
Saccadic Vector Optokinetic Perimetry (SVOP)

Initiative Type

Technology

Status

Deliver

Added

01 February 2018

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23 April 2018

URL

<https://cnxp3cuvtvrn68yjaibaht5ywrxspj7m.clinicalexcellence.qld.gov.au/improvement-exchange/svop>

Summary

Saccadic Vector Optokinetic Perimetry (SVOP) tests a patient's peripheral vision (or visual field) to look for defects in young children (aged one to ten years) with a variety of nervous system and eye disorders. Previously, available tests were often unreliable in this age group. SVOP works by using eye tracking technology and software to measure the patient's eye movement in response to a series of visual cues displayed in different locations on a computer screen. SVOP can be also used in

visual field testing of older children and adults if difficulties arise with the more complex methods of testing visual fields.

Key dates

Jan 2014

Dec 2016

Implementation sites

Lady Cilento Children's Hospital

Partnerships

Healthcare Improvement Unit

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Aim

Provides an opportunity to pilot and evaluate new technologies within 'real world' clinical settings in the Queensland context.

Benefits

SVOP is a fast, non-invasive test that provides a reliable, highly repeatable examination of a young child's peripheral vision that was previously not available.

Background

This technology was funded through the New Technology Funding and Evaluation Program (NTFEP). The NTFEP funds the introduction and evaluation of new technologies that:

- Are safe and effective
- Provide better health outcomes
- Provide value for money
- Provide greater access to care.

The evaluation findings will inform recommendations regarding the future use and/or investment of the technology within Queensland.

Evaluation and Results

- SVOP provides a reliable, highly repeatable examination of a young child's peripheral vision previously not available for this age group.
- SVOP testing is faster than other tests although the equipment requires calibration for each patient which takes time.
- One disadvantage of SVOP is that children must remain relatively still during the test - this can be difficult.
- SVOP is a non-invasive and intuitive test that is well tolerated by children.
- SVOP is useful in testing children that are unable to manage the requirements of other tests.
- Longer term clinical use is required to gain clinician confidence in its capabilities and other potential applications.

Resources

[Technology evaluation summary](#)

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