

# History, Principles, and Policies of Observation Medicine



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## KEYWORDS

• Emergency medicine • Observation medicine • Observation units • Health policy

## KEY POINTS

- The history of observation medicine parallels the rise of emergency medicine over the past 50 years to meet the needs of patients, emergency departments (EDs), hospitals, and the US health care system.
- Type 1 protocol-driven observation units are best managed using 7 basic principles. These units have consistently been shown to provide better outcomes than traditional care for selected patients.
- The growth of observation medicine has been driven by innovations in health care, ongoing shift of patients from inpatient to outpatient settings, and changes in health policy.
- To fully understand observation medicine, it is important to understand observation services payment policy, history, and ramifications.

*Leave nothing to chance, overlook nothing: combine contradictory observations and allow enough time...A great part, I believe, of the art is to be able to observe.*  
—Hippocrates 410 BC

## A BRIEF CLINICAL HISTORY OF OBSERVATION MEDICINE

The act of observing patients is not unique to the present. Observation has been fundamental to the care of patients since the time of Hippocrates, when he argued that understanding the nature of the humans and disease processes was best achieved through the active observation of their condition. This new approach,

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Disclosure Statement: Dr M.A. Ross has no disclosure of any relationship with a commercial company that has a direct financial interest in subject matter or materials discussed in article or with a company making a competing product. Dr M. Granovsky is president of a company that does coding and billing for emergency physicians but has no other disclosures.

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Emerg Med Clin N Am 35 (2017) 503–518  
<http://dx.doi.org/10.1016/j.emc.2017.03.001>

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recorded in the Hippocratic Corpus, became the foundation of medicine as it is known today.

Jumping forward more than 2 millennia to the 1960s, the creation of EDs addresses a public health need. It was recognized that patients were dying of time-sensitive conditions, such as trauma and cardiac arrest, because they could not reach lifesaving experts and equipment soon enough — such as trauma surgeons, emergency physicians, operating rooms, and defibrillators. This led to the creation of emergency medicine, a new specialty whose defining feature was time rather than an organ system, age, or technology. EDs and emergency physicians specialized in the management of time-sensitive conditions. Between 1955 and 1971, ED visits increased by 367%.<sup>1</sup>

As EDs grew and became more differentiated, the first descriptions of observation beds appeared. In a 1965 edition of the journal, *Hospital Forum*, Lynn Boose, an administrative resident with the Bellflower California Kaiser Foundation Hospital, described “the use of observation beds in emergency service units” where it was recommended that an observation patient’s stay “should not exceed 24 hours” based on his review of 1094 cases.<sup>2</sup>

Observation medicine research over the ensuing decades evolved along with innovations in health care.<sup>3</sup> In the 1970s, studies focused broadly on the use of short-stay units in EDs.<sup>4</sup> This focus continued in the 1980s with an increasing focus on specific conditions, in particular chest pain.<sup>5,6</sup> Studies explored other clinical areas, such as pediatrics, geriatrics, trauma, asthma, and abdominal pain.<sup>7–9</sup> The prevalence and scope of ED observation units (EDOUs) were described.<sup>10,11</sup> The 1990s saw high-quality observation medicine research flourish with federally funded prospective randomized clinical trials.<sup>12–14</sup> Chest pain research refined patient selection and diagnostic testing using the term, *accelerated diagnostic protocols (ADPs)*.<sup>14</sup> Chest pain protocols in dedicated units were reported to have better outcomes than inpatient admission in terms of shorter length of stays, lower costs, less diagnostic uncertainty, and improved patient satisfaction.<sup>13,14</sup> Similar findings were reported in accelerated treatment protocols for asthma with shorter stays.<sup>15</sup> In the new millennium, EDU research addressed new conditions, including syncope, transient ischemic attack, and atrial fibrillation.<sup>16–18</sup> Studies described the role of observation for pediatric conditions, the elderly, and hospital operations.<sup>19–22</sup> In the second decade of the millennium, clinical research continued as health services research focused on the impact of observation medicine on hospitals, health systems, and health policy.<sup>23–25</sup> Studies further defined which chest pain patients may not need observation or advanced cardiac imaging.<sup>26</sup>

