

## August DRRC and Compliance Amendment

### 23.73 Price Transparency Regulations – Duke University

#### Committees Recommendation:

Final Decision: Approved for Production pending Data Release Application corrections/modifications

Unselect Inpatient under the Data Inclusion Criteria / Claim Type(s) section

#### PI's Desired Adjustment:

This study is a longitudinal research study that includes pre and post analyses of Colorado's Shop-for-Care Tool and CMS's Hospital Price Transparency Rule. Access to all inpatient and **selected** outpatient claims from the CO APCD would provide me with the opportunity to accurately study these policies with state-of-the-art policy evaluation and economic modelling techniques. Here I describe my desired adjustment to the above suggested modification and justify specifically why I request all inpatient claims and claims beginning in 2012. I also justify my request for **selected** outpatient claims, including outpatient imaging claims.

Specifically, I propose the following inclusion criteria for the data request:

- 1. Include all inpatient claims**, either by selecting an entire inpatient and emergency department database, or by selecting all claims with place of service code in the set: 21, 23, 51, 52, 61.\*
- 2. Include a limited set of outpatient claims (facility and professional)** from Ambulatory Surgical Centers (ASCs), Hospital Outpatient Departments (HOPDs), urgent care facilities, and birthing centers. Specifically, select all outpatient claims with place of service codes in the set: 19, 20, 22, 24, 25.\*

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\* Please see Tables 1 & 2 at the end of this document for definitions of requested and not requested place of services codes based on CMS definitions.

This set includes urgent care facilities and birth centers, in addition to ASCs and HOPDs, which were discussed in my first presentation to DRRC. Urgent care facilities and birthing center are not affected by the CMS policy but provide some of the same services as hospitals, which were affected by the policy. This different policy treatment would allow the same comparison as the ASC versus HOPD analysis discussed with DRRC. If necessary, I can limit my request to only HOPDs and ASCs (codes 19, 22, and 24).

This restriction to the subset of outpatient claims that occurred at Ambulatory Surgical Centers, Hospital Outpatient Departments, urgent care facilities and birthing centers incorporates DRRCs feedback to use a place of service based restriction to limit the outpatient claims to the minimum necessary set of claims.

- 3. Include all outpatient imaging claims** from any place of service with a CPT code from 70000-79999, which are codes for imaging procedures.

### **Justifications:**

**Justification for all inpatient claims for this study:** CMS's Hospital Price Transparency Rule and part of Colorado's Shop-for-Care Tool required or provided price transparency of hospital (inpatient) prices. These hospital (inpatient) prices are the primary focus of my study. All inpatient claims, as opposed to a subset of claims or a dataset of prices, are necessary for the correct analysis of Colorado's Shop-for-Care Tool and CMS's Hospital Price Transparency Rule for three reasons.

First, all inpatient claims are necessary to accurately assess the effects of the two price transparency policies on prices. Each policy could have compositional effects and direct effects on prices. A compositional effect refers to a shift in demand from high priced hospitals to low priced hospitals. This would result in a lower average price paid and lower total spending, but with no reduction in the price paid by a given insurer for a given service at a given hospital. Compositional effects cannot be studied without all claims. A direct effect on prices refers to a reduction in the price paid by a given insurer for a given service at a given hospital after information becomes available, relative to the counterfactual price in the absence of information.

Separating these two effects is important to guide policy. If there is no compositional effect, this suggests that consumers may not have used the information or may not have put much weight on prices when they chose hospitals. This could support the need for information campaigns regarding the availability of price information. Alternatively, if there was a large compositional effect, but no direct effect, this suggests that hospitals did not feel the need to reduce prices to recover demand. This would suggest high hospital margins and potentially substantial market power that could motivate regulation.

Policymakers intended price transparency to reduce health care costs. The total effect on costs is the combination of compositional effects and direct price effects. Without all inpatient claims, I cannot evaluate whether there was an overall policy effect.

Second, all inpatient claims are necessary to test whether consumers used price information. Specifically, I will build a model of consumers' choice of hospitals to test whether consumers' price sensitivity increased when price information was available. In other words, I will examine the hospitals that consumers chose to go to prior to price information becoming available and the hospitals consumers chose after price information became available. A finding that after price information became available consumers chose lower priced hospitals more (controlling for other factors) would support the conclusion that consumers used the price information. I cannot conduct this analysis without all inpatient claims because I need to observe the choices of all consumers.

