



# Pediatric Burn Transfers: A 10 Year Analysis of Adherence to ABA Transfer Criteria

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## Background

- The ABA referral criteria provides guidelines for transfer of burn patients to minimize morbidity and mortality.
- Transferring pediatric burn patients allows for specific pediatric services and multidisciplinary teams to optimize care.
- This study reviewed pediatric burn patients transferred to BC Children's Hospital (BCCH) Burn Centre to better understand the reasons for transfer.

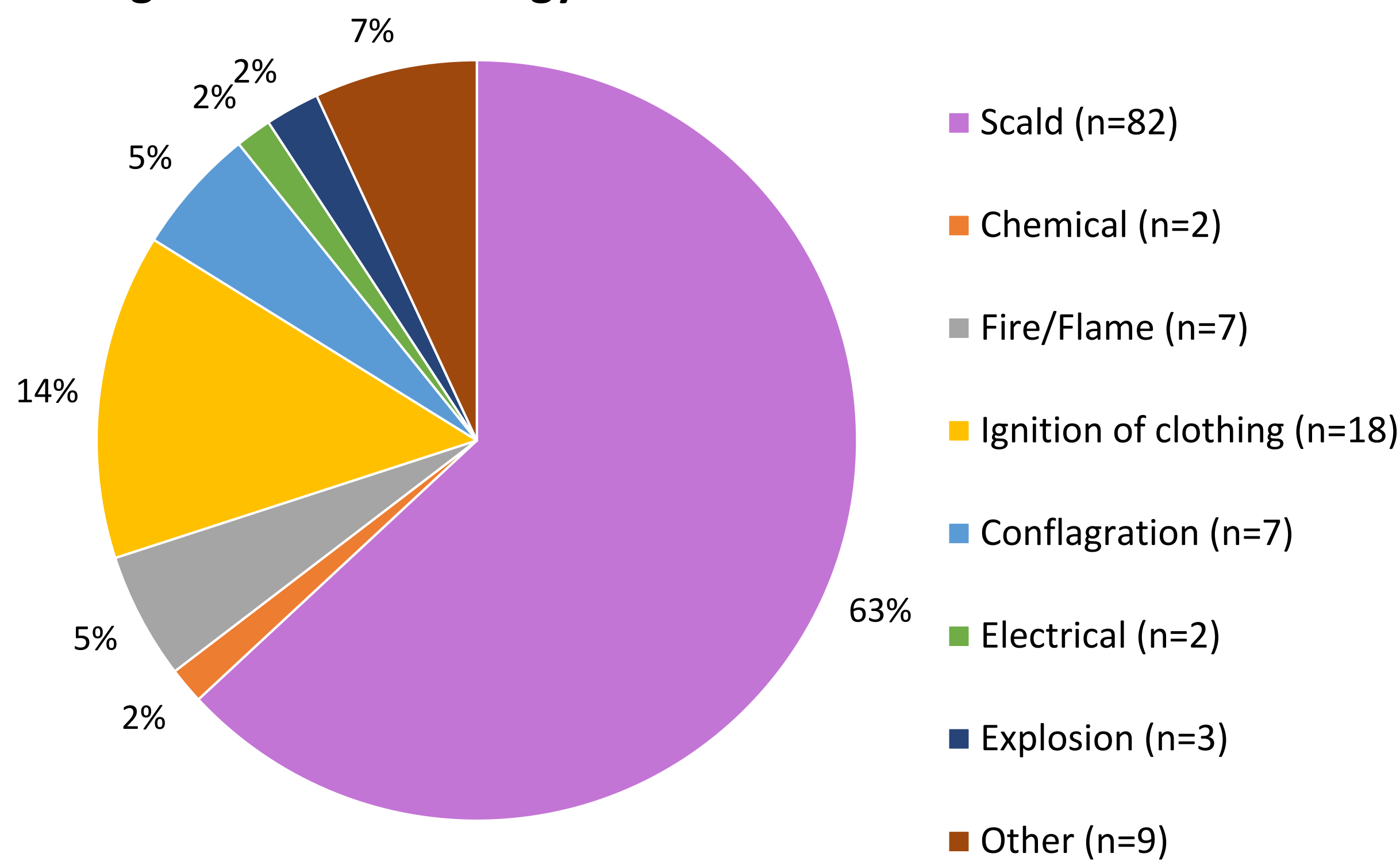
## Methods

- A 9-year retrospective review of burn patients under 18 years of age who were transferred to BC Children's Hospital from January 2010 - December 2018 was conducted.
- Using the BC Burn Registry, patient demographics, burn characteristics, and basis for transfer were collected.

## Results

- 130 children (41% female, 59% male) were transferred
- Mean age at transfer was 5.0 years old (range: 2.6 weeks - 16.9 years old)

Figure 1 – Burn Etiology



- Criterion 1: Partial-thickness burn > 10% TBSA (45.5%)**
  - Majority (86.9%) of patients had burns < 20% TBSA
- Criterion 2: Burns that involve the face, hands, feet, genitalia, perineum or major joints (89.2%)**
  - Most common reason for transfer and 60% of patients had a burn to a major joint – most frequently over the shoulder.
- Criterion 3: Third-degree burns (13.8%)**
  - Most commonly third degree burns were to the upper extremity
- Criterion 4: Electrical burns (0.02%)**

## Results

- Criterion 5: Chemical burns (0.02%)**
- Criterion 6: Inhalation injury (0.08%)**
- Criterion 7: Burn in patients with pre-existing medical disorders that could complicate management (14.6%)**
  - Most common: Psychiatric, respiratory or medical comorbidities
- Criterion 8: Burns with concomitant trauma (0.03%)**
  - All patients met other referral criteria
- Criterion 9: Hospitals without qualified personnel or equipment (66.2%)**
  - 43 different medical centers transferred patients, 25 were not able to provide care for children (see Figure 2)
- Criterion 10: Burn patients who require special social, emotional, rehabilitative intervention**
  - No data indicated reason for transfer based on criterion 10

Figure 2 – Ability to Care for Pediatric Patients and Number of Patients Transferred Per Health Authority

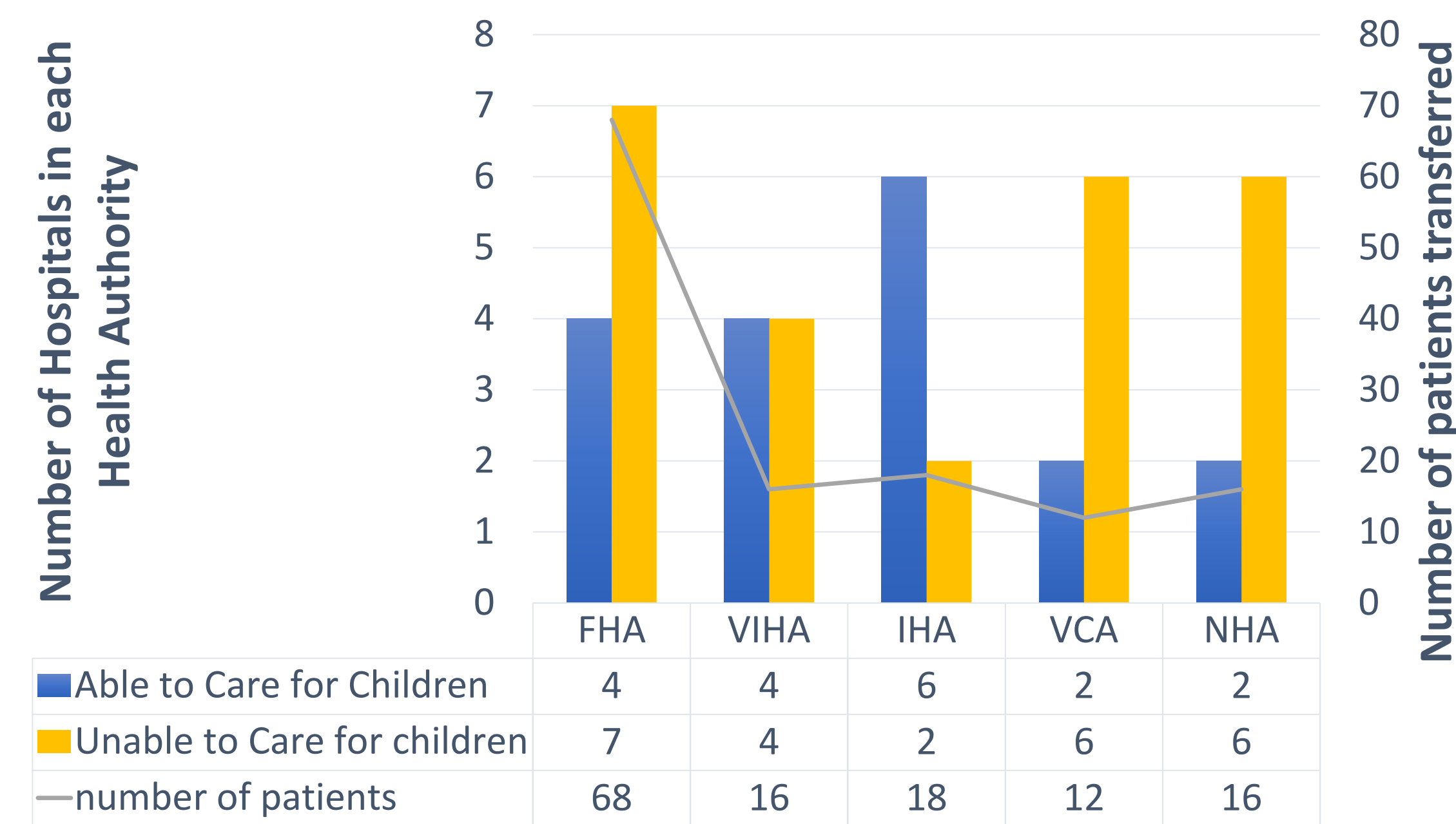
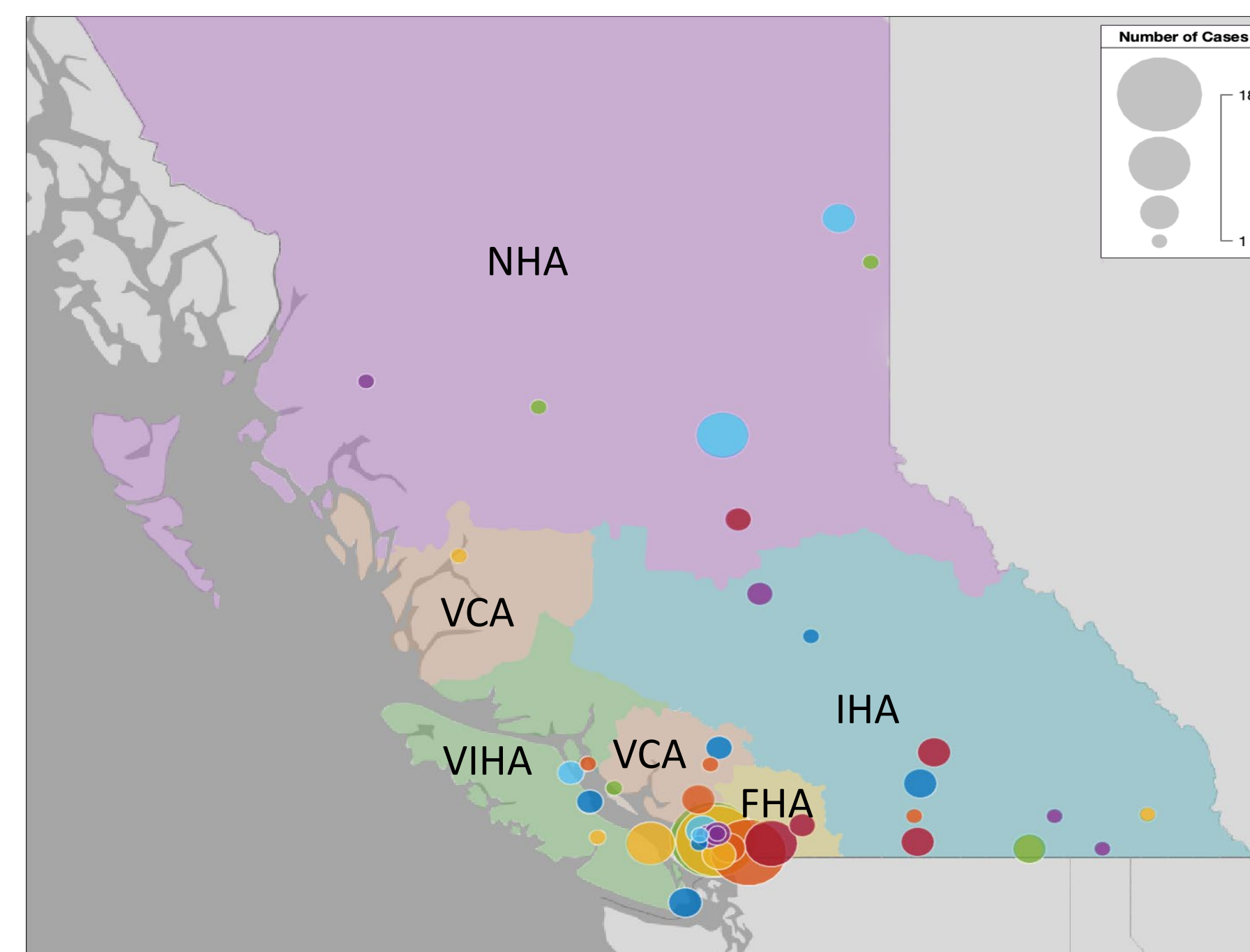
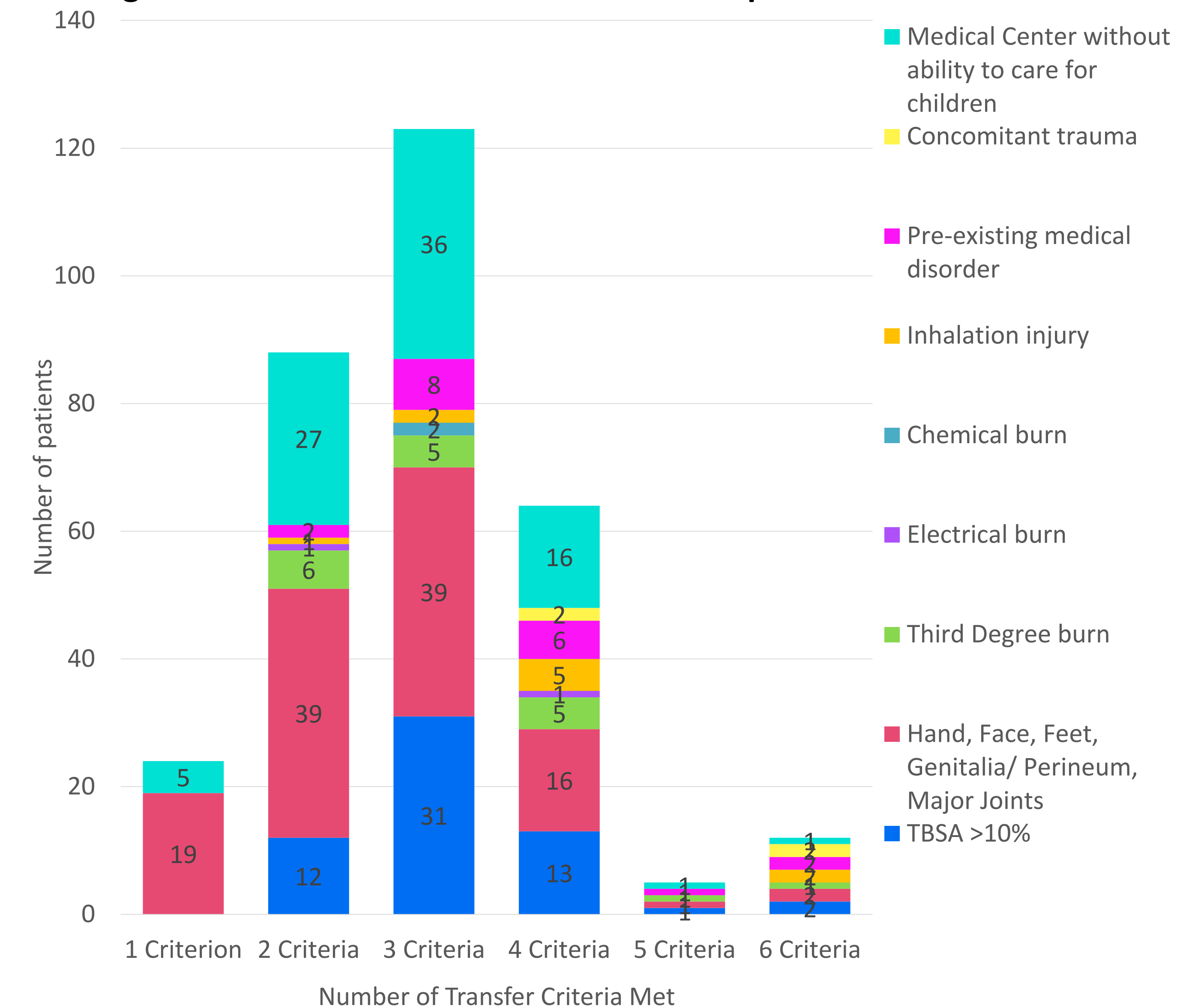


Figure 3 – Number of Pediatric Burn Cases in BC Transferred



## Results

Figure 4 – Number of Transfer Criteria Met per Patient



## Limitations

- Limitations of a retrospective study include lack of documented phone advice with subsequent non-urgent transfers
- Unable to account for patients who met transfer criteria upon presentation, but were not referred to the burn center
- The impact of transfer and burn outcomes were not assessed

## Conclusions

- All pediatric burn patients transferred met at least one of the ABA referral criteria over the 9-year period
- Majority of transferred patients met two or more criteria, most commonly Criterion 2 and Criterion 9
- Geographically, the closest health authority (FHA) to BCCH referred the highest number of patients and had the fewest number of hospitals able to manage children

## Disclosures

JM Roller: None. M Bucevska: None. R Courtemanche: None. S Hynes: None.