# The Work That's Done So Infants Can Play

A time use study showing how caregivers at three daycare centers spend their time and the impact their activities have on how infants spend their time



Presented to: International Association of Time Use Research 2007 Annual Conference, Washington D.C., October 17, 2007

by Mark Ellwood, B.Comm President, Pace Productivity Inc. Toronto, Canada



# THE WORK THAT'S DONE SO INFANTS CAN PLAY

# PRESENTED TO INTERNATIONAL ASSOCIATION OF TIME USE RESEARCH 2007 ANNUAL CONFERENCE, WASHINGTON D.C., OCTOBER 17, 2007

BY MARK ELLWOOD,
PRESIDENT, PACE PRODUCTIVITY INC, TORONTO, CANADA

# **TABLE OF CONTENTS**

INTRODUCTION	2
BACKGROUND	3
METHODOLOGY	3
METHODOLOGY NOTES	5
LOCATIONS	5
AN INFANT'S DAY	7
CAREGIVER TIME	12
NURSE TIME	16
VOLUNTEER TIME	18
CONCENTRATION AND INTERRUPTIONS	20
TIME OF DAY	21
CONCLUSIONS	23
RECOMMENDATIONS	24
DATA EXHIBITS	25

# INTRODUCTION

#### **ABSTRACT**

The time that parents spend in childcare activities is crucial to childhood development. In daycare settings, this work is transferred from parents to paid caregivers. How they spend their time is a function of the number of children under their care and the programs that are designed for the children. Time spent on non-childcare related activities also has an impact. When the children are medically fragile, the allocation of care giving time changes because of special interventions such as tube feeding and therapy. By understanding how caregivers spend their time, important daycare staffing policies can be developed. This paper summarizes a time study funded by the New York State Office of Children and Family Services on Best Practices. This international study was conducted in a daycare for special needs infants in Rochester, New York, along with a second daycare in New York State and a third in Toronto, Canada. The study adds a unique perspective; that of the infants themselves. Observers using a TimeCorder electronic tracking system gathered time-use data in two phases. They watched caregivers for a period of time. The results show what activities comprise a typical caregiver's day. The observers later watched the infants. The results show how much time infants spend eating, sleeping, going on excursions, receiving therapy, being read to, and other activities during a typical day. Finally, patterns of activity throughout the day are also shown. The data has profound implications for childcare in daycare settings.

# WHY THIS STUDY IS IMPORTANT

This report is being presented to the International Association for Time Research for three important reasons.

- 1. First, it uses a unique methodology for gathering how time is spent. The TimeCorder device, first launched in 1989 and re-designed in 2004, is a unique electronic device for gathering how time is spent. Other methods have limitations; questionnaires and telephone interviews rely on memory recall and are prone to inaccuracy. Diary studies tend to be very short (i.e. only two days) to avoid fatigue, and may have lists of activities that are very long. The TimeCorder is easy to use, accurate to the second, and well accepted. In our corporate studies, the co-operation rate is 94%.
- 2. The second reason is that this study examines time spent in a daycare for medically fragile infants. This is the first of its type in New York State. Data from this study will be used to improve operations and to determine plans for expansion to other centers.
- 3. Finally, this study takes a unique approach in measuring how time is spent by different parties who have a relationship to each other. In this case, it is caregivers and infants. Tracking the caregivers' time shows how their day is spent. Tracking the infants shows what impact the caregivers have. Also, infant time has rarely been studied before.

2\_\_\_\_\_

# **BACKGROUND**

This report outlines the results of a time study conducted by Pace Productivity Inc. for Daystar, a daycare for medically fragile infants in Rochester, New York. The study was conducted on various days from March to June 2007. Management of the daycare (Mary Ertruk) has provided permission to present the findings to the 2007 IATUR annual conference.

The purpose of this study, is to provide data for a Best Practices Grant. This grant was funded by the New York State Office of Children and Family Services to complete a comprehensive, collaborative research and development initiative that will yield a Best Practices child care program and environment for caring for infants with special medical and developmental needs.

Specifically this study measured how caregivers at Daystar and two other daycares in New York and Ontario spend their time. In addition, this unique methodology measured infant time.

In 1988 Daystar's concept was born from a need for foster care homes for medically fragile infants. As a sponsored ministry of the Sisters of Saint Joseph of Rochester, Inc. Daystar has provided a loving, therapeutic foster home for over 70 infants with special needs.

In 2002, responding to area hospitals discharging growing numbers of medically frail children, Daystar expanded its mission to include nursing- supervised, licensed medical childcare.

Currently, Daystar is the only known facility of its kind in New York State. It has cared for over 40 special needs infants and their families in 4 years.

# **METHODOLOGY**

To track how effective time allocation is at Daystar, Pace Productivity Inc. was engaged to conduct a time study using its innovative TimeCorder professional time tracking system. This electronic device allows users to easily track their time by pushing buttons associated with precoded activities. Usually in our studies we ask people to track their own time. For this study, we used observers.

We did this because unlike knowledge workers in an office or sales setting, caregivers are in direct contact with those they care for – the infants. We decided that tracking their own time might be slightly distracting for the caregivers. Also, we want to gather parallel data on infant time – hence the need for observers. The Daystar observers all had Masters Levels Early Childhood Degrees. The Sunnyside observer was trained in early childhood education.

The device has a series of buttons labelled A to Z. Each button is associated with an activity. Each time an observer presses a new button, time stops recording on the previous activity and begins recording on a new one, like a chess clock in reverse. In addition to cumulative time, the TimeCorder also tracks the number of occasions for each activity. When a button is pressed, the "count" for that activity increases by one. In the report, the accumulation of these is referred to as *occasions*. When the number of occasions is divided into the cumulative time, a typical

3

duration is derived. It is the average length of time for which an activity occurs, expressed in minutes.

We decided that gathering data on the infants would provide a unique perspective that, as far as we know, has never been done before in a time study. In this way, we can determine the effect of caregivers on infants. Infants cannot tell us whether the quality of their experience was good or not good. But their time profiles give an indication of what kinds of care they are receiving, and what the differences are between typical infants and those with special care needs.

For the infants, observers tracked 26 activities, plus a miscellaneous activity. For the caregivers, the nurse and the volunteers, observers tracked 53 activities. This was done by pressing two buttons in quick succession; either AA, BB, CC, etc or Misc A, Misc B, Misc C, etc.

Data recorded with the TimeCorder is tracked accurately to the second. In the report, the results are expressed in tenths of hours for the time, and in minutes for the durations. Some of the numbers may not always appear to add or divide evenly because of rounding. Throughout the report, a distinction is made between activities and categories. *Activities* are the individual items that participants tracked on the TimeCorder. *Categories* are logical groups of activities arranged for analysis. Details can be found in the exhibits that follow.

One team of observers tracked both infant and caregiver time at Daystar in Rochester and at MCC, also in the Rochester area. In Toronto Canada, one individual tracked both infant and caregiver time at Sunnyside Daycare.

Observers only tracked one caregiver at a time. While watching infants, they usually tracked two infants with two separate devices.

During the study, observers logged 283 hours among the caregivers and the nurse at all three locations, encompassing 4,192 events. The logged an additional 279 hours of infant activities including 2,203 different events.

Altogether, infants were tracked on 27 days at Daystar, 12 days at Sunnyside and 16 days at MCC. Many times two infants were tracked at the same time.

LOCTION	INFANT DAYS TRACKED
Daystar	May 3, 3, 4, 4, 7, 7, 10, 10, 11, 14, 15, 15, 16, 16, 17, 17, 18, 18, 21, 21, 23, 24, 24, June 1, 1, 4, 5
Sunnyside	Feb 23, 27, 27, 28, 28, 30, 30, March 1, 1, 2, 2, 7,
MCC	May 16, 17, 17, 18, 22, 23, 24, 24, 25, 25, 29, 29, 39, 30, 31, 31

#### SITE VISIT

In January 2007, prior to the start of the time study, Mark Ellwood, president of Pace Productivity Inc., and Wendy Van Eck, the owner of Sunnyside Day Care in Toronto, visited Daystar and made observations for a day. Wendy's recommendations are included at the end of this report.

Also, some testing was done in advance of the formal time study to determine the list of activities. The list was developed by Mark Ellwood, Mary Ertruk, and Wendy Van Eck.

# **METHODOLOGY NOTES**

It is our belief that the data from this study, collected with a unique, proven methodology, provides useful input for planning.

# However:

- For caregivers, only 383 hours of data representing 4,192 activities were tracked.
- For infants, only 279 hours of data were tracked, encompassing 2,203 activities.
- Different observers were used at all three facilities and may have interpreted some activities differently.

# **LOCATIONS**

**Daystar**, a sponsored ministry of the Sisters of St. Joseph of Rochester, began in Pittsford, New York in 1988 as a certified foster home for infants ages birth to three with special needs.