In parallel with these advances, clinical practice also evolved. The American College of Emergency Physicians formed an Observation Medicine Section and adopted policies for the management of observation units, stating, “(o)bservation of appropriate ED patients in a dedicated ED observation area, instead of a general inpatient bed or an acute care ED bed, is a ‘best practice’ that requires a commitment of staff and hospital resources.”<sup>27</sup> In the early 1990s, chest pain centers, which usually included chest pain ADPs and dedicated beds, became more common.<sup>28,29</sup> To represent this group, the Society of Chest Pain Centers was formed and has accredited more than 1000 hospitals nationally.<sup>30</sup>

## PRINCIPLES OF OBSERVATION MEDICINE

Observation care, like emergency care, is defined by time. Most ED visits occur in less than 6 hours, whereas the national average inpatient length of stay is approximately 4.5 days.<sup>31,32</sup> Hospitals are often penalized for patients whose inpatient length of

stay is less than 24 hours.<sup>33</sup> These parameters defines a group of patients whose health care needs exceed what can realistically be achieved in less than 6 hours in the ED but if managed actively requires less than 24 hours of hospitalization. Left with an admit or discharge only model, they become orphans of the system and are either admitted unnecessarily or discharged inappropriately. These 6-hour to 24-hour patients have care that falls between the ED and inpatient settings and is best provided in a dedicated observation unit, otherwise known as a type 1 setting (Table 1). The principles of observation medicine describe how to best manage these 6-hour to 24-hour patients based on clinical research and national policies<sup>27,34,35</sup> (Box 1).

**Table 1**  
Observation care settings

Observation Settings	Description	Comments
Type 1	Protocol driven Observation unit	Highest level of evidence for favorable outcomes Care typically directed by ED
Type 2	Discretionary care Observation unit	Care directed by a variety of specialists Unit typically based in ED
Type 3	Protocol driven Hospital bed anywhere	Often called a virtual observation unit
Type 4	Discretionary care Hospital bed anywhere	Most common practice Unstructured care Poor alignment of resources with patients' needs

**Box 1**  
Principles of observation medicine

1. Focused patient care goals — a well-defined condition-specific patient care goal defined at the time of initiating observation services. Condition-specific guidelines specify patient selection for the observation unit, interventions, and criteria for discharge or admission from the EDOU.
2. Limited duration and intensity of service — the average length of stay of observation patients is 15 hours to 18 hours. Patients requiring a higher intensity of service are generally admitted.
3. Appropriate hospital setting — optimal clinical, operational, and economic outcomes occur in a type 1 setting, as proximate to the ED as possible.
4. Appropriate staffing — appropriate staffing levels of nurses, ancillary, associate providers, and physicians is essential, as is administrative oversight.
5. Providing ongoing care in an outpatient setting — clinical guidelines, care pathways, and protocols fall under 2 broad categories: ADPs (eg, chest pain) and accelerated treatment protocols (eg, asthma).
6. Intensive review — critical metrics must be collected to assure that benchmark targets are being achieved, for example, discharge rates (70%–90%), length of stay (15–18 hours), and financial metrics. These targets are tracked for the whole EDOU and for specific clinical conditions.
7. Economical service — to be successful, an EDOU must be cost-effective and equitable for all involved. Equitability should include the hospital, the physician, and those paying for these services.