Third, all inpatient claims are necessary to accurately model and study the negotiation process between hospitals and insurers. Hospitals have more at stake when negotiating the price for a service that they provide very often versus a service that they rarely provide. As such, hospitals are likely to exert more effort to negotiate favorable (higher) prices for these services. Insurers have a similar incentive to exert more effort to negotiate a lower price for a service if they pay for a large quantity of that service. Therefore, to accurately model the negotiation process, I need to observe all inpatient claims to determine a given service's share of the total services (and revenue) that a hospital provides, or an insurer pays for. Incorporating this quantity-based incentive of the negotiating parties is necessary

to follow the current state-of-the-art analyses of bargaining (e.g., Grennan and Swanson, *Journal of Political Economy*, 2020).

**Justification for claims beginning in 2012:** I have requested data beginning in 2012 because the Shop-for-Care Tool was first published in 2014. An accurate assessment of the effect of the tool requires prices from a pre-policy period to compute changes over time. Data back to 2012 provides the 2-year pre-period necessary to assess the parallel trends assumption of my proposed difference-in-differences analysis.

**Justification for outpatient ASC, HOPD, Urgent Care, Birthing Center, and Imaging claims:** CMS's Hospital price transparency rule applies to HOPDs but does not apply to ASCs and similar services are conducted at both locations. I propose to conduct a difference-in-differences analysis of changes in prices at ASCs pre vs post CMS policy versus the same difference at HOPDs to estimate the effect of the policy. Similarly, hospitals, which are affected by the rule, provide some similar services to urgent care centers and birthing centers, which are not affected by the rule. This different policy treatment of similar services allows the same difference-in-differences analysis as the analysis of HOPDs vs ASCs described above.

Imaging claims are requested because the Shop-for-Care Tool included price information on a subset of imaging procedures. By comparing the changes in prices for the imaging claims included in the Shop-for-Care Tool to imaging claims not included in the Tool, I can conduct another difference-in-differences analysis of the Tool. This would provide valuable information to the state of Colorado on the effectiveness of the Shop-for-Care Tool.

**Table 1: Place of service codes for which all claims are requested**

<b>Code(s)</b>	<b>Name</b>	<b>Description</b>
<b>19</b>	Off Campus- Outpatient Hospital	A portion of an off-campus hospital provider based department which provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services to sick or injured persons who do not require hospitalization or institutionalization.
<b>20</b>	Urgent Care Facility	Location, distinct from a hospital emergency room, an office, or a clinic, whose purpose is to diagnose and treat illness or injury for unscheduled, ambulatory patients seeking immediate medical attention.
<b>21</b>	Inpatient Hospital	A facility, other than psychiatric, which primarily provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services by, or under, the supervision of physicians to patients admitted for a variety of medical conditions.
<b>22</b>	On Campus- Outpatient Hospital	A portion of a hospital's main campus which provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services to sick or injured persons who do not require hospitalization or institutionalization.
<b>23</b>	Emergency Room- Hospital	A portion of a hospital where emergency diagnosis and treatment of illness or injury is provided.
<b>24</b>	Ambulatory Surgical Center	A freestanding facility, other than a physician's office, where surgical and diagnostic services are provided on an ambulatory basis.
<b>25</b>	Birth Center	A facility, other than a hospital's maternity facilities or a physician's office, which provides a setting for labor, delivery, and immediate post-partum care as well as immediate care of new born infants.
<b>51</b>	Inpatient Psychiatric Facility	A facility that provides inpatient psychiatric services for the diagnosis and treatment of mental illness on a 24-hour basis, by or under the supervision of a physician.
<b>52</b>	Psychiatric Facility-Partial Hospitalization	A facility for the diagnosis and treatment of mental illness that provides a planned therapeutic program for patients who do not require full time hospitalization, but who need broader programs than are possible from outpatient visits to a hospital-based or hospital-affiliated facility.
<b>61</b>	Comprehensive Inpatient Rehabilitation Facility	A facility that provides comprehensive rehabilitation services under the supervision of a physician to inpatients with physical disabilities. Services include physical therapy, occupational therapy, speech pathology, social or psychological services, and orthotics and prosthetics services.

