

The Development of an Outpatient Prospective Payment System for Oncologic Services in America

Norbert I. Goldfield & Richard F. Averill

To cite this article: Norbert I. Goldfield & Richard F. Averill (1992) The Development of an Outpatient Prospective Payment System for Oncologic Services in America, *Oncology Issues*, 7:3, 10-11, DOI: [10.1080/10463356.1992.11905064](https://doi.org/10.1080/10463356.1992.11905064)

To link to this article: <https://doi.org/10.1080/10463356.1992.11905064>



Published online: 19 Oct 2017.



Submit your article to this journal [↗](#)



Article views: 3



View related articles [↗](#)

The Development Of An Outpatient Prospective Payment System For Oncologic Services In America

By Norbert I. Goldfield, M.D., and Richard F. Averill, M.S.

The Health Care Financing Administration (HCFA) is now considering a wide variety of options to fulfill the Congressional mandate of developing an outpatient prospective payment system for the facility component of hospital-based outpatient services. The Ambulatory Patient Group (APG) system is under strong consideration for use to pay the facility, not the physician component, of ambulatory services.

The increasing interest in APGs is evident in the fact that entities other than HCFA are using APGs for a variety of utilization and quality management purposes. For example, the state of New Jersey is currently planning to implement APGs on an all-payer basis beginning in 1993. In addition, several managed care organizations and commercial carriers are utilizing APGs for profiling and contracting purposes.

APGs were central to the development of an ambulatory classification system. It was determined that such a system must have the following characteristics:

- Comprehensive coverage of ambulatory services
- Homogeneous resource use
- Clinically meaningful groupings
- Minimal opportunities for upcoding
- Flexibility
- Useful data for quality management

System Development

APGs are a patient classification system designed to explain the amount and type of resources used in an ambulatory visit. Two types of data were used in the development of approximately 275 APGs:

- **Clinical.** Input was obtained from more than 100 health care professionals, including nurses, laboratory technicians,

administrators, and physicians.

- **Charge.** Large claims-based data sets were obtained from Medicare, NY State Dept. of Health, and the U.S. Army.

Patients in each APG have similar clinical characteristics, resource use, and costs. Data elements used to collect APGs were limited to the information routinely collected on standard (UB-82) claims forms. APGs are a "visit-based" system. While many options were considered, the complexity of ambulatory services has ruled out, at least for now, a system that is based on an episode of illness. However, every effort has been made to expand the services which are bundled or "packaged" into each patient visit. For instance, a CBC could be packaged into a chemotherapy visit.

There are important differences between APGs and DRGs:

- APGs are based on CPT-4 procedure codes; DRGs are based on ICD-9 codes.
- There can be more than one APG per visit, but only one DRG per hospital admission.
- The presence or absence of a significant procedure represents the first axis of classification for APGs; diagnosis is the first axis of classification for DRGs.

A significant procedure is defined as one which is normally performed in an outpatient setting and, more importantly, one which dominates the time and resources of the visit. Delivering intravenous chemotherapy is considered a significant procedure. If a significant procedure does not occur, the patient is assigned to a medical visit APG. Ancillary procedures, such as a CBC, are typically ordered as a by-product of a significant procedure or a medical visit.

Significant Procedures in Oncology

Oncologic significant procedures are grouped in the body system, "hematology,

lymphatic, endocrine, and chemotherapy." (See Figure 1 on next page.) Procedures included in this body system include different types of transfusions, chemotherapy, allergy tests, and surgical procedures on the endocrine or lymphatic systems.

Two transfusion procedure groups were created: one for a simple transfusion, the other for a blood exchange, such as a therapeutic apheresis (CPT code 36520). The charge data revealed that the blood exchange APG costs almost 50 percent more than a blood transfusion.

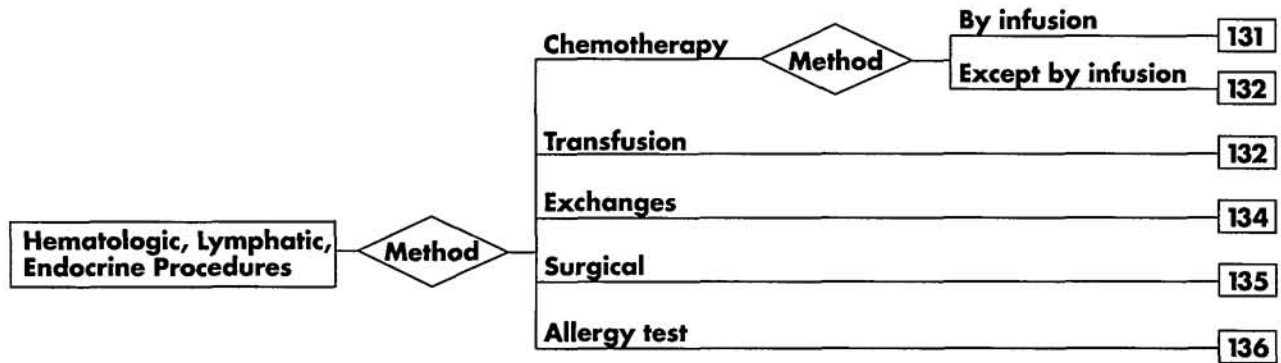
Chemotherapy represents a frequently provided, increasingly performed, and expensive outpatient service. Therefore, it is important to reflect the cost of this service in the APG structure. However, there are many components to this service, including labor, medical supplies and, in particular, expensive medications. Chemotherapy provided, for example, in an outpatient department, generally constitutes the sole reason for the visit and, thus, chemotherapy is considered a significant procedure.