## MEDICARE OBSERVATION SERVICES — HOSPITAL PAYMENT POLICY HISTORY

To understand observation services, it is important to understand past and present Medicare observation policy. To put this in context, in 2014 the United States spent approximately \$3 trillion on health care, with the largest portion (32%) spent on hospital care. The largest individual payer of health care was the Centers for Medicare & Medicaid Services (CMS), which covered 36% of health insurance payments.<sup>36</sup> Control of escalating hospital costs has been a central issue for Medicare for decades. Medicare policy is developed at CMS headquarters in Baltimore, Maryland, and then administered via 10 regional offices located throughout the United States.<sup>37</sup> Medicare has 4 parts, which were developed in chronologic order to meet societal needs: Medicare Part A covers inpatient admissions and skilled nursing facility (SNF) care after admission; Part B covers outpatient visits, such as clinic, ED, or observation visits as well as physician services; Part C covers Medicare Managed Care (or Advantage) plans; and Part D covers prescription drug plans.<sup>38,39</sup> Observation services fall under Medicare Part B.<sup>34</sup>

To control rising hospitalization costs, in 1983 Medicare launched an inpatient prospective payment system, which adopted a payment methodology called diagnosis-related groups (DRGs).<sup>40</sup> Under this model, inpatient hospitalization is only paid for specific conditions with corresponding DRG codes and payment rates. Shortly thereafter, it was realized that this created a population of patients who were “too sick to go home, but not sick enough to be admitted” as inpatients. A policy correction was needed. To address this issue, Medicare introduced observation services, where a patient could be managed as an outpatient in a bed anywhere in a hospital for up to 24 hours to determine the need for inpatient admission. This definition, with minor modifications, remains:

*Observation care is a well-defined set of specific, clinically appropriate services, which include ongoing short-term treatment, assessment, and reassessment that are furnished while a decision is made regarding whether patients require further treatment as hospital inpatients or if they are able to be discharged from the hospital. Observation services are commonly ordered for patients who present to the ED and who then require a significant period of treatment or monitoring to make a decision concerning their admission or discharge. Observation services are covered only when provided by the order of a physician or another individual authorized by state licensure law and hospital staff bylaws to admit patients to the hospital or to order outpatient services.*

*Observation services must also be reasonable and necessary to be covered by Medicare. In only rare and exceptional cases do reasonable and necessary outpatient observation services span more than 48 hours. In a majority of cases, the decision whether to discharge a patient from the hospital after resolution of the reason for observation care or to admit the patient as an inpatient can be made in less than 48 hours, usually in less than 24 hours.*<sup>34</sup>

Initial ambiguity with the definition of observation led to misuse of observation services. The 2 most common examples were misuse of observation for scheduled elective outpatient procedures and prolonged observation stays.<sup>41,42</sup> For outpatient procedures, standard recovery periods after those procedures were allowed. In rare and unusual cases, a patient might require a few additional hours for recovery due to unforeseen complications. Initially, Medicare allowed hospitals to bill these rare and unanticipated additional hours of recovery using the observation codes. For various reasons Medicare was frequently double-billed for both the procedure and

observation time, often from the time patients first arrived in the hospital.<sup>43</sup> In other cases, patients were held in inpatient beds as observation outpatients for several days to weeks. Both examples increased costs to Medicare, with prolonged stays increasing patient out-of-pocket costs.<sup>41</sup> Neither of these examples was relevant to EDOUs, but they drove policies that influenced observation unit funding.

To address these issues, in 2000 when Medicare launched its outpatient version of the DRG program, called ambulatory payment classification (APCs), it stopped paying separately for observation services.<sup>41,42</sup> Observation payments were added to the associated ED or clinic visits payments, leading to a slight increase in payment for those visits but no identifiable separate payment for observation. This created a powerful incentive for hospitals to admit most, if not all, observation patients as short-stay inpatients. This policy change likely contributed to a significant rise in short-stay inpatient admissions, which later became a target of the recovery audit contractors (RACs). Based on provider input, in 2002 Medicare began paying again for observation services but with several stipulations for 3 specific conditions: chest pain, asthma, and heart failure.<sup>44</sup> In 2005, most stipulations were lifted; then in 2008, Medicare began paying for all conditions.<sup>44</sup>

