PROFESSIONAL WRITING · STUDY GUIDE

Exam 4 Study Guide

This guide covers chapters 7 and 8, the documents people use with their hands and their eyes. First the operational documents: which one a request really needs, how to write a step, how to grade and place a warning, and how to word a policy. Then data: writing the finding first, building tables and charts that tell the truth, and attaching a visual so it counts as evidence. Work one chapter at a time. Read the "what to know" paragraphs, copy the tables out by hand, then try each worked case with the steps covered. Finish each chapter with its ten self-test items. The cram sheet at the end puts every rule and number in one place.

WHAT THIS GUIDE COVERS

- Chapter 7 · policy, procedure, work instruction, protocol and guideline, task analysis and minimalism, scaffolding before step 1, one imperative action per step, location and condition first, decision tables, ANSI signal words and the hazard message, the hierarchy of controls, modal verbs, exceptions, document control and field testing.
- Chapter 8 · the one-sentence finding, sentence versus table versus chart, building readable tables, matching chart type to comparison, the encoding hierarchy, assertive titles and direct labels, baselines, denominators, percentage points and uncertainty, callouts, captions, alt text and the talk track.

CHAPTER 7

Instructions, Procedures and Policy

Read it in full: **Chapter 7 in the textbook**. Practice it in the lab: **Step Surgery** and **The Hazard Message Composer**.

What to know

Instructions, procedures and policies are used while hands are busy and pulses are up. Sentences shorten, verbs move to the front, and every condition comes before the action it governs, because a reader who has acted cannot un-act.

Five documents do five jobs. A **policy** states what the organization requires and why. A **procedure** (SOP) states who does what, in what order. A **work instruction** covers one task at one machine or screen. A **protocol** is a pre-authorized sequence that fires when a defined condition appears. A **guideline** recommends and leaves room for judgment. The test is the reader's question: am I allowed to (policy), whose job is this (procedure), which button (instructions). Keep reasoning in policy, sequence in procedure and keystrokes in instructions so each can be revised at its own speed.

Task analysis means watching a competent person do the task once without interrupting and a newer person think aloud. Record every action, decision point, tool, and every improvisation the official document does not mention. Write at the level of an action a stranger could see. John Carroll's minimalism (*The Nurnberg Funnel*, 1990) observed that people skip introductions, jump to their problem, act, and return when something breaks. Write for interruption: each step survives out of context.

Before step 1, give the scaffolding: title, purpose (why it exists), scope (is this for me, and who must not), prerequisites checkable in seconds, materials and estimated time. Number anything that must happen in order; use letters for rare sub-steps; insert a stage heading after roughly seven to ten steps. Put branches at the moment of discovery, cross-reference instead of duplicating, end with a **verification step** the reader can see, and add troubleshooting in the reader's words with named role-based exits.

Each step is one action in the **imperative mood** ("Close the lid"). The word **and** inside a numbered step is a defect until proven otherwise; keep two micro-actions together only if stopping between them is incoherent ("Sign and date the form"). Put location before action ("On the File menu, select Export") and condition before command ("If the reading is above 40 psi, close the valve"). Give quantities with units, separate what the reader does from what the system does, and put expected results inline. When a task branches on more than one variable, build a **decision table**, including the row for when the rule cannot be followed. Keep rationale, history and hedging out of steps, and turn prohibitions into positive actions.

