PUBLIC REVIEW PACKET

California Nursing Conditions Observatory

Five-hospital proof of concept • Inspection guide for the twice-audited Pilot V1.0 workbook

BOTTOM LINE This is a transparent observational pilot—not a hospital rating, safety score, causal analysis, or estimate of statewide nursing conditions.

The project asks a deliberately narrow question: what can public data document about nursing workload, capacity pressure, workforce structure, and system strain at selected California hospitals—without claiming more than the data can support?

The workbook contains 27 sheets. Every source, transformation, interpretation rule, missing value, and known limitation is exposed for inspection. Reviewers are invited to challenge the data lineage, formulas, labels, comparisons, and inferences.

Release status: California Pilot V1.0

Item	Status
Workbook	Two independent formula-level audits completed; all requested corrections implemented
Facilities	Five deliberately different California hospitals
Core annual window	2022→2024 facility-wide measures
Unit/cost-center window	2022→2023, shown separately
Quarterly pulse	Q1 2025 versus Q1 2026 self-reported HCAI context
Release	Pilot V1.0 frozen for free, transparent inspection; future corrections require a dated new version

1. Start here

Open the workbook and read these sheets in order:

1. Dashboard — the high-level five-hospital view.
2. Cockpit Snapshot — workload layers, capacity, access pressure, evidence freshness, and best next evidence.
3. Findings — what each observed pattern may mean and what it cannot establish.
4. Interpretation Rules — the rules preventing causal or safety overreach.
5. Data Coverage — what is present, stale, partial, suppressed, or absent.
6. Source Manifest and Source Registry — provenance and acquisition status.
7. Unit Labor Detail / Unit Labor Trends / Unit Labor Notes — the closest available public nursing-workload layer.
8. Correlation Inputs / Correlation Results — exploratory n=5 calculations with explicit warnings.

Do not begin with the correlation sheet. The correlations are exploratory diagnostics, not headline findings. They use only five paired hospital changes and cannot support statistical or statewide inference.

2. The governing idea

Every proposed metric must answer: “What did a nurse experience or do differently?” If it cannot, it belongs in contextual evidence or is excluded. The workbook therefore keeps five evidence layers separate:

Layer	What it represents	Examples
1. Direct workload	Closest available evidence of nursing work	Unit/cost-center RN HPPD, skill mix, contract share
2. System strain	Pressure on the surrounding care system	ED throughput, APOT, occupancy, closures
3. Workforce stability	Longer-moving labor conditions	Vacancy, turnover, retention where public
4. Structural substitution	Changes in who performs work	RN/LVN/UAP mix, contract use, task shifting
5. Context	Potentially relevant but non-causal surroundings	Financial results, ownership, mergers, regulation

3. What the pilot can and cannot say

Supported	Not supported

Documented period-to-period changes at the five selected hospitals	A California-wide or national nursing trend
Differences between facility-wide and unit/cost-center workload measures	A finding that a hospital met or violated bedside ratios
Directional convergence or divergence among separate indicators	A composite nursing-capacity or safety score
Identification of missing frontline evidence	Causal attribution to financial performance, ownership, or management motive
Questions that deserve unit-level records or direct nurse reports	Patient-safety conclusions without an appropriate causal design

4. Measurement architecture

Facility-wide RN productive-hour proxy

This annual measure divides reported RN productive hours by inpatient days. It is useful for describing facility-level nursing-hour intensity, but its numerator may include work outside a single bedside unit. It can therefore rise while a particular unit is struggling—or fall because service mix or classification changed. It is never labeled bedside staffing.

Unit/cost-center RN HPPD

Where a valid patient-census denominator exists, RN productive hours are divided by reported adult-patient census days for a named cost center. This is closer to lived inpatient workload than the facility proxy, although it still cannot reveal shift assignments, acuity, missed breaks, ratio exceptions, or care left undone.

Time-window separation

The facility-wide series covers 2022→2024. The available unit/cost-center series covers 2022→2023. They are shown side by side but are never joined into one trend, score, or causal sequence.

Quarterly staffed-bed utilization proxy

Quarterly utilization is reported patient days divided by reported staffed-bed days. Because staffed beds are the denominator, a fall in staffed beds can mechanically raise utilization even when patient days barely change. The UC Davis comparison is suppressed because the reported 2025 staffed-bed value exceeded licensed beds and the definition could not be reconciled.

Exploratory correlations

The workbook contains nine Pearson correlations, each calculated on exactly five paired 2022→2023 hospital changes. Coefficients are displayed to two decimals, labeled exploratory, and accompanied by n=5 warnings. They are suitable only for generating questions about direction and convergence.

5. Missingness and suppression

Missing does not mean zero, no event, or compliant. It means unknown. The workbook preserves blanks, labels unavailable feeds, and suppresses calculations when the denominator or reporting definition is internally inconsistent. No imputation is used to manufacture completeness.