In parallel with these events, in 2006 a Medicare demonstration project, called the RAC, collected more than \$900 million in overpayments made by Medicare to hospitals. The largest collection category was for short inpatient admissions that should have been billed as outpatient. In 2010 this program was expanded to the entire country. In a 2014 report to Congress, the RAC program reported that it had collected \$2.3 billion in Medicare overpayments to hospitals for inpatient services.<sup>33</sup> One of its largest overpayment collection categories was for patients admitted as inpatients whose medical records indicated that they “could have safely and effectively been treated as an outpatient.” This finding encouraged hospitals to admit patients only if they were certain that they would meet inpatient criteria, which was becoming increasingly vague.

Not surprisingly, between 2007 and 2009 there was a 34% increase in the ratio of observation visits relative to inpatient admissions for Medicare patients.<sup>45</sup> Observation stays increased from 26 hours to 28 hours, with 40% of stays lasting more than 24 hours and 10% more than 48 hours. This increase in observation relative to inpatient was due to both an increase in observation stays and a decrease in inpatient admissions. The increase in observation volumes was likely due to several factors: a return to baseline when Medicare resumed payment for observation services in 2008, hospital fears of being targeted by RAC auditors for inappropriate inpatient admission, a lack of clarity regarding the definition of an inpatient, and medical innovations shifting care from inpatient to outpatient settings.

### **THREE MEDICARE OBSERVATION POLICY ISSUES**

#### ***Observation Visits and Hospital Readmissions***

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In recent years, there has been a decline in hospital readmission rates, driven in part by Medicare inpatient readmission penalties.<sup>46</sup> This decline raised concerns that hospitals were keeping inpatient readmission rates down by keeping patients in outpatient observation status to avoid these penalties. Zuckerman and colleagues<sup>46</sup> found that between 2007 and 2015, for Medicare patients with acute myocardial infarction, heart failure, and pneumonia, inpatient readmission decreased more (21.5% to 17.8%) than the increases in observation visit (2.6% to 4.7%). More importantly, they found no patient-level association between inpatient readmissions and observation stays. Venkatesh and colleagues<sup>47</sup> found that for these targeted conditions, observation bed days represented less than 2.5% of visits.

### ***Patient Out-of-Pocket Costs for Observation Care***

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Concerns have been raised that observation care leads to higher patient out-of-pocket costs than inpatient admission, prompting some patients to demand that they be admitted rather than observed. The best way to avoid higher out-of-pocket costs is to manage them in a type 1 setting. Hockenberry and colleagues<sup>48</sup> reported that observation stays of less than 24 hours were associated with costs that were lower than the Medicare Part A deductible. Patients treated in a protocol-driven observation unit had fewer visits with a length of stay beyond 24 hours (10.4%) compared with local state (44%) and national (29%) data.<sup>23</sup> Unfortunately, between 66% and 80% of US hospitals do not have an observation unit.<sup>24,49</sup> Not surprisingly, Wright and colleagues<sup>50</sup> found that hospital, patient, and health system characteristics were associated with the duration of observation services.

Medicare patients are likely to pay less out of pocket as observation patients than as inpatients. Patient out-of-pocket costs are different for inpatient (Medicare Part A) and outpatient (Medicare Part B) services. In 2016, Medicare patients admitted as inpatients paid a \$1288 deductible for that admission, which covers all hospital and SNF costs and associated readmissions within 60 days of discharge. Patients managed as outpatients (clinic, ED visits, and observation visits) paid a 20% copayment of Medicare-negotiated charges. Additionally, self-administered medications are not covered, and outpatient time does not qualify toward the inpatient 3-day minimum to establish an SNF benefit. An analysis of all 2012 Medicare claims found that 94% of patient out-of-pocket costs were lower with observation care than with inpatient care. Average out-of-pocket costs for inpatient care were almost twice those of observation: \$725 versus \$401. When the costs of self-administered medications (\$127) were added, out-of-pocket costs for observation care were still less than those for inpatient.<sup>51</sup> 2016 observation policy adjustments (discussed later) have made observation savings even less likely to exceed the inpatient deductible.<sup>52</sup> 1.6% of Medicare observation patients have more than 1 observation visits within 60 days, with the potential for higher costs.<sup>53</sup> A majority of Medicare patients, however, have supplemental insurance to cover these deductibles, making the likelihood of higher out-of-pocket costs even less.<sup>54</sup>

