



Research Billing I: The *Most Basic* Basics

Clinical Research Resources Office
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Poll 1: What description best fits your role?

1. Clinical research coordinator
2. Clinical research financial analyst/manager
3. Regulatory specialist, study team or department
4. IRB administrator
5. Department administrator
6. Investigator
7. Other



Poll 2: Does your role include attention to research billing?

1. Yes, directly
2. Yes, indirectly
3. No
4. I am not sure



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Primary objectives*

1. Understand basic research billing compliance (RBC) requirements
2. Identify the range of studies subject to them
3. Consider the role of RBC in protecting participants and providers

**Discussion of the BMC/BUMC RBC process is Part II, 13 March*



Contextualizing research billing compliance

- Scope of relevance: any study that includes ≥ 1 **clinical provisions**
- In the last 16 years: graduated from hot topic to perennial **top risk***
 - In response to federal rulings in 1995, 2000
 - Initial codification: **~30 years after human subjects protections'**
 - Centers for Medicare and Medicaid Services (CMS) has primary oversight**
 - Some CR clinical items are "routine," – billable to federally insured patients***
 - Non-compliance is subject to **significant penalties**
 - (How) does research billing risk relate to **research ethics**?

*https://assets.hcca-info.org/Portals/0/PDFs/Resources/ResourceOverview/650_0_TopRiskAreasResearchComp.pdf

**CMS rules span across many federal payers; often "Medicare" is employed as a synonym

*** "Standard of care" is frequently used as a synonym for "routine"



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Scope of relevance: clinical research



For RBC purposes, clinical research = ≥ 1 clinical item

- Whenever protocol includes ≥ 1 clinical “procedures, services, or other items”*
- **Interventional or observation** studies
 - Intended or not to affect health outcomes
 - Sponsored internally or externally
- **Range of study’s clinical services:** buccal swab to organ transplant
 - IRB requirement tends to conform with RBC need but is neither necessary nor sufficient
 - FDA-regulated and federally sponsored CR are subject to extra requirements
- Context paradigm: services provided in BMC clinic and documented, coded, and billed in electronic medical record (EMR)
 - Exceptions do not exempt provider from RBC
 - Services are billed separately as **practitioner** (professional) or **institutional** (technical) to same CMS administrator
 - Match is expected

**CMS terminology to cover all billables; includes surgeries, office visits, labs, images, drugs, devices, sutures: everything is coded*



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Some studies are excluded from coverage; most require special RB claims modifications

Routine care **includes** items provided, in an active or control arm, that are:

- Conventional care (= the care that the patient would receive anyway)
- Needed “solely” to provide the investigational item
 - E.g., chemotherapy administration charges
- Used for “clinically appropriate” patient monitoring
- Needed to diagnose, prevent, or treat complications

Routine care **excludes** item(s) provided:

- For **data-collection** purposes only (beyond clinical management of the patient)
- As the **object of the investigation**, unless it is “conventional care

**Content paraphrased from National Coverage Determination 310.1, issued in 2000, modified in 2007*



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Federal allowance of routine items ultimately results in three categories of clinical research, relative to RBC

Every related claim must include identifying coding, including ct.gov's National Clinical Trial number

Object is investigational or sponsor is federal

Study object is not investigational or sponsor is not federal

Exempt from informing payer of CR context

Phase I trials of healthy patients, e.g.

Excluded from coverage



Risks of non-compliance



Misbilling and its discontents

Research billing non-compliance = **misbilling**

- Most egregious: charge participant when sponsor is the required payer
- Times two: charging participant *and* sponsor = **double billing** (and double credit to professional provider)

Challenges

- Billing is frequent
- Electronic medical record: not designed to manage RB's twin oddities
 - **Alternative payer**: sponsor
 - **Alternative reason for service**: data collection
- Medical coding = identification of exact services provided = intricate with pitfalls
 - Special research claims modifications for most; absence of them for others
 - **Clinical documentation** must support submitted claims



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Misbilling federal payers violates the False Claims Act*

- Individuals (eg, clinicians) and institutions are liable
- Civil and criminal penalties
 - **Criminal**: requires “knowingly” committing fraud but systemic negligence counts
- Every instance of discovered federal overpayment faces
 - **Penalties**, adjusted annually, 2/12/2024: **\$13,946-\$27,894****
 - Damages, trebled: overpayment amount x 3
- Quickly adds up
 - Moffitt Cancer Center agrees to pay **\$19.5m**, 4 January 2024***
 - Items “provided during research studies that were not eligible for reimbursement”
- Note: the FCA is invoked in effort violations with similar high settlements

* *Also possible: exclusion from participation in federal insurer payments*

** <https://www.federalregister.gov/documents/2024/02/12/2024-02829/civil-monetary-penalties-inflation-adjustments-for-2024>

*** <https://www.justice.gov/opa/pr/florida-research-hospital-agrees-pay-more-195-million-resolve-liability-relating-self>



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Following standard medical billing, RBC = no free services!