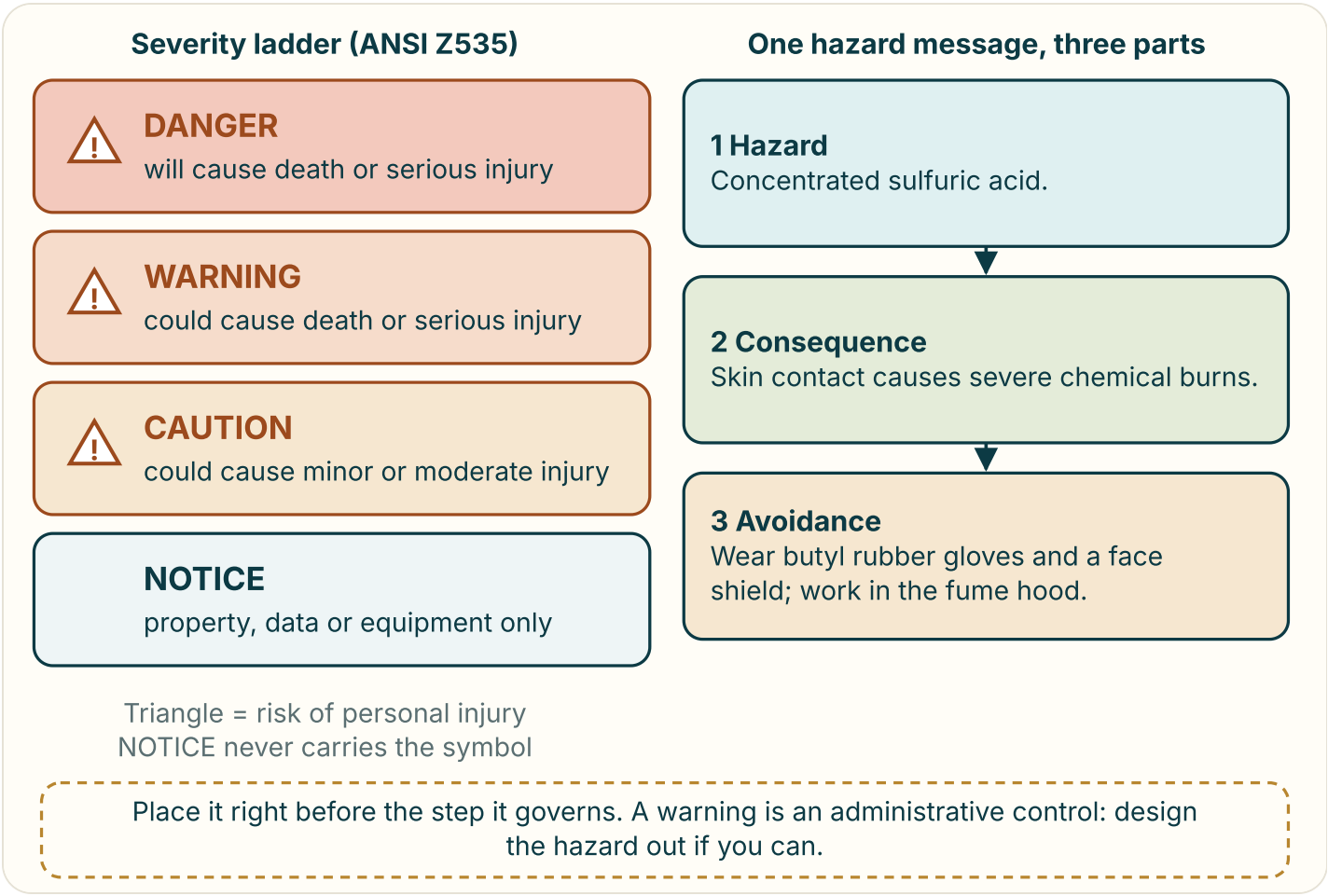
ANSI Z535 grades hazards (Z535.4 product labels, Z535.6 messages in manuals; ISO 3864 is the international counterpart). DANGER: will result in death or serious injury, reserved for extreme

cases. WARNING: could result in death or serious injury. CAUTION: could result in minor or moderate injury. These three carry the **safety alert symbol**. NOTICE covers property damage, data loss or equipment harm, with no symbol. A **hazard message** states the hazard, the consequence and the avoidance. Place it immediately before the step it governs, never depend on color alone, and keep the count low. A warning is an administrative control, ranked below elimination, substitution and engineering controls and above only PPE.

A policy has a title and identifier, purpose, scope, definitions, numbered testable statements, responsibilities by role, exceptions, related documents and a control block. Choose modal verbs on purpose: **must** (requirement), **must not** (prohibition, never "may not"), **should** (recommendation; say what to do when deviating), **may** (permission), **will** (an organizational commitment). Shall is contested: plain-language guidance prefers must, while a legal-drafting tradition keeps shall. Assign each duty to exactly one role, write an exception path, keep a revision history that says what changed and why, and run a silent **usability field test**; one tester finds roughly a third of the problems.

LOCK THESE IN

- Policy = am I allowed to; procedure = whose job and in what order; work instruction = which button; protocol = triggered; guideline = advisory.
- Watch the work before writing; improvisations are the most valuable content.
- Before step 1: title, purpose, scope, prerequisites, materials, time.
- One imperative action per step; "and" is a defect detector.
- Location before action; condition before command; verification at the end.
- More than one branching variable: decision table, including the cannot-follow row.
- DANGER will, WARNING could (death or serious), CAUTION could (minor or moderate), NOTICE property only.
- Must requires, should recommends, may permits, will commits. One owner per duty.



