

# Self Injurious Behaviour (SIB), Autism & other Neurological Conditions



Compass Connections Webinar Series:  
Self Injurious Behaviours, Session #3

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# Outline

1. Similarities and differences from Non Suicidal Self Injurious Behaviour
2. Case history
3. 3 main drivers of SIB
4. Approach to management
5. Behavioral approach
6. Environment
7. Family support



# Potential Bias

- All speakers are members of the Self Injurious Behaviour & Neuropsychiatry Clinic at BC Children's Hospital
- Dr. Friedlander & Mary Glasgow Brown are Faculty Members at UBC (Dept. Of Medicine & Dept. of Occupational Science & Occupational Therapy)
- Katie Allen is an owner of East Vancouver Behaviour Ltd.

# SIB in children with Autism

## Prevalence

- Any SIB 46%
- Severe SIB 18%

## Onset

- In 50% , SIB starts before age of 3

# Persistence

- Once established, SIB is the go-to behavior for these children if distressed or frustrated.
- Similar rate in adults with Autism.

# Topography

- Head banging (with hands/fists; against objects)
- Self-biting/chewing
- Hands/fists to other parts of the body
- Knee to head



# Why do people engage in SIB?

Overlap with Non Suicidal Self Injury (NSSI)



# Why do people engage in NSSI?

- Feeling numb
- Communication
- Self punishment
- A way to avoid feelings/triggers
- A sense of control



# Development and Maintenance of SIB

Rhythmic  
repetitive  
behaviour

Sensitivity to internal states  
(e.g. pain, mood); sensitivity to  
environment (e.g. noise, gaze)

Social reinforcement

Chris Oliver, (2015).

# Self-injury in Autism

- Burn out in families
- Expensive for system
- Clear role for targeted early intervention

# Case

- 7-year-old , non verbal male with Smith-Magenis Syndrome (SMS)
- lives with his family who are very stressed and have only minimal respite
- Referred aged 4, for evaluation of SIB occurring multiple times a day (slapping self on cheek, hitting head with fists and head banging on hard objects)
- Numerous precipitants included being tired, ill, unexpected loud sounds, frustration and having hair brushed or nails cut as well as numerous internal rules about how others should behave.

## Case: SIB significantly improved following

- Treatment of sleep with trazodone 50mg and melatonin 10mg at night.
- Constipation resulting in numerous hospital admissions was vigorously treated.
- ADHD (poor frustration tolerance & compliance with adult requests) improved with clonidine 0.025mg TID
- Behaviour Consultant introduced---  
reactive & proactive strategies

# Case: Additional Recommendations & Treatment

- Sensory specific recommendations to address sensory seeking/avoiding behaviour
- Referral for feeding study
- Recommendations to address toileting skills
- If frustrated he still engages in SIB

# The 3 main drivers of SIB in Autism

1. Health related pain/distress
2. Psychiatric disorders
3. Behavioral (learned behavior, sensory and communication)

# Internal discomfort/pain

- Otitis media ( self-injury to head)
- Gastroesophageal Reflux Disease (SIB around meal times)
- Menses (related to menstrual cycle)
- Constipation
- Dental
- Medication side effects



**Children who are non verbal  
may experience pain differently  
in terms of where and how.**



# Psychiatric factors

- Sleep
- Mood
- Anxiety
- OCD
- ADHD
- Tics
- Catatonia

# Approach to management: Engage all players

- Assisted/ augmented communication
- Assist with self regulation
- Develop reactive and proactive behavioral strategies
- Identify and treat underlying medical illness
- Treat sleep
- Treat psychiatric comorbidity
- Behavioral analysis