- No standardized public hospital-level feed of nurse-reported missed breaks or ratio exceptions was available for this pilot.
- No public feed establishes shift-by-shift assignments or unit acuity.
- Annual nursing-hour data lag current operating conditions.
- Some financial filings were still in process during construction and are marked accordingly.

6. Data provenance

The workbook's Source Manifest and Source Registry are the authoritative lineage record. Major public-source families include California HCAI annual financial/labor and utilization files, quarterly hospital financial/utilization reporting, California regulatory materials, and CMS hospital throughput measures. Raw extracts and transformation notes are retained with the working project files.

Reviewer standard A displayed number is not enough. Verify the source file, field definition, hospital identifier, year or quarter, denominator, transformation, and the wording used to describe the result.

7. Independent red-team review and corrections

An independent AI reviewer traced all 27 sheets and the underlying formulas. Its overall conclusion was that the workbook was defensible as designed, subject to five presentation and inference fixes. Those fixes are now implemented:

Issue identified	V1.1 correction
Quarterly occupancy used a staffed-bed denominator that could move mechanically	Relabeled as a staffed-bed utilization proxy; formula dependence explained; inconsistent UC Davis comparison suppressed
Nine n=5 correlations were displayed to six decimal places	Display precision reduced to two decimals; n=5 and exploratory status made prominent
Correlation inputs used 2022→2023 while headline facility measures used 2022→2024	Windows labeled directly on Dashboard, Cockpit, Findings, Correlation Inputs, and Correlation Results
Capacity and financial findings appeared together in quarterly narration	Financial context separated visually and narratively; no motive or causal claim permitted
Unit Labor Detail was stronger than the facility proxy but underused	Med-surg and weighted-inpatient RN HPPD promoted to Dashboard, Cockpit, and Findings

A second independent audit then extracted the full release package, verified its checksums, traced all 27 sheets, hand-recomputed the weighted inpatient metric from raw cost-center rows, and recalculated 737 formulas with zero errors. It found no release-blocking defect and requested two final disclosure corrections, plus one additional caution. All three are implemented in Pilot V1.0:

Second-audit finding	Pilot V1.0 closure
Promoted cost-center RN HPPD lacked a Data Coverage entry	Added a complete Data Coverage row with age, directness, update cadence, cockpit use, missingness meaning, primary limitation, and source URL
Weighted inpatient composition was not disclosed where displayed	Defined the census-weighted calculation on Dashboard, Cockpit, and Unit Labor Notes; states that unit portfolios vary and cross-hospital blends are not guaranteed apples-to-apples
The same five values appear as headline descriptives and correlation inputs	Added an explicit warning that headline visibility does not increase n, stability, or inferential strength

Final verification: all 27 sheets were rendered and visually inspected again. The final formula-error scan returned no #REF!, #DIV/0!, #VALUE!, or #NAME? errors.

8. Reviewer assignment

Please review adversarially. The objective is not to endorse the project; it is to identify anything that could mislead a nurse, patient, journalist, regulator, researcher, hospital, or member of the public.

- Recalculate formulas and verify denominators against the source definitions.
- Look for accidental mixing of facility-wide, cost-center, annual, quarterly, and current CMS periods.

- Identify any wording that implies bedside conditions, compliance, safety, causation, motive, or statewide generalization.
- Check hospital identity and peer-type labels across every source.
- Challenge suppression and missingness decisions: should any displayed result instead be unknown?
- Assess whether financial context remains sufficiently separated from nursing and capacity findings.
- Identify the minimum additional evidence needed to answer the most important unresolved nursing question.

9. Questions for the reviewer

9. What is factually wrong?
10. What formula or denominator is wrong?
11. What comparison is not valid?
12. What label could mislead a reasonable reader?
13. What claim exceeds the evidence?
14. What important limitation is missing or too easy to overlook?
15. What should be suppressed rather than displayed?
16. What additional public source would materially improve the nursing signal?
17. Is the workbook reproducible from its disclosed sources and transformations?
18. Would you consider this ready for public inspection? If not, list the blocking corrections.

10. Copy-and-paste prompt for another AI

PROMPT You are conducting an adversarial methodological and formula audit of the attached California Nursing Conditions Observatory workbook. Do not merely summarize it. Inspect every sheet and trace formulas to source inputs. Test denominators, hospital/year alignment, missingness, suppression, and displayed precision. Distinguish facility-wide measures from unit/cost-center measures and keep 2022→2023 separate from 2022→2024. Identify any wording or layout that implies bedside staffing, ratio compliance, safety, causation, financial motive, or statewide generalization. Return: (1) release-blocking defects, (2) material corrections, (3) optional improvements, (4) formula-level findings with sheet/cell references, and (5) a final verdict: ready, ready with corrections, or not defensible. Treat missing values as unknown, not zero. Do not reward polish; reward reproducibility and epistemic restraint.

11. Release status and future changes

The second audit found no release-blocking defect. The corrected workbook is therefore frozen as California Pilot V1.0 and published with this guide for inspection. Other states may reproduce the method using their own public reporting systems. Any later correction must create a new dated version with a visible change log—never silently overwrite the public record.