Grade it, then say it in three parts. The signal word sets severity; the message states the hazard, what it does, and how to avoid it, right before the step.

Key terms and comparisons

Document	The reader's question	Binding force
Policy	What are we required to do, and why?	Mandatory; approved at leadership level
Procedure (SOP)	Who does what, in what order?	Mandatory for the named roles
Work instruction	Exactly how do I do this one task?	Mandatory where method is controlled
Protocol	When condition X appears, what is pre-authorized?	Mandatory once triggered
Guideline	What is recommended when I must judge?	Advisory; deviation usually documented

Modal verbs in policy

Word	What it signals	Trap
must	Requirement; no discretion	Do not use it for advice you will not audit
must not	Prohibition	"May not" collides with permission
should	Recommendation; deviation allowed	Say what to do when deviating
may	Permission; a real option	Never "may" for "might"
will	A commitment by the organization	Not for assigning the reader a duty
shall	Traditional legal obligation	Contested; must is the modern default internally

Signal words (ANSI Z535)

Word	Meaning	Safety alert symbol
DANGER	Will result in death or serious injury; extreme cases only	Yes
WARNING	Could result in death or serious injury	Yes
CAUTION	Could result in minor or moderate injury	Yes
NOTICE	Property damage, data loss, equipment harm	No
Hierarchy of controls	Elimination, substitution, engineering, administrative, PPE	Warnings are administrative

Worked cases

WORKED CASE 1 · SPLITTING AND REORDERING STEPS

Repair: "The technician should then make sure the centrifuge lid is closed and press the start button." Then repair: "Close the valve if the reading is above 40 psi."

STEP 1 · FIND THE AND

Two actions share one number: closing the lid and pressing start.

STEP 2 · MAKE EACH IMPERATIVE

"5. Close the centrifuge lid. 6. Press START." No "should", no third person.

STEP 3 · ADD THE EXPECTED RESULT

"6. Press START. The drum spins up and the display reads RUNNING."

STEP 4 · CONDITION FIRST

"If the reading is above 40 psi, close the valve." A scanning reader now meets the condition before the command.

WORKED CASE 2 · BUILDING A DECISION TABLE

Specimen checks branch on whether identifiers match, whether a label exists, and whether the specimen can be recollected. Turn the prose into lookup.

STEP 1 · LIST THE CONDITIONS AS ROWS

Match; name matches but date of birth does not; no label and recollectable; label missing or wrong and not recollectable.

STEP 2 · WRITE THE ACTION COLUMN

Send; stop and verify with a second staff member, then recollect; discard per policy and recollect; do not discard, call the lab supervisor first.

STEP 3 · ADD WHAT TO DOCUMENT

Collection log; discrepancy note; incident report within 24 hours; supervisor name, time and instructions.

STEP 4 · CHECK FOR THE HARD ROW

The last row, when the rule cannot be followed, is the one novices omit and the one that matters most.

WORKED CASE 3 · GRADING AND WRITING A HAZARD

A jam-clearing step exposes the operator to a rotating blade that could sever a finger. Choose the signal word and write the message.

STEP 1 · GRADE

Could cause serious injury, not certain to: **WARNING**. DANGER is reserved for will-result extremes.

STEP 2 · HAZARD

"Rotating blade."

STEP 3 · CONSEQUENCE

"Contact causes severed fingers."

STEP 4 · AVOIDANCE AND PLACEMENT

"Stop the motor and wait for the blade to stop before clearing a jam." Put it immediately before the jam-clearing step.

THEN ASK

Can the blade be guarded or interlocked? Engineering it away beats any warning.

WORKED CASE 4 · FIXING AN UNENFORCED SHOULD

A policy says staff "should" double-check infusion pump settings. An audit finds 40 percent do not. What are the honest options?

STEP 1 · READ THE MODAL

Should signals a recommendation with deviation allowed.

STEP 2 · OPTION A

Change should to must, define it, and build real enforcement and support.

STEP 3 · OPTION B

Keep should, accept it is a recommendation, and stop treating non-compliance as a violation.

WHAT YOU CANNOT DO

Audit a discretionary verb as a requirement. That punishes people for reading the document accurately.