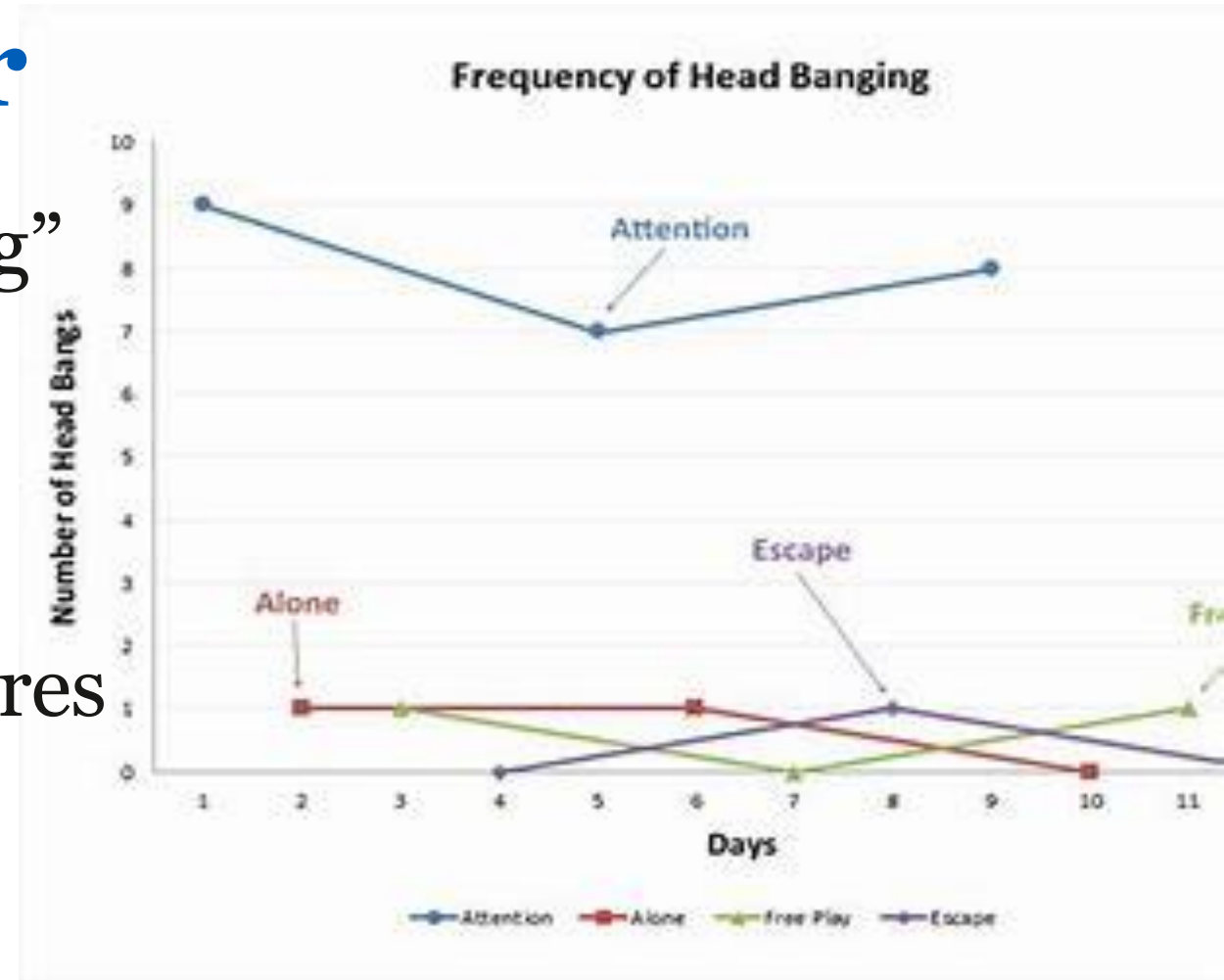
# Behavioral lens



- Observable and Measureable
- Interaction between Behavior      Environment
- Assess for function vs. topography
- Function-based Treatment
- Data collection and analysis
- Data-based decisions for treatments, medications etc.

