Medical Billing RAG Training Data

INDEX & QUICK REFERENCE

Case Type	Primary Code	Secondary Code	Key Constraint
Chest Pain / ACS Rule-Out	H102	H105	Document bridge orders
Laceration Repair	H101 + Z176	G847 (if vaccine)	Measure wound size precisely
Cardiac Arrest / Code Blue	G521	G523, G522	Start/stop times required
Wrist Fracture / Reduction	H122 (night)	F028	E410 after-hours premium (+75%)
Mental Health / Form 1	K623	K070, K013	Must sign Form 1 to bill
Respiratory Distress (Critical)	G521A	G523A, G522A	Continuous attendance required
Cardioversion / Arrhythmia	G395 + Z408	E410 (if night)	Cannot use Z408 inside G521
Palliative Consult	H055 or H065	K070, K023	Must reply to referrer
Early Bird (Before 08:00)	A-codes	H980, H981	Document call-in time
Night Owl (23:00–24:00)	A-codes	H962, H984, H985	Switch to H-codes at 00:00
Polytrauma (ISS >16)	R-codes	E420	Calculate ISS in note
Anesthesia	R440C + Time Units	E007C (age)	1 unit/15m (hr 1), 2 units/15m (hr 2), 3 units/15m (after)
Critical Care + Procedure	G521/G523/G522	Procedure code (Z/F/etc)	Exclude procedure time from critical care
Resident Supervision	F-codes (procedure)	—	Resident = on-site; Fellow = available

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DETAILED CASE ENTRIES

1. CHEST PAIN / SUSPECTED ACUTE CORONARY SYNDROME

Diagnosis Code: 413 (Angina Pectoris)

Billing Path:

- **Primary:** H102 ($43.05) — Comprehensive Assessment
- **Secondary:** H105 ($26.25) — In-patient Interim Admission Orders
- **Optional:** K013 ($49.35/unit if ≥30 min counseling documented with timestamps)

Key Rules:

- H105 requires explicit "bridge orders" documentation in chart
- Document start/stop times for counseling to claim K013
- Use even without confirmed MI (troponin negative acceptable)

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2. LACERATION REPAIR

Diagnosis Code: 883 (Open Wound of Finger)

Billing Path:

- **Primary:** H101 (17.10) + Z176 ($20.00 for <5cm simple)
- **Alternatives:**
  - Z175 ($35.90 for 5–10cm)
  - Z154 ($35.90 for face/complex <5cm)
- **Add-on:** G847 ($5.40) if tetanus vaccine actually administered

Key Rules:

- Measure wound to 0.1 cm accuracy — gap at 5.1 cm nearly doubles procedural fee
- Z176 is 50% fee if using dermabond (tissue glue)
- Document any nerve block (G224) separately
- Avoid H102 for isolated injuries (use H101 instead)

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3. CARDIAC ARREST / CODE BLUE RESUSCITATION

Diagnosis Code: 427 (Cardiac Arrest/Dysrhythmia)

Billing Path:

- **Primary:** G521 ($110.55 first 15 min)
- **Add-ons:** G523 ($55.20 per 15 min unit for 16–30 min block)
- **Subsequent:** G522 ($38/unit per 15 min, up to 4 units)
- **Procedures:** G211 (Intubation $154.10), G212 (Central Line $70.95) — bill separately

Key Rules:

- Intubation/lines are excluded from G521 base fee; bill separately
- Procedures cannot overlap critical care time in most interpretations
- Document explicit start/stop times (e.g., 19:05–20:05)
- Continuous bedside attendance required (leaving stops clock)

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4. WRIST FRACTURE WITH REDUCTION

Diagnosis Code: 813 (Fracture of Radius/Ulna)

Billing Path:

- **Primary (Night):** H122 ($76.95) + F028 ($109.45)
- **Premium:** E410 (+75% to procedure if 2–8 AM or nights)
- **Optional:** G370 ($20.25 for hematoma block if not bundled per local policy)

Key Rules:

- H122 is specific night-shift code (not H102)
- E410 premium applies to procedure time, not assessment time
- Example: F028 $109.45 × 1.75 = $191 after E410 premium
- Document exact time of reduction and post-reduction X-ray result

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5. MENTAL HEALTH ASSESSMENT WITH FORM 1

Diagnosis Code: 300 (Anxiety/Depression) or appropriate psychiatric diagnosis

Billing Path (Choose One):

- **Option A (Safest):** K623 ($117.05) alone — for pure Form 1 assessment
- **Option B:** H102 ($43.05) + K023 ($49.35/unit) + K070 ($31.75) if extensive counseling
- **Option C (Long Visit >40 min):** H102 + K023 (2 units = $98.70) + K070 = $173.50

Key Rules:

- K623 includes necessary history/exam — avoid double billing with H102
- Cannot bill K623 AND K023 together (incompatible)
- K623 requires signed Form 1 — no signature = no bill
- K070 (Home Care) requires physician-written clinical instruction — non-physician form completion = nil fee
- Must reply to referring doctor to audit-proof H055 consultation claim