*Without positive financial needs assessment, no service may be provided without charge**

- CMS demands that beneficiaries receive the lowest price
- If a provider does not charge a patient, or documents a lower service but provides a higher service, a new Medicare beneficiary price is established
- Applies to:
 - **Every patient**, including study participants
 - **Every service**, direct or ancillary, professional or technical
- Research presents a susceptible context:
 - Failure to bill the participant or the sponsor = **free service**

**Or at a rate lower than the applicable federal rate*



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Beyond billing patient/insurance

Services provided outside of standard BMC clinic (external to Epic, may or may not employ medical coding)

1. Research cores/recharge centers

- Cannot misbill participants: no routine services apply
- Nevertheless, strong documentation required to prevent audit alerts, establish compliance with federal cost principles

2. Effort instead of medical coding: rife with violation potential

- Professional (pro) and technical services are tandem charges
- Effort = pro service only; technical applies even when use of effort is compliant
 - Somewhat distinct electronic pathways but audit-susceptible
 - Absence of pro charges raises flags
 - NIH: accepts pro services as effort; requires routine tech services to be billed as routine



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Do the responsibilities of RBC fall within research ethics?

- Most violations appear to go undetected
- Healthcare institutions vary in formal diligence
- Research-related regulations are disparate
- ...



Summary



Research billing basics: recap

- **Relevant whenever a study includes ≥ 1 prospective clinical services**
- **Narrow context:** in play whenever a patient-care charge is generated in the context of research
 - Protocol-specified or for treatment of a study-related adverse event
 - At BMC, the required clinical documentation and charging occur through Epic
 - May be billable to the patient/insurance or to the sponsor
 - If the study is a clinical trial, most likely requires special claims modification
 - Failure to add complete set of modification results in claims rejection (= loss of revenue)
- **Larger context, less understood:** whenever a study-related clinical item occurs
 - Recharge center/core billing by federal requirements
 - Charged to sponsor as time and effort
 - Should have been billed or charged as time and effort but wasn't
- **Penalties for non-compliance are significant**
- **Ethical research stewardship** includes commitment to RBC(?)

Appendix: background for Part II

Allowance of research-related routine services fundamentally altered CR compliance

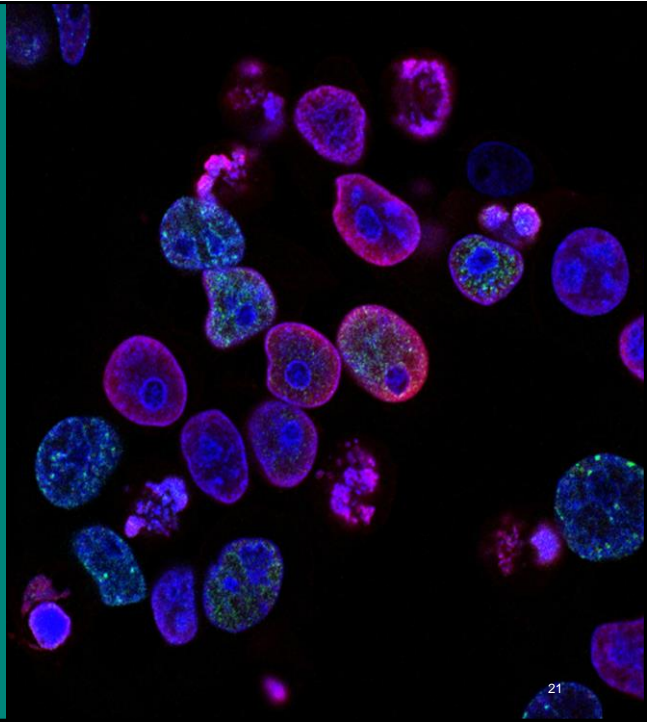
1. Analysis at the item level: **routine or research-only**
 - Inexact, time-consuming: robust documentation needed
 - Frequency and extent of service matter
 - Clinicians vary in clinical practice history
2. Analysis of **study characteristics**
 - Relatively simple determination:
 - Follow-through is complex
3. Identification of **study participants/visits**, including documentation of:
 - exact items provided (and not provided)
 - treatment of study-related adverse events
4. Charge “segregation” for billing review and, for most CR, claims modification
5. **Back-end confirmation** of correct payer for each clinical item
6. Over time, **standard process** features evolved and were shared

Upcoming presentation March 13th on the BMC RBC Process including:

- **Coverage Analysis**
 - Analysis at the item level
 - Analysis of study characteristics
- Identification and documentation of **study participants/visits**
- Charge “**segregation**” for billing review
- **RBC Systems**
 - Clinical Trial Management System
 - Electronic Health Record System
- Charge “**segregation**” for billing review
- **Back-end confirmation** of correct payer for each clinical item

References

- 1995: U.S. allows Medicare billing related to investigational devices: 42 CFR 405.201-213 Medicare Services Coverage Decisions That Related to Health Care Technology (amended 2004, 2013, 2021)
- 2000: Medicare extends billing to “clinical trials”, National Coverage Determination 310.1 (amended 2007)
- Medicare Claims Processing Manual, Chapter 32, especially §§68-69 (investigational devices; qualifying clinical trials)



Contact the speakers

Mike Porreca

Senior Manager, Clinical Trial Office
Research Operations
Boston Medical Center

michael.porreca@bmc.org

Kaye Mottola

Research Policy, Education, and Communications
Research Operations
Boston Medical Center

kaye.mottola@bmc.org



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