

# Effectiveness of Regional Intervention for Improving Patient Journey within Critical Care Services of Ontario: Early Evaluation Findings

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## BACKGROUND