<https://www.cms.gov/medicare/coding-billing/place-of-service-codes/code-sets>

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**Table 2:** Place of service codes for which claims are NOT requested

<b>Code</b>	<b>Name</b>	<b>Description</b>
<b>01</b>	Pharmacy	A facility or location where drugs and other medically related items and services are sold, dispensed, or otherwise provided directly to patients.
<b>02</b>	Telehealth Provided Other than in Patient's Home	The location where health services and health related services are provided or received, through telecommunication technology. Patient is not located in their home when receiving health services or health related services through telecommunication technology.
<b>03</b>	School	A facility whose primary purpose is education.
<b>04</b>	Homeless Shelter	A facility or location whose primary purpose is to provide temporary housing to homeless individuals (e.g., emergency shelters, individual or family shelters).
<b>05</b>	Indian Health Service- Free- standing Facility	A facility or location, owned and operated by the Indian Health Service, which provides diagnostic, therapeutic (surgical and non-surgical), and rehabilitation services to American Indians and Alaska Natives who do not require hospitalization.
<b>06</b>	Indian Health Service- Provider-based Facility	A facility or location, owned and operated by the Indian Health Service, which provides diagnostic, therapeutic (surgical and non-surgical), and rehabilitation services rendered by, or under the supervision of, physicians to American Indians and Alaska Natives admitted as inpatients or outpatients.
<b>07</b>	Tribal 638 Free- standing Facility	A facility or location owned and operated by a federally recognized American Indian or Alaska Native tribe or tribal organization under a 638 agreement, which provides diagnostic, therapeutic (surgical and non-surgical), and rehabilitation services to tribal members who do not require hospitalization.
<b>08</b>	Tribal 638 Provider-based Facility	A facility or location owned and operated by a federally recognized American Indian or Alaska Native tribe or tribal organization under a 638 agreement, which provides diagnostic, therapeutic (surgical and non-surgical), and rehabilitation services to tribal members admitted as inpatients or outpatients.
<b>14</b>	Group Home	A residence, with shared living areas, where clients receive supervision and other services such as social and/or behavioral services, custodial service, and minimal services (e.g., medication administration).
<b>15</b>	Mobile Unit	A facility/unit that moves from place-to-place equipped to provide preventive, screening, diagnostic, and/or treatment services.

<b>16</b>	Temporary Lodging	A short term accommodation such as a hotel, camp ground, hostel, cruise ship or resort where the patient receives care, and which is not identified by any other POS code.
<b>17</b>	Walk-in Retail Health Clinic	A walk-in health clinic, other than an office, urgent care facility, pharmacy or independent clinic and not described by any other Place of Service code, that is located within a retail operation and provides, on an ambulatory basis, preventive and primary care services.
<b>18</b>	Place of Employment-Worksite	A location, not described by any other POS code, owned or operated by a public or private entity where the patient is employed, and where a health professional provides on-going or episodic occupational medical, therapeutic or rehabilitative services to the individual.
<b>26</b>	Military Treatment Facility	A medical facility operated by one or more of the Uniformed Services. Military Treatment Facility (MTF) also refers to certain former U.S. Public Health Service (USPHS) facilities now designated as Uniformed Service Treatment Facilities (USTF).
<b>27</b>	Outreach Site/ Street	A non-permanent location on the street or found environment, not described by any other POS code, where health professionals provide preventive, screening, diagnostic, and/or treatment services to unsheltered homeless individuals.
<b>28-30</b>	Unassigned	N/A
<b>31</b>	Skilled Nursing Facility	A facility which primarily provides inpatient skilled nursing care and related services to patients who require medical, nursing, or rehabilitative services but does not provide the level of care or treatment available in a hospital.
<b>32</b>	Nursing Facility	A facility which primarily provides to residents skilled nursing care and related services for the rehabilitation of injured, disabled, or sick persons, or, on a regular basis, health-related care services above the level of custodial care to other than individuals with intellectual disabilities.
<b>33</b>	Custodial Care Facility	A facility which provides room, board and other personal assistance services, generally on a long-term basis, and which does not include a medical component.
<b>34</b>	Hospice	A facility, other than a patient's home, in which palliative and supportive care for terminally ill patients and their families are provided.
<b>35-40</b>	Unassigned	N/A
<b>41</b>	Ambulance - Land	A land vehicle specifically designed, equipped and staffed for lifesaving and transporting the sick or injured.