### ***Risk of Losing Medicare Skilled Nursing Facility Benefits due to Observation Services***

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Medicare allows inpatients requiring a prolonged inpatient convalescence after the acute phase of their inpatient illness to be moved to a SNF. Under this provision, the SNF stay is covered by the inpatient DRG payment. To qualify, patients must have spent at least 3 midnights as inpatients, with the inpatient clock starting when the inpatient order is written. Time in the ED or observation does not qualify.<sup>55,56</sup> An analysis of 2009 Medicare data by Feng and colleagues<sup>57</sup> found that only 0.75% of Medicare observation patients were at risk of losing SNF payment due to time spent in observation. A subsequent government analysis of all 2012 Medicare claims data found that 0.6% of Medicare observation patients were at risk of losing their SNF coverage.<sup>51</sup> Based on an analysis of Medicare Advantage claims, where the 3-day rule is not used, Grebla and colleagues<sup>58</sup> proposed that CMS consider waiving the 3-day rule because it seems to increase hospital length of stays. For these plans, the absence of the 3-day rule was associated with average hospital stays that were 0.7 days shorter with no increase in the use of SNFs. By decreasing observation length of stays, observation units can minimize patient risks of losing their SNF benefits due to time spent in observation.<sup>23</sup>

## **MEDICARE POLICY CHANGES TO DISCOURAGE PROLONGED OBSERVATION CARE**

Beyond Medicare policy, which specifies that observation should rarely extend beyond 24 to 48 hours, Medicare has introduced 3 policy changes that discourage prolonged observation services.

### ***Two-Midnight Rule***

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To decrease RAC pressures and prolonged observation stays and provide greater clarity regarding the definition of an inpatient, CMS launched the two-midnight rule in October 1, 2013.<sup>59</sup> This is relevant to observation services since the objective of observation is to determine the need for inpatient admission. The hospital setting where patients are most likely to comply with this policy is an EDOU.<sup>23</sup> The two-midnight rule states that

- Inpatient admissions generally are payable under Part A if the admitting practitioner expects a patient to require a hospital stay that crosses 2 midnights and the medical record supports that reasonable expectation.
- Medicare Part A payment is generally not appropriate for hospital stays not expected to span at least 2 midnights.
- All treatment decisions for beneficiaries are based on the medical judgment of physicians and other qualified practitioners.

### ***The Notice of Observation Treatment and Implication for Care Eligibility Act***

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Responding to pressures from patient advocacy groups, Congress passed a bill called the Notice of Observation Treatment and Implication for Care Eligibility (NOTICE) Act (HR 876).<sup>60</sup> Hospitals are required to notify Medicare patients whose observation stay has exceeded 24 hours, both verbally and in writing, why they are still under observation status and what the financial consequences of this will be. The standardized notice letter is called the Medicare Outpatient Observation Notice.<sup>61</sup> Requirements of the NOTICE Act are for hospitals:

*To give each individual who receives observation services as an outpatient for more than 24 hours an adequate oral and written notification within 36 hours after beginning to receive them, which*

- *Explains an individual's status as an outpatient and not as an inpatient and the reasons why*
- *Explains the implications of that status on services furnished (including those furnished as an inpatient), the implications for cost-sharing requirements, and subsequent coverage eligibility for services furnished by an SNF*
- *Includes appropriate additional information*
- *Is written and formatted using plain language and made available in appropriate languages and is signed by the individual or a person acting on the individual's behalf (representative) to acknowledge receipt of the notification; or, if the individual or representative refuses to sign, the written notification is signed by the hospital staff who presented it*