Daystar opened the first nursing supervised licensed medical childcare program in western New York in July 2002. This was in response to a critical need for a daycare / respite program for the increasing numbers of medically frail infants being discharged to home from area hospitals. Mary Erturk, a neonatal nurse from Strong Memorial Hospital was named the Director. Mary had been a volunteer at Daystar since 1996 in the foster care program.

Daystar is licensed and regulated by the New York State Office of Children and Family Services as a Group Family Daycare Home. This licensing limits the number of infants in the home to 10 each day.

The daycare is housed in the lower level of Daystar's home on Lochnavar Parkway in Pittsford, NY. It can accommodate up to 10 infants, age birth to 3 years for anything from respite care to full time daycare. The hours of operation are 7:30 a.m. - 5:30 p.m., Monday to Friday. Revenues derive from a combination of fees and donations. Under the guidance of an experienced neonatal nurse, and with the support of specialists, trained staff and volunteers, the Daystar program not only provides for the children's special medical needs, but also nurtures the children to enable

5

them to reach their fullest potential. The nurse trains the staff to perform the daily medical procedures such as tube feedings, monitoring oxygen delivery, medications and the methods of care that are unique for each medically fragile infant.

Admission to Daystar requires a medical or developmental problem that cannot be cared for in a typical daycare setting. The infants served in the medical child care / respite program are born with multi-system, complex impairments, many the result of prematurity. Most of the Daystar babies have global delays 33% greater than a typically developing infant. The majority of Daystar babies receive daily professional therapy to assist them with their motor delays, feeding delays, vision impairment, speech delays and therapy to assist them in communicating with assistive technology. Most of these infants also qualify for one-on-one nursing care in the home. Daystar offers medically competent and socially stimulating care in a loving home environment.

When a Daystar baby's health improves and is ready for more structured care, he or she moves to a typical setting or a program in a specialized school for children with disabilities.

Medical Conditions Among 13 Daystar Babies*	#
Downs Syndrome	2
Spina Bifida	1
Other Syndromes	1
Extreme Prematurity (< 30 weeks)	2
Delayed, Unknown Etiology	3
Cerebral Palsy	7
Legal Blindness	7
Hearing Loss	3
Requires Continuous Oyxgen	1
Requires Feeding Tubes	4

<sup>\*</sup> Maximum of 10 infants at any time

On average during the study, 9.4 children attended Daystar each day. In the morning 3.9 staff were present and in the afternoon 3.7 staff were present. In addition, there were typically 1.9 volunteers in the morning and 1.7 volunteers in the afternoon. Thus the overall average is approximately 5.6 staff to 10 children.

**Sunnyside Day Care** is located in Toronto, Canada. The daycare is licensed by the provincial Ministry of Community and Social Services and adheres to the requirements of The Day Nurseries Act of Ontario. It takes up the basement and ground floor of a large 3-story house. It includes 4 classrooms accommodating about 50 children from aged 6 months to 6 years. The infant room accommodates 5 infants up to 18 months old, who then graduate to the toddler room. Beside the infant room is a sleep room, used exclusively for napping.

The staff ratio is 2 staff to 5 infants. Provincial government regulations require 1 to 3 ratio. The daycare is privately owned and is fully funded by fees and receives no subsidies. The proprietor, Wendy Van Eck oversees the operations, though she rarely supervises children.

The Monroe Community College Child Care Center (MCC) is a department of the MCC Association, Inc. It provides quality early child care and education to MCC students, faculty, staff, and community. Both lead teachers are Child Development Associates (CDAs) and have some college coursework. All staff are required to have 15 hours of training each year. Both Caregivers have a number of college early childhood education (ECE) courses and also take the 15 hours of required training. The daycare is housed in a one-story building on the Monroe Community College Campus, in the town of Brighton, on the outskirts of Rochester.

Children's ages are between 12-24 months in the infant room. The average age there is 18 months.

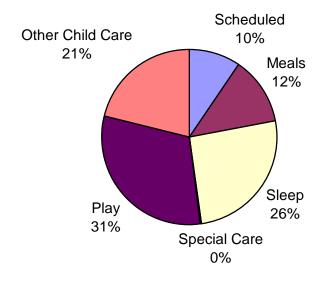
# AN INFANT'S DAY

Observers gathered data from a number of sessions where they exclusively watched infants. Often this was for the whole time the infant was at the daycare. To make comparisons easy, we have pro-rated both the infant and caregivers data to a 45-hour week. This shows what profiles would look like, had the infants been present for the same amount of time each week. This allows for simple comparisons between the three sites.

We can also show the data on a daily basis, but by doing so, the numbers become very small and intuitively harder to compare. What follows is an analysis for an infant who stays for a 9-hour day, i.e. 8:30 a.m. - 5:30 p.m.

The 27 activities that were tracked are grouped into 6 major categories; scheduled activities, meals, sleep, special care, play, and other child care. As shown below, the largest activities are sleep and independent play

# **INFANT HOURS PER WEEK IN DAYCARE**



The following chart examines the same data across the three different facilities for comparison.

#### 18 16 14 12 10 8 6 4 2 0 Other Child Scheduled Meals Sleep Special Care Play Care 3.4 11.7 9 ■ Daystar 3.4 0.6 16.9 7.4 ■ Sunnyside 4.8 13.1 0 13.8 6 ■ MCC 2.5 7.2 9.9 0.1 12.9 12.4

# **INFANT HOURS PER WEEK IN DAYCARE**

#### **SCHEDULED TIME**

This category includes activities that are planned for the infants; being massaged, being read to (though some of this may have been ad hoc), doing art, music class, programmed play, and therapy. The difference between programmed play and independent play is that the former was planned in a schedule, or toys were put out for a specific purpose.

At Daystar, therapy takes up most of the time in this category, 1.3 hours per week. Most sessions are scheduled with therapists for 30 minutes, but the average tracked in this study is only 14 minutes. As Mary Ertruk comments, "By the time they get settled, 13-15 minutes of actual work sounds correct." The rest of the session may be setting up, and discussions with the caregiver pre and post.

Scheduled time is the highest at Sunnyside. The two largest activities that contribute to this category are music / dance class at 2.1 hours per week and being read to, also at 2.1 hours. At Daystar, the largest activity is therapy.

At MCC, therapy is the largest activity in this category at 0.9 hours per week.

#### **MEALS**

This category includes time when the infant is feeding him or herself solids, being bottle fed, being tube fed, drinking a bottle independently and eating solids (i.e. fed by a caregiver.) MCC shows the highest time spent on this, as infants spend over 7 hours per week, or almost an hour and a half per day on feeding. This is primarily feeding self solids at 4.5 hours per week, almost an hour per day. Based on data from other studies, including the Australian Time Use Survey of New Mothers (Smith, Ellwood, 2006), this appears on the high side. In that study, total time spent by *mothers* feeding their infants at 6-9 months is about 12 hours per week. Also, MCC times are much higher than the other two centers.

Infants at Daystar, despite their medically fragile conditions, take the least amount of time of the three daycares for feeding, 3.4 hours per week. They spend the most time on bottle feeding and eating solids. (Daystar has very few self-feeders.) Sunnyside infants are between the other two centers, eating for 4.8 hours per week.

Tube feeding for Daystar infants is very small, just 0.2 hours per week. This is also reflected in the caregiver time. The average caregiver spends only 0.8 hours tube feeding each week. Although tube feeding may actually have been higher, the observer may have recorded this under sleep time. And for the caregivers, once the tube is set up, the caregiver would have moved to a different infant or activity.

Note: Mary Ertruk comments that most Daystar babies are on continuous tube feedings that would only require the caregiver to reset the pump, fill up the bags. If not continuous, then a bolus feeding is for one hour. The infant is not held the entire time. She comments that staff try to be as efficient as possible. The philosophy is that the medical procedures should be done so they do not interrupt the baby's playtime.

# **SLEEP**

Sleep shows a large variation between the three daycare centres. Infants at approximately the same age, with different conditions, don't all sleep the same amount. At Sunnyside, there is just one sleep session each day. It averages 140 minutes long. Within this, a few minutes are settling time, so the actual nap is about 2 hours. It occurs just after lunch, about 12:30 p.m.

At Daystar, naps are much more frequent. They occur 4 times per day, for about 30 minutes each time.

Mary Ertruk, the director of Daystar points out that:

"Short naps are what the infants need. Most of our babies are awake and active for 2 hours and rest or nap during the third. We would not be able to keep a child awake until a prescribed nap time even if we tried. Once the child is older and their health issues improve, they nap after lunch for 1-2hours. Pre-mature babies have a documented sleeping cycle that is frequent short naps. You can almost set your watch by them. They get into REM sleep very quickly. The preemies are our most "typical" baby. Medically

fragile babies use their energy in different ways than typical children. Even a baby that cannot sit up at 12 months old will become exhausted just from the environment. Over stimulation is huge at Daystar. We always have to reduce the stimulation to get the best from our kids. Some of the sleeping may be a way to turn off the environment."