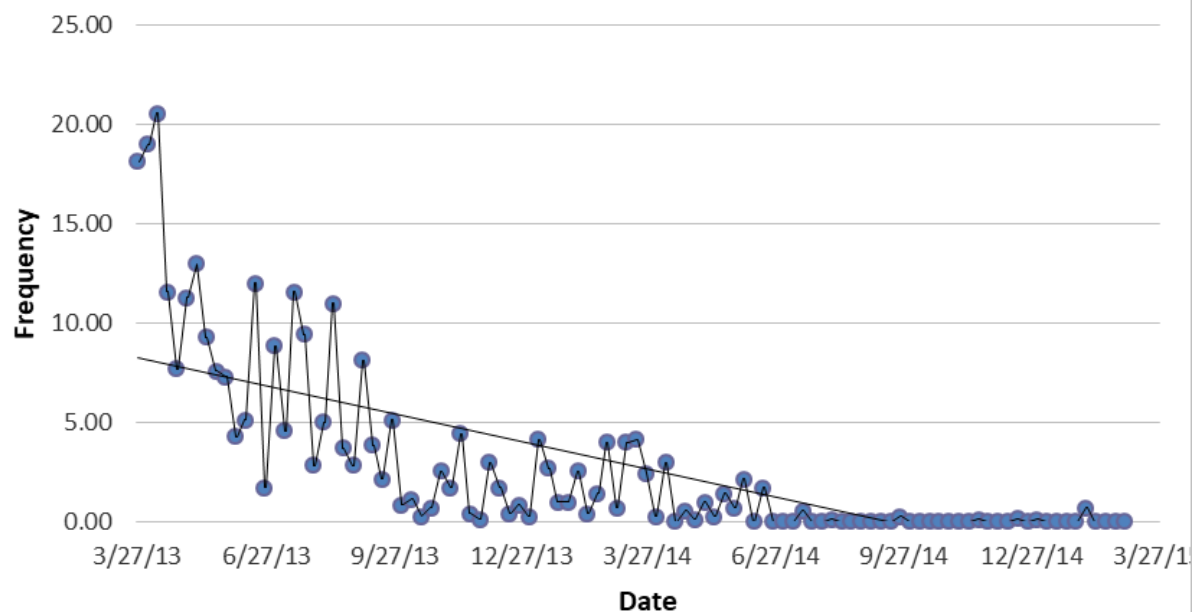
# Function of behavior

- “Why is the behavior occurring”
- Attention, Escape, Tangible, Automatic
  - Functional Analysis
- Function determines procedures for treatment