### ***The Comprehensive Observation Services Ambulatory Payment Classification 8011***

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In 2016 Medicare packaged a majority of costs associated with an observation visit into a single payment called a comprehensive APC (C-APC 8011).<sup>34</sup> This includes payment for all services associated with an observation visit, such as the ED visit, diagnostic tests (such as stress tests), imaging, laboratory tests, treatments, and



intravenous medications — making it unlikely that observation outpatient out-of-pocket costs exceed the inpatient deductible.<sup>52</sup> This APC, however, does not include self-administered medications and does not count time in observation toward the 3-day SNF rule. To qualify for this APC, there cannot be an associated major or T status procedure. Examples of T status procedures include a cardiac catheterization, endoscopy, or an appendectomy. This prevents double-billing observation time with procedures, discussed previously. The 2017 payment for C-APC 8011 is \$2222 (**Box 2**).

Over the past 3 and a half decades, multiple Medicare policy revisions have shifted incentives toward, then away, and then toward observation services. Currently, observation services cost Medicare approximately 3 times less than inpatient admission.<sup>51</sup> It is unlikely that CMS will abandon observation services. Medicare policy changes have addressed several prior issues by incentivizing hospitals to avoid prolonged observation stays, decrease patient out-of-pocket costs, minimize loss of SNF benefits, and address confusion over outpatient status. These outcomes are most likely to occur in a well-run type 1 observation unit.

### PHYSICIAN OBSERVATION SERVICES — CODING AND REIMBURSEMENT

#### *Centers for Medicare & Medicaid Services Observation Regulations Shape Physician Documentation Requirements*

CMS defines observation care to include short-term treatment, assessment, and reassessment and periodic monitoring and to be covered only when provided by order of a physician.<sup>62</sup> Based on these CMS directives, the following are typically accepted general documentation requirements for physician observation services:<sup>62</sup>

- An initial note with a plan demonstrating the medical necessity for the observation stay
- A clearly dated and timed order to place a patient in observation
- Progress note(s) demonstrating periodic assessments as appropriate
- A short discharge summary reviewing a patient's course in the unit and plans (if any) for additional postobservation treatment and follow-up

#### **Box 2**

#### **Synopsis of Centers for Medicare & Medicaid Services payment policy requirements for comprehensive observation services ambulatory payment classification 8011<sup>a</sup>**

1. A physician order and documentation supporting the need for observation
2. A preceding (packaged) hospital visit—any of the following:
  - a. Type A ED visit — level 1 to level 5 (HCPCS codes 99281–99285)
  - b. Type B ED visit — level 1 to level 5 (G0380–G0384)
  - c. Outpatient clinic visit (HCPCS code G0463)
  - d. Critical care (CPT code 99291)
  - e. Direct referral to observation (G0463)
3. A minimum of 8 hours of observation: Observation services of substantial duration (HCPCS code G0378 × 8 or more hours)
4. No procedure with an associated T status on the claim for the same or preceding day of service.
5. Status indicator J2 for C-APC — a unique indicator for this C-APC category

<sup>a</sup> Effective 2016.

*Abbreviation:* HCPCS, Healthcare Common Procedure Coding System.



### **Current Procedural Terminology Coding for Observation Services**

*Current Procedural Terminology (CPT)* instructs that when observation status is “initiated in the course of an encounter in another site of service,” such as an ED, all “Evaluation and Management” (E/M) services provided by the same physician (defined as a physician of the same specialty, from the same group) in conjunction with initiating observation status are bundled into the initial observation care when performed on the same date. This means that when the same group provides both emergency and observation services, the observation CPT E/M codes replace the emergency E/M codes for the initial E/M services provided in the ED. Reimbursement for these codes is similar. The observation codes provide payment for the work of discharging the patient, however, which the emergency codes do not.

CPT observation codes are divided into 2 categories. The first category involves care all delivered on the same calendar date. The second category involves care that spans past the midnight hour, involving care delivered during 2 or more calendar dates ([Table 2](#)).