At MCC, naps are about the same length as at Daystar (33 minutes at MCC, 30 minutes at Daystar) but there are fewer of them, just 3 per day.

Being soothed to sleep ranges from 6 to 11 minutes at the various sites, but does not always occur.

#### **PLAY**

The play category consists of just a single activity, since it is so large. Play is the largest activity of all, taking up 38% of an infant's time in Rochester. Infants at Daystar have the largest amount of play because they have a smaller amount of scheduled time In Toronto, play is just 31% and at MCC it is 29%.

Play sessions are about the same length throughout; 6 minutes at MCC, 8 minutes at Sunnyside, and 9 minutes at Daystar.

# **SPECIAL CARE**

Activities in the special care category are performed at Daystar only. There was no time recorded on any of these, except a very small amount of giving medications at MCC.

At Daystar, time spent by infants on these is very small; one time receiving medication each day takes 6 minutes.

# OTHER CHILD CARE

This category includes everything not covered elsewhere. There are significant differences between the three sites.

Infants at MCC show the highest time in this category because of the high amount of time they spend on excursions (7 hours per week) and some time spent being cuddled (3 hours). Daystar is slightly lower because while there is no time on excursions, there is a high amount of time spent being cuddled, held and consoled (7 hours). Sunnyside infants spend the least time in this category because they spend 5 hours on excursions, but very little time being cuddled and consoled

Cuddling time was any activity where the caregiver was in direct contact with the infant. These events tend to be very frequent and short. At Daystar, they occur 97 times per week per infant, for about 4 minutes each time..

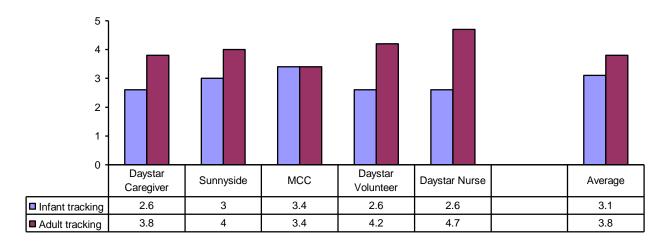
(Note: While the infants at Daystar show no time on excursions, the caregivers show a very small amount of time on this activity. This reflects different tracking days.)

Outdoor excursions at Sunnyside and MCC occur either two or three times for day for 31 to 35 minutes each time.

Diaper changing shows a consistency between the infant and caregiver phases of the study. Across all three daycares, infants who were measured have their diapers changed for 3.1 minutes each time. Meanwhile, caregivers spend 3.8 minutes per diaper change. Theoretically, these two duration times should be the same. The reason for the difference is that the caregiver may have been doing diaper-related activities for the extra 0.7 minutes while the infant was still involved in some other activity, such as play.

Diaper changes vary by the different locations, as shown in the chart below. NOTE: Infant tracking in Daystar does not indicate who was doing the change.

#### **DIAPER CHANGES - MINUTES PER CHANGE**



# **CAREGIVER TIME**

Shifts in the different daycare centres varied quite a bit. In Toronto, caregiver staff usually work 8 hours per day plus 1 hour for lunch and breaks for a total of 9 hours.

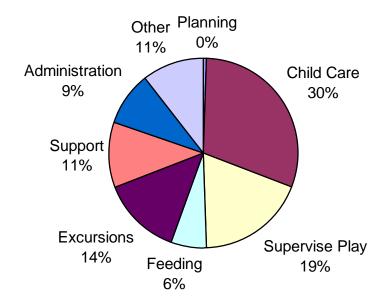
In Daystar, the shifts are much shorter. The average length of shift that was tracked at Daystar is only 4.48 hours, while the average at Sunnyside is 8.7 hours. At MCC the TimeCorder observers did not track full shifts which are usually 8 hours long.

As with the infant data, to make comparisons easy, we have pro-rated the data to a 45-hour week. This shows what profiles would look like, had everyone worked the same amount each week.

One result of pro-rating the hours is that Daystar employees show very low personal time. They work right through their shifts, with fairly short breaks, whereas at Sunnyside and MCC the lunch breaks are longer. The data shows what happens when this time shifts from personal time to other activities.

The 53 activities are divided into 8 categories as shown in the pie chart below. Of the caregiver's time 68% is spent directly with providing care for infants (rounded to 69% on the chart). This includes the categories of child care, supervising play, feeding, and excursions. The productivity challenge for caregivers is how to maximize their time on direct care, while reducing other administrative and support tasks.

#### **CAREGIVER HOURS PER WEEK**



12

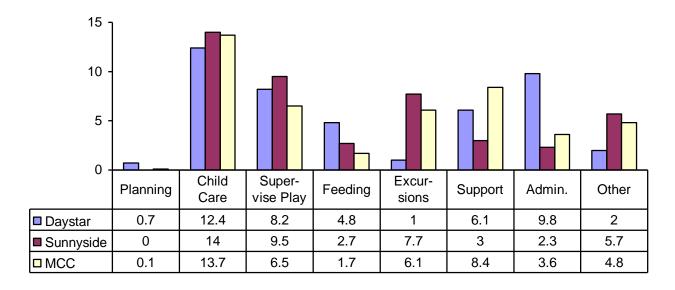
While the average child-related time for caregivers is 68%, it differs by position and location, as shown below.

Location	% of time on direct child-related activities
Daystar Caregiver	58%
Daystar Nurse	25%
Daystar Volunteer	75%
Daystar Average *	58%
Sunnyside	73%
MCC	63%
Caregiver Average	68%
AVERAGE ALL **	66%

<sup>\*</sup> Weighted for 3.8 caregivers, 1.8 volunteers, 1 nurse

The following table shows caregiver hours per week across the different categories and locations.

# **CAREGIVER HOURS PER WEEK**



<sup>\*\*</sup> Average of all time tracked during study for all participants

#### **PLANNING**

The planning category consists of 8 activities; care plan updates, coach staff, daily assessment, discuss issues with nurse, nurse to staff discussions, share info with lunch staff, supervisions, training staff / self.

Most of these activities were set up for Daystar staff, who spend just 0.7 hour per person on this category, largely in discussions with the nurse or with lunch staff. Sunnyside (and presumably MCC staff) spend little time on planning because the daily schedule is already set up for them.

#### CHILD CARE

Child care consists of 18 activities where the caregiver is providing direct care for the infant. It includes activities that are not part of feeding, play or excursions.

Caregivers in all three locations spend similar amounts of time on this category, ranging from 27% to 31% of their time. Within this though, there are some key differences. At Sunnyside and MCC, there is much more time spent on nap time routine than in Daystar. As Mary pointed out, the infants go into REM sleep very quickly. Perhaps nap time doesn't take as long for medically fragile infants.

Meanwhile, reading is quite high at Sunnyside (3.2 hours) while very low at Daystar (0.3 hours) and MCC (0.3 hours).

Offsetting their very low nap time routines, the Daystar caregivers spend much more time on cuddling and holding infants -5.2 hours per week, compared with only 0.8 hours at Sunnyside and 3 hours at MCC.

# **SUPERVISING PLAY**

Play consists of 6 activities; cognitive play, fine motor play, gross motor play, play with children, sensory play, and talk / interact with children. Unfortunately there is not a direct match between these activities and the infant list. There probably is some overlap between these different activities. Therefore the category total may provide a greater insight than the individual activities.

Overall Sunnyside caregivers provide the most play, 9.5 hours per week. In Daystar, the comparable figure is 8.2 hours and in MCC it is 6.5 hours.

#### **FEEDING**

Feeding consists of two activities; bottle feeding and feeding solid food. Tube feeding – set up clean up, is included in the Support category.

Caregiver feeding time is very low in day cares for infants who are not medically fragile; 1.7 hours at MCC and 2.7 hours at Sunnyside. It takes much longer at Daystar, where caregivers spend 4.8 hours per week, mostly feeding solid food.

#### **EXCURSIONS**

The excursions category includes just a single activity – taking infants out for a walk, usually in a stroller. At Sunnyside, when infants get older, they may go out together in a wagon, with children taking turns to walk with the caregiver. At Sunnyside, there are almost 2 per day (rain prevented one during the study) adding up to almost 8 hours per week. MCC does more, 15 per week for a total of 6 hours. Daystar rarely runs excursions. The extrapolated table shows 4 per week adding up to an hour. In fact, of the 11 days tracked. The raw data shows 3 excursions all occurring on the same day. The duration was 23, 10, and 9 minutes. There was one other 38-minute excursion and one that lasted just 2 minutes.

