Stimulus Preference Assessments
By Jill Grattan & MaryAnn Demchak

Stimulus preference assessment (SPA) is a term used to describe several procedures to identify stimuli (e.g., toys, activities, edibles, etc.) that can, potentially, function as reinforcers (e.g., Daly III et al., 2009). To understand stimulus preference assessment, first it is important to understand what is meant by “stimulus.” The word “stimulus” is used to refer to any “thing” or “event.” When we talk about stimulus preference assessment, a stimulus can be a toy, an activity, an edible, or many other things or events. The process of conducting a stimulus preference assessment involves assessing to determine which particular stimuli (plural of stimulus) are preferred by the individual. Identifying preferred stimuli can help us to identify reinforcers. Reinforcers are something (e.g., toy, activity, praise) that is provided following a target behavior that maintains or increases the probability of the target behavior occurring in the future. ‘Target behavior’ is the behavior that you are trying to increase or maintain.

Reinforcers that are identified through stimulus preferences assessments have been shown to be more effective at increasing target behaviors than using stimuli that are randomly or subjectively selected (Vollmer, Marcus, & LeBlanc, 1994). Numerous studies have demonstrated that SPAs are more accurate in identifying items that may function as reinforcers for a particular student than stimuli arbitrarily selected by teachers, caregivers, or staff (e.g., early intervention team members, staff in a residential facility, etc.) (Green, Middleton, & Reid, 2000; Green et al., 1988; Reid, Everson, & Green, 1999).

SPAs can be divided into two general categories: (1) approach-based and (2) engagement-based assessments (e.g., DeLeon, Iwata, Conners, & Wallace, 1999; Fisher, Piazza, Bowman, Hagopian, et al., 1992):

- **Approach based assessments:** data are collected on whether or not the individual approaches each stimulus (e.g., toy, edible, activity) presented. If the individual approaches, he/she is typically allowed to interact with the stimulus (toy, activity, edible, etc.) for a brief period of time (e.g., 30 seconds).

- **Engagement based assessments:** data are collected on the duration of time an individual interacts with a stimulus (e.g., toy, activity, etc.).

- **Successive Choice SPA:** This third type of assessment combines features of both approach and engagement based assessments and is recommended for individuals with profound, multiple disabilities. It will be discussed in detail in a future newsletter.
Preliminary Steps to Conduct a Stimulus Preference Assessment

1. **Gather ideas** and create a list of stimuli the individual may like (e.g., toys, games, activities, food, etc.) across a wide variety of sensory categories (e.g., visual, tactile, auditory, olfactory) from observations, parent, caregiver, and IFSP / IEP team member reports.

   **Important Note:** Do not combine edible and leisure items in the same array – conduct separate preference assessments for edibles and leisure items.

2. **Match the stimuli presentation to the individual’s skills.** For example, presenting photos or line drawings of activities may be appropriate for an individual who can match photos or line drawings to the corresponding object; however, photos or line drawings are not appropriate for an individual who does not demonstrate matching skills. In this case, presentation of the actual objects would be more appropriate. It is also important to be sure that the stimuli presentation is appropriate to the individual’s vision. If the individual’s vision impairment is such that he/she cannot see photos or line drawings, then the stimuli need to be presented in a tactile manner (e.g., objects).

3. **Determine the purpose** of the preference assessment and match the type of assessment to the purpose – Kodak, Fisher, Kelley, and Kisamore (2009) suggest:
   a. **Approach-based assessments** are appropriate for determining stimuli for situations in which stimuli will be provided frequently for brief periods of time (e.g., while teaching) or for determining preferences of some individuals with limited vision and hearing.
   - The IFSP / IEP team should determine if the individual’s vision, hearing, and motor abilities are sufficient for an approach-based assessment (e.g., looking at or reaching for an object to determine if he/she is interested in it) or if an engagement-based assessment (timing how long the individual interacts with an object) is more appropriate.
   - An approach-based assessment may not be appropriate for individuals who engage in problem behavior when asked to give an object back to a supervising adult. In this case, engagement-based assessments may be more appropriate.
   b. **Engagement-based assessments** may be more effective in identifying stimuli that will function as reinforcers when the individual can engage with the object for longer periods of time (e.g., teaching leisure skills).

**Conducting an Approach-based SPA**

**Approach-based assessments** – An individual can approach an object in many ways; for example: reaching toward an object, looking at an object, smiling at an object, etc.