#### **Care all on the same date (Current Procedural Terminology codes 99234, 99235, and 99236)**

In this situation, all care takes place on a single calendar day. For example, a patient is placed in observation at 9:00 AM and discharged home at 9:00 PM the same day. The observation code set for same day services 99234 to 99236 was officially recognized in 1998. The Relative Value Update Committee (RUC) developed formal vignettes that were submitted to CMS as a component of the relative value unit (RVU) valuation of the services<sup>63</sup> ([Box 3](#)). The initial valuations were put forth in 1998 and have not changed much since that time. The CMS has a requirement of 8 hours of care on the same date of service by the provider reporting observation codes 99234 to 99236. When emergency and observation services are combined for a single group model, the clock starts at the beginning of the ED visit because this service is bundled.

#### **Care spans 2 calendar days (Current Procedural Terminology codes 99218, 99219, and 99220)**

In this situation, a patient is observed for a period of time on the first day and the care continues past midnight ending on the second calendar day. For example, a patient is placed in observation status at 4:00 PM and discharged home the following day at 10:00 AM (see [Table 2](#)). Observation provided on calendar date #1 is reported with the code set 99218 to 99220, which was first officially recognized in 1993. The original valuations were put forth in 1993 and have increased since their initial publication.

<b>Complexity</b>	<b>Emergency Care Without Observation<sup>a</sup></b>	<b>Observation and Discharge Care on the Same Day</b>	<b>Observation and Discharge Care Covers 2 D</b>	<b>Observation, Subsequent, and Discharge Care Covers 3 (Plus) D<sup>a</sup></b>
Low	99283	99234	99218 + 99217	99218 + 99224 + 99217
Moderate	99284	99235	99219 + 99217	99219 + 99225 + 99217
High	99285	99236	99220 + 99217	99220 + 99226 + 99217

<sup>a</sup> For the emergency codes and the subsequent care codes, these are common examples but not an automatic cross-walk between services.

**Box 3****Current Procedural Terminology Relative Value Update Committee vignettes**

- RUC vignette: 99234 — a 19-year-old pregnant patient (9 weeks' gestation) presents to the ED complaining of persistent vomiting for 1 day.
- RUC vignette: 99235 — a 48-year-old patient presents to the ED with a history of asthma in moderate respiratory distress. The patient is placed in the observation unit and discharged later the same day.
- RUC vignette: 99236 — a 52-year-old patient comes to the ED because of chest pain. The patient is managed in the observation unit and discharged later on the same day.
- RUC vignette: 99218 — an intoxicated 52-year-old man presents after a fall. He has a blood alcohol concentration of 0.325% and has vomited several times. The patient is kept for observation.
- RUC vignette: 99219 — a 57-year-old woman presents with an allergic reaction after a bee sting, complaining that "her throat is constricting" and she is having "difficulty breathing." The patient is managed in observation.
- RUC vignette: 99220 — a 78-year-old man with a history of congestive heart failure presents complaining of shortness of breath and lower extremity edema. He admits to not taking his "heart pills" and admits to drinking beer and eating hotdogs recently at a baseball game. He is dyspneic and able to complete 3-word to 5-word sentences; he has rales to midlung field and +3 pitting edema in the bilateral lower extremities. His ECG is unchanged from prior. The patient is placed in observation.
- 99224 — physicians typically spend 15 minutes at the bedside and on a patient's hospital floor or unit.
- 99225 — physicians typically spend 25 minutes at the bedside and on a patient's hospital floor or unit.
- 99226 — physicians typically spend 35 minutes at the bedside and on a patient's hospital floor or unit.

***The observation discharge code (Current Procedural Terminology code 99217)***

The discharge code 99217 (officially recognized in 1994) is used to report the work performed on the final day of a multiday observation stay. Observation care discharge management includes services on the date of observation discharge (can only be used on a calendar day other than the initial day of observation). The documentation for 99217 should include the following: a final examination, discussion of the observation stay, follow-up instructions, and documentation.

