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Appaloosa County Day Care Center, Inc.

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BACKGROUND

The Appaloosa County Day Care Center, Inc. (ACDC) began operations in a vacant warehouse retrofitted with bathrooms and kitchen facilities. ACDC's mission is to provide quality, affordable childcare to the residents of the community and surrounding area. The service area is a rural, economically depressed county that continually ranks in the lowest 10 percent of per-capita income in the state. The organization's seven-member board of directors is comprised of volunteer representatives from various agencies throughout the community–the school district, community college, hospital, Department of Human Services, etc. The board members bring a breadth of human services experience to the oversight of the day care, but most do not possess an accounting or financial background. While they were committed to the financial viability of the day care, they initially focused on the center's mission–to provide affordable childcare to working-class families. As a result, the board set childcare rates to achieve their goal of affordability rather than assuring adequate revenues to provide high-quality services while reaching breakeven points.

From its founding, the center faced another significant challenge. The center was the first of its kind in the community, so negative perceptions about using "institutionally" provided day care were prevalent. Local families preferred to use in-home childcare provided by friends or relatives. These perceptions and preferences, coupled with poor administrative practices, caused the center to struggle continually to meet its financial obligations. ACDC was almost forced to close its doors on more than one occasion. The financial performance of ACDC is not unusual, as many community-based day care facilities struggle to remain open.

DAY CARE INDUSTRY REVENUE AND COST PATTERNS

As an industry, day care facilities generally operate with very low profit margins. Typical for-profit day care profit margins are approximately 4 percent, with about 70 percent of a center's total costs attributed to wages and other employee-related costs (Helburn 1995, 172, 176). The state's Department of Human Services' licensing regulations drive a significant level of employee-related costs. These regulations mandate a strict staff-to-child ratio that all licensed facilities must follow. For example, infant care (ages two weeks to two years) regulations require at least one staff member for every four children (see excerpt from regulations in Exhibit 1). Thus, if a center pays just the minimum wage (federal wage currently $7.25 per hour, $7.80 w/taxes), at least $1.95 per hour would need to be charged for each infant just to cover the cost of the employee. Additionally, one must consider how revenues are affected when there are fewer than four infants per employee scheduled in the nursery. When the ratio drops, income per hour drops; however, the full hourly wage to the employee remains the same and an immediate loss occurs. See Exhibit 1 for the complete Department of Human Service staff ratio requirements.

Exhibit 1
Department of Human Services
Excerpt from Childcare Regulations

Staff ratio. The staff-to-child ratio shall be as follows:

Age of Children	Minimum Ratio of Staff to Children
Two weeks to two years	One to every 4 children
Two years	One to every 6 children
Three years	One to every 8 children
Four years	One to every 12 children
Five years to ten years	One to every 15 children
Ten years and over	One to every 20 children

Source: Department of Human Services. 2008. Child Care Centers and Preschools Licensing Standards and Procedures. Comm. 204, August.

In addition to labor, other costs that impact day care center operations include occupancy costs, food, insurance, supplies, and programming expenses. Occupancy and food costs are also highly influenced by the Department of Human Services, as a facility must provide a minimum amount of space per child (based on age) and follow specific nutritional guidelines in preparing meals and snacks.

ACDC PLANNING AND OPERATIONS

About five years into operations, a new board of directors was appointed and strategic objectives were developed. As its first strategic actions, the board replaced the Center's administration and developed specific operating procedures to keep the facility afloat financially. In order to eliminate the community's negative perceptions of institutionalized childcare, the board decided to move the center to a higher-quality facility. After further study, the board concluded that constructing a new facility would be the best option for providing quality childcare in an attractive and safe environment. In addition, the new building would house the community's federally-funded Head Start program and the local school district's handicapped pre-school program, as these programs were housed in inadequate facilities. Thus, the ACDC board spearheaded the construction of an 8,000-square-foot building that would be owned by ACDC, Inc., and funded in part by a federal grant and a loan from the local USDA Rural Development Office.

During the planning and construction of the new facility but prior to its opening, the ACDC board had to resolve a number of issues. First and foremost, the board did not want to raise the childcare rates, for fear that doing so would deter people from patronizing the facility. On the other hand, the board was not at all positive that the existing rates would cover the costs associated with the new building. In addition, ACDC was becoming a landlord, and this created additional concerns for the board. ACDC agreed to lease floor space or rooms to the Head Start program and school district, perform facility maintenance, and provide utilities. ACDC did not provide any furniture or fixtures. The board's main question: How much rent should ACDC charge the tenants? The ACDC board researched the lease rates charged to the area's commercial retail facilities and determined that $20 per 100 square feet was the going rate and decided to charge their tenants at this rate. Because the board members were not experienced in making financial and capital expenditure decisions, they did not fully consider that this rate was for floor space only; commercial leaseholders typically pay all of their own utilities, sanitation, and maintenance fees. Thus, the board had inadvertently created the potential for a future financial crisis for ACDC. Selected post-construction revenues, costs, and operational information for ACDC follow.