# **SUPPORT ACTIVITIES**

There are 9 activities in this category. They deal with activities that support care giving, but that are not in direct contact with infants. The smaller this category is, the more time there is available for time elsewhere in child care, excursions, play, and meals.

Sunnyside is relatively low, just 3 hours per week. Half of this is preparing and cleaning up solid food. Almost exactly the same amount of time is spent on this at Daystar and MCC. But Daystar caregivers have extra time setting up tube feeding and cleaning up toy, resulting in 6 hours on this category. Meanwhile, the MCC caregivers are extremely burdened by picking up and cleaning toys. They do this 80 times per week for a total of 4.4 hours! Consequently, their total time for the category is the highest of the three at 8.4 hours.

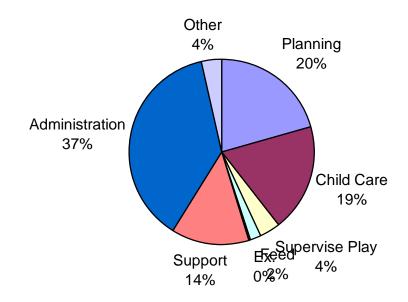
# **ADMINISTRATION**

There are 8 activities in the administration category. Daystar stands out because of three activities; chart documentation, miscellaneous (4.2 hours!) and other non-infant activities. Altogether, this category is 22% of the time. Sunnyside caregivers only spend 5% of their time here and MCC 8%.

# **NURSE TIME**

The nurse at Daystar is not a direct childcare worker. Her job is to do daily assessments, update care plans, do other paperwork, and provide guidance to the caregivers. This is reflected in her time profile, which is much different from the caregivers and volunteers. While caregivers spend 68% of their time directly with children (only 58% at Daystar), the comparable percent is just 25% for the nurse. The nurse spends over half her time in administration and planning activities.

# **NURSE % OF TIME EACH WEEK**



# **PLANNING**

In the planning category, nurse to staff discussions predominate. There are 111 of them per week, the highest activity in terms of frequency. The nurse discusses the daily care of each infant with the caregivers. This way they update the are plans and discuss the latest with the family and therapists. Each of these discussions takes 3.4 minutes. Note: the caregiver time does not show the same amount of time in an activity called "discuss issues with nurse". The reason is that the caregiver may have been doing something else while the nurse was speaking to her

#### **CHILD CARE**

Child care time is much lower than caregivers and focuses on one large activity, preparing and administering medication. This occurs 56 times per week, or just over 11 times per day. It

16

accounts for 5 out of the 8.5 hours spent in this area. Changing diapers, giving baths and other baby activities each represent 0.7 hours per week.

As a comparison, in 2005, nurses at the Cook County Children's Hospital in Fort Worth were observed conducting interventions with patients, and documenting their activities. Observers tracked 16 nurses conducting 5504 activities over a 10-day period. For those nurses, giving non-injectable medications averaged 3.7 minutes, while injectible medications averaged 6.4 minutes. The nurse at Daystar spends 5.4 minutes for each.

Hospital nurses also spend much less time per diaper change – just 2.3 minutes compared with 4.7 minutes at Daystar. When the Daystar nurse changes a diaper she is most likely doing the daily nursing assessment. This includes listening to their heart and lungs.

#### SUPERVISING PLAY

This category is very low for the nurse, and focuses on talking / interacting with children, accounting for 1.5 hours per week. By comparison, the caregivers at Daystar spend 4.4 hours on this.

#### SUPPORT ACTIVITIES

The nurse spends the same amount of time on support activities as the caregivers do, 6 hours per week. However, the nurse time is concentrated on meeting and greeting parents (2.7 hours) while the caregivers only spend 0.9 hours on this. The nurse is often the point of first contact for parents. However, there are up to 5 caregivers who engage in this activity – their cumulative total  $(5 \times 0.9 = 4.5 \text{ hours})$  surpasses the nurse.

#### **ADMINISTRATION**

This is the largest activity for the nurse, 17 hours per week. The time here is concentrated on two large activities chart documentation and paperwork. Together they account for 13.7 hours per week.

In corporate studies, across a variety of jobs, administrative activities usually don't surpass 25% of a typical work week. The Daystar nurse has a much higher orientation towards administration than almost any other job we have ever measured. 38% of her time is spent on administrative activities.

The average time spent on chart documentation is 4.5 minutes. The average on paperwork is 6.5 minutes. These are both well above the average amount of time on documentation from the Fort Worth nurses study. The average time spent on documentation there is just 3.4 minutes.

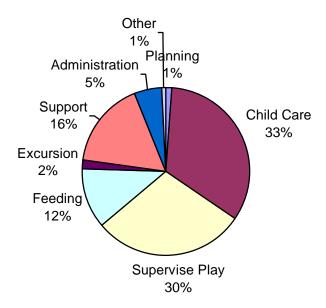
# **VOLUNTEER TIME**

Volunteers who work at Daystar have the highest percentage of time devoted to children, 77%.

11 volunteer sessions were tracked during the study. The average length of a volunteer shift was 2.7 hours, ranging from 79 minutes at the low end to 213 minutes on the high end.

Their time is not burdened by support or administrative activities. It is dedicated to direct child care or play supervision.

# **VOLUNTEER % OF TIME EACH WEEK**



**Planning** time is almost zero, with a very small amount of time spent on discussing issues with the nurse.

**Child care** represents one-third of the time. The majority of this, 11 out of 15 hours, is spent cuddling and holding infants. When the caregivers do this, the average duration is 3 minutes; for the volunteers, it is closer to 5 minutes.

Volunteers also do some diaper changing.

**Supervising play** is also a large category for the volunteers. They spend the equivalent of 8 hours per week talking and interacting with children. Again, the duration of these activities is much longer than it is for caregivers; 4 minutes for volunteers versus only 2 minutes for caregivers. Caregivers are usually caring for more than one infant.

**Feeding** is done for about the same time as caregivers except that volunteers focus more on bottle feeding while caregivers take care of solid food.

**Support activities** are relatively large for volunteers, with almost 6 hours per week spent on general pick up and cleaning up toys. Each occasion is quite long at 6 minutes.

Other time is very low because volunteers don't take lunch breaks or other long breaks.

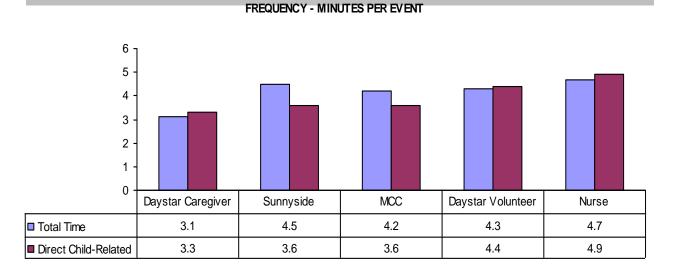
Finally **administration** is relatively low at just 5% of the time. This is largely chart documentation, which they do as quickly as caregivers at 2.4 minutes per event.

# **CONCENTRATION AND INTERRUPTIONS**

The TimeCorder allows us to measure how busy a job is, as determined by how many interruptions there are. From this, we can calculate how long a typical activity takes in minutes. In our corporate studies, among employees who track their own time using the TimeCorder device, the typical duration during a workday is 15 minutes. As shown below, the typical duration from this study ranges from 3-5 minutes. Providing care to children is a busy job with many interruptions.

Notwithstanding the need for children to be stimulated and to have new stimuli, a job that is too frantic with too many interruptions is unproductive. As Mary Ertruk points out, "...everyone is stressed. There are not adequate break times and we are not using people efficiently."

- The chart below shows that for overall time, shown in blue, the Daystar caregivers have a much "busier" schedule than other caregivers or the volunteers. (The shorter the bar, the "busier" the job." For Sunnyside and for MCC, one of the activities that contributes to a longer average duration is excursions. Long excursions of 49 minutes at Sunnyside and 25 minutes at MCC tend to pull the average duration higher when compared to Daystar where there are almost no excursions.
- The red bar shows the duration for child related activities only. Paperwork and discussions with staff may be short, but once one is with a child either involved with the categories we defined as child care, supervising play and feeding (i.e. excluding excursions) the results still show a more frenetic pace for Daystar caregivers than the other. The Daystar nurse and volunteers do the best, in terms of concentrated time.
- Interestingly, the nurse shows the longest duration. This is because her numerous paperwork events are longer than many child-related events done by the care givers and volunteers; her time is the least oriented towards direct involvement with the infants. Also, her typical duration is longer than it is for other nurses we have studied. This may be because of inefficient time management practices.