TRAPS PEOPLE FALL INTO

- **One document for three questions.** A policy full of keystrokes must go back through approval every time a screen changes.
- **"Prepare the sample" as a step.** If it can be done three ways, it is a heading. Break it down.
- **"For all staff."** True and empty. Say who, where, and who is not covered.
- **Unverifiable prerequisites.** "Be trained" cannot be checked in five seconds.
- **Numbering a system action.** "The form routes to your supervisor" is a result, not a step.
- **Inflating to DANGER.** Overuse trains readers to discount the top of the scale.
- **CAUTION for equipment damage.** That is NOTICE. The safety alert symbol means bodily risk only.
- **Joint ownership.** "Nursing and Pharmacy will jointly ensure" means neither does. Name one lead.

Chapter 7 self-test · ten items

1. A reader asks "Whose job is this, and what happens next?" Which document answers it?

A. A policy
B. A guideline
C. A procedure
D. A work instruction

C. A procedure A procedure states who does what, in what order. Policy answers whether you are allowed; instructions answer which button.

2. What does task analysis add that a draft written from memory misses?

A. The improvisations workers use that the document never mentions
B. A longer introduction that explains the whole history of the task
C. The legal approval signatures that every procedure requires
D. A list of every staff member's name who performs the task

A. The improvisations workers use that the document never mentions Watching the work exposes unwritten checks, decision points and escalation paths.

3. Which prerequisite meets the chapter's standard?

A. Be properly trained before starting any part of this procedure
B. Have a good understanding of the specimen handling process
C. Check with someone experienced if you are unsure about anything
D. Collection competency within 12 months and an active scanner login

D. Collection competency within 12 months and an active scanner login A prerequisite must be checkable in five seconds. "Be trained" is decoration.

4. Which step is written correctly?

A. The lid is then closed.
B. Close the centrifuge lid.
C. Technicians should close it.
D. Close the lid and press start.

B. Close the centrifuge lid. One action, imperative mood. The last option holds two actions; the others describe someone else or physics.

5. Why is "If the reading is above 40 psi, close the valve" safer than the reverse order?

A. It is shorter and uses fewer words than the reversed version
B. Valves must always be named at the end of a sentence
C. The scanning reader meets the condition before the command
D. The passive voice is avoided only in this word order

C. The scanning reader meets the condition before the command Condition before command means nobody acts on the instruction before learning it was conditional.

6. A task branches on both the test result and the patient's age. What should the writer use?

A. A decision table
B. A long paragraph
C. A bulleted list
D. A footnote

A. A decision table Prose handles one condition adequately and two badly. A table turns reasoning into lookup.

7. Which signal word fits a hazard that could cause minor or moderate injury?

A. WARNING
B. NOTICE
C. DANGER
D. CAUTION

D. CAUTION CAUTION is for minor or moderate injury. WARNING and DANGER cover death or serious injury; NOTICE covers property only.

8. Where should a hazard message be placed?

A. In a warnings section at the front only
B. Immediately before the step it governs
C. At the end, after the verification step
D. In an appendix that lists all hazards

B. Immediately before the step it governs The reader who most needs it is at the step. A front section satisfies a checkbox and little else.

9. Where do warnings sit in the hierarchy of controls?

A. Low: administrative, above only PPE
B. At the top, above every other control
C. Equal to engineering controls in rank
D. Below PPE, as the very weakest control

A. Low: administrative, above only PPE Elimination, substitution and engineering controls all outrank a warning.

10. Which modal verb should a policy use for a genuine prohibition?

A. may not
B. should not
C. must not
D. will not

C. must not "May not" collides with permission. Must not is the clear prohibition.

CHAPTER 8

Presenting Data and Visual Evidence

Read it in full: **Chapter 8 in the textbook**. Practice it in the lab: **The Finding Forge** and **The Distortion Lab**.

What to know

Numbers do not speak for themselves. A spreadsheet dumped into a report is homework handed to the reader. First decide what the data shows, then whether a sentence, table or chart carries it best, then build the display so the point lands in about four seconds.

Write the **one-sentence finding** before opening a charting tool. For the chapter's 44-bed unit (14, 13, 8 and 7 falls over 3,421, 3,402, 3,290 and 3,355 patient days, with hourly rounding from 1 July): "Falls per 1,000 patient days fell from 4.1 in the first quarter to 2.1 in the fourth, a drop of roughly half, coinciding with the July start of hourly rounding (Table 1)." Then the honest caveat: with only forty-two falls, a swing of two or three events moves the rate, so this is an encouraging signal, not a demonstrated effect. The **four-second test**: a colleague must name the point in four seconds.