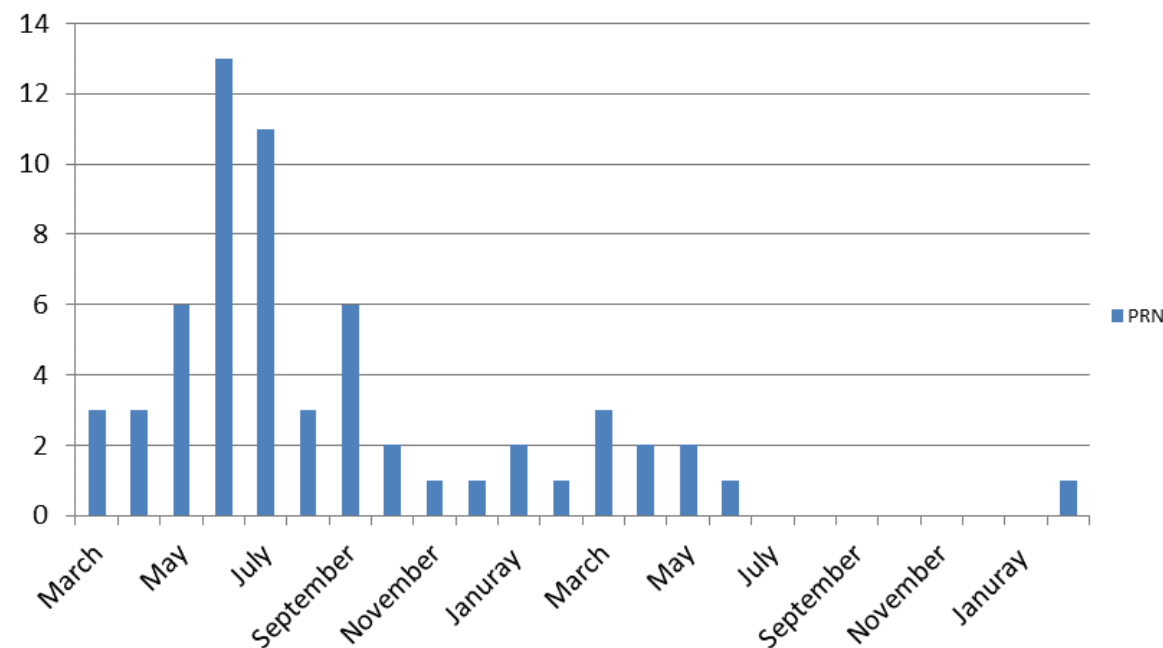


# Data analysis and decision making

**Average Weekly Aggression**



**PRN for agitation**



# Medication and behavioral Therapy

When medication is therapeutically applied it allows an open window for behavioral intervention

- **1. Decrease challenging behavior**

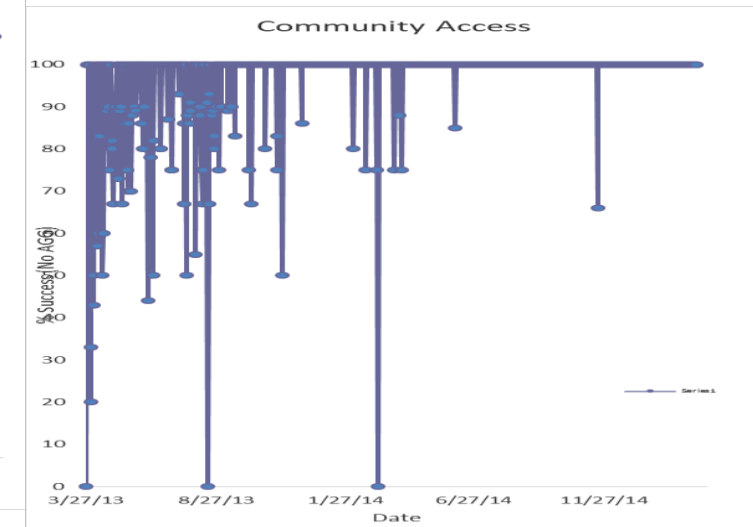
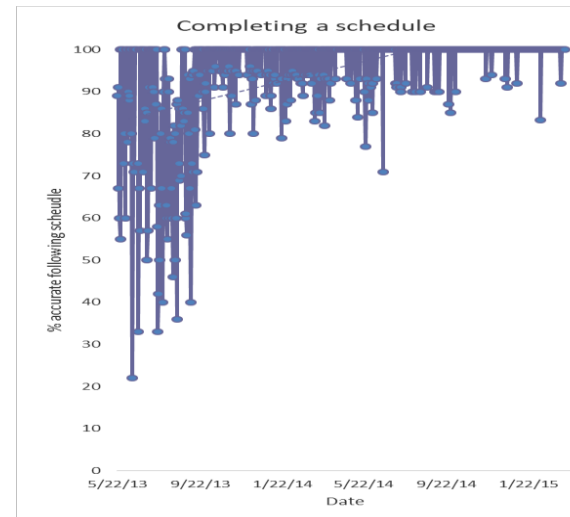
- Limiting irritability, providing more tolerance to aversive events, less distressed
- Reduce EO's for behavior

- **2. Increase adaptive behaviors**

- Functional communication
- Play/leisure
- Social interactions and community involvement