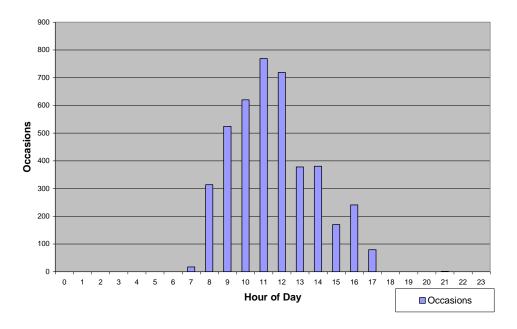


20\_\_

# TIME OF DAY

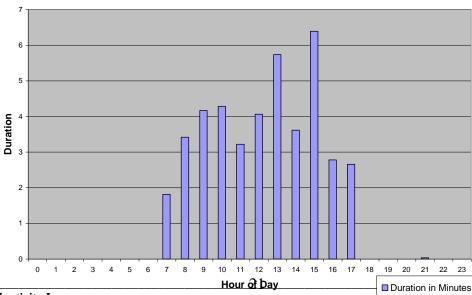
The TimeCorder devices gathered time stamp data that can be used to see patterns of activity throughout the day. The following chart shows the data for caregivers, volunteers and the nurse in all three locations combined. With a couple of exceptions, the day starts after 8:00 a.m. and finishes before 6:00 p.m. (Other time of day charts can be produced, though in some cases there are few data points.)

All Tasks



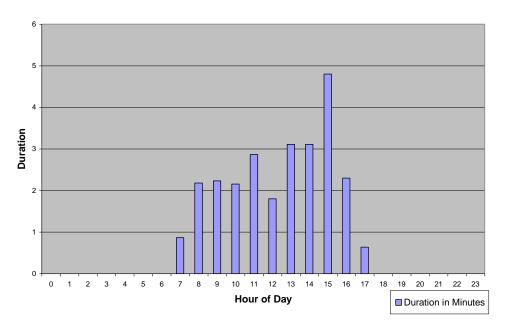
Below the pattern is shown for how long each activity lasts. Recall that overall duration for events ranges from 3-6 minutes. Below, there are spikes at 1:00 p.m. and 3:00 p.m. The 1:00 p.m. spike is because caregivers often take their breaks at that time. The 3:00 p.m. spike is skewered because talking and interacting with children and cuddling / holding them tends to go up between 3:00 and 4:00 p.m.



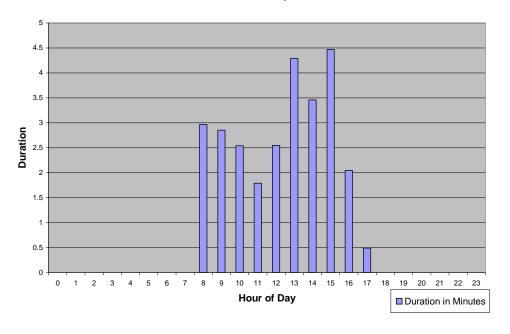


Pace Productivity Inc.

# Talk interact with children



# Cuddle hold carry soothe



# CONCLUSIONS

# Caregivers at Daystar:

- Work short shifts, resulting in frequent daily turnover of caregivers
- Have a very hectic schedule as defined by frequency of activities
- Spend a considerable amount of time in non-infant activities (miscellaneous, documentation, other non-infant)
- Rarely go on excursions, hence get little variety in their day
- Are not able to turn their low break time into greater child care time

# The nurse at Daystar:

- Is overwhelmed by administrative tasks
- Her time for each documentation and paperwork event is very long.

# **Volunteers at Daystar:**

• Spend a large portion of their time with children, but mostly cuddling them instead of engaging them in planned activities.

# **Infants at Daystar:**

- Spend more time in unsupervised play and less time in scheduled activities than other day cares.
- Are not "burdened" by an excessive amount of time spent in special care activities
- Are only benefiting from about half of their scheduled therapy time.

# RECOMMENDATIONS

- Daystar provides excellent quality day care for medically fragile infants. However, there are a number of adjustments that need to be made before the model can be expanded to other centers:
- 1. Staff should work full-length shifts rather than the shorter 5-hour shifts. While the short shifts for caregivers free up lunch and personal time, this is not translating into more time spent with infants.
- 2. Add excursions to the daily program. Both Sunnyside and MCC spend much more time providing daily outings than Daystar does. The staff benefit from having a different type of activity to add variety, and the infants benefit from having sunshine, fresh air, exercise, and a variety of new stimuli. See appendix for details.
- 3. Create more scheduled events. See appendix for details.
- 4. Determine how best to use the nurse and to conduct the functions she currently is responsible for.
- 5. Improve scheduling and time management so that infants get the full benefit of the allotted time for therapy.

A

# **DATA EXHIBITS**

# The first set of exhibits is each one page long

- Infants All Locations
- Daystar infants
- MCC infants
- Sunnyside infants

# The following exhibits are two pages each, because of the number of activities

- Caregiver All locations
- Daystar caregiver
- Daystar nurse
- Daystar volunteer
- MCC caregiver
- Sunnyside caregiver

A typical table shows the average for a group of individuals, grouped together as identified on the exhibit.

Looking at a typical table, the list of activities for infants or for caregivers is on the left. The activities have been grouped into various categories we set up.

The next column shows hours per week. Results are pro-rated to show an average week.

The "Occasions" column shows the number of times someone engages in each activity. It indicates the frequency that each activity occurs. Like the other columns, it is pro-rated to show a typical week.

Duration (Minutes) is a calculated figure. It is the total number of hours that an employee spends on an activity, divided by the number of occasions, then multiplied by 60. It is the average length of each "session", in minutes. If participants were interrupted a lot, the duration time will be very low.

25

Weekly Averages: Infant				
All Centers	Hours	Percent	Occas-	Duration
	per Week	of Time	ions	(Minutes)
Scheduled Activities				
Being massaged	0.1	0%	1	5.9
Being read to	1.2	3%	14	5.3
Doing art	0.1	0%	1	13.6
Music class, dance class	1.3	3%	4	18.7
Programmed play	1.1	2%	17	4.0
Therapy	0.5	1%	3	9.2
Subtotal	4.3	10%	39	V
Meals		10,0		
Being tube fed	0.2	0%	1	9.6
Drink bottle independently	0.7	2%	15	2.8
Eating solids	2.2	5%	19	6.8
Feed formula from bottle	0.4	1%	4	5.5
Feeding self solids	2.0	5%	13	9.5
Subtotal	5.5	12%	53	0.0
Sleep				
Almost sleeping, being soothed	0.9	2%	8	7.2
Miscellaneous	0.2	0%	11	1.2
Sleeping and napping	10.5	23%	11	59.0
Subtotal	11.7	26%	30	
Special Care				
Apply braces, splints	0.0	0%	1	0.5
Get into adaptive equipment	0.0	0%	0	0.1
Getting weighed	0.0	0%	0	0.0
Receiving medication	0.1	0%	2	3.7
Subtotal	0.1	0%	3	
Play				
Independent play	13.8	31%	114	7.3
Subtotal	13.8	31%	114	
Other Child care				
Arrive depart with parents	0.1	0%	4	1.7
Being cuddled, held, consoled	2.2	5%	40	3.3
Being dressed, undressed	0.4	1%	12	2.2
Daily assessment	0.1	0%	1	4.0
Diaper change	0.9	2%	18	3.1
Interact with other children	0.4	1%	24	1.0
Outdoor excursions	5.2	12%	10	32.6
Taking a bath	0.1	0%	4	1.7
Subtotal	9.5	21%	113	
Total	45.0	100%	352	7.7

Weekly Averages: Infant	
Daystar Hours Percent Occas- Durat	ion
per Week of Time ions (Minut	es)
Scheduled Activities .	•
Being massaged 0.4 1% 2 10.6	3
Being read to 0.1 0% 4 2.1	
Doing art 0.0 0% 0 0.0	
Music class, dance class 0.8 2% 2 29.3	3
Programmed play 0.9 2% 23 2.3	
Therapy 1.3 3% 5 13.8	3
Subtotal 3.4 8% 36	
Meals	
Being tube fed 0.2 0% 1 14.7	7
Drink bottle independently 0.1 0% 5 1.5	
Eating solids 1.2 3% 10 7.0	
Feed formula from bottle 1.7 4% 14 7.2	
Feeding self solids 0.2 0% 2 8.6	
Subtotal 3.4 8% 31	
Sleep	
Almost sleeping, being soothed 1.5 3% 14 6.4	
Miscellaneous 0.0 0% 0 0.0	
Sleeping and napping 10.2 23% 20 30.2	2
Subtotal 11.7 26% 34	
Special Care	
Apply braces, splints 0.1 0% 4 0.8	
Get into adaptive equipment 0.0 0% 0 0.0	
Getting weighed 0.0 0% 0 0.0	
Receiving medication 0.6 1% 5 6.2	
Subtotal 0.6 1% 9	
Play	
Independent play 16.9 38% 115 8.8	
Subtotal 16.9 38% 115	
Other Child care Arrive depart with parents 0.2 0% 5 2.2	
Being cuddled, held, consoled 7.1 16% 97 4.4	
Being dressed, undressed 0.3 1% 9 1.9	
Daily assessment 0.0 0% 0 0.0	
Diaper change 0.9 2% 20 2.6	
Interact with other children 0.4 1% 11 2.0	
Outdoor excursions 0.0 0% 0 0.0	
Taking a bath 0.2 0% 3 3.7	
Subtotal 9.0 20% 145	
Total 45.0 100% 371 7.3	<b>,</b>