Use a sentence for fewer than about four values, a table for lookup and exact comparison (auditors live in tables), and a chart when the message is a shape. Audience decides resolution: build the detailed table first, move what does not survive to an appendix and say so. Compress to one number if you like, but the caveat travels with it.

Tables put cases in rows and variables in columns, rows ordered chronologically or by the column that carries the point (alphabetical only for name lookup). Units go in the header once. Right-align numbers, left-align text, round once at display with one rule down the column, use thousands separators, write 0 for zero and n/a or an em dash for missing. Number and title the table, add a source line with an extraction date, make totals sum or explain why, and strip heavy grid lines. Style guides differ on title placement (Chicago and IEEE: table titles above, figure captions below; APA: both above).

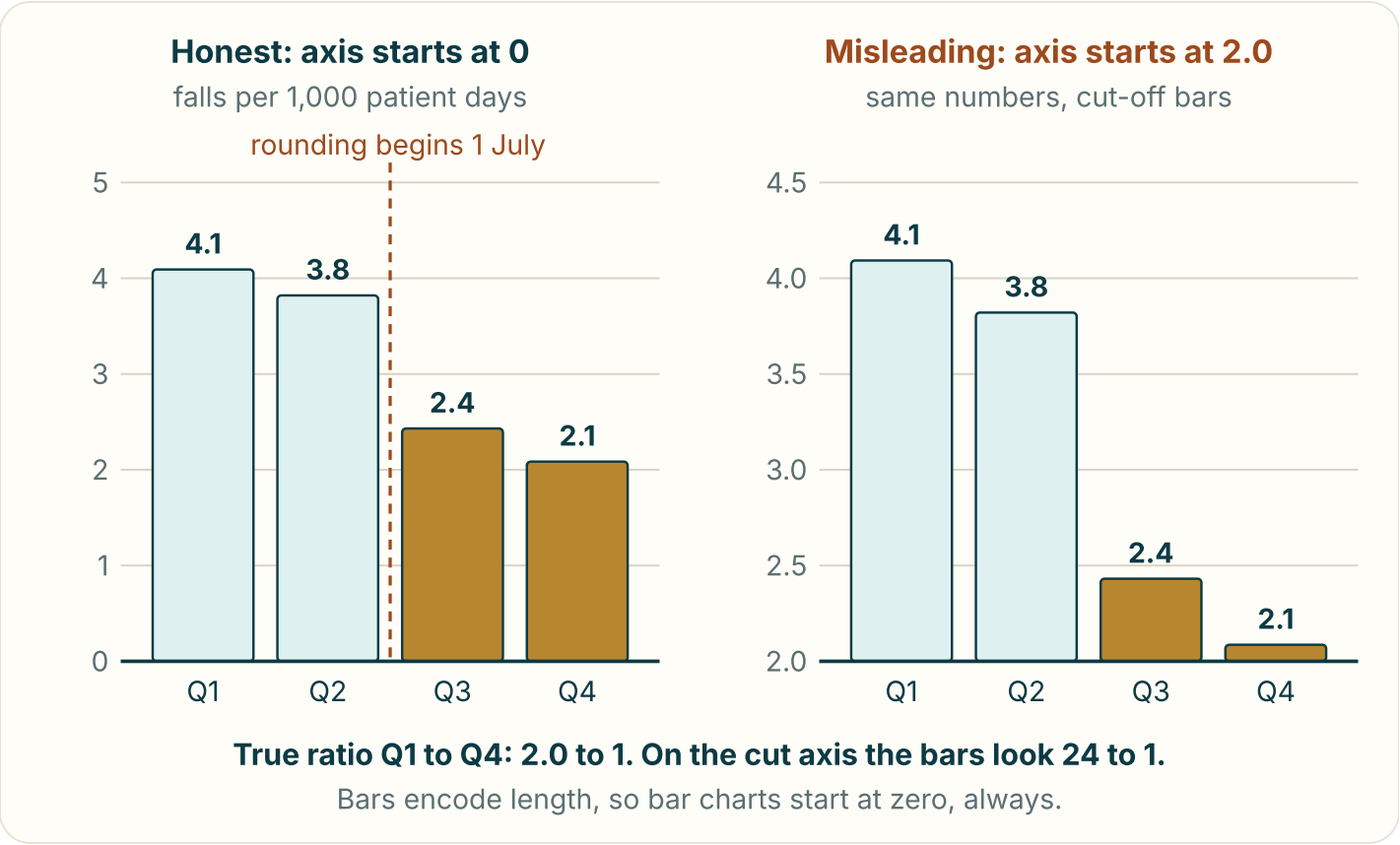
Name the comparison first. Trend: line chart. Ranking: horizontal bars sorted by value. Part-to-whole: one stacked bar or a table of percentages. Distribution: histogram or box plot. Relationship: scatter plot. Pie charts are debated; multiple pies, exploded slices and 3-D pies are not defensible. The **encoding hierarchy** runs position, length, angle and slope, area, color saturation. Bubble diameters mislead because area scales with the square. Use few colors, gray out the rest, label directly instead of using a legend, write an **assertive title**, label axes with units, and annotate the intervention date.