There are several types of approach-based assessments (each of which will be discussed in detail below):
1. Paired Choice (or forced choice, or paired stimulus)
2. Multiple Stimulus Without Replacement
3. Multiple Stimulus

**Paired Choice (PS)** (Fischer et al., 1992). This Paired Choice type of SPA takes the longest amount of time to conduct. However, it identifies multiple stimuli that may function as reinforcers and a strong hierarchical ranking of preferences.

1. Gather objects (e.g., toys, edibles, activities, etc.)
2. Present two objects to the individual
3. Allow the individual to choose one object and play with the object (e.g., toy, activity) for 10-30 seconds. Write down which object was selected.

   - If the individual requires longer processing times, he/she may need to interact with the object for a longer period of time (e.g., 30 seconds)
4. Once the individual makes a choice, immediately remove the object that was not chosen.

5. Repeat step ‘2-4’ until all objects (6-12) been presented in all combinations (e.g., object A has been presented with B, C and D; object B has been presented with objects C, D, and A, etc.).

6. Record the individual’s choices in the order selected.

7. Conduct this assessment using the same stimuli (objects) several times; record the individual’s choices each time.

8. Recording the individual’s choices in this way will provide a hierarchy of preferences. Higher ranked objects may function as stronger reinforcers.

**Multiple Stimulus Without Replacement (MSWO)** (DeLeon and Iwata, 1996). This type of SPA may be best for identifying several reinforcers that could be varied. This type of preference assessment is less time consuming than the Paired Choice assessment described above. The MSWO will identify multiple stimuli that may function as reinforcers. This assessment results in a good hierarchical ranking of preferences. To conduct this Multiple Stimulus Without Replacement SPA:

1. Gather objects (e.g., toys, edibles, activities, etc.)

2. Present approximately six objects to the individual
   - The number of objects presented will depend on the individual’s vision and motor abilities (e.g., ability to scan, peripheral vision, whether the individual can reach to both sides, turn head to look at all objects)

3. Allow the individual to choose one object and play with the object (e.g., toy, activity) for 10-30 seconds. Write down which stimulus (object) was selected.
   - If the individual requires longer processing times, he/she may need to interact with the object for a longer period of time (e.g., 30 seconds)

4. Immediately remove the objects that were not selected (while the individual is engaged with the object of his/her choice)

5. When re-presenting the array for the individual to make another choice, do **not** put the object that was selected back into the array

6. Change the position of the remaining objects in the array (move the item on the far left to the right, then recenter the remaining objects)

7. Present the remaining objects to the individual

8. Repeat steps ‘2-7’ several times, until all objects have been selected or the individual stops responding (3 presentations with no choice made)

9. Record the individual’s choices in the order selected

10. Use the data collected to determine a hierarchy of preferences – objects chosen first and more frequently may function as stronger reinforcers

**Multiple Stimulus (MS)** (Windsor, Piche, & Locke, 1994). This type of SPA may be best to identify one very strong reinforcer. Identify preferred stimuli through paired choice or MSWO assessments, then select several of the top ranked items for the MS assessment. For example, prior to a lesson, the teacher could use the MS assessment to identify a specific stimulus the individual could work for:

1. Gather objects (e.g., toys, edibles, activities, etc.)

2. Present approximately six objects to the participant
   - The number of objects presented will depend on the individual’s vision and motor abilities (e.g., ability to scan, peripheral vision, whether the individual can reach to both sides, turn head to look at all objects)

3. Allow the individual to choose one object and play with the object (e.g., toy, activity) for 10-30
seconds. Write down which object was selected.

- If the individual requires longer processing times, he/she may need to interact with the object for a longer period of time (e.g., 30 seconds)

4. Immediately remove the objects that were not selected
5. When re-presenting the array for the individual to make another choice, make sure to include the object the individual selected and played with
   - Move the item what was on the far left to the right side of the array, then recenter the other stimuli
6. Repeat steps ‘2-5’ several times to determine the individual’s preferences. Record the individual’s choices in the order selected (the same object may be chosen each time)
7. Objects chosen more frequently may function as stronger reinforcers.

### Conducting an Engagement-based SPA

**Engagement-based assessment** – record the length of time an individual plays with each object (e.g., toys, activities, etc.); the more time spent playing with an object, the more preferred the item is assumed to be. One type of engagement-based assessment is the single stimulus engagement (Hagopian, Rush, Lewin, and Long, 2001). To conduct this SPA –

1. Gather objects (e.g., toys, activities, etc.) and a timer
2. Present each object to the individual for 2 minutes
3. Record the length of time the individual engages with the object

4. Repeat until the individual has interacted with all of the objects
5. Repeat several times (i.e., present each object to the individual several times, different order)
6. Rank order each object presented based on the length of time the individual interacts with the object.
7. Higher ranked stimuli are assumed to be more preferred and to function as stronger reinforcers in comparison to those ranked lower.

