THE CENTER FOR HEALTH DESIGN®

Clinic Design Outcome Collection Form

As an important part of post-occupancy evaluation (POE) to assess the impact of clinic design on patient and staff outcomes, this questionnaire collects information about healthcare outcomes that are likely impacted by clinic design at **_____ (name of clinic).** Please fill out the following sections as completely and accurately as possible.

Patient Flow

The physical environment strongly impacts patient flow and clinic productivity. Please provide information about patient outcomes related to patient flow.

A. Availability of data

☐ **Clinic visit cycle time**

☐ **Percentage of no-show appointments**

☐ **Number of patient visits per FTE provider per year**

B. Clinic visit cycle time in the last calendar year (IHI Patient Cycle Tool – collects time points when patient checks in, patient sits in waiting room, staff comes to patient, staff leaves patient in exam room, provider comes in room, provider leaves room, patient leaves room, patient arrives at checkout, patient leaves clinic).

Average length of patient stay in waiting area: _____ minutes (Time from "patient checks in" to "staff comes to patient")

Average length of patient waiting in exam room: _____ minutes (Time from "staff leaves patient in exam room" to "provider comes to room").

Average length of total cycle time: _____ minutes (Time from "patient checks in" to "patient leaves clinic")

C. Percentage of No-Show Appointments in the last calendar year (Total number of no-show appointments divided by the total number of appointment slots. Multiply the result by 100): ___%.

D. Number of patient visits per FTE provider per year in the last year: _____

A. Data source

Percentage of No-Show Appointments: _____
Clinic visit cycle time: _____
Number of patient visits per FTE provider per year: _____

Staff Outcomes

The built environment has a significant impact on staff. Please provide information about the following staff outcomes.

A. Availability of data

☐ **Voluntary nurse turnover rate for the last year**

☐ **Staff absenteeism for the last year**

☐ **Work-related injuries and illnesses for the last year**

B. <u>Voluntary turnover rate</u> for the last year (The voluntary nurse turnover rate is defined as the number of Registered Nurses (RNs) and Advanced Practice Nurses (APNs) who voluntarily leave

divided by the number of RNs and APNs (full-time plus part-time) on the last day of the time period. Similar definitions for voluntary medical assistant (MA) turnover rate and voluntary provider (MD, DDS, nurse practitioner-NP, physician assistant-PA) turnover rate)

Number of RNs and APNs who voluntarily leave: _____

Total number of RNs and APNs: _____

Average voluntary nurse turnover rate: _____%

Number of MAs who voluntarily leave: _____

Total number of MAs: _____

Average voluntary medical assistant turnover rate: _____%

Number of providers (MD, DDS, NP, PA) who voluntarily leave: _____

Total number of providers (MD, DDS, NP, PA): _____

Average voluntary medical assistant turnover rate: _____%

C. Staff absenteeism for the last year (Staff absenteeism is defined as average hours lost per staff member = the total hours of all employees absent during a year divided by the total number of employees in that year).

Staff absenteeism rate: _____

D. Work-related injuries and illnesses for the last year (According to OSHA definition, the incidence rate of work-related injuries and illnesses = (Number of injuries and illnesses x 200,000) / Employee hours worked. For details see http://www.bls.gov/iif/osheval.htm and OSHA Form 300).

Number of recordable cases of injuries and illnesses: _____

Number of injury and illness cases with days away from work, job transfer, or restriction: _____
Number of staff injuries due to patients: _____

Employee hours worked: _____

Incidence rate of recordable cases of injuries and illnesses: _____

Incidence rate of injury and illness cases with days away from work, job transfer, or restriction: _____

E. Data source
Voluntary Nurse Turnover Rate: _____
Staff Absenteeism: _____
Work-Related Injuries and Illnesses: _____

Incidents / Complaints

The physical environment could be one of the sources of patient and staff complaints and other adverse incidents. Please provide information about patient and staff complaints and other incidents

A. Availability of data

☐ **Complaints about privacy and confidentiality**

☐ **Complaints about sick building syndromes or other health effects**

☐ **Unsafe entry incidences**

B. Complaints about privacy and confidentiality in the last calendar year (privacy - an individual's interest in limiting who has access to personal healthcare information; confidentiality - the protection of individually identifiable information as required by state and federal legal requirements):

Patient complaints: #_____

Staff complaints: #_____

C. Complaints about sick building syndromes or other health effects in the last calendar year (sick building syndrome - situations in which building occupants experience acute health and comfort effects that appear to be linked to time spent in a building, but no specific illness or cause can be identified):

Patient complaints: #_____

Staff complaints: #_____

D. Unsafe entry incidences: # _____ in the last calendar year (unsafe entry - unauthorized access to facilities or systems)

E. Data source

Complaints about privacy and confidentiality: _____
Complaints about sick building syndromes or other health effects: _____
Unsafe entry incidences: _____

Environmental Impact

Efficient conservation of resources through building design is an important approach to reducing a healthcare facility's operating expenses and environmental impact. Please provide the following information related to energy use, water use, and waste generation for the clinic.