Weekly Averages: Infant				
MCC	Hours	Percent	Occas-	Duration
	per Week	of Time	ions	(Minutes)
Scheduled Activities	-			
Being massaged	0.1	0%	1	7.2
Being read to	0.4	1%	9	2.7
Doing art	0.0	0%	0	6.6
Music class, dance class	0.5	1%	6	5.3
Programmed play	0.5	1%	20	1.6
Therapy	0.9	2%	7	7.9
Subtotal	2.5	6%	43	
Meals				
Being tube fed	0.5	1%	2	18.5
Drink bottle independently	0.4	1%	12	1.8
Eating solids	1.4	3%	9	9.0
Feed formula from bottle	0.5	1%	7	4.3
Feeding self solids	4.5	10%	21	12.7
Subtotal	7.2	16%	50	
Sleep				
Almost sleeping, being soothed	1.6	3%	14	6.8
Miscellaneous	0.2	1%	14	1.0
Sleeping and napping	8.1	18%	15	33.0
Subtotal	9.9	22%	42	
Special Care				
Apply braces, splints	0.0	0%	1	0.0
Get into adaptive equipment	0.0	0%	1	0.1
Getting weighed	0.0	0%	0	0.0
Receiving medication	0.1	0%	4	2.4
Subtotal	0.1	0%	5	
Play				
Independent play	12.9	29%	125	6.2
Subtotal	12.9	29%	125	
Other Child care				
Arrive depart with parents	0.1	0%	3	1.2
Being cuddled, held, consoled	3.0	7%	60	3.0
Being dressed, undressed	0.1	0%	4	2.3
Daily assessment	0.1	0%	2	4.2
Diaper change	1.1	2%	19	3.4
Interact with other children	8.0	2%	34	1.5
Outdoor excursions	7.0	15%	14	30.7
Taking a bath	0.3	1%	11	1.5
Subtotal	12.4	28%	145	
Total	45.0	100%	411	6.6

Weekly Averages: Infant				
Sunnyside	Hours	Percent	Occas-	<b>Duration</b>
-	per Week	of Time	ions	(Minutes)
Scheduled Activities	•			,
Being massaged	0.0	0%	1	0.1
Being read to	2.1	5%	20	6.3
Doing art	0.2	0%	1	16.1
Music class, dance class	2.1	5%	4	31.5
Programmed play	1.6	3%	12	7.7
Therapy	0.0	0%	0	0.0
Subtotal	6.0	13%	38	
Meals				
Being tube fed	0.0	0%	1	0.6
Drink bottle independently	1.1	2%	20	3.3
Eating solids	3.0	7%	29	6.3
Feed formula from bottle	0.0	0%	0	0.0
Feeding self solids	0.6	1%	9	4.2
Subtotal	4.8	11%	60	
Sleep				
Almost sleeping, being soothed	0.4	1%	2	11.1
Miscellaneous	0.3	1%	12	1.4
Sleeping and napping	12.4	28%	5	140.9
Subtotal	13.1	29%	19	
Special Care				
Apply braces, splints	0.0	0%	0	0.0
Get into adaptive equipment	0.0	0%	0	0.0
Getting weighed	0.0	0%	0	0.0
Receiving medication	0.0	0%	0	0.0
Subtotal	0.0	0%	0	
Play				
Independent play	13.8	31%	105	7.9
Subtotal	13.8	31%	105	
Other Child care				
Arrive depart with parents	0.1	0%	5	1.7
Being cuddled, held, consoled	0.4	1%	12	2.0
Being dressed, undressed	0.7	1%	18	2.2
Daily assessment	0.0	0%	0	3.4
Diaper change	0.8	2%	17	3.0
Interact with other children	0.1	0%	21	0.3
Outdoor excursions	5.2	12%	9	34.7
Taking a bath	0.0	0%	0	0.0
Subtotal	7.4	16%	81	
Total	45.0	100%	303	8.9

Weekly Averages: Caregiver All Centers	Hours per Week	Percent of Time	Occas- ions	Duration (Minutes)
Planning	pei week	OI IIIIIE	10113	(williates)
Care plan updates	0.0	0%	0	0.0
Coach, manage, develop staff	0.0	0%	Ö	0.0
Daily assessment	0.0	0%	1	2.0
Discuss issues with nurse	0.1	0%	3	1.6
Nurse to staff discussions	0.0	0%	0	0.0
Share info with lunch staff	0.1	0%	1	2.6
Supervision and followup	0.0	0%	1	1.3
Training - staff - new associates		0%	0	0.0
Subtotal	0.0	<b>0%</b>	6	0.0
Child care	0.2	0 70	· ·	
Arts and crafts	0.1	0%	2	3.2
Change diaper	2.0	4%	32	3.8
Change diaper	0.0	0%	0	1.4
Circle time - group activity	0.6	1%	3	11.2
Console crying baby	0.3	1%	8	2.3
Cuddle hold infant	2.2	5%	65	2.0
Dance instruction	0.2	0%	2	4.7
Dress for going outdoors	0.2	2%	9	5.3
Give bath	0.8	0%	4	1.4
Massage infant	0.1	0%	1	4.8
Medication preparation, adminis	_	0%	4	1.3
Music instruction	0.3	1%	3	6.7
Nap time routine	4.2	9%	26	9.8
Nebulizer prep, administer	0.1	0%	1	9.6 7.4
Other baby activities	0.6	1%	15	2.5
Reading to children	1.9	4%	26	4.3
Suctioning	0.0	0%	0	0.0
<u> </u>	0.0	0%	1	4.8
Therapy - attend, observe	13.6	30%	202	4.0
Subtotal Supervising Play / Interaction	13.0	30 /6	202	
Cognitive play	0.1	0%	4	1.2
Fine motor play	0.1	0%	7	1.4
Gross motor play	0.2	1%	, 12	2.0
Play with children	5.1	11%	82	3.7
Sensory play	0.3	1%	2	7.9
Talk / interact with children	2.5	6%	80	1.9
	<b>8.4</b>	1 <b>9%</b>	1 <b>86</b>	1.9
Subtotal Feeding	0.4	19/0	100	
Bottle feeding	0.6	1%	17	2.3
Feed solid food	2.2	5%	23	2.3 5.8
	2.2 <b>2.8</b>	5% <b>6%</b>	23 <b>40</b>	5.0
Subtotal Excursions	2.0	<b>0</b> 70	40	
	6.1	120/	10	27 1
Outdoor walk	6.1 <b>6.1</b>	13%	10 <b>10</b>	37.1
Support Activities	0.1	13%	10	
Support Activities				

Calls to parents	0.0	0%	1	2.7
General pick up clean toys	1.7	4%	38	2.7
Laundry	0.2	0%	1	8.1
Meet, greet parents	8.0	2%	20	2.6
Order, distribute, put away suppli	es 0.0	0%	0	6.6
Prepare bottle	0.3	1%	13	1.3
Prepare Stock Area	0.1	0%	1	5.0
Prepare, clean up solid food	1.7	4%	36	2.8
Tube feeding - set up, clean up	0.2	0%	6	2.3
Subtotal	5.0	11%	116	
Other				
Personal time including lunch	4.8	11%	13	22.8
Subtotal	4.8	11%	13	
Administration				
Chart documentation	2.1	5%	43	2.9
Meet with supervisor / manager	0.0	0%	1	2.8
Miscellaneous	1.4	3%	33	2.6
Other Non Client Activities	0.4	1%	7	3.2
Paperwork & general administrati	ion0.1	0%	2	2.8
Parking	0.0	0%	0	6.1
Provide tours, conduct PR	0.0	0%	0	0.1
Shift change report	0.0	0%	0	1.0
Subtotal	4.0	9%	86	
Total	45.0	100%	658	4.1

