



Adapted service offering
for individuals with autism
spectrum disorder (ASD)
seeking to obtain a
first driver's licence

EXECUTIVE SUMMARY

of the ETMI report

Title

Adapted service offering for individuals with autism spectrum disorder (ASD) seeking to obtain a first driver's licence

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How to cite this document

Caron, D., Ndjepel, J., & St-Jacques, S. (2026). Adapted service offering for individuals with autism spectrum disorder (ASD) seeking to obtain a first driver's licence – Executive summary of the ETMI report, UETMISSS, CIUSSS de la Capitale-Nationale, 11 p.

Production

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Legal deposit 2026

Bibliothèque et Archives nationales du Québec

ISBN: 978-2-555-03867-7 (PDF)

ISSUE

Driving represents a significant lever for fostering autonomy, social participation, and socio-professional integration among people with autism spectrum disorder (ASD). However, their rates of obtaining a driver's license remains lower than those of the general population. Several factors including cognitive, sensory, communicative, and contextual influence the driving learning process among autistic individuals. Given the growing interest among professionals and practitioners in supporting this population's as they seek to learn to drive, there is a clear need to develop an evidence-based program tailored to their specific needs.

CONTEXT

The CIUSSS de la Capitale-Nationale offers an adapted Road Safety Education Program for individuals with disabilities through its driving school. In recent years, the school has experienced an increase in requests from individuals with autism spectrum disorder (ASD). The school's personnel have a recognized expertise in teaching driving to people with physical disabilities. However, they currently lack the competencies required to adequately support people with autism. In response to this growing demand, the driving school seeks to adapt its services based on evidence-based practices to also accommodate people with autism. In this context, the *Direction des programmes Déficience intellectuelle et trouble du spectre de l'autisme et déficience physique* (DDITSADP) mandated the UETMISSS of the CIUSSS de la Capitale-Nationale to support the development of an adapted service offering for people with ASD. The mandate of the UETMISSS was to identify the criteria that professionals should consider when assessing autistic individuals wishing to learn to drive, as well as the interventions that may facilitate the process of learning to drive.

OBJECTIVE

This ETMI aimed to identify the prerequisites to consider for individuals with ASD seeking to learn to drive, as well as the interventions that might facilitate their learning. Six evaluation questions guided the project, focusing on autistic individuals aged 16 to 30:

- What are the prerequisites to consider when learning to drive?
- What interventions may facilitate the process of learning to drive?
- What are the indicators enabling to measure progress in learning to drive?
- To what extent are the identified interventions safe?
- Which professionals are involved in the driving assessment and education?
- What are the barriers and facilitators surrounding learning to drive?

For further information, please consult the full report at:

[Rapport-ETMI Offre-service-adaptee-TSA.pdf](#)

METHODOLOGY

To address these evaluation questions, several data sources were used. A systematic literature review was conducted across four bibliographic databases (CINAHL, MEDLINE, PsychInfo, and Embase) and relevant websites, covering publications from January 1, 2014, to December 31, 2025. Experiential and contextual data were subsequently collected from health and social services professionals, autistic individuals, representatives of professional associations, and managers from the *Société de l'assurance automobile du Québec* (SAAQ). All collected data were triangulated with the scientific literature to generate key findings. Recommendations were developed based on these findings and the stakeholder consultation, using an informal consensus building approach.

RESULTS

Following the screening and appraisal process, 25 documents were retained, including 16 scientific studies (15 primary studies and 1 systematic review) and 9 grey literature documents, including 5 theses or dissertations. Experiential data were collected from 8 professionals and 30 autistic individuals. Contextual data were obtained from four professional associations (occupational therapists, psychologists, psychoeducators, and neuropsychologists) and from the SAAQ.

FINDINGS

The following findings were formulated for each evaluation question, based on the level of evidence of the outcomes of interest and the convergency of the overall data:

What are the prerequisites to consider when learning to drive for people with ASD?

- An assessment by various professionals is required to obtain a comprehensive profile of each autistic individual wishing to learn to drive.
- Several criteria contribute to determine driving fitness, including ASD severity, functional autonomy, behavioural stability, adequate communication, cognitive, judgement, decision-making and self-awareness skills.

What are the interventions that facilitate learning to drive for people with ASD?

- 10 interventions were identified and grouped into 5 training modalities: theoretical, on-road practice, driving simulator practice, combined theoretical and driving simulator, and combined simulator and on-road practice.
- Interventions relying exclusively on a driving simulator, as well as those combining theoretical education with driving simulator practice, were found to be the most effective.

What are the indicators enabling to measure progression toward learning to drive?