<b>42</b>	Ambulance – Air or Water	An air or water vehicle specifically designed, equipped and staffed for lifesaving and transporting the sick or injured.
<b>43-48</b>	Unassigned	N/A
<b>49</b>	Independent Clinic	A location, not part of a hospital and not described by any other Place of Service code, that is organized and operated to provide preventive, diagnostic, therapeutic, rehabilitative, or palliative services to outpatients only.
<b>50</b>	Federally Qualified Health Center	A facility located in a medically underserved area that provides Medicare beneficiaries preventive primary medical care under the general direction of a physician.
<b>53</b>	Community Mental Health Center	A facility that provides the following services: outpatient services, including specialized outpatient services for children, the elderly, individuals who are chronically ill, and residents of the CMHC's mental health services area who have been discharged from inpatient treatment at a mental health facility; 24 hour a day emergency care services; day treatment, other partial hospitalization services, or psychosocial rehabilitation services; screening for patients being considered for admission to State mental health facilities to determine the appropriateness of such admission; and consultation and education services.
<b>54</b>	Intermediate Care Facility/ Individuals with Intellectual Disabilities	A facility which primarily provides health-related care and services above the level of custodial care to individuals but does not provide the level of care or treatment available in a hospital or SNF.
<b>55</b>	Residential Substance Abuse Treatment Facility	A facility which provides treatment for substance (alcohol and drug) abuse to live-in residents who do not require acute medical care. Services include individual and group therapy and counseling, family counseling, laboratory tests, drugs and supplies, psychological testing, and room and board.
<b>56</b>	Psychiatric Residential Treatment Center	A facility or distinct part of a facility for psychiatric care which provides a total 24-hour therapeutically planned and professionally staffed group living and learning environment.
<b>57</b>	Non-residential Substance Abuse Treatment Facility	A location which provides treatment for substance (alcohol and drug) abuse on an ambulatory basis. Services include individual and group therapy and counseling, family counseling, laboratory tests, drugs and supplies, and psychological testing.



<b>58</b>	Non-residential Opioid Treatment Facility	A location that provides treatment for opioid use disorder on an ambulatory basis. Services include methadone and other forms of Medication Assisted Treatment (MAT). (Effective January 1, 2020)
<b>59</b>	Unassigned	N/A
<b>60</b>	Mass Immunization Center	A location where providers administer pneumococcal pneumonia and influenza virus vaccinations and submit these services as electronic media claims, paper claims, or using the roster billing method. This generally takes place in a mass immunization setting, such as, a public health center, pharmacy, or mall but may include a physician office setting.
<b>62</b>	Comprehensive Outpatient Rehabilitation Facility	A facility that provides comprehensive rehabilitation services under the supervision of a physician to outpatients with physical disabilities. Services include physical therapy, occupational therapy, and speech pathology services.
<b>63-64</b>	Unassigned	N/A
<b>65</b>	End-Stage Renal Disease Treatment Facility	A facility other than a hospital, which provides dialysis treatment, maintenance, and/or training to patients or caregivers on an ambulatory or home-care basis.
<b>66-70</b>	Unassigned	N/A
<b>71</b>	Public Health Clinic	A facility maintained by either State or local health departments that provides ambulatory primary medical care under the general direction of a physician.
<b>72</b>	Rural Health Clinic	A certified facility which is located in a rural medically underserved area that provides ambulatory primary medical care under the general direction of a physician.
<b>73-80</b>	Unassigned	N/A
<b>81</b>	Independent Laboratory	A laboratory certified to perform diagnostic and/or clinical tests independent of an institution or a physician's office.
<b>82-98</b>	Unassigned	N/A
<b>99</b>	Other Place of Service	Other place of service not identified above.

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