Weekly Averages: Caregiver				
Daystar	Hours	Percent	Occas-	Duration
	per Week	of Time	ions	(Minutes)
Planning	-			,
Care plan updates	0.0	0%	0	0.0
Coach, manage, develop staff	0.0	0%	0	0.0
Daily assessment	0.0	0%	1	2.0
Discuss issues with nurse	0.4	1%	15	1.4
Nurse to staff discussions	0.0	0%	0	0.0
Share info with lunch staff	0.3	1%	7	2.6
Supervision and followup	0.0	0%	3	0.9
Training - staff - new associates	0.0	0%	0	0.0
Subtotal	0.7	2%	25	
Child care				
Arts and crafts	0.0	0%	0	0.0
Change diaper	2.2	5%	34	3.8
Change feeding tube	0.1	0%	2	1.4
Circle time - group activity	0.0	0%	0	0.0
Console crying baby	0.6	1%	15	2.4
Cuddle hold infant	5.2	12%	108	2.9
Dance instruction	0.0	0%	0	0.0
Dress for going outdoors	0.2	0%	4	3.1
Give bath	0.0	0%	0	0.0
Massage infant	0.1	0%	3	3.1
Medication preparation, administ		1%	19	1.4
Music instruction	0.3	1%	5	4.4
Nap time routine	1.3	3%	22	3.6
Nebulizer prep, administer	0.7	2%	6	7.4
Other baby activities	0.2	0%	9	1.1
Reading to children	0.2	1%	6	3.6
Suctioning	0.0	0%	0	0.0
Therapy - attend, observe	0.0	1%	8	4.8
	12.4	27%	2 <b>41</b>	4.0
Supervising Play / Interaction	12.4	21 /0	<b>44</b> I	
Supervising Play / Interaction Cognitive play	0.1	0%	5	1.6
Fine motor play	0.1	0%	2	2.6
	0.1	0 % 2%	∠ 11	2.0 4.7
Gross motor play	2.8	2% 6%	32	4.7 5.1
Play with children			32 1	
Sensory play	0.0	0%	=	1.9
Talk / interact with children	4.4	10%	128	2.0
Subtotal	8.2	18%	178	
Feeding	4.0	20/	40	4.0
Bottle feeding	1.3	3%	19	4.0
Feed solid food	3.5	8%	22	9.5
Subtotal	4.8	11%	41	
Excursions	4.0	00/	4	40.7
Outdoor walk	1.0	2%	4	16.7
Subtotal	1.0	2%	4	

Support Activities				
Calls to parents	0.0	0%	1	1.0
General pick up clean toys	1.3	3%	27	3.0
Laundry	0.5	1%	5	6.2
Meet, greet parents	0.9	2%	33	1.7
Order, distribute, put away suppli	es 0.0	0%	0	0.0
Prepare bottle	0.5	1%	20	1.5
Prepare Stock Area	0.0	0%	1	3.7
Prepare, clean up solid food	1.6	4%	36	2.7
Tube feeding - set up, clean up	1.2	3%	32	2.3
Subtotal	6.1	14%	153	
Other				
Personal time including lunch	2.0	4%	10	12.7
Subtotal	2.0	4%	10	
Administration				
Chart documentation	3.2	7%	73	2.7
Meet with supervisor / manager	0.0	0%	0	0.0
Miscellaneous	4.2	9%	87	2.9
Other Non Client Activities	2.2	5%	41	3.2
Paperwork & general administrati	on0.0	0%	1	1.4
Parking	0.2	0%	2	6.1
Provide tours, conduct PR	0.0	0%	1	0.1
Shift change report	0.0	0%	1	1.4
Subtotal	9.8	22%	205	
Total	45.0	100%	858	3.1

Weekly Averages: NURSE				
Daystar	Hours	Percent	Occas-	Duration
-	per Week	of Time	ions	(Minutes)
Planning	•			(
Care plan updates	0.0	0%	0	0.0
Coach, manage, develop staff	0.0	0%	0	0.0
Daily assessment	2.8	6%	30	5.6
Discuss issues with nurse	0.0	0%	1	1.4
Nurse to staff discussions	6.3	14%	111	3.4
Share info with lunch staff	0.1	0%	1	4.1
Supervision and followup	0.0	0%	0	0.0
Training - staff - new associates	0.1	0%	2	2.4
Subtotal	9.3	21%	146	۷.٦
Child care	0.0	2170	140	
Arts and crafts	0.0	0%	0	0.0
Change diaper	0.7	2%	9	4.7
Change feeding tube	0.0	0%	0	0.0
Circle time - group activity	0.0	0%	0	0.0
Console crying baby	0.0	0%	0	0.0
Cuddle hold infant	0.4	1%	8	3.3
Dance instruction	0.4	0%	0	0.0
	0.0	0% 0%	2	
Dress for going outdoors Give bath	0.2	0% 2%	2	5.1 18.6
			1	
Massage infant	0.0	0%		0.9
Medication preparation, administ		11%	56	5.4
Music instruction	0.4	1%	2	11.5
Nap time routine	0.0	0%	0	0.0
Nebulizer prep, administer	0.0	0%	1	1.6
Other baby activities	0.7	2%	8	5.1
Reading to children	0.0	0%	0	0.0
Suctioning	0.0	0%	0	0.0
Therapy - attend, observe	0.2	0%	1	10.3
Subtotal	8.5	19%	92	
Supervising Play / Interaction				
Cognitive play	0.0	0%	0	0.0
Fine motor play	0.0	0%	0	0.0
Gross motor play	0.0	0%	0	0.0
Play with children	0.2	0%	2	4.1
Sensory play	0.0	0%	1	0.2
Talk / interact with children	1.5	3%	31	2.8
Subtotal	1.6	4%	35	
Feeding				
Bottle feeding	0.0	0%	0	0.0
Feed solid food	0.8	2%	7	6.8
Subtotal	0.8	2%	7	
Excursions				
Outdoor walk	0.2	0%	1	8.5
Subtotal	0.2	0%	1	
	•			

Support Activities				
Calls to parents	0.1	0%	2	2.6
General pick up clean toys	1.4	3%	33	2.5
Laundry	0.0	0%	0	0.0
Meet, greet parents	2.7	6%	29	5.5
Order, distribute, put away supplie	es 0.3	1%	3	5.7
Prepare bottle	0.3	1%	9	1.7
Prepare Stock Area	0.0	0%	3	0.8
Prepare, clean up solid food	0.3	1%	9	2.2
Tube feeding - set up, clean up	1.0	2%	19	3.2
Subtotal	6.1	14%	108	
Other				
Personal time including lunch	1.6	3%	6	16.0
Subtotal	1.6	3%	6	
Administration				
Chart documentation	7.2	16%	95	4.5
Meet with supervisor / manager	0.0	0%	1	0.5
Miscellaneous	8.0	2%	16	2.8
Other Non Client Activities	1.2	3%	5	16.0
Paperwork & general administrati	on6.5	15%	60	6.5
Parking	0.0	0%	0	0.0
Provide tours, conduct PR	0.0	0%	0	0.0
Shift change report	1.1	3%	3	19.6
Subtotal	16.9	38%	181	
Total	45.0	100%	576	4.7

Weekly Averages: Volunteer				
Daystar	Hours	Percent	Occas-	Duration
	per Week	of Time	ions	(Minutes)
Planning				
Care plan updates	0.0	0%	0	0.0
Coach, manage, develop staff	0.0	0%	0	0.0
Daily assessment	0.0	0%	0	0.0
Discuss issues with nurse	0.5	1%	11	2.6
Nurse to staff discussions	0.0	0%	1	1.1
Share info with lunch staff	0.0	0%	0	0.0
Supervision and followup	0.1	0%	3	1.2
Training - staff - new associates	0.0	0%	0	0.0
Subtotal	0.5	1%	15	
Child care				
Arts and crafts	0.0	0%	0	0.0
Change diaper	1.7	4%	24	4.2
Change feeding tube	0.0	0%	0	0.0
Circle time - group activity	0.7	2%	3	16.2
Console crying baby	0.1	0%	4	0.9
Cuddle hold infant	11.1	25%	139	4.8
Dance instruction	0.0	0%	0	0.0
Dress for going outdoors	0.1	0%	3	1.4
Give bath	0.4	1%	3	9.1
Massage infant	0.0	0%	0	0.0
Medication preparation, adminis		0%	0	0.0
Music instruction	0.0	0%	Ö	0.0
Nap time routine	0.3	1%	7	2.6
Nebulizer prep, administer	0.0	0%	1	2.2
Other baby activities	0.2	1%	14	1.1
Reading to children	0.2	1%	7	2.9
Suctioning	0.0	0%	0	0.0
Therapy - attend, observe	0.0	0%	0	0.0
Subtotal	1 <b>5.0</b>	<b>33%</b>	<b>204</b>	0.0
Supervising Play / Interaction	13.0	<b>33</b> /0	204	
Cognitive play	0.0	0%	0	0.0
Fine motor play	0.9	2%	19	2.9
Gross motor play	0.3	2%	14	3.1
Play with children	3.3	7%	45	4.4
Sensory play	0.2	0%	8	1.3
Talk / interact with children	8.1	18%	117	4.2
	13.3	29%	203	4.2
Subtotal	13.3	2970	203	
Feeding	2.5	8%	20	5.3
Bottle feeding	3.5		39 40	
Feed solid food	1.7 5.2	4% 449/	10 <b>40</b>	10.6
Subtotal	5.2	11%	49	
Excursions Outdoor walk	0.0	20/	А	44.0
Outdoor walk	0.8	2%	4	11.8
Subtotal	8.0	2%	4	

