

2027-02-19 · 80 minutes

Process flowchart

Your goal: Create a process flowchart that maps patient movement through your prototyped ER, applying human-factors principles.

One product: Patient-flow process flowchart using standard symbols, annotated with one human-factors principle, and verified against the February 18, 2027 floor plan.

Question: Where does your patient route require a decision, and does the chart lead through spaces actually shown on your plan?

Start the work

Your floor plan supplies the places and paths. Today's chart adds the actions and decisions along them.

1. Open your actual floor plan and constraints. Read E1 to E3 and identify whether the required plan is available.
2. List the patient-facing decisions and staff-owned routing steps in your design. Keep clinical decisions with trained staff.
3. Draw the full route with start/end ovals, action rectangles, decision diamonds and labeled arrows.
4. Annotate one human-factors principle at a specific confusion point. Explain the intended change using E2.
5. Trace each branch against your actual plan and repair any mismatch. Identify branches you have not checked and ask for the information needed to check them.
6. Submit the process flowchart through the confirmed assignment route. A practice chart alone cannot complete the missing plan-match check.

If the linked assignment is unavailable, save your work and ask your teacher for access help. If your actual plan is missing, save the practice work and request the plan before completing final verification. Do not report it as completed.

Words you will use

Process flowchart

A drawing that shows actions, decisions and their order.

Floor plan / prototype

A view from above showing spaces and routes; a model used to explore a design.

Process step / terminal point

An action in the route; a start or end of the route.

Decision / branch

A question or choice that changes the next step; one path leaving that choice.

Connector

A link between chart parts. An arrow shows direction; matching continuation labels can join separated parts.

Human factors

Designing to fit people's abilities and limits.

Wayfinding

Finding and following a route to a destination.

Consistent terminology

Using the same name for the same destination across instructions, signs and maps.

Annotation

A short note linked to a specific part of a drawing.

Verification / mismatch

Checking a claim against its required reference; a disagreement found in that check.

Criterion / constraint

A feature used to judge the design; a limit the design must meet.

Triage / urgency

Assessment by trained staff of how promptly care is needed; the level of time sensitivity.

Bottleneck

A step that limits how quickly work moves through a route.

Walk-in / escorted route

An arrival on foot; a path along which staff accompany the person.

E1: Flowchart symbol key and checking rule

AHRQ's workflow examples use an oval for a start or end, a rectangle for an action, and a diamond for a decision.

Oval: name where the route starts or ends. A start has an outgoing arrow; an end finishes the traced route.

Rectangle: write an action and who does it, such as "Visitor follows the Reception sign."

Diamond: write a question with distinct outcomes. Label the outgoing arrows, such as Yes and No. Each outcome must lead somewhere.

Arrow: connect steps in the order they occur. The arrowhead points toward the next step. A drawn connector is not proof that a physical corridor exists.

If a chart continues elsewhere, use matching labeled continuation circles, such as A to A. This optional classroom convention avoids a long crossing line. It is not a new decision.

AHRQ advises reviewing a workflow with people involved in it. Here, compare the drawn route with your actual prototype plan and explain any remaining uncertainty.

E2: Consistent wayfinding information

Human factors considers how a design fits people's abilities and limits. Wayfinding is how people find and follow a route.

NHS wayfinding guidance says information should be consistent across a journey. It explains that different names in spoken directions, signs and maps can cause confusion.

Apply consistent destination names at a decision point. Use the same room label in your chart, sign annotation and floor plan. Explain which guessing step this is intended to reduce.

The guidance also calls for consulting users and checking the system. Your annotation is a proposed improvement, not evidence that someone used it successfully.

This source supplies a design principle. It does not provide your room layout, authorize medical routing or establish a measured reduction in error.

E3: Your actual floor-plan input

Required input: your actual ER floor-plan model from the February 18 session, with its room labels, corridors, doors and entrance-to-exit path. Also open its assigned criteria and constraints.

Use the exact version you will check. Keep the plan beside your chart and identify it by its title or date. Do not include private names or patient information.

The supplied M1 model teaches how to chart and check a route. It cannot prove your own chart matches your plan.

If the plan is missing or unfinished, practice with M1 and request recovery of your actual plan. Request the actual plan before completing the final plan-match check. Do not label M1 as your completed ER prototype.

If a clinical route is not supplied by the teacher or your approved classroom brief, identify it as unresolved. Do not ask a patient to decide whether their condition is an emergency.