ACDC COST STRUCTURE

LABOR COSTS

ACDC maintains a staff of employees assigned to each age-level classroom that is in compliance with DHS guidelines. The staff schedule is rotated throughout the week so that the staff-to-child ratio is always maintained while no one employee works more than 40 hours per week. The employer's labor costs include the wages, FICA (7.65%), and the SUTA rate (1%). The facility does not offer any other employee benefits. (See Table 1)

Table 1
Payroll Detail

	Wages	Taxes	Total Payroll
Administrative	$ 13,750	$ 1,190	$ 14,940
Kitchen	9,000	780	9,780
Infant care	19,250	1,665	20,915
Toddler care	38,500	3,330	41,830
Pre-K care	29,000	2,510	31,510
Totals	**$109,500**	**$ 9,475**	**$118,975**

FOOD COSTS

The center provides food for ACDC patrons, but it does not charge a separate fee to recover the cost of snacks or meals. The cost of food is included as part of the tuition fee. In addition, the employees are required to remain on-site during the lunch hour in order to maintain the staff-to-child ratio, so their meals are also provided by the center. All children and classroom staff receive breakfast, lunch, and two snacks a day.

OCCUPANCY COSTS

Building: Because ACDC worked in conjunction with the local school district and the Head Start program prior to constructing the new facility, the building was purposely built larger than the space required by the day care only. Consequently, when it came time to analyze costs, it was the board's opinion that the Head Start and school district programs should share in the costs of the loan and building (i.e., interest expense and depreciation).

Utilities: When ACDC designed the facility, it considered the needs of the tenants and designed their rooms accordingly. The board did not have the foresight, however, to set up the tenants' rooms with their own gas, electric, and water meters. Therefore, all of the utilities are measured through common meters, and ACDC pays the bills for the entire facility. The only exception to this is the telephone expense, as each program contracts and pays for its own phone service. See Exhibit 2 for details.

Maintenance, etc.: As specified in the lease agreement, ACDC pays the entire building's expenses related to maintenance, cleaning supplies, and sanitation. See Exhibit 2 for details.

INSURANCE COSTS

ACDC has four different insurance costs: property, general liability, officer's bond, and worker's compensation. The property insurance covers the entire building. The general liability insurance covers the children and staff in the ACDC program and helps protect the center against accidents or claims against the staff. The tenants must carry their own liability insurance. The bond insurance on the officers covers the center for any inappropriate handling of financial matters by the board of directors. Finally, the worker's compensation insurance covers the administration and ACDC employees for work-related injuries.

Exhibit 2
Excerpt from Building Lease

IT IS AGREED this 1st day of July, 20xx, by and between Appaloosa County Day Care Center, Inc., hereinafter referred to as Landlord; and Head Start, hereinafter referred to as Tenants:

That the Landlord hereby leases to the Tenants and the Tenants hereby lease from the Landlord the following premises situated in Appaloosa County, USA, to wit:

Three rooms and an office (2650 sq. ft.) in the "ACDC" day care center as specified in the building plans, in consideration of the mutual promises of the parties herein and upon the terms, provisions, and conditions following:

1. LEASE PERIOD. The term of this lease shall be for a period of twelve months starting July 1, 20xx.

2. RENT. Tenants shall pay rental for the period as follows; $530.00 on the 1st day of July and $530.00 on the 1st day of each month thereafter during the lease period; said rental thus at all times to be paid in advance for the month. The Landlord will pay all utilities, maintenance, and custodial services on the building. The Landlord reserves all remaining rooms for their use or lease.

OTHER OPERATING COSTS

A complete listing of the organization's operating expenses is shown in Table 2. The costs not previously discussed include administrative or program costs such as accounting, advertising, continuing education, and supplies. These costs are attributable solely to ACDC.

THE ACCOUNTANT'S CHALLENGE

Rather than addressing the revenue and cost issues that arose during the facility construction, the board took a "wait and see" position and opted to review both the childcare rates and rental rates after the new facility had begun operations. After the first year of building occupancy, the ACDC board wanted to evaluate the costs and revenues associated with each of the day care's and tenants' programs. You are the center's accountant (and the only individual on the board with significant financial knowledge), so the other board members have asked you to explain why the center is running at a loss. You indicate that you believe that both the childcare rates and rental rates were set without establishing correlation to the costs that they were intended to cover. You also state that you want to take the time to complete a thorough cost and profitability analysis of the day care's childcare programs and tenant agreements. In order to do so, you decide to implement an activity-based costing system to allocate costs to the various programs and tenants.

