8)

Position No.	2 Digit	3 Digit	4 Digit	Rubrics
838		824		<i>Minerals</i>
839			8241	Calcium
840			8242	Phosphorus
841			8243	Iron studies (can be broken down to five-digit level for greater specificity)
842			8240	Blood minerals NEC
843		825		<i>Proteins, amino acids, and lipids</i>
844			8251	Albumin
845			8252	Cholesterol
846			8253	Lipoprotein electrophoresis (including ultracentrifugation)
847			8254	Total protein
848			8255	Protein electrophoresis (excluding serum immunoelectrophoresis, 8532)
849			8256	Triglycerides
850			8250	Blood proteins, amino acids, and lipids, NEC

**Section 9—Site and Duration of Service**

This subclassification was designed to begin to define uniformly the site and duration of service. While it may be argued that site and duration of service is not actually a "process" of care, it is certainly valuable information, not only for billing purposes but also for documenting the patterns of health care delivery. An important area to consider is the nonattending patient whose activities are often as important as the attending patient. The need to document information on the nonattending patient is becoming more important due to outside regulation of health care. Common primary health care sites are listed at the two-digit level, with the duration of service established at the three-digit level. The time definition for the duration of service is arbitrary and may need to be modified to deal with the user's particular situation. Tailoring the time span of duration to meet individual practice patterns is preferable to changing the rubric definition, since terms such as minimal, brief, and limited are subjective in any case.

The fourth digit designator "1" for "new patient" and "2" for "established patient" may be used in all of section 9.

(An example of the four-digit code from Section 9)

Position No.	2 Digit	3 Digit	4 Digit	Rubrics
965	91			<b>Office visit</b>
966		911	911-	<i>Office visit—minimal</i> (1-10 minutes)
967		912	912-	<i>Office visit—brief</i> (11-20 minutes)
968		913	913-	<i>Office visit—limited</i> (21-30 minutes)
969		914	914-	<i>Office visit—intermediate</i> (31-40 minutes)
970		915	915-	<i>Office visit—extended</i> (41-60 minutes)
971		910	910-	<i>Office visit—prolonged</i> (over 1 hour)