Bar charts start at zero, always, because bars encode length. Line charts are contested: a non-zero baseline is acceptable only when zero is not meaningful and the axis is labeled, though readers still overestimate changes. Show enough history; aim lines near forty-five degrees. Supply **denominators**. Separate **percentage points** from **relative change**: 40 to 50 percent is ten points, a 25 percent relative increase. With small counts, give the counts. Avoid dual axes. Report n with percentages, label error bars, and do not use "significant" unless you mean the statistical sense.

Attach visuals with a number and title, a callout sentence that states the finding and cites the figure by number (never "below"), a caption with source, and alt text that carries the point. Place the figure after its first mention. About 8 percent of men and 0.5 percent of women have color vision deficiency, so never rely on color alone; WCAG asks 4.5 to 1 for normal text and 3 to 1 for large text and graphics. Credit borrowed images when you paste them. Slides get one idea and about six data points. The **talk track**: orient, point, interpret, land, in about thirty seconds.

LOCK THESE IN

- Write the one-sentence finding first; pass the four-second test.
- Sentence for a few values, table for lookup, chart for shape.
- Cases in rows, variables in columns, units in the header, one rounding rule.
- Trend line, ranking sorted bars, part-to-whole stacked bar, distribution histogram, relationship scatter.
- Encoding: position, length, angle, area, color. Label directly; assertive titles.
- Bars start at zero; line baselines are contested; avoid dual axes; show enough history.
- Percentage points are not relative change; with tiny counts, give counts.
- Number, callout, caption with source, alt text; talk track: orient, point, interpret, land.



Same data, two baselines. Computed from the chapter's quarterly counts. With the axis cut at 2.0, a roughly two-to-one difference looks more than twenty-to-one.

Key terms and comparisons

Comparison	Use	Avoid
Trend over time	Line chart, time across	Bars for many time points
Ranking	Horizontal bars, sorted	Alphabetical order; pies
Part-to-whole	One stacked bar or % table	Pies past about four slices; 3-D
Distribution	Histogram or box plot	Reporting only the mean
Relationship	Scatter plot, one dot per unit	Two lines on twin axes

The chapter's fall table, rebuilt

Quarter (2025)	Falls (n)	Patient days	Falls per 1,000 patient days
Q1 (Jan-Mar)	14	3,421	4.1
Q2 (Apr-Jun)	13	3,402	3.8
Q3 (Jul-Sep)	8	3,290	2.4
Q4 (Oct-Dec)	7	3,355	2.1
Year	42	13,468	3.1

Distortions and fixes

Distortion	What the reader wrongly concludes	Honest fix
Bar axis above zero	A small gap looks enormous	Start at zero; add a labeled zoom panel
Dual axis	Two lines seem to track each other	Stacked panels, or index both to 100
No denominator	The biggest unit looks worst	Report a rate and give the denominator
Cherry-picked range	A normal wobble looks like a turnaround	Longest series; mark the intervention
Relative change on tiny counts	"Up 200 percent" sounds like a crisis	"From one case to three"
Unlabeled error bars	Precision misread	Say SD, SE or 95% interval

Worked cases

WORKED CASE 1 · FROM COUNTS TO A FINDING

Compute the quarterly rates from 14, 13, 8 and 7 falls over 3,421, 3,402, 3,290 and 3,355 patient days, and write the finding.

STEP 1 · DIVIDE AND SCALE

14 ÷ 3,421 × 1,000 = 4.09; 13 ÷ 3,402 × 1,000 = 3.82; 8 ÷ 3,290 × 1,000 = 2.43; 7 ÷ 3,355 × 1,000 = 2.09.

STEP 2 · ROUND ONCE, ONE RULE

4.1, 3.8, 2.4, 2.1. Seven decimals from eight events would claim false precision.