- No documents were identified that addressed indicators specifically designed for the measurement of progress in learning to drive.

To what extent are the identified driving interventions safe?

- Safety of the identified interventions was not evaluated in the selected documents.
- Lack of data does not allow for any conclusions to be drawn regarding the safety of the identified interventions. Further studies examining this aspect are required.

Which professionals are involved in the driving assessment and education?

- The assessments of driving ability for individuals with ASD may be conducted by various health professionals, primarily occupational therapists.
- Occupational therapists and driving instructors with or without prior experience working with individuals with ASD are the professionals most frequently involved in driving instruction for this population.

What are the barriers and facilitators surrounding learning to drive among individuals aged 16 and older with ASD?

- Several barriers and facilitators may influence the process of learning to drive for autistic individuals at the organizational, professional, individual and social environment levels.

RECOMMENDATIONS

Based on the findings and following stakeholder consultation, the following recommendations were made:

Effectiveness Dimension

- For individuals with ASD wishing to learn to drive, the driving school of the CIUSSS de la Capitale-Nationale could:
 - Conduct, where feasible, an interdisciplinary assessment (primarily involving occupational therapists and neuropsychologists), according to available resources, in order to obtain a comprehensive profile of driving capacities.
 - Provide support throughout the SAAQ administrative processes prior to and during the learning process. This support could be delivered by email or telephone to foster accountability and encourage engagement from parents/caregivers. A guide or an information sheet in plain language could also be made available to them.
- To support the acquisition of driving skills for people with ASD, it is recommended that the driving school prioritize interventions using a driving simulator or combining theoretical education with simulator-based practice, delivered in an individualized manner and in accordance with the professional's clinical judgement.

- Given the absence of data on progression indicators, it is suggested that the driving school implement a systematic documentation process to track the driving learning progression of autistic individuals, drawing on the variables measured in the identified interventions. Examples include vehicle manoeuvres, overall driving performance, vehicle orientation and directional control, and adherence to traffic rules. This approach could support the identification of relevant indicators, ensure systematic follow-up, and constitute a useful database for the driving school.

Safety Dimension

Given the lack of data on the safety of the identified interventions, it is suggested that the driving school of the CIUSSS de la Capitale-Nationale systematically document incidents and accidents occurring during driving education, including those arising during simulator training. This process could, for example, be integrated into a research project.

Organizational and Professional Dimensions

- To facilitate driving education for individuals with ASD, it is recommended that the driving school of the CIUSSS de la Capitale-Nationale ensure that:
 - Driving assessments (during and at the end of the learning process) are carried out primarily by occupational therapists or, depending on available resources, by specialized educators.
 - Instruction is provided by occupational therapists as well as driving instructors trained for ASD-specific considerations.

At the organizational level, the driving school:

- Must implement adapted and individualized programs to support individuals with ASD.
- Must integrate strategies adapted to the learner's need and level of progress.
- Should have instructors with strong communication and interpersonal competencies¹.
- Could consider training instructors on the realities of individuals with ASD.
- Could become as a "hub/resource school," providing support (information and advice) to other driving schools.

¹ Interpersonal competencies include, among others: active listening, patience, respect of others' emotions, being reassuring, and maintaining a positive approach.

At the professional level, the driving school:

- Must use individualized educational approaches adapted to the learner's strengths and weaknesses.
- Must use a variety of supports to enhance comprehension and accessibility of information for this population.
- Must break tasks down into steps and implement a staged progression approach.
- Should aim for more repetitions.
- Should also make use of virtual learning environments.
- Should favour shorter, more frequent lessons with breaks.
- Should emphasize regular practice.
- Should begin practical lessons in a calm, low-stimulation environment.

At the individual level:

Given the variability of profiles and levels of ASD, the driving school should account for the individual characteristics of each learner in order to support the acquisition of driving competencies.

At the social environment level, the driving school:

- Could foster the development of trusting relationships with the learner's support network to enlist their involvement.
- Could encourage accompanied driving practice with a support person outside of formal lessons, in appropriate cases and in accordance with the professional's clinical judgement.

CONCLUSION

This evaluation project provides a synthesis of the interventions that may facilitate driving instruction for individuals with ASD aged 16 and over. The available evidence indicates that the most effective interventions combine various modalities including theoretical learning, driving simulation, and real-world practice. The identified learning prerequisites will enable professionals to assess the readiness of individuals with ASD to enrol in a driving education program. The recommendations are intended to support the leadership of the CIUSSS de la Capitale-Nationale driving school in developing a driving education program adapted to the needs of autistic learners.

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