Supplementary Online Content

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eTable 1. Short-term Facilities With no Surgical Expenditure Information

Facility Name	Hospital Type
Ballard Rehab San Bernardino	Short Term General
Central Valley General Hospital	Short Term General
John C. Fremont Healthcare District	Short Term General
American Recovery Center	Short Term Specialty
Casa Colina Hospital For Rehabilitative Medicine	Short Term Specialty
Healthsouth Bakersfield Rehab Hospital, Llc	Short Term Specialty
Healthsouth Tustin	Short Term Specialty
Merritt Peralta Institute Chemical Dependency Recovery Hospital	Short Term Specialty
Northern California Rehab	Short Term Specialty
San Diego Rehab	Short Term Specialty
San Joaquin Valley Rehabilitation	Short Term Specialty
Sharp Mcdonald Center	Short Term Specialty
Tarzana Treatment Centers, Inc.	Short Term Specialty
The Betty Ford Center At Eisenhower	Short Term Specialty
Tom Redgate Memorial Recovery Center	Short Term Specialty

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eTable 2. Definitions of Select Financial Terminology

Direct Costs	Costs that *can* be attributed to a specific department[18], such as the salary and benefits of staff employed within the surgical department, supplies used, and utilities.
Indirect Costs	Costs that *cannot* be attributed to a specific department, but rather are required as part of a larger operation, such as insurance, interest, and land tax. These costs are allocated to the individual department based on "statistical factors" such as the square footage of the department, revenue, or full time equivalents[17,18].
Fixed Costs	Costs that do not vary based on activity level; another way to think of fixed costs is that they are sunk – they will exist no matter how many patients are served. Indirect costs are often fixed, such as rent and tax.[18]
Variable Costs	Costs that are directly proportional to the activity level; in other words, every additional patient will add variable costs. Supplies are a classic example[18].
Semi-Variable Costs	Costs that are proportional to activity level, but only once a certain threshold is reached. Staffing is often semi-variable; for example, if a med/surg floor has a 5:1 patient-to-nurse ratio, the first through fifth patients admitted will have the same cost, but the sixth patient will require a second nurse, and therefore increase costs[18].
Cost-Charge Ratio (CCR)	The CCR is the ratio between total hospital charges (the total amount billed to patients/payers for all patients over a given year) and total hospital costs. Administrative databases, such as those released by the Centers for Medicare & Medicaid Services and the Healthcare Cost & Utilization Project (HCUP) provide these ratios for a hospital for a given year allowing researchers to convert the patient's bill (charges) to an approximate cost of taking care of the patient.
Time-Driven Activity-Based Costing (TDABC)	An accounting system that calculates the actual resources expended to take care of a patient by aggregating the smallest available unit of measurement. TDABC requires extensive process mapping of a patient's route through the hospital to calculate costs, but is considered more accurate and more actionable as it allows identification of waste in the care process. TDABC is contrasted to traditional "top-down" approaches which calculate the total expenses of a department or hospital and then breaks them into smaller units[24,25].

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eTable 3. Median Operating Room Cost per Minute Versus The Consumer Price Index and Medical Component of the Consumer Price Index, as Ratios, Using 2005 as the Base Year

Year	Median OR Cost Per Minute	M-CPI	CPI
2005	1.0000	1.0000	1.0000
2006	1.0909	1.0402	1.0323
2007	1.2039	1.0862	1.0617
2008	1.2791	1.1264	1.1024
2009	1.2949	1.1622	1.0985
2010	1.3748	1.2018	1.1165
2011	1.5127	1.2384	1.1518
2012	1.6473	1.2838	1.1756
2013	1.7199	1.3154	1.1928
2014	1.6600**	1.3468	1.2122

M-CPI = Medical component of consumer price index; CPI = Consumer price index
Data Sources: OSHPD California Hospital Financial Statements & Bureau of Labor Statistics
***P*<.001 for non-parametric comparison to M-CPI and CPI in 2014

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eTable 4. Miscellaneous Expenses not Included in OR Cost per Minute Estimates, FY2014

	Unit	Sample Size	Mean	SD	Median	IQR	
Anesthesia	Number of Anesthesia Minutes[1]	240	$3.42	$2.94	$2.30	$1.26-	$4.82
Medical Supplies Sold to Patients	Adjusted Inpatient Day	301	$305.18	$230.81	$245.14	$126.22-	$442.48
Radiology[2]	Number of Proecdures[3]	301	$167.89	$68.80	$150.20	$118.69-	$213.83
Pathology[4]	Number of Tests[3]	220	$78.36	$42.98	$68.44	$46.37-	$99.14
Blood Products	Units of Blood Issued[5]	273	$294.07	$146.88	$296.84	$187.82-	$388.83

Note: Estimates include inpatient and outpatient care, as well as services rendered in a variety of settings. For example, blood product administration would include that administered in the OR, intensive care unit, and ambulatory settings.