From the plan to the chart

Begin by listing patient-facing wayfinding questions in your plan. For example, “Can I find the destination named by staff?” tests information access, not urgency.

Draw the route’s actions and genuine decisions. A hallway name is not automatically a Yes/No decision. Make the question and the labeled outcomes clear.

Use the same destination names on the chart and plan. Trace every drawn branch physically on the plan. An arrow cannot pass through a wall or enter a room with no shown access.

Annotate one location where your human-factors change is intended to reduce confusion. Explain the principle, the change and its limit next to that location.

A chart-to-plan check can expose a missing route or label. It does not establish that a real person will move safely or that a sign will work for every user.

Solo, recovery and optional extension

Independent work uses the same actual plan and source cards. You may draw on paper or use a drawing tool. No group participation is required.

Recovery route: begin with one walk-in path on your actual plan. Use the correct symbols, mark one possible confusion point and annotate the fix.

Then check that path against the plan. Label it a one-path recovery if other required paths remain. Ask your teacher whether more paths must be added before the full product is complete.

Optional extension: compare two staff-assigned fictional routes. For this practice only, staff have assigned Case A, a sprained-ankle case, to route A. Staff have assigned Case B, a stroke case, to an immediate staff-escorted route B.

The diagnoses and assignments are stipulated classroom inputs, not a triage rule. Students do not assess symptoms, rank patients or choose treatment.

Show the branch at staff routing, then keep the two assigned paths distinct where your actual plan permits. Label staff as the decision owner.

If the plan or teacher brief does not provide the two destinations, ask for them before attempting this extension. Do not invent rooms. A drawing cannot show whether simultaneous movement creates a bottleneck without further evidence.

M1: Library route, chart and plan check

M1 is an original school-library wayfinding model. It is not an ER plan or patient record. The model is not to scale.

M1 plan, complete text equivalent: an entrance opens into a lobby. The lobby contains a help desk. A corridor connects the lobby to the Reading Room. The Reading Room door opens from that corridor. No other route is shown.

Initial information problem: the corridor sign says “Study Space,” but the destination door says “Reading Room.” The model stipulates the label mismatch; nobody’s confusion was measured.

Diagram equivalent, nodes: S is an oval, “Arrive in lobby.” P is a rectangle, “Visitor reads destination sign.” D is a diamond, “Can I identify the route to Reading Room?”

Diagram equivalent, branches: S connects to P; P connects to D. The Yes arrow from D reaches rectangle R, “Follow corridor to Reading Room.” The No arrow reaches rectangle H, “Ask help-desk staff for directions.”

Diagram equivalent, completion: H connects to R. R connects to oval E, “Arrive at Reading Room.” Every arrow names the next step. Both branches reach E; the help desk is already in the lobby.

Text trace: arrive, read the sign, then either follow the corridor or ask staff before following that same corridor. End at the Reading Room. This text gives every node and branch needed to draw M1.

Human-factors annotation at P: change the corridor sign from “Study Space” to “Reading Room.” Consistent names connect the sign with the door label. The proposed change may reduce a naming guess; it has not been tested.

Worked verification: S, P and H are in the lobby; R follows the shown corridor; E is at its Reading Room door. The chart introduces no new room or wall-crossing route.

Use this checking method with your own actual ER plan. Copying M1 does not complete the required patient-flow chart.

Try the decision

Your chart has a direct arrow from the entrance to a treatment room, but the plan shows a wall there. What should you do before marking the chart verified?

- Trace an actual shown route and revise the chart, or mark the route unresolved until the plan is clarified.
- Keep the direct arrow because a patient flowchart can ignore walls shown on the plan.
- Replace your plan with M1 and mark the patient chart complete.

Explain your choice using the reading. Discuss it or say it to yourself. This practice does not add another submission.

Your 80-minute flow

0–10 minutes	Read sources and model; locate plan/criteria or flag recovery need.
10–25 minutes	List decisions from the actual plan. If missing, practice M1 and request plan recovery.
25–50 minutes	Draw full patient route; use continuation space when needed.
50–65 minutes	Annotate one confusion point and proposed change; retain an outcome limit.
65–75 minutes	Check every route, repair mismatches and mark unresolved items.
75–80 minutes	Submit the checked chart if you have completed the input checks and can access the assignment; otherwise save it and ask for what you need.