STEP 3 · THE YEAR

42 falls ÷ 13,468 patient days × 1,000 = 3.1.

STEP 4 · SIZE THE CHANGE

(4.09 − 2.09) ÷ 4.09 = 49%, so "a drop of roughly half" is accurate.

STEP 5 · ADD THE CAVEAT

"With only forty-two falls, a swing of two or three events moves the rate, so we read this as an encouraging signal rather than a demonstrated effect."

WORKED CASE 2 · POINTS VERSUS PERCENT

Satisfaction rose from 40 percent to 50 percent. Write a sentence that cannot be misread.

STEP 1 · ABSOLUTE CHANGE

50 − 40 = **10 percentage points**.

STEP 2 · RELATIVE CHANGE

10 ÷ 40 = **25 percent** relative increase.

STEP 3 · SEE THE RISK

"Rose 25 percent" invites a reader to imagine 40 + 25 = 65.

STEP 4 · WRITE BOTH

"From 40 percent to 50 percent, a ten-point gain, or a 25 percent relative increase."

WORKED CASE 3 · CHECKING A BUBBLE CHART AND A SMALL COUNT

One clinic's volume is four times another's and is drawn as a circle with four times the diameter. Separately, infections went from one case to three.

STEP 1 · AREA SCALES WITH THE SQUARE

4 × the diameter gives 4^2 = **16 times** the area, so the bigger clinic looks sixteen times larger.

STEP 2 · FIX THE BUBBLES

Scale by area (diameter by the square root of 4, so 2 times) and label the values, or use bars on a common axis.

STEP 3 · THE SMALL COUNT

(3 − 1) ÷ 1 = 200 percent. True, and misleading at this size.

STEP 4 · REPORT IT HONESTLY

"Rose from one case to three."

WORKED CASE 4 · ATTACHING A FIGURE PROPERLY

A scatter plot shows triage times by shift (n = 906). Write the callout, title, caption and alt text.

STEP 1 · CALLOUT

"Triage times cluster tightly on days and nights but scatter badly on the evening shift, with a tail past forty minutes (Figure 2)."

STEP 2 · ASSERTIVE TITLE

"Figure 2. Evening shift accounts for nearly all triage waits over 40 minutes."

STEP 3 · CAPTION WITH SOURCE

"Each dot is one visit (n = 906). Source: EHR triage timestamps, extracted 14 Jan 2026."

STEP 4 · ALT TEXT THAT CARRIES THE POINT

"Scatter plot of triage wait times by shift; evening values spread from 5 to 62 minutes while day and night stay under 25."

TRAPS PEOPLE FALL INTO

- **Building the chart before the finding.** If you cannot write the sentence, you have a data set, not a finding.
- **A chart of two bars.** That is decoration. Two or three values belong in a sentence.
- **Alphabetical rows by default.** Order by time or by the column that carries the point.
- **False precision.** 2.4316109 from eight events claims what the data cannot support.
- **Truncating a bar axis.** A cut bar no longer has a length proportional to its value.
- **Counts with no denominator.** 20 falls is not worse than 10 if the patient days tripled.
- **"Rose 25 percent" for points.** Name the endpoints and both kinds of change.
- **"See the chart below."** States no finding and breaks when the layout reflows. Cite Figure 2.

Chapter 8 self-test · ten items

1. What should a writer do before opening a charting tool?

A. Choose a color palette
B. Pick the chart type first
C. Draft the alt text for it first
D. Write the one-sentence finding

D. Write the one-sentence finding Until you can say what the data shows, you cannot know whether it needs a chart, a table or a sentence.

2. An auditor will check twelve clinics on four measures. Which display fits best?

A. A pie chart for each of the twelve clinics
B. A table sorted by the measure that matters
C. A line chart with twelve colored series
D. A short paragraph listing every value

B. A table sorted by the measure that matters Tables are for lookup and exact comparison. Auditors and regulators live in tables.

3. A spreadsheet gives a rate of 2.4316109 from eight events. What should be printed?

A. 2.4316109, to keep full accuracy visible
B. 2.43, rounded to two places for this row only
C. 2.4, with one decimal down the whole column
D. 2, since rates should never show decimals

C. 2.4, with one decimal down the whole column Round once at display to the precision the data earns, and hold the rule down the column.