### Other Tips for Conducting SPAs

- Do not combine edibles with leisure items in the same SPA. Instead, conduct a separate assessment for food. Research has shown individuals tend to pick food before other objects and so mixing food with other items may lead to the assumption that the other objects are not preferred.
- Items ranked low in the preference assessments may still function as reinforcers
- Pick a wide variety of stimuli to present in the SPA – things you are sure the individual likes, novel stimuli, and things in which you do not think the individual is very interested. Make sure you do not present stimuli you know to be aversive to the individual. (Aversive stimuli are those that are unpleasant or maybe even painful to the individual.)
- With novel stimuli, provide the individual with time to become familiar with the object before you present it in the SPA. If you do not, you might find that the individual may select the item just because it is new or may avoid the object because it is new.
- Change the stimuli offered in the preference assessments.
- **Always** pair the delivery of a tangible object with vocal reinforcement (i.e., praise) – the goal is to eventually fade out the use of tangible objects.

### References


Tips for Home or School

Using Reinforcement Appropriately

By: Jill Grattan and MaryAnn Demchak

Using Reinforcement Appropriately

Important Definitions:

**Contingent**: depending on something else that might or might not happen; likely, but not certain to happen (e.g., plans to go to the beach are contingent on the weather) (Merriam-Webster from, http://www.merriam-webster.com/dictionary/contingent?show=0&t=1394834564)

**Positive Reinforcement**: The presentation of something contingent on the demonstration of a target behavior that maintains or increases the future likelihood of that behavior.

  Example: John uses his picture card to request an apple. John receives a slice of apple. John is more likely to use his picture card in the future to request apple.

**Negative Reinforcement**: The removal of something contingent on the demonstration of a target behavior that maintains or increases the future likelihood of that behavior.

  Example: John uses his picture card to request a break from the activity. John receives a break from the activity (the activity is removed). John is more likely to use his picture card in the future to request a break.

**Reinforcers**: Something (e.g., toy, activity, praise) that is provided following a target behavior and increases the probability of the target behavior

**Target Behavior**: The target behavior is the behavior that you are trying to increase.

In the above examples, the target behaviors are: John using his picture cards to request an apple (first example) and to request a break (second example).

Important Guidelines:

1. Be careful in choosing reinforcers; not all of the items or activities you think will be reinforcing, will actually be a reinforcer. That is, if the targeted behavior does not increase or maintain, then the item you attempted to use as a reinforcer was not actually a reinforcer. An item or activity is only a reinforcer if the behavior it follows increases or maintains in the future.

2. Be sure to base your selection of possible reinforcers on the results of a stimulus preference assessment (SPA). The lead article in this newsletter highlights how to conduct a SPA. Some important reminders to keep in mind when selecting potential stimuli to assess within a SPA include:

   - As much as possible, the child should choose the potential reinforcer; what parents/teachers/early interventionists think is reinforcing may not actually be reinforcing for the child.

   - Make a list of objects and activities the child plays or interacts with

     - The objects the child interacts with frequently may function as a reinforcer

       For example, John frequently plays with a toy train, a car, blocks, and a tambourine; these items could potentially be used as reinforcers.

     - Many different activities might serve as reinforcers: hugs, tickles, high-5 games, chase, spins, swings, trampoline, yoga balls, vibrating massagers, etc.

   - Ask other people who interact with your child what your child likes
For example, find out what items or activities the child likes at school, day care, home, etc. These items or activities may function as a reinforcer in another setting such as the home.

3. Sometimes it will be necessary to choose another item or activity to try as a reinforcer when what you first tried did not work. Whatever you try next as a reinforcer should be based on your SPA.

4. Reinforcers may change over time. Items or activities that serve as a reinforcer today, may not serve as a reinforcer tomorrow, or even in one hour. Have a variety of reinforcers available and let child choose from among them. Let the child choose a reinforcer frequently (e.g., after each lesson, let the child pick what he/she would like to work for [i.e., the reinforcer]).