Your response record

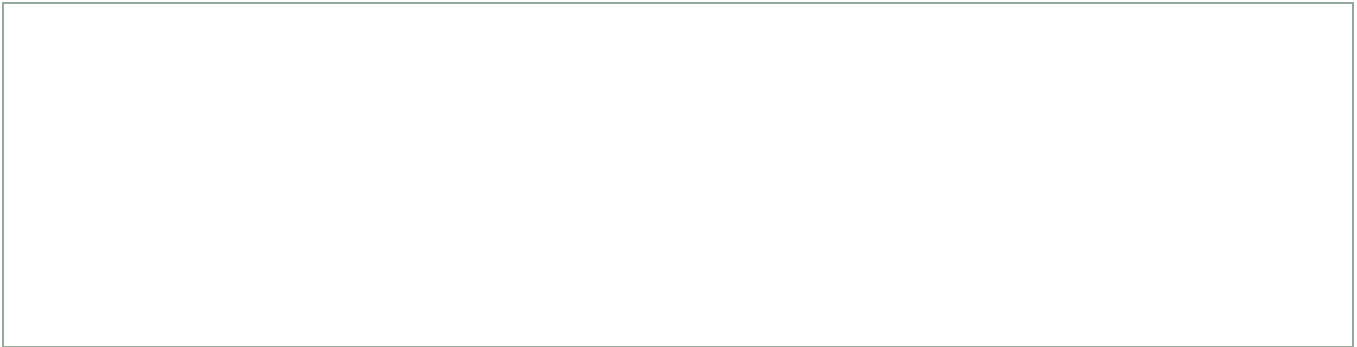
Use these labels on paper or in your document. The space below also works when this page is printed.

Decision points on your plan

List the wayfinding decisions and responsible people along the patient path in your actual design. Name the plan version you are using.

Use location or destination questions. Do not turn a diagnosis into a patient self-triage question.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.

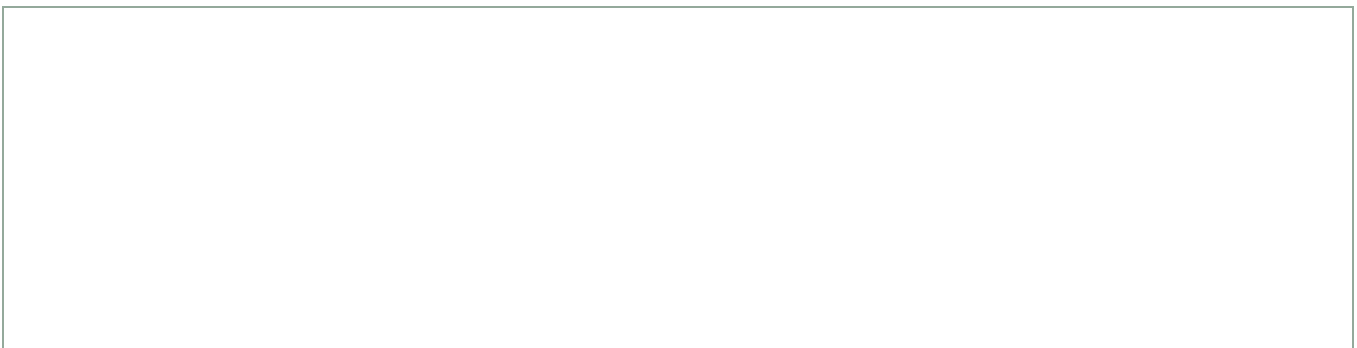


Patient-flow process flowchart

Draw the route using the E1 symbols. Label every decision branch and connect it to a next step or end. Show staff as owners of clinical routing.

Keep each symbol large enough for its label. Add space or another page rather than squeezing an extra branch between lines.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.