Support Activities				
Calls to parents	0.0	0%	0	0.0
General pick up clean toys	5.6	12%	54	6.2
Laundry	0.0	0%	1	0.5
Meet, greet parents	1.0	2%	11	5.5
Order, distribute, put away suppli	es 0.0	0%	0	0.0
Prepare bottle	0.3	1%	11	1.5
Prepare Stock Area	0.0	0%	3	1.0
Prepare, clean up solid food	0.5	1%	8	3.4
Tube feeding - set up, clean up	0.0	0%	0	0.0
Subtotal	7.4	16%	88	
Other				
Personal time including lunch	0.4	1%	8	2.7
Subtotal	0.4	1%	8	
Administration				
Chart documentation	1.4	3%	34	2.4
Meet with supervisor / manager	0.2	0%	4	2.2
Miscellaneous	8.0	2%	15	3.2
Other Non Client Activities	0.1	0%	3	1.4
Paperwork & general administrati	on0.1	0%	3	2.0
Parking	0.0	0%	0	0.0
Provide tours, conduct PR	0.0	0%	0	0.0
Shift change report	0.0	0%	0	0.0
Subtotal	2.4	5%	58	
Total	45.0	100%	630	4.3

Weekly Averages: Caregiver MCC	Hours	Percent		Duration
Planning	per Week	of Time	ions	(Minutes)
Care plan updates	0.0	0%	0	0.0
Coach, manage, develop staff	0.0	0%	0	0.0
Daily assessment	0.0	0%	1	8.0
Discuss issues with nurse	0.1	0%	1	3.1
Nurse to staff discussions	0.0	0%	0	0.0
Share info with lunch staff	0.0	0% 0%	0	0.0
	0.0	0% 0%		0.0
Supervision and followup		0% 0%	0 0	
Training - staff - new associates	0.0 <b>0.1</b>	0% <b>0%</b>	1	0.0
Subtotal Child care	<b>U.</b> 1	070	ı	
	0.1	00/	1	9.4
Arts and crafts	_	0% 5%	=	
Change diaper	2.2	5%	39	3.4
Change feeding tube	0.0	0%	0	0.0
Circle time - group activity	0.0	0%	0	0.0
Console crying baby	0.2	1%	9	1.5
Cuddle hold infant	3.0	7%	76	2.4
Dance instruction	0.0	0%	0	1.6
Dress for going outdoors	0.2	0%	7	1.7
Give bath	0.4	1%	16	1.4
Massage infant	0.0	0%	0	0.0
Medication preparation, adminis		0%	0	2.2
Music instruction	0.2	0%	3	3.8
Nap time routine	4.8	11%	41	7.0
Nebulizer prep, administer	0.0	0%	0	0.0
Other baby activities	2.3	5%	49	2.7
Reading to children	0.3	1%	6	3.4
Suctioning	0.0	0%	0	0.0
Therapy - attend, observe	0.0	0%	0	0.0
Subtotal	13.7	31%	248	
Supervising Play / Interaction				
Cognitive play	0.0	0%	0	0.0
Fine motor play	0.0	0%	1	0.7
Gross motor play	0.2	1%	5	2.9
Play with children	0.6	1%	8	4.5
Sensory play	0.9	2%	5	10.3
Talk / interact with children	4.8	11%	103	2.8
Subtotal	6.5	14%	122	
Feeding				
Bottle feeding	0.7	2%	7	6.5
Feed solid food	1.0	2%	16	3.8
Subtotal	1.7	4%	22	
Excursions				
Outdoor walk	6.1	14%	15	25.2
Subtotal	6.1	14%	15	

Support Activities				
Calls to parents	0.1	0%	2	3.1
General pick up clean toys	4.4	10%	80	3.3
Laundry	0.4	1%	2	11.1
Meet, greet parents	1.2	3%	17	4.3
Order, distribute, put away suppli	es 0.1	0%	1	6.6
Prepare bottle	0.4	1%	15	1.7
Prepare Stock Area	0.0	0%	0	0.0
Prepare, clean up solid food	1.8	4%	32	3.4
Tube feeding - set up, clean up	0.0	0%	0	0.0
Subtotal	8.4	19%	149	
Other				
Personal time including lunch	4.8	11%	17	16.7
Subtotal	4.8	11%	17	
Administration				
Chart documentation	2.5	6%	46	3.3
Meet with supervisor / manager	0.0	0%	0	0.0
Miscellaneous	1.0	2%	16	3.8
Other Non Client Activities	0.0	0%	0	0.0
Paperwork & general administrati	on0.1	0%	1	4.7
Parking	0.0	0%	0	0.0
Provide tours, conduct PR	0.0	0%	0	0.0
Shift change report	0.0	0%	0	0.5
Subtotal	3.6	8%	63	
Total	45.0	100%	637	4.2

Weekly Averages: Caregiver Sunnyside	Hours	Percent		Duration
Planning	per Week	of Time	ions	(Minutes)
Care plan updates	0.0	0%	0	0.0
Coach, manage, develop staff	0.0	0%	0	0.0
Daily assessment	0.0	0%	1	0.0
Discuss issues with nurse	0.0	0%	0	0.1
Nurse to staff discussions	0.0	0%	0	0.0
Share info with lunch staff	0.0	0%	0	0.0
Supervision and followup	0.0	0%	1	1.7
Training - staff - new associates		0%	0	0.0
Subtotal	0.0	0%	2	
Child care	0.4	00/	0	0.0
Arts and crafts	0.1	0%	3	2.6
Change diaper	1.8	4%	28	4.0
Change feeding tube	0.0	0%	0	0.0
Circle time - group activity	1.1	2%	6	11.2
Console crying baby	0.2	1%	5	2.8
Cuddle hold infant	0.8	2%	45	1.0
Dance instruction	0.3	1%	4	4.8
Dress for going outdoors	1.2	3%	11	6.6
Give bath	0.0	0%	0	0.0
Massage infant	0.1	0%	1	6.5
Medication preparation, adminis		0%	1	0.1
Music instruction	0.3	1%	2	11.5
Nap time routine	4.8	11%	19	15.1
Nebulizer prep, administer	0.0	0%	0	0.0
Other baby activities	0.0	0%	0	0.0
Reading to children	3.2	7%	43	4.4
Suctioning	0.0	0%	0	0.0
Therapy - attend, observe	0.0	0%	0	0.0
Subtotal	14.0	31%	167	
Supervising Play / Interaction				
Cognitive play	0.1	0%	6	1.1
Fine motor play	0.2	1%	11	1.3
Gross motor play	0.3	1%	16	1.2
Play with children	8.0	18%	135	3.6
Sensory play	0.0	0%	1	2.9
Talk / interact with children	8.0	2%	52	0.9
Subtotal	9.5	21%	221	
Feeding				
Bottle feeding	0.4	1%	21	1.1
Feed solid food	2.3	5%	27	5.3
Subtotal	2.7	6%	47	
Excursions				
Outdoor walk	7.7	17%	9	48.9
Subtotal	7.7	17%	9	

Support Activities				
Calls to parents	0.0	0%	0	0.0
General pick up clean toys	0.5	1%	21	1.3
Laundry	0.0	0%	0	0.0
Meet, greet parents	0.6	1%	17	2.2
Order, distribute, put away supplied	es 0.0	0%	0	0.0
Prepare bottle	0.1	0%	10	0.9
Prepare Stock Area	0.2	0%	2	5.2
Prepare, clean up solid food	1.6	4%	37	2.6
Tube feeding - set up, clean up	0.0	0%	0	0.0
Subtotal	3.0	7%	87	
Other				
Personal time including lunch	5.7	13%	11	30.4
Subtotal	5.7	13%	11	
Administration				
Chart documentation	1.4	3%	31	2.8
Meet with supervisor / manager	0.0	0%	1	2.8
Miscellaneous	0.7	1%	23	1.8
Other Non Client Activities	0.0	0%	0	0.0
Paperwork & general administration	on0.1	0%	3	2.7
Parking	0.0	0%	0	0.0
Provide tours, conduct PR	0.0	0%	0	0.0
Shift change report	0.0	0%	0	0.0
Subtotal	2.3	5%	57	
Total	45.0	100%	602	4.5