5. Try to choose reinforcers that are as natural as possible. For example, if praise is most often given in a situation, then praise is most natural. However, in the beginning, it may be necessary to pair tangible reinforcers (e.g., toys, activities, food) with praise to keep the individual motivated. As the individual uses the new behavior more frequently, then use praise, without pairing the tangibles (e.g., toys, activities, food) with the praise. Eventually, fade the praise, and move to natural consequences (e.g., one puts on a jacket to stay warm, not because someone is providing praise).

6. Reinforcers should be given consistently and immediately upon the occurrence of the target behavior
   - Consistently – In the beginning, the reinforcer should be delivered upon each and every time the target behavior occurs.
   - Immediately – the reinforcer should be delivered as close in time as possible (e.g., within 3 seconds) to the target behavior occurring. At first, a reinforcer will not be effective if it is delivered several minutes later.

7. Reinforcers should be appropriate to the task.

   For example, one minute of toy play may be enough to be a reinforcer for washing hands; however, if the child spends 10 minutes cleaning up blocks, one minute of toy play may not be enough to reinforce the task.

8. Be aware of how recent activities affect reinforcers:
   - For example, if a child has just eaten large lunch, food may not be an effective reinforcer because the child is full.
   - If a child just spent one hour playing with a specific toy, the toy may not function as a reinforcer because the child may be tired of the toy.
   - Another example: a toy that a child has not interacted with for a day may be temporarily more reinforcing than a toy the child has been playing with continuously for a long time.

Visit our website to review ALL of our Tips for Home & School
www.unr.edu/ndsip
All tip sheets are available in English & Spanish
What is Cerumen?

Cerumen is what we commonly refer to as ear wax. It is composed of secretions and sloughed epithelial cells and hair from the external auditory canal. Cerumen is a naturally occurring, normally extruded product that protects the skin in the auditory canal by trapping dirt and slowing the growth of bacteria.

What is Cerumen Impaction?

Cerumen impaction occurs when the cerumen (ear wax) builds up to the point of blocking the auditory canal or becomes too hard to wash away naturally. Cerumen impaction can cause complications such as hearing loss, pain, or dizziness. Cerumen impaction is present in approximately 10% of children and 36% of individuals with an intellectual disability. An anatomic deformity and an increased number of hairs in the external auditory canal as well as physical barriers to natural ear wax extrusion (e.g., cotton swabs, hearing -aids, etc.) have been associated with an increased occurrence of cerumen impaction. Cerumen impaction is diagnosed by direct visualization of the impaction with an otoscope.

How is Cerumen Impaction Treated?

Depending on available equipment, physician skill, and patient circumstances, treatment options for cerumen impaction include watchful waiting, manual removal of the impaction, and the use of ceruminolytic agents that soften the ear wax so that the ear canal can subsequently be irrigated to remove the blockage.

Manual removal of the impaction typically involves the use of a metal or plastic loop or spoon and is generally considered an effective method for treating an impaction. Manual removal does not expose the ear canal to moisture and, therefore, may lessen the risk of infection. Manual removal is often quicker than other treatments and allows direct visualization of the procedure via a hand-held monocular otoscope.

Irrigation may be attempted alone or with a ceruminolytic agent with one of the many different irrigation methods available in a doctor’s office setting. These include ear syringes, oral jet irrigators, ear irrigators, etc. Each of these irrigation devices have drawbacks including the possibility of resultant minor ear trauma, the risk of perforation of the tympanic membrane (ear drum), and a negative caloric-reflex response if the temperature of the irrigating fluid used is not at body temperature.

If severe pain were to develop during manual removal the treatment should be terminated and the patient referred to an otolaryngologist. If vertigo were to develop during an irrigation treatment the patient should be referred to an Ear, Nose, and Throat subspecialist. A formal hearing evaluation should be considered in patients with hearing deficits or continued hearing loss after wax removal.

References and Images Retrieved From:


What is CHARGE syndrome?

CHARGE syndrome is an identified (genetic) pattern of birth defects which occurs in about one in every 9 -10,000 births worldwide. CHARGE is a variegated syndrome, that is characterized by extensive medical and physical difficulties that differ from child to child. The majority of CHARGE syndrome births are not indicated by family history or any other similar conditions in the family. Babies with CHARGE syndrome are often born with life-threatening birth defects, including heart abnormalities and respiratory issues. “CHARGE” originally came from the first letter of some of the most common features observed in these children: C=coloboma of the eye, H=heart defects, A=atresia of the choanae, R=retardation of growth and development, G=genital and urine abnormalities, E=ear abnormalities and/or hearing loss.