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6. RESPIRATORY DISTRESS (LIFE-THREATENING CRITICAL CARE)

Diagnosis Code: J96.00 (Acute Respiratory Failure)

Billing Path:

- **First 15 min:** G521A ($111–112)
- **Second 15 min:** G523A ($57–58)
- **Each additional 15 min (up to 4 units):** G522A ($38 each)
- Example: 60 min = G521A + G523A + G522A (2 units) = $239

Key Rules:

- Requires continuous attendance with life-threatening single/multiple organ failure
- Cannot bill standard A-codes for same time block (local policies vary)
- Document explicit start/stop times (e.g., 19:05–20:05)
- List organ failures treated (e.g., "Acute hypoxemia managed with BiPAP")
- Continuous bedside presence is mandatory
- E415A COVID premium applies only if still active in region

7. CARDIOVERSION FOR ARRHYTHMIA

Diagnosis Code: 427 (Cardiac Dysrhythmia)

Billing Path (Choose One):

- **Option A (Stable, quick):** H102 ($43.05) + Z408 ($64.95)
- **Option B (Unstable, monitoring):** G395 (varies) + Z408
- **Add-on (If after midnight):** E410 procedure premium (+75%)

Key Rules:

- Cannot bill G521 + Z408 together (Z408 bundled into G521)
- Use G395 + Z408 if patient required stabilization or risk of decompensation
- Use H102 + Z408 if stable and quick procedure
- Document joules delivered and exact time of rhythm change
- E410 applies to Z408 if delivered after midnight

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8. PALLIATIVE CARE CONSULT FROM PRIMARY CARE

Diagnosis Code: V66 (Convalescence/Palliative Care)

Billing Path (Choose Highest-Paying Option):

Strategy	Codes	Fee	Time Trigger
A: Consult (Recommended)	H055 + K070	$138.55	20–40 min
B: Assess + Counseling	H102 + K023 (1 unit) + K070	$124.15	20–40 min
C: Long Visit	H102 + K023 (2 units) + K070	$173.50	>40 min

Key Rules:

- H055 (FRCP/Specialist) = $106.80; H065 (CCFP/GP) = $81.25
- Cannot bill H055 AND K023 together (double-dipping audit trap)
- K070 (Home Care Application) requires physician signature on clinical instruction — form completion alone = $0
- K023 unit = $49.35; can bill up to 2 units if time documented
- Must reply to referring doctor with brief note to audit-proof H055 claim

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9. EARLY BIRD VISIT (BEFORE 08:00 WEEKDAY)

Diagnosis Code: V68 (Administrative) or patient diagnosis

Billing Path:

- Assessment Codes: A007 or appropriate A-prefix code (varies)
- Premium 1: H960 (Travel Premium — bill once)
- Premium 2: H980 (First Patient Seen)
- Premium 3: H981 (Additional Patients 2–5)

Key Rules:

- Only applies to patients seen before 08:00
- Stop premiums at 08:00 — revert to standard H101/H102 after shift start
- Must document "Called in early at [TIME] by [NAME]" — just showing up early doesn't count
- Travel premium H960 applies only if physician drove in specifically
- No premium stacking after your scheduled shift begins

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10. NIGHT OWL VISIT (23:00–24:00 WEEKDAY EVENING)

Diagnosis Code: V68 (Administrative) or patient diagnosis

Billing Path:

- Assessment Codes: A007 or appropriate A-prefix code (varies)
- Premium 1: H962 (Travel Premium — bill once for 17:00–24:00 window)
- Premium 2: H984 (First Patient Seen before midnight)
- Premium 3: H985 (Additional Patients before midnight)

Key Rules:

- Applies only to patients seen between 23:00–24:00 (11 PM–midnight)
- At 00:00 (scheduled shift start), stop premiums and A-codes — switch to H122/H102

- Must document "Called in at 23:00" — distinct from shift start time
- H962 travel premium billed once per call-in session
- Cannot use H984/H985 after midnight; use standard ER codes instead

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11. POLYTRAUMA (ADULT, ISS >16)

Diagnosis Code: 959 (Polytrauma/Multiple Injury)

Billing Path:

- Primary: R-codes for each surgical repair
- Premium: E420 (Polytrauma Premium) — applies to services within 24 hours of trauma

Key Rules:

- ISS >16 required to bill E420
- List ISS calculation in note (e.g., "ISS 27 due to Face(3) + Chest(3) + Leg(3)")
- Both surgeons can bill if two specialties operate (each claims R-codes + E420)
- E420 applies within 24 hours of trauma event
- ISS = sum of highest AIS scores for 3 most severely injured body regions

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12. ANESTHESIA TIME-BASED CODING

Diagnosis Code: 715 (Osteoarthritis) or procedure indication

Billing Path (Example: THR 07:35–10:00 = 145 min):