(1) Minutes counted from start to end of general anesthesia.

(2) Diagnostic radiology, including costs associated with peripheral and cerebrovascular labs.

(3) Number of procedures and tests are based on the number that can be separately billed.

(4) Includes autopsy, surgical, cytology, and other pathologic laboratory services.

(5) Number of units issued to patients; does not include unused units.

Data Source: OSHPD California Hospital Financial Statements

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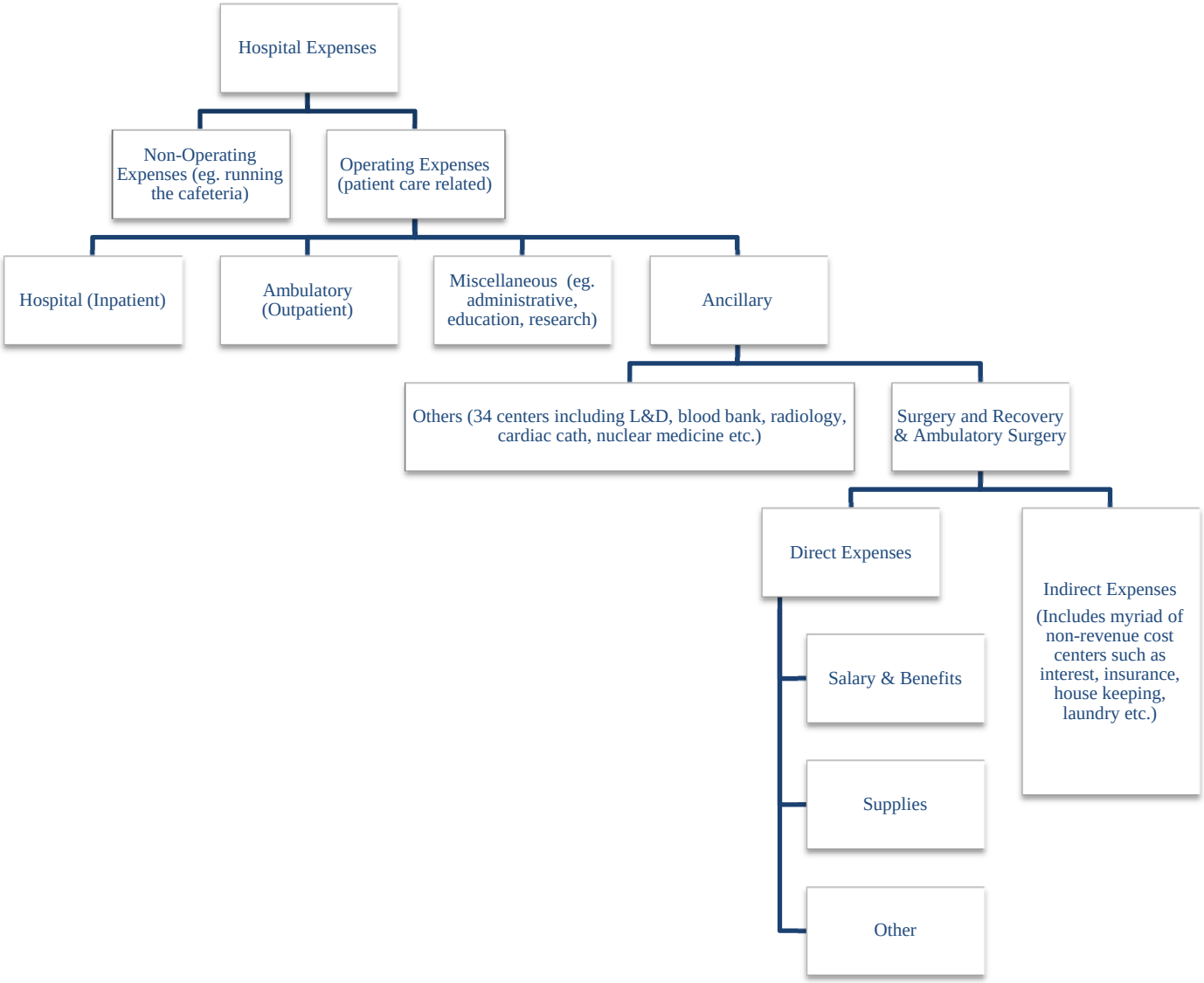
eFigure. Hierarchy of Hospital Expenses



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