Cause and Diagnostic Criteria

A mutation of the CHD7 gene is the suspected cause of CHARGE syndrome. Gene testing is very expensive and isn't always reliable - only about 2/3 of people with CHARGE test positively for the CHD7 gene mutation. Therefore, the diagnosis of CHARGE syndrome is clinical, and is based on a variety of medical features seen in the child. Evaluations for CHARGE syndrome should be made by a geneticist that specializes in CHARGE. A diagnosis can be made using a combination of Major and Minor features. "Major features are characteristics that are quite common in CHARGE syndrome but relatively rare in other conditions, and are, for the most part, diagnosable in the newborn period." “Minor features are characteristics which are also common in CHARGE, but not quite as helpful in distinguishing CHARGE from other syndromes” (The CHARGE Syndrome Foundation, 2013).

Major Features of CHARGE Syndrome

<table>
<thead>
<tr>
<th>Feature</th>
<th>Includes</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Coloboma of the eye</td>
<td>Coloboma (sort of like a cleft) of the iris, retina, choroid, macula or disc (not the eyelid); microphthalmos (small eye) or anophthalmos (missing eye); <strong>CAUSES VISION LOSS</strong></td>
<td>80% - 90%</td>
</tr>
<tr>
<td>Choanal atresia or stenosis</td>
<td>The choanae are the passages that go from the back of the nose to the throat. They can be narrow (stenosis) or blocked (atresia). It can be unilateral (one-sided) or bilateral (both sides), bony or membranous.</td>
<td>50% - 60%</td>
</tr>
<tr>
<td>Cranial nerve abnormality</td>
<td>I—Missing or decreased sense of smell IX/X Swallowing difficulties, aspiration VII - facial palsy (one side or both)</td>
<td>90 - 100% 70 - 90% 40%</td>
</tr>
<tr>
<td>CHARGE outer ear</td>
<td>Short, wide ear with little or no lobe, &quot;snipped off&quot; helix (outer fold), prominent antihelix (inner fold) which is discontinuous with tragus, triangular concha, decreased cartilage (floppy), often stick out, usually asymmetric.</td>
<td>&gt; 50%</td>
</tr>
<tr>
<td>CHARGE middle ear</td>
<td>Malformed bones of the middle ear (ossicles): <strong>CAUSES CONDUCTIVE HEARING LOSS</strong></td>
<td>Common</td>
</tr>
<tr>
<td>CHARGE inner ear</td>
<td>Malformed cochlea (Mondini defect); small or absent semicircular canals: <strong>CAUSE HEARING LOSS AND BALANCE PROBLEMS</strong></td>
<td>90%</td>
</tr>
</tbody>
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Taken from http://chargesyndrome.org/about-charge.asp
### Minor Features of CHARGE Syndrome

<table>
<thead>
<tr>
<th>Feature</th>
<th>Includes</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Heart defects</td>
<td>Can be any type, but many are complex, such as tetralogy of Fallot</td>
<td>75%</td>
</tr>
<tr>
<td>Cleft lip +/- cleft palate</td>
<td>Cleft lip with or without cleft palate, cleft palate, submucous cleft palate</td>
<td>20%</td>
</tr>
<tr>
<td>TE fistula</td>
<td>Esophageal atresia, Tracheo-esophageal fistula (TEF), H-shaped TEF</td>
<td>15% - 20%</td>
</tr>
<tr>
<td>Kidney abnormalities</td>
<td>Small kidney, missing kidney, misplaced kidney, reflux</td>
<td>40%</td>
</tr>
<tr>
<td>Genital abnormalities</td>
<td>Males: small penis, undescended testes Females: small labia, small or missing uterus Both: lack of puberty without hormone intervention</td>
<td>50% 25% 90%</td>
</tr>
<tr>
<td>Growth deficiency</td>
<td>Growth hormone deficiency Other short stature</td>
<td>15% 70%</td>
</tr>
<tr>
<td>Typical CHARGE Face</td>
<td>Square face with broad prominent forehead, arched eyebrows, large eyes, occasional ptosis (droopy lids), prominent nasal bridge with square root, thick nostrils, prominent nasal columella (between the nostrils), flat midface, small mouth, occasional small chin, larger chin with age. Facial asymmetry even without facial palsy.</td>
<td></td>
</tr>
<tr>
<td>Palm crease</td>
<td>Hockey-stick palmar crease</td>
<td>50%</td>
</tr>
<tr>
<td>CHARGE Behavior</td>
<td>Perseverative behavior in younger individuals, obsessive compulsive behavior (OCD) in older individuals</td>
<td>&gt;50%</td>
</tr>
</tbody>
</table>