- Base Units: R440C (10 units)
- Time Units: 20 units
- Age Premium: E007C (1 unit if 70–79 years)
- Total: 31 units

Time Unit Calculation:

- 0–60 min: 1 unit per 15 min = 4 units
- 61–90 min: 2 units per 15 min = 4 units
- 91–145 min: 3 units per 15 min = 12 units
- Total time units: 20

Key Rules:

- Record start time (in OR) and stop time (handover) to the minute
- First hour: 1 unit/15 min
- Next 30 min: 2 units/15 min
- Thereafter: 3 units/15 min
- Age premium E007C adds 1 unit for patients 70–79 years

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13. CRITICAL CARE (PURE / NO PROCEDURE)

Diagnosis Code: 427.5 (Cardiac Arrest) or appropriate critical code

Billing Path (Example: 09:15–10:30 = 75 min):

- First 15 min: G521 ($110.55)
- Second 15 min: G523 ($55.20)
- Remaining 45 min: G522 (3 units @ $38 each = $114)
- Total: $279.75

Time Breakdown:

- 0–15 min: G521
- 16–30 min: G523
- 31–75 min: G522 (3 units)

Key Rules:

- Intubation, defibrillation, procedures are bundled into G521/G523/G522 — do NOT bill separately
- Do NOT bill for nurse procedures (IV lines)
- Constant attendance excluding all other work required
- Document "leaving room = clock stops"

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14. CRITICAL CARE + SEPARATE PROCEDURE (TIME CARVED OUT)

Diagnosis Code: 860 (Traumatic Pneumothorax) or trauma code

Billing Path (Example: 09:20–10:40, pause 10:00–10:20 for chest tube):

Activity	Duration	Code

Activity	Duration	Code
Resuscitation	20 min	G521 + G523
Chest Tube (Pause)	20 min	Z341
Resuscitation Resumed	20 min	G522 (1–2 units)

Total Coding:

- Critical Care: 60 min = G521 + G523 + G522 (2 units)
- Procedure: Z341 (Thoracostomy)

Key Rules:

- Cannot bill critical care time during the procedure — must pause critical care clock
- Document exact pause time ("Resus suspended 10:00–10:20 for chest tube insertion")
- Carving out procedure time usually pays better than generic time
- Overlapping time = audit trap

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15. RESIDENT SUPERVISION (BILLING BY STAFF PHYSICIAN)

Diagnosis Code: 813 (Radius Fracture) or procedure indication

Billing Rules by Trainee Rank:

Scenario	Resident (PGY)	Fellow	Billable?
On-site supervision	Required	—	YES
Phone/home (Resident)	Not allowed	—	NO
Phone/home (Fellow)	—	"Immediately available"	YES

Billing Path:

- Procedure Code: F-codes (e.g., F028 for fracture reduction)
- Billed by: Staff physician
- Supervision Documentation: "Resident performed under direct supervision" or "Fellow performed under my immediate availability"

Key Rules:

- Residents: staff must be physically present in building
- Fellows: staff can be off-site but immediately available
- If resident performs without on-site staff: not billable
- Document trainee rank clearly

CODING PRIORITY RULES (FOR RAG DECISION TREE)

1. Measure wounds/injuries first.
2. Check time stamps (early, night, after-hours).
3. Identify critical vs routine (G521+ vs H/A codes).
4. Separate procedures from time (pause for procedures).
5. Check trainee rank (Resident vs Fellow).
6. Avoid double-billing (H055 vs K023; K623 vs H102; G521 vs Z408).
7. Document everything (times, measurements, signatures, ISS, orders).
8. Verify premiums (E410, E420, H960/H980/H981, H962/H984/H985).

AUDIT TRAPS TO AVOID

Trap	Consequence	Prevention
No bridge order documentation for H105	Audit denial	Explicit bridge orders in chart
Approximate wound size	Fee loss	Precise measurement
No critical care times	G521+ not defensible	Record clock times

Trap	Consequence	Prevention
H055 without referrer reply	Denied	Send brief reply
K070 done only by nurse	Nil fee	MD clinical instruction + signature
Overlapping critical + procedure time	Overpayment	Document pause
K623 + K023	Double-dip	Choose one path
Resident unsupervised	Denied	On-site staff
No ISS for polytrauma	E420 denied	Document ISS
A-codes after shift start	Overpayment	Switch to H-codes

GLOSSARY FOR RAG AGENT

- H-codes: ER assessment/procedure
- A-codes: Consult/visit (often pre-shift)
- G-codes: Critical care time
- Z-codes: Procedures
- F-codes: Fracture reductions
- R-codes: Surgery/anesthesia
- K-codes: Psych/palliation/counseling
- E-codes: Premiums
- ISS: Injury Severity Score
- AIS: Abbreviated Injury Scale
- ROSC: Return of Spontaneous Circulation
- BiPAP: Bilevel Positive Airway Pressure
- PGY: Postgraduate year
- FRCP / CCFP: Specialist/GP certifications