***Subsequent observation care (Current Procedural Terminology codes 99224, 99225, and 99226)***

In 2011, the RUC published values for subsequent observation codes to represent the middle days of care provided to patients staying in observation status for multiple days (see [Table 2](#)), likely driven with the advent of the two-midnight rule and changes in the delivery of observation services. Although available, they are less frequently used in an EDOU setting where stays rarely cross 3 days. The codes include reviewing the medical record and the results of diagnostic studies and changes in a patient's status since the last assessment by the physician. Because they are subsequent visit codes, based on CPT principles, only 2 of the 3 key components of history, physical examination, and medical decision making are required to be satisfied.

***Physician documentation requirements***

Although several different coding and documentation paradigms exist, the Medicare 1995 documentation guidelines represent a set of concrete guidelines for history,

	Detailed	Comprehensive
<b>Documentation Level Required</b>		
Observation CPT codes	99218, 99234	99219, 99220 99235, 99236
<b>Documentation Elements Required</b>		
History of present illness	4 elements	4 elements
Past, family, or social history	1 area	3 areas
Review of systems	2–9 systems	10 systems
Physical examination	5–7 organ systems	8 organ systems

physical examination, and the intensity of medical decision making required to support a given observation code choice. Although CPT identifies 7 elements contributing to the potential scoring of cases, observation cases are scored primarily based on the key elements of the history, physical examination, and medical decision making. Except for the lowest level of service, observation services typically require a complex history and physical examination ([Table 3](#)).

Service	Current Procedural Terminology	Documentation Requirements			2017	2017
		History	Physical	Medical Decision Making	Work Relative Value Units	Total Relative Value Units
Emergency level 3	99283	EPF	EPF	M	1.34	1.75
Emergency level 4	99284	D	D	M	2.56	3.32
Emergency level 5	99285	C	C	H	3.80	4.90
Obs + same day disch — low	99234	D or C	D or C	L	2.56	3.77
Obs + same day disch — mod	99235	C	C	M	3.24	4.78
Obs + same day disch — high	99236	C	C	H	4.20	6.16
Observation initial day — low	99218	D or C	D or C	L	1.92	2.82
Observation initial day — mod	99219	C	C	M	2.60	3.84
Observation initial day — high	99220	C	C	H	3.56	5.25
Obs subsequent day — low	99224	PF	PF	L	0.76	1.13
Obs subsequent day — mod	99225	EPF	EPF	M	1.39	2.06
Obs subsequent day — high	99226	D	D	H	2.00	2.97
Observation discharge day	99217	+	+	+	1.28	2.06

**Abbreviations:** C, comprehensive; D, detailed; EPF, expanded problem focused; H, high; L, low; M, moderate; Obs, observation; PF, problem focused.

## THE RELATIVE VALUE UNIT VALUATION PROCESS

Physician services are reported using the *CPT* coding system. When the *CPT* committee approves a new code, the next step is assigning an RVU valuation to that service. The new code is sent to the RUC where members review detailed information, including physician survey data, to aid in assigning an appropriate relative value to the service. For each *CPT* code, RVU valuations are calculated for physician work, practice expense, and liability expense. Each of these 3 components is assigned an RVU value and the sum represents the total RVUs for that *CPT* code (**Table 4**).

## SUMMARY

Independent of US policy history, observation units have been described in every major continent and country around the world. Policy shifts have contributed to the observation pendulum swinging between encouraging inpatient admission at one time, then observation at another. Patients who fall into the 6-hour to 24-hour category, will always exist. Observation patients need protocol-driven observation units, as do EDs.<sup>23,64</sup> Just as EDs have become the safety net of the health system, observation units have become the safety net of EDs — preventing inappropriate discharges or admissions while improving health care resource utilization. Observation medicine research will continue to refine and improve this well-established service, to the benefit of ED patients and their health care system.

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