A. Availability of data:

☐ Energy use ☐ Water use ☐ Waste generation

B. Annual energy use figures provided are: [choose one]

o Typical average annual use
o Specific year (please specify):_____

Total energy use:

Total: _____ (kBtu/ft^2 per year)

Breakdown by fuel:

Electricity: _____ (kWh per year)
Gas: _____ [Btu per year; MJ per year; CCF per year; Therms per year]
Fuel oil: _____ [Btu per year; MJ per year; US gals per year]
Other: _____, _____ [kWh per year; Btu per year; MJ per year; CCF per year; US gals per year]
Steam: _____ (1000 Lbs per year)
Chilled water: _____ (1000 Tons-HRS per year)
Biomass: _____ [kWh per year; Btu per year; MJ per year]

Total energy cost: _____ (US dollar)

C. Annual water use figures provided are: [choose one]

o Typical average annual use
o Specific year (please specify):_____

Total water use: _____ (gallon)

Total water cost: _____ (US dollar)

D. Annual waste generation provided are: [choose one]

- o Typical average annual use
- o Specific year (please specify):_____

Waste disposal _____ tons (Management of solid waste through landfilling, incineration, or other means at permitted solid waste facilities - *Solid waste generation, disposal, and diversion measurement guide* by Cal/EPA)

Waste diversion _____ tons (The total quantity of solid waste that is diverted from permitted solid waste transformation and disposal facilities, through existing source reduction, recycling, and composting programs)

Waste diversion rate ___% (The amount of materials recycled as a percentage of the solid waste stream. Waste diversion rate = Waste diversion / [Waste disposal + Waste diversion])

E. Data sources of energy use and water use:

Energy use: _____ [Energy bill, Meter measurement, Estimate, Other_____]
Water use: _____ [Energy bill, Meter measurement, Estimate, Other_____]
Waste generation: _____ [Waste hauler, Estimate, Other_____]

Healthcare-Associated Infection Rate

Healthcare-associated infections constitute a significant challenge to patient safety. Please provide information about healthcare-associated infections at your facility according to CDC definitions and criteria (see http://www.cdc.gov/ncidod/dhqp/pdf/nnis/NosInfDefinitions.pdf).

A. Availability of infection data ☐

B. Types of healthcare-associated infections your facility routinely monitors and includes in the calculation of the overall infection rate (See http://www.cdc.gov/ncidod/dhqp/pdf/nnis/NosInfDefinitions.pdf for the definition and criteria of each type of infection.)

C. Overall nosocomial infection rate for the most recent year for which the data are available

Overall nosocomial infection rate provided is for the year _____

Overall nosocomial infection rate _____

D. Data source of the infection rate:

_____

Technical measurements

Please provide the following technical measurements of building performance in the clinic. Please mark the locations of measurements on floor plans.

A. Availability of data

- ☐ **Air temperature and humidity**
- ☐ **Sound level**
- ☐ **Artificial lighting level**
- ☐ **Daylight level**

B. Air temperature and humidity (Temperature: portable thermometer, with external element on wire, shielded from radiation, sensitive to 0.5C or 1F, and 3-minute 90% response time [$50]. Humidity:

electric psychrometer, or sling psychrometer, sensitive to 5% RH, [$100]. ASHRAE Performance Measurement Protocol)

Air temperature / Relative humidity	9am	noon	3pm
Waiting room (center)	____ C, F / ____%	____ C, F / ____%	____ C, F / ____%
Exam room (center, average)	____ C, F / ____%	____ C, F / ____%	____ C, F / ____%
Nurse station (center)	____ C, F / ____%	____ C, F / ____%	____ C, F / ____%
Corridors (average of three locations)	____ C, F / ____%	____ C, F / ____%	____ C, F / ____%

C. Sound level (A-weighted equivalent sound level (Leq) measured at ear level [seated position] by a sound meter equivalent to an integrating sound level meter with an omnidirectional condenser microphone, meets Type 2 specifications [ANSI S1.4] and capable of digitally displaying the A-weighted equivalent sound level (Leq) to the nearest decibel. Manufacturer's stated noise floor of the meter should not exceed 25 dBA. A handheld Type 1 portable acoustic calibrator shall be used to calibrate the sound level meter. Minimum duration of each measurement shall be 30 seconds.)

Sound level	9am	noon	3pm
Waiting room (center)	_____ dBA	_____ dBA	_____ dBA
Exam room (center, average)	_____ dBA	_____ dBA	_____ dBA
Nurse station (center)	_____ dBA	_____ dBA	_____ dBA
Corridors (average of three locations)	_____ dBA	_____ dBA	_____ dBA

D. Artificial lighting level (Illuminance meter: rack mountable, bench top or portable [$100-250])

Illuminance level	9am	noon	3pm
Waiting room (desk level)	_____ ftc, lux	_____ ftc, lux	_____ ftc, lux
Exam room (exam table, average)	_____ ftc, lux	_____ ftc, lux	_____ ftc, lux
Nurse station (desk)	_____ ftc, lux	_____ ftc, lux	_____ ftc, lux
Corridors (average of three locations)	_____ ftc, lux	_____ ftc, lux	_____ ftc, lux

E. Daylight level (Illuminance meter: rack mountable , bench top or portable, with doors closed lighting off, blinds open).

Date and time of measurement _____.
Weather condition: ☐ Clear ☐ Partly cloudy ☐ Cloudy

Daylight level	Room orientation	9am	noon	3pm
Waiting room (center)	E/S/W/N	_____ ftc, lux	_____ ftc, lux	_____ ftc, lux
Exam room (center, average)	E/S/W/N	_____ ftc, lux	_____ ftc, lux	_____ ftc, lux
Nurse station (center)	E/S/W/N	_____ ftc, lux	_____ ftc, lux	_____ ftc, lux
Corridors (average of three locations)	E/S/W/N	_____ ftc, lux	_____ ftc, lux	_____ ftc, lux

F. Instruments

Air temperature: _____
Relative humidity: _____
A-weighted equivalent sound level: _____

Artificial lighting level: _____
Daylight level: _____

Comments and contact information

A. Comments

Please provide your comments or suggestions about this questionnaire and/or this project:

_____

_____

_____

B. Contact information

Please include your name, title, phone number and email address so that we may contact you for clarification. Your personal information will not be used in publication or for any other purposes.

Name: _____

Title: _____

Phone: _____

Email: _____