*No one feature is necessary for a CHARGE diagnosis. These features may vary from severe to absent in children with CHARGE.*

### Medical Management and Surgeries

Surgical treatment is necessary in children with CHARGE syndrome to correct congenital anomalies. Example surgical interventions include: Tracheostomy - which is done to stabilize the air passage; Myringotomy and tymphonostomy tubes which is done to treat otitis media; Gastrostomy and fundoplication in cases of feeding difficulty, and cochlear implantation. In addition to available surgeries, appropriate medical management of CHARGE syndrome is necessary. The following link provides a **Medical Manual for Parents** of children with CHARGE syndrome to assist them with caring for their child:


### Resources:


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Deafblind International.org

Deafblind International.org is an organization that provides information, networking, conferences, and publishes and international journal in the deafblind field (Dbi Review).
Link to information on CHARGE: http://www.deafblindinternational.org/about_charge.html

CHARGE Syndrome Foundation

CHARGE syndrome Foundation: http://www.chargesyndromefoundation.org/
Numerous resources, including webinars (on a large variety of topics): http://chargesyndrome.org/resources.asp

CHARGE Syndrome Foundation’s Facebook page: https://www.facebook.com/chargesyndromefoundation

11th International Charge Syndrome Conference facebook: https://www.facebook.com/11thInternationalChargeSyndromeConference

Perkins

Perkins – a very informative website with lots of information for individuals diagnosed with deafblindness (e.g., information on literacy) including, webcasts (this page has webcasts on a variety of topics): http://www.perkins.org/resources/webcasts/

Perkins’ webcasts on CHARGE: http://www.perkins.org/resources/webcasts/charge-syndrome.html

Books
(a) CHARGE Syndrome (Genetics and Communication Disorders) (authors: Timothy S. Harshorne, Margaret Hefner, Sandra Davenport, James W. Thelin;
(b) The Joys of Jennifer: Finding Success for Your Child with CHARGE Syndrome or Other Challenges (by Carolyn Siewicki)
Resources for Parents—CHARGE syndrome

National Center on Deaf-Blindness: https://nationaldb.org/

Lots of information on working with individuals diagnosed with deaf-blindness and the CHARGE info in their "library" offers numerous links to websites, articles, and conference proceedings: https://nationaldb.org/library/search/?search=CHARGE&format=data

And another page of information on CHARGE: https://nationaldb.org/library/list/86

CHARGE Lab, Dr. Tim Hartshorne, located in Central Michigan University:
https://www.cmich.edu/colleges/chsbs/Psychology/charge/Pages/default.aspx

David Brown, an expert on CHARGE syndrome.
e-mail address: davidb@sfsu.edu -- He has a zip folder with all his articles and will send this to anyone who requests it.

Circle of Moms – a community website where you join to talk with other moms. This community website is specific to CHARGE:

SENSE (U.K.) is a national charity that provides information, supports and campaigns for people with deafblindness. Search for information on CHARGE using their search bar. site: http://www.sense.org.uk/

Sense has launched a new comprehensive information pack which offers 28 in-depth factsheets about the many aspects of living with CHARGE syndrome. The CHARGE packet from Sense UK http://www.sense.org.uk/content/charge-information-pack-practitioners

Their facebook page: https://www.facebook.com/senseuk; Put a search in for the CHARGE info page
Through our grant program, we hope to alleviate some of the financial challenges faced by families of children diagnosed with complex and debilitating neurologic, metabolic, or genetic conditions.

- **Types of items considered** for this program are (but are not limited to): seating, mobility, transport, comfort, positioning, bathing, therapy tools, feeding, etc.
- **$500 per grant maximum**
- Requires medical authorization from primary pediatric specialists, pediatrician, or social worker
- Grants can be awarded either as reimbursement for purchase (if approved) or paid directly to vendor.

**Eligibility:** We work directly with the families of medically fragile or special needs children, under 18 years of age, who are diagnosed with debilitating rare, neurologic, metabolic, or genetic conditions. Must live in Southern Nevada more than 50% of the time.

**Application deadline:**
November 30, 2014
February 28, 2015
May 31, 2015

**Recipients Announced:**
December 21, 2014
March 21, 2015
June 21, 2015

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More information: [www.littlemisshannah.org](http://www.littlemisshannah.org)
(P): 702-608-2488