The development of the chemotherapy APGs was complicated by the challenge of appropriately recognizing all of the resources consumed during a chemotherapy visit. There are two main types of resources which must be accounted for: the cost of the drug and the route of administration. It is necessary to recognize the cost of the drug, because its administration represents the reason for the visit. In addition, the cost of the chemotherapeutic agent can vary considerably from less than \$10 to more than \$500. The second main resource consumed during a chemotherapy visit is the route of administration. This resource consists of labor costs (nursing and other technical and nontechnical personnel), room charges, and medical and surgical supplies.

After considerable consultation with clinical experts, it was determined that two types of significant procedure APGs would

.....
Norbert I. Goldfield, M.D., is Medical Director, 3MIHealth Information Systems, Wallingford, CT., and Richard F. Averill, M.S., is Principal Investigator.

Figure 1. Significant Procedure Visits: Hematologic, Lymphatic, and Endocrine



be necessary for each outpatient chemotherapy visit: route of administration and the chemotherapeutic drug itself. The entire group of HCPCS codes for chemotherapy drugs (i.e., J codes) were split into three different APGs. However, there were significant differences in the cost information obtained from a variety of settings (a health maintenance organization and various hospital outpatient departments). Where differences in cost information occurred, specific chemotherapeutic agents were assigned to APGs on the basis of a combination of charge data from the sources listed above and clinical input.

The route of administration APG for chemotherapy was further divided into two APGs: intravenous infusion or intravenous push. These constitute a proxy for chemotherapy administration time and labor.

The Use of APGs for Payment/Contracting

How does the APG system propose to pay the facility portion of outpatient services? As Figure 2 below indicates, each significant or ancillary procedure results in an APG. Some of them may be packaged, consolidated or discounted. Hopefully, the following examples will clarify these terms and how the current APG system might be used for payment.

Let's say four APGs are generated in one visit for the treatment of a fractured arm: 1 for setting the fracture, 2 for labora-

tory tests, and 1 for a plain X-ray film. A possible recommendation might be that one of the laboratory tests, which is a simple and inexpensive test to perform, and the plain X-ray film could be packaged into the payment for the fracture. The other laboratory test, which is expensive, would probably not be packaged.

If several tests or X rays, such as CT scans, are performed at the same time, they may be "discounted." Also, if more than one procedure is performed during the same visit and are similar on the basis of a variety of parameters, they may be combined or "consolidated" for payment purposes.

Here is an example relevant to oncology chemotherapy services. Five APGs will be generated if a patient receives three different drugs via an intravenous drip over several hours. A fifth ancillary procedure APG would be generated if a CBC is ordered. Each of the three drugs will be assigned to an APG, based on the average cost of the drug. And each drug would be paid for under the current APG system. The route of administration would fall under the significant procedure entitled, "intravenous chemotherapy administration" (APG No. 131). The CBC would fall into the "simple hematology" APG and would be packaged into APG 131. Supplies and other medications provided during the visit would be packaged into the route of administration payment for the visit.

One can see the APG system's flexibility in that a managed care organization or governmental entity could decide not to package any of its laboratory tests because it already has capitated payment levels for laboratory tests. In addition, the APG system's utility for institutional and physician profiling of patterns of care is evident. One could readily examine issues of either under- or over-utilization for a variety of procedures, tests, and medical visits. The provision of services can be readily plotted on a control chart, and provide the managed care organization with an excellent quality or utilization management tool. Such information should be managerially useful for physicians and health care institutions alike. Simply put, a hospital outpatient department or managed care organization can much more easily contract or track services using approximately 275 APGs instead of a total of 19,000 CPT-4 and ICD-9 codes.

Summary


APGs are a classification system which attempts, at a minimum, to describe the facility component of outpatient services. The APG software is in the public domain and is already being used by a variety of organizations. APGs are under consideration by HCFA as the basis for the prospective payment of the facility component of outpatient services. A subsequent article will describe the APGs for medical visits that are pertinent to oncology. 

Figure 2. APG Payment System

