


# THE VALUE OF DIAGNOSTIC TESTING FOR PARENTS OF CHILDREN WITH RARE GENETIC DISEASES (RD)

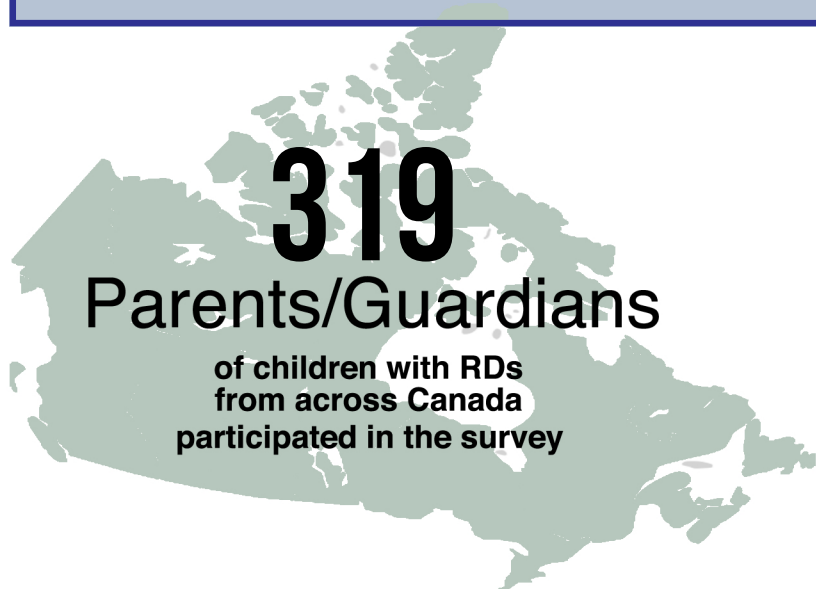
 **ROUGHLY 50%** of patients with a rare genetic disease (RDs) are undiagnosed

**Exome Sequencing**  
A new technology, called whole exome sequencing (ES), is improving our ability to diagnose individuals with suspected rare genetic diseases and could have a significant impact on patients being assessed in Canadian clinics. However, before ES is incorporated routinely, there must be a clear understanding of its value to patients and families.



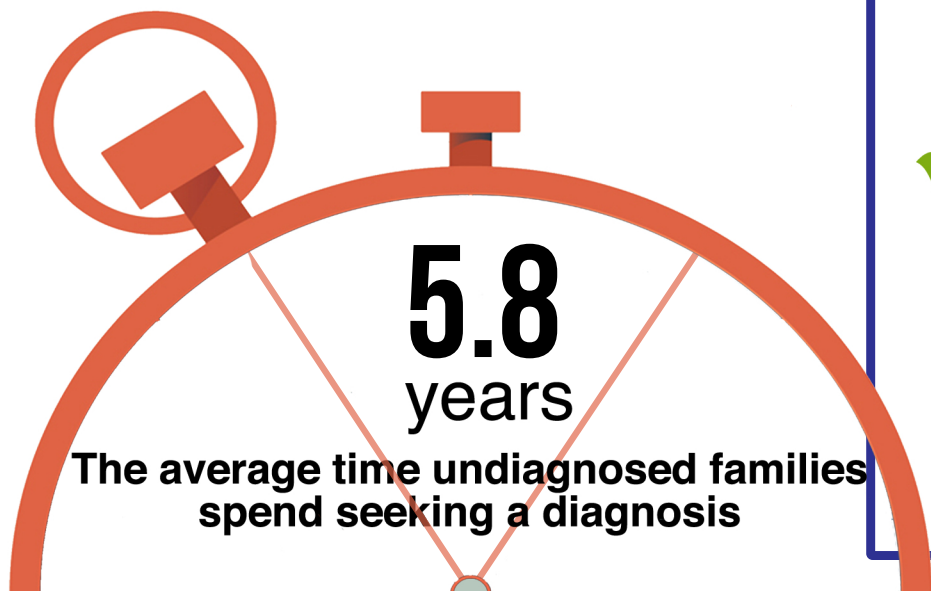
In 2016 researchers from the Alberta Children's Hospital at the University of Calgary and Children's Hospital of Eastern Ontario at the University of Ottawa conducted a survey to examine the value of a diagnostic test for families of children with RDs.

## SURVEY RESULTS



**89%** of parents/guardians said their child had undergone genetic testing

**66%** of parents/guardians said their child had received a diagnosis



Parents value ES more than the other diagnostic tests we explored:

- 75%** had a positive attitude towards ES
- 45%** had heard about ES
- 26%** had ES
  - Of the 26%: **55%** Reported that ES provided a diagnosis

Using a series of hypothetical scenarios to estimate parents/guardians preferences identified:

- \$6,590 CAD** is the amount parents/guardians were willing to pay for ES
- 5.2 years** is the time parents/guardians were willing to wait for ES

## IMPACT



The results from our survey highlight the value of ES as part of the diagnostic process for parents/guardians of children with RDs. These results will be shared with key stakeholders to increase accessibility of this testing for Canadian children who need it.

If you would like more information about the results of this study, you can read our publication or you can contact the Study Coordinator, Karen MacDonald (karenv.macdonald@ucalgary.ca).