

**Ultrasound Screening Infants At-Risk of Developmental Hip Dysplasia in BC: Assessing Access-to-Care**



PRESENTER:  
**Fowler, Trevor**

**BACKGROUND:**

Developmental dysplasia of the hip (DDH) is the most prevalent pediatric hip condition, affecting 1-3% of infants. DDH can be reversed non-invasively in most cases but can be severe if diagnosed late. Despite a hip ultrasound taking ~10 minutes, some patient families need to travel great distances from their community to BCCH for this procedure, placing a great burden on the parents as well as BCCH. Currently, BC lacks a standardized care pathway for DDH screening and surveillance. This project aims to assess the burden faced by families to receive DDH screening, the current quality of care, and provide baseline data for future evaluation of the care pathway as well as population-level DDH surveillance.

**METHODS:**

Data abstracted from electronic medical records of infants who received a bilateral hip ultrasound for DDH (N=1949)

**DEMOGRAPHICS:**

- Birthdate
- Home postal code
- Number of ultrasounds
- Age at first ultrasound
- Female or male

**REASONS FOR REFERRAL:**

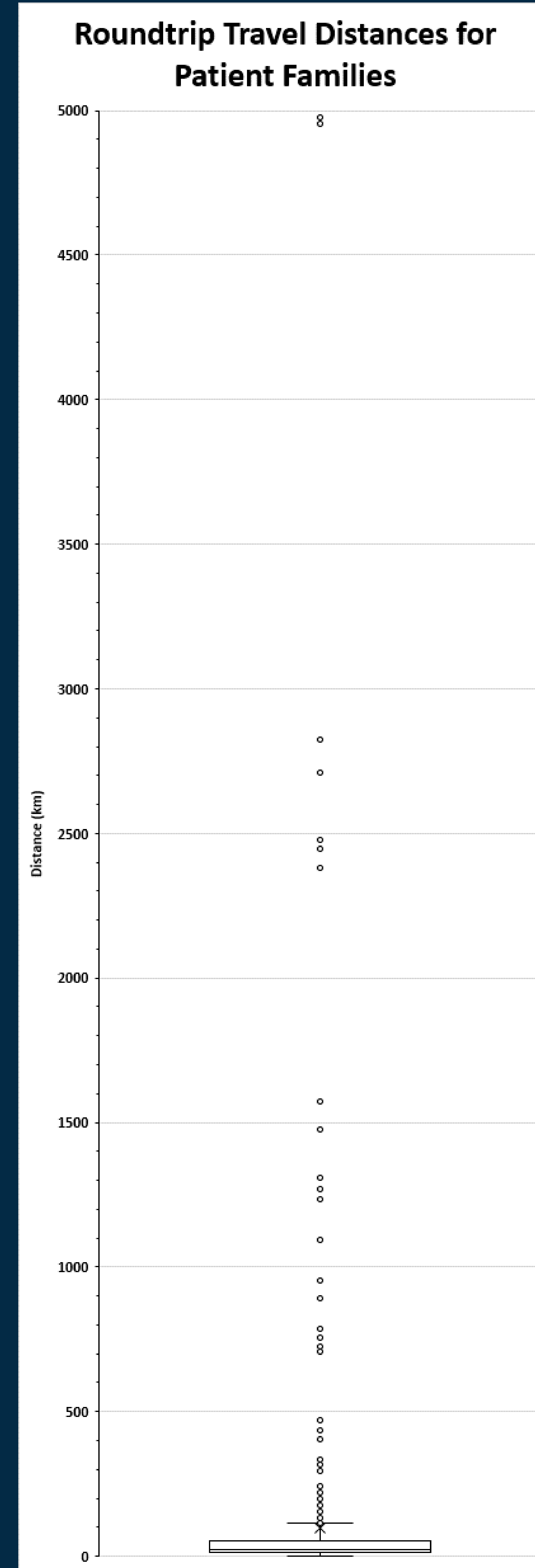
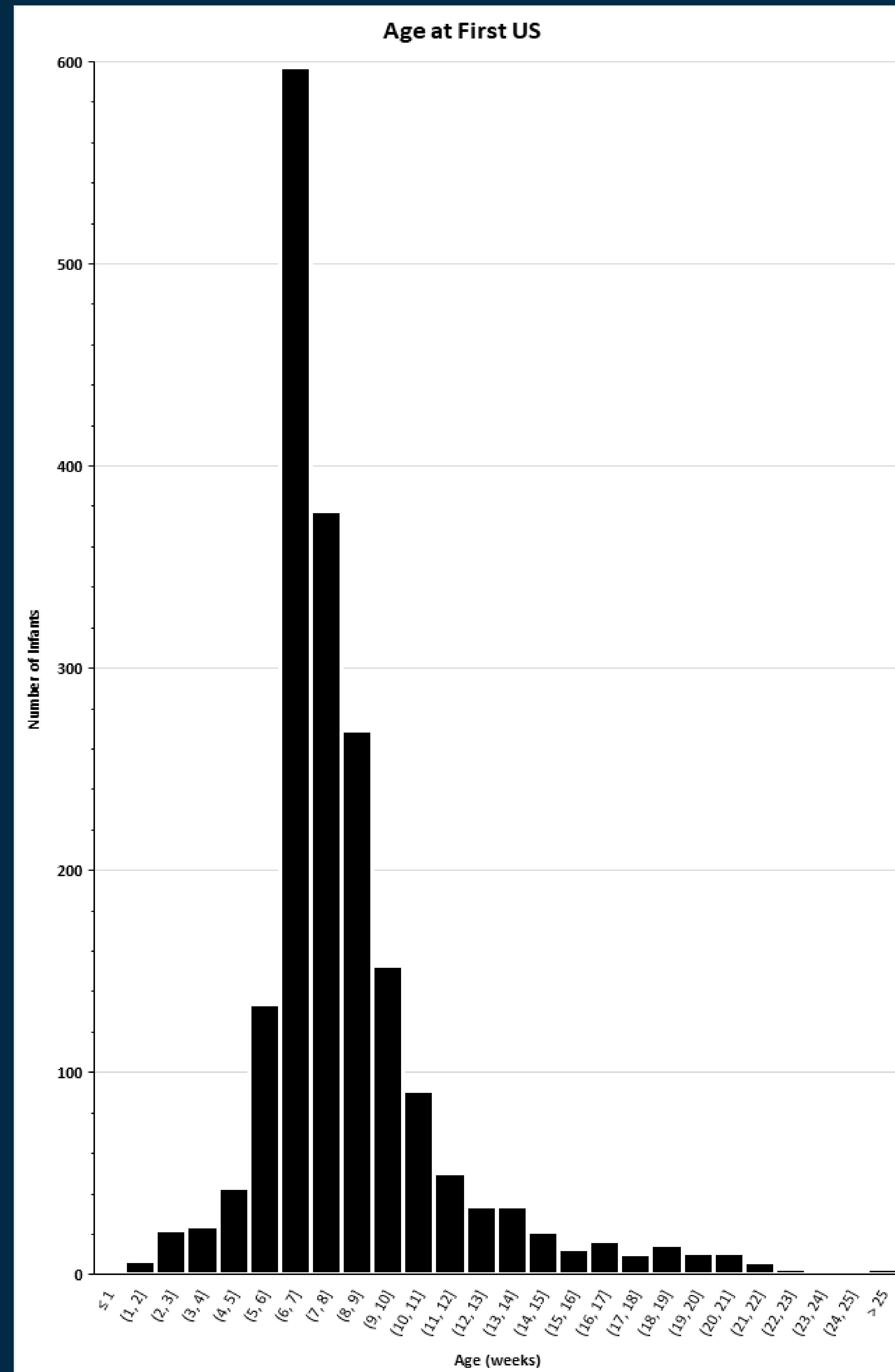
- Breech position?
- Family history of DDH?
- Twin/triplet?
- History of hip instability?
- Firstborn?

**DISTANCE TO CARE:**

- Used Google Maps to calculate driving distance and time
- Determined home health authority

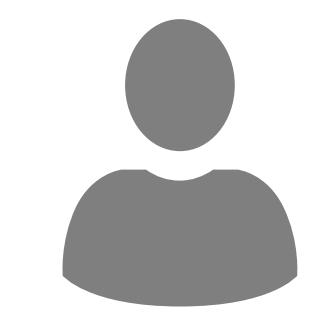
**KEY FINDINGS:**

1. 4.2% (82) of infants were DDH-positive
2. The average roundtrip travel distance was 95km, with the distances for 177 infants classified as outliers
3. Many infants received their first ultrasound outside of the recommended age range (4-8 weeks)



**IMPLICATIONS:**

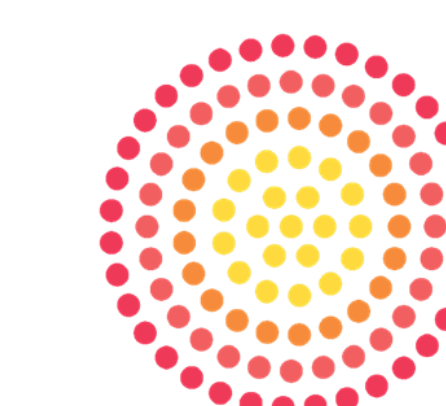
While many patient families are travelling reasonable distances to receive screening, the burden faced by those families needing to travel great distances cannot be overlooked. The average travel time was 98 minutes, and some families travelled more than 4800km for their ultrasound. Additionally, the average age at the time of the first ultrasound was 8.2 weeks, which is beyond the recommended age range. These results provide an early justification of the need for a standardized care pathway for DDH screening and care in BC to ensure equitable, accessible DDH care.



- Trevor Fowler
- Miles Jaques
- Samantha Tang
- David Stephen-Tammuz
- Kishore Mulpuri
- Emily Schaeffer
- Anya F Smith



THE UNIVERSITY OF BRITISH COLUMBIA



Children's Healthcare Canada

Santé des enfants Canada