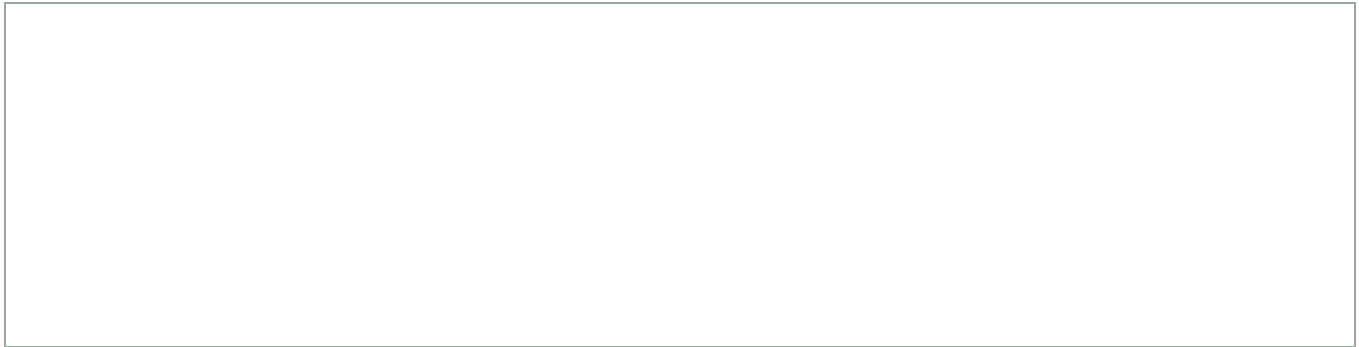


Human-factors annotation

At one possible confusion point, name the consistent-information principle from E2. Show the proposed label or instruction change and explain its intended benefit.

Use the same destination name on the chart and plan. Do not claim the change has been tested.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.

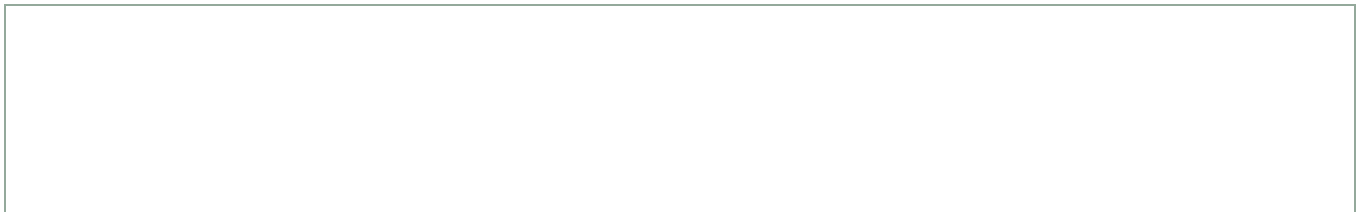


Plan-match verification on the same chart

Trace each chart branch on your actual floor plan. Mark the chart checked only after confirming the matching rooms, access and route. Record and repair mismatches.

If the plan is unavailable or the path is unresolved, ask for the information needed before completing the check. M1 cannot substitute for your missing plan.

Use this space or the same labeled section in your existing document. Add paper when your table, graph or drawing needs more room.



Check your product

- The chart uses correct symbols and labeled branches for the required route.
- A source-grounded human-factors annotation identifies a specific point and intended improvement.
- Every completed plan-match check refers to the actual prototype; unresolved paths remain visible.

Keep the limit: This task checks a classroom process drawing against its actual prototype floor plan. It does not prove that a real ER is safe, that errors are reduced, or that clinical outcomes improve. Trained staff decide urgency and clinical routes. The supplied model cannot replace your missing floor plan.

Turn in your work

Use the linked BI assignment for your process flowchart with its human-factors annotation and plan-match check. Follow its posted format and deadline. Keep the referenced floor plan available for review. Check the uploaded preview and that Schoology shows Submitted.

If the linked assignment is unavailable, save your work and ask your teacher for access help. If your actual plan is missing, save the practice work and request the plan before completing final verification. Do not report it as completed.

[Open this assignment in Schoology.](#)

Carry forward

A process arrow needs both a clear next step and a matching route on the plan.

Keep the checked chart with the same prototype plan. Record any unresolved route as a design question, not a verified path. Which route needs clarification before you revise the plan?

Sources and resources

[Open today's page](#)

AHRQ-SYMBOLS · Tool 5.1 Sample Workflow Diagrams

Agency for Healthcare Research and Quality

<https://digital.ahrq.gov/health-it-tools-and-resources/implementation-toolsets-e-prescribing/toolset-e-prescribing/tool-51-sample-workflow-diagrams>

AHRQ-FLOW · Flowchart: Workflow Assessment for Health IT Toolkit

Agency for Healthcare Research and Quality

<https://digital.ahrq.gov/health-it-tools-and-resources/evaluation-resources/workflow-assessment-health-it-toolkit/all-workflow-tools/flowchart>

NHS-WAY · Wayfinding: effective wayfinding and signing systems guidance for healthcare facilities

NHS Estates; published by NHS England

<https://www.england.nhs.uk/wp-content/uploads/2021/05/Wayfinding.pdf>