4. Which chart best shows how a rate moved over twenty-four months?

A. A line chart with time on the horizontal axis
B. A pie chart with one slice for each month
C. A scatter plot with one dot per department
D. A stacked bar showing shares of the whole year

A. A line chart with time on the horizontal axis Trend over time is a line chart. Bars for many time points hide the shape.

5. Which visual property do readers judge most accurately?

A. The area of a circle or a bubble
B. Position on a shared scale
C. Angle of a pie wedge
D. Color saturation

B. Position on a shared scale Position, then length, then angle and slope, then area, then color saturation.

6. Why must a bar chart start at zero?

A. Charting software cannot draw bars that start above zero
B. Readers expect zero on every chart of any kind
C. Zero baselines make the bars look more dramatic
D. Bars encode length, so a cut bar misstates the value

D. Bars encode length, so a cut bar misstates the value A line encodes position, which is why line baselines are contested and bar baselines are not.

7. Unit A reports 20 falls and Unit B reports 10. What can you conclude?

A. Nothing yet; you need each unit's patient days
B. Unit A is twice as unsafe as Unit B is overall
C. Unit B is understaffed compared with Unit A
D. Unit A's rate must be twice Unit B's rate

A. Nothing yet; you need each unit's patient days Counts without exposure are not comparisons. A unit with three times the patient days could have a lower rate.

8. Satisfaction moved from 40 percent to 50 percent. Which statement is accurate?

A. It rose ten percent, a 25 percentage point relative increase
B. It rose 25 percentage points, a ten percent relative increase
C. It rose ten percentage points, a 25 percent relative increase
D. It rose 25 percent, which means it is now 65 percent

C. It rose ten percentage points, a 25 percent relative increase 50 minus 40 is ten points; ten divided by 40 is a 25 percent relative increase.

9. A chart puts revenue and complaints on two vertical axes and says they track each other. What is the main objection?

A. The author can pick scales that make any two lines appear to match
B. Dual-axis charts cannot be printed in grayscale for a busy committee
C. Revenue must always be shown in a table rather than a chart
D. Complaints should be shown as a pie chart, not as a line

A. The author can pick scales that make any two lines appear to match Use stacked panels sharing the time axis, or index both series to 100 at the start.

10. Which talk track order does the chapter give?

A. Point, land, orient, interpret
B. Interpret, orient, land, point
C. Orient, point, interpret, land
D. Land, interpret, point, orient

C. Orient, point, interpret, land Say what the chart is, point to what matters, say what it means, then land the recommendation.

Cram sheet

Everything from chapters 7 and 8 in one place. Cover the right column and see if you can rebuild each row.

Numbers and calculations

Item	Value or method	Note
Rate	count ÷ exposure × 1,000	Falls per 1,000 patient days
Chapter rates	4.1, 3.8, 2.4, 2.1; year 3.1	42 falls over 13,468 days
Percentage points	new % − old %	40 to 50 = 10 points
Relative change	(new − old) ÷ old	40 to 50 = 25%
Bubble by diameter	area grows with the square	4 × diameter = 16 × area
Color vision deficiency	About 8% of men, 0.5% of women	Mostly red-green
WCAG contrast	4.5 : 1 normal text; 3 : 1 large and graphics	Pale gray axis labels fail
Steps per stage	About 7 to 10 before a stage heading	One tester finds about a third of problems

Lists to know

List	Items
Five documents	Policy, procedure, work instruction, protocol, guideline
Before step 1	Title, purpose, scope, prerequisites, materials, time
Signal words	DANGER, WARNING, CAUTION (with symbol), NOTICE (without)
Hazard message	Hazard, consequence, avoidance
Hierarchy of controls	Elimination, substitution, engineering, administrative, PPE
Policy parts	Title and ID, purpose, scope, definitions, statements, responsibilities, exceptions, related documents, control block
Five comparisons	Trend, ranking, part-to-whole, distribution, relationship
Attaching a visual	Number and title, callout, caption with source, alt text

Rules that are not formulas

Topic	The rule
Steps	One imperative action; location before action; condition before command.
Branches	Two or more variables means a decision table with a cannot-follow row.
Warnings	Right before the step; never color alone; design the hazard out first.
Modals	Must, must not, should, may, will; define them; one owner per duty.
Tables	Cases in rows, variables in columns, units in the header, totals that sum.
Baselines	Bars at zero always; line baselines only when zero is meaningless and labeled.
Small numbers	Give counts and n; label error bars; "significant" only in the statistical sense.
Callouts	State the finding and cite by number, never "below".

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