Tables 1-3 provide revenue and expense information for the first year of operations at the new facility. Tables 4-6 provide additional information useful for the cost analysis and decision making.

Table 2
Operating Expenses

Accounting & legal	$ 900
Advertising	150
Bank charges	35
Continuing education	450
Depreciation	11,800
Food expense	5,500
Ins. – Bldg/property	860
Ins. – Officer bond	120
Ins. – Gen. liability	2,190
Ins. – Workers comp	400
Interest expense	13,085
Payroll – wages*	109,500
Payroll – taxes*	9,475
Repairs & maintenance	5,950
Sanitation Service	2,435
Supplies – Cleaning	365
Supplies – Program/art	3,675
Supplies – Office	2,900
Telephone	1,060
Utilities	4,000
Water/sewer	1,100
TOTAL EXPENSES	**$ 175,950**

*See detail in Table 1

Table 3
Revenues

Tuition	
Infant care	$ 28,530
Toddler care	68,710
Pre-K care	62,650
Rent	
School district	4,200
Head Start	6,360
TOTAL	**$ 170,450**

Table 4
Hourly Childcare Rates

Infant care	$ 2.00
Toddler care	1.75
Pre-K care	1.75

Table 5
Square Footage

ACDC	3,600
School district	1,750
Head Start	2,650
TOTAL	**8,000**

ACTIVITY-BASED COSTING—A QUICK REVIEW

Activity-based costing (ABC) is used frequently in manufacturing settings because it typically improves product cost information. ABC replaces arbitrary cost allocations by first assigning costs to activities and then to goods based on how much each good uses the activities. The concepts of ABC can also be applied to service-based organizations where tangible products do not exist. In a service organization, costs are assigned to the various activities performed, cost drivers that measure the activities performed are identified, cost driver rates are calculated for each activity, and the resulting rates are used to assign activity costs to the types of services provided. This process reflects the causal relationship between the activity, the costs created by the activity, and the assignment of these costs to services.

IDENTIFICATION OF COST DRIVERS

There are many activities present in a day care setting that create or drive costs. An example is the preparing and serving of food. It is relatively easy to assign many of the costs, such as food and direct labor, to this activity. It is more difficult, however, to assign costs to many of the most significant activities that occur regularly in a day care. These activities (like reading a book, playing a game, or teaching a skill) are key components of the service being provided—childcare—but they are difficult to measure. Therefore, identifying each of the individual activities that drive cost and then assigning cost to the daycare programs based on those activities may be cost prohibitive. For that reason, ACDC places activities into broad category classifications. When considering drivers that would be cost effective yet causally related to the costs

Table 6
Population

	Total number of students enrolled	Total staff employed	Average daily attendance of students	Average daily staffing of employees	Total average daily population
ACDC					
Administrator	-	1	-	1	1
Kitchen	-	1	-	1	1
Infant care	11	3	8	2	10
Toddler care	35	5	22	4	26
Pre-K care	32	4	20	3	23
School district	-	-	12	6	18
Head Start	-	-	40	6	46
Total	**78**	**14**	**102**	**23**	**125**

being incurred, population or a population subset becomes the driver identified for many of the activity cost pools. Population may be measured in terms of enrollment, class size, or number of staff. See Table 6.

QUESTIONS

1. Identify the services or programs to be included in the cost and profitability analysis.
2. Examine the costs listed in Table 2.
   a. Identify the direct costs associated with each service or program.
   b. Which costs would be organization-sustaining costs? Provide an argument for or against assigning these costs to services or programs.
3. Identify the broad activity categories and create cost pools by assigning the costs from Table 2 to the pools.
4. Identify the cost drivers that have a causal relationship to the activity cost pools created in Question 3.
5. Calculate the activity or cost-driver rates for each cost pool. Note: You should develop rates that will allocate costs to ACDC programs and/or tenants only. You should not allocate any costs back to general administration.
6. Using the services or programs identified in Question 1, determine service or program revenues, assign the costs to the service or programs, and calculate service or program profitability. A spreadsheet may be helpful with this task.
7. Based upon your calculations in Question 6, which services or programs are operating successfully? What appears to be the determining factor in whether the service or program is profitable?
8. Discuss at least three alternatives for improving the overall profitability of the daycare facility.

REFERENCE LIST

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