- **3. Increase Wellness**

- Food repertoires
- Sleep hygiene
- Toilet training
- Bathing



# Equipment: Reducing the Risk

## 1. Protective Equipment

E.g. Helmet, wrist guards, gloves

*OR*

## 2. Restraints

E.g. Adapted seat belts, arm extension splints

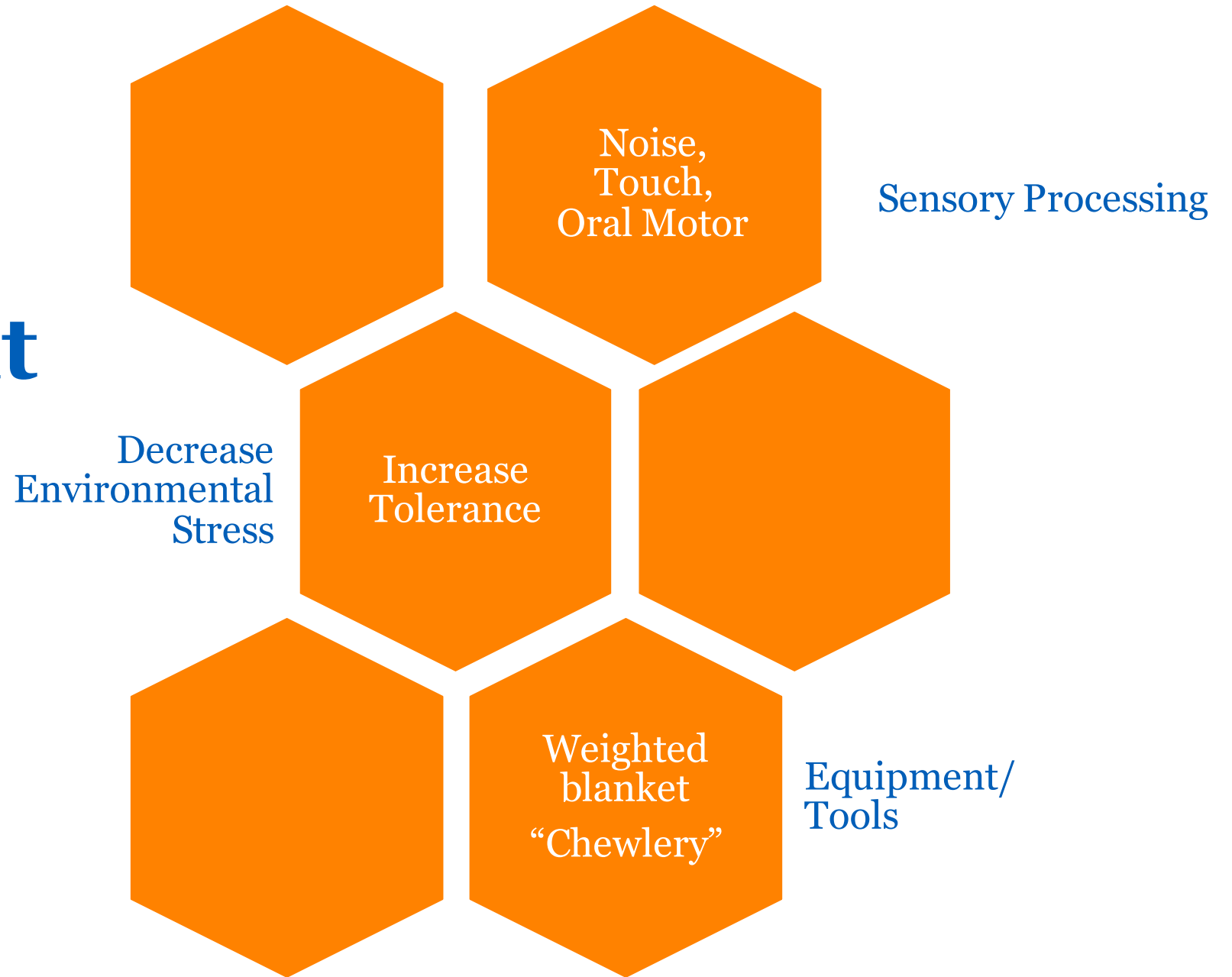


# Equipment: A Team Approach

- Multiple decision-makers  
(parents, child, health, school)
- Safety Plan- when to use/when to not use
- Reevaluate & phase out if possible

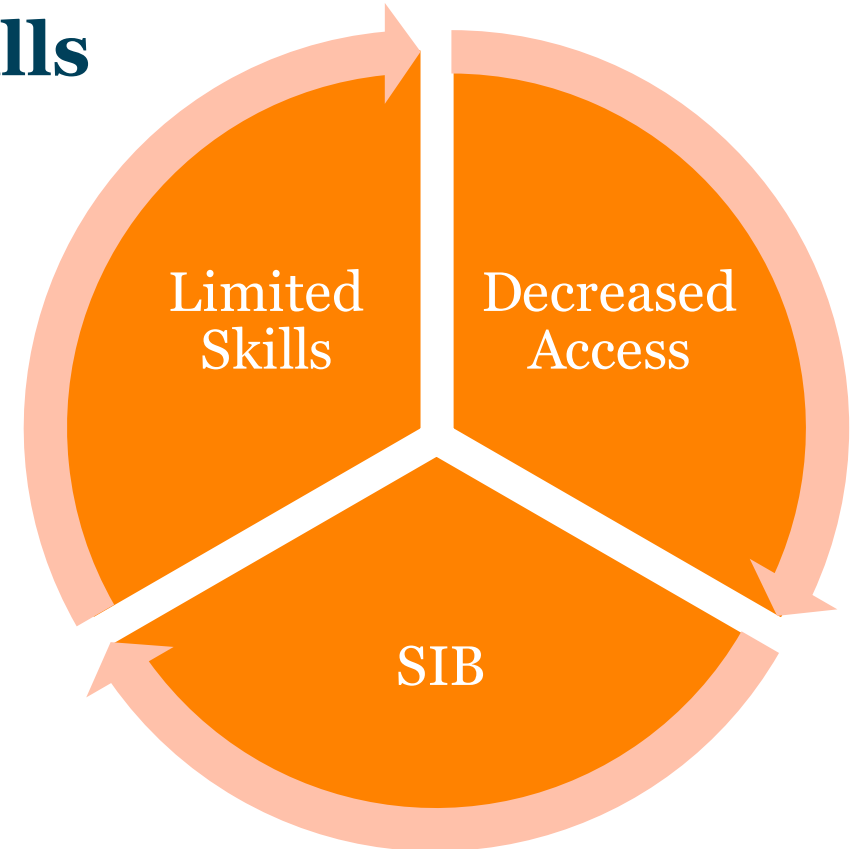


# Sensory & Environment



# Skills & Participation

- **Communication, ADLS, Play skills**
- **School**
- **Community**



# Family/caregiver support

1. Respite
2. Peer/Group Support  
[www.familysupportbc.ca](http://www.familysupportbc.ca)
3. Assistance with case management
4. Parent/Caregiver Health Resources

# Consultation for families in remote communities

1. Talk to GP/NP or pediatrician
2. Primary physician/NP can consult Compass
3. Primary physician/NP can refer to BCCH Neuropsychiatry clinic
4. Most severe cases may need referral to SIB clinic (internal referral from Neuropsychiatry/Infant Clinic)

# Support for families in remote communities

1. Access **Family Support institute of BC** for advice, education and to access their SIB education sessions.
2. If the child has funding for behavioral intervention, ensure that the **provider is targeting the SIB**.
3. Consider **zoom consultation**:
  - With a Behaviour Consultant with BCBA designation, hopefully with expertise in SIB.
  - Other therapies locally or remotely to address functional communication (speech therapist), sensory processing, emotional regulation & functional skills (OT)

Thank you & Questions

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