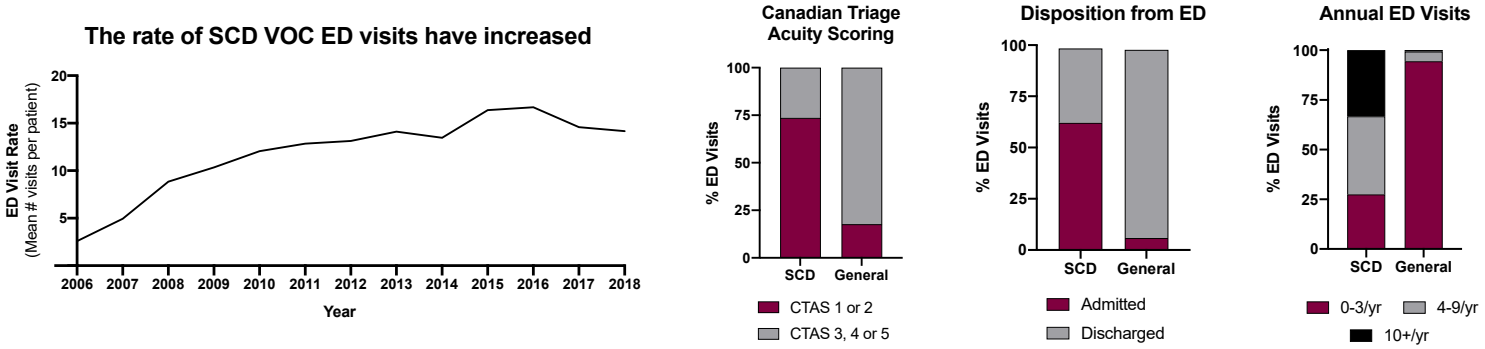
Disparities in sickle cell disease care in emergency departments in Ontario

To treat the intense pain of vaso-occlusive crisis, patients with sickle cell disease often need emergency department care. We are concerned that care for this population may not be equitable and may not be meeting best practice guidelines. We used health data for the Ontario population to look at emergency department visits for patients with sickle cell disease and those in the general population who were similar in terms of age, sex, neighbourhood characteristics, region, and seriousness of illness on arrival in the emergency department. Here, we looked at data for 1,430 patients with sickle cell disease with 6,623 emergency department visits, as well as 9,802 people in the general population with 11,575 emergency department visits.



KEY FINDINGS:

- Emergency department visits for sickle cell crisis have increased from an average of **3 visits** per year per patient with sickle cell disease in 2006 to an average of **14 visits** per year in 2018.
- Compared to the general patient population, people presenting with sickle cell crises were **13 times** more likely to be assigned a higher triage acuity score and be admitted to hospital respectively, with **one-third** of this population having visited the emergency department 10 or more times per year.
- Adults with sickle cell disease visited the emergency department more than **2.5 times** as often as children, having waited on average **nearly twice as long** to be seen by a physician, and were delayed from their first-dose pain medication by at least **30 minutes** (clinical target of 60 minutes from arrival).
- Patients with sickle cell disease from the lowest income neighbourhoods had more frequent emergency department visits and were **1.4 times** more likely to receive low triage acuity scores by nursing staff upon arrival compared with those from the highest income neighbourhoods.
- Higher triage acuity scores among adults with sickle cell disease positively correlated with improved clinically relevant outcomes and may represent a means to further improve their quality of care.

BOTTOM LINE:

- Disparities in the quality of care and clinical outcomes for subgroups of patients with sickle cell crisis raise concern from a health equity perspective.
- Based on these data, future policy, clinical and research efforts must work to understand, address and close these gaps in both emergency department and hospital settings in order to improve the quality of care for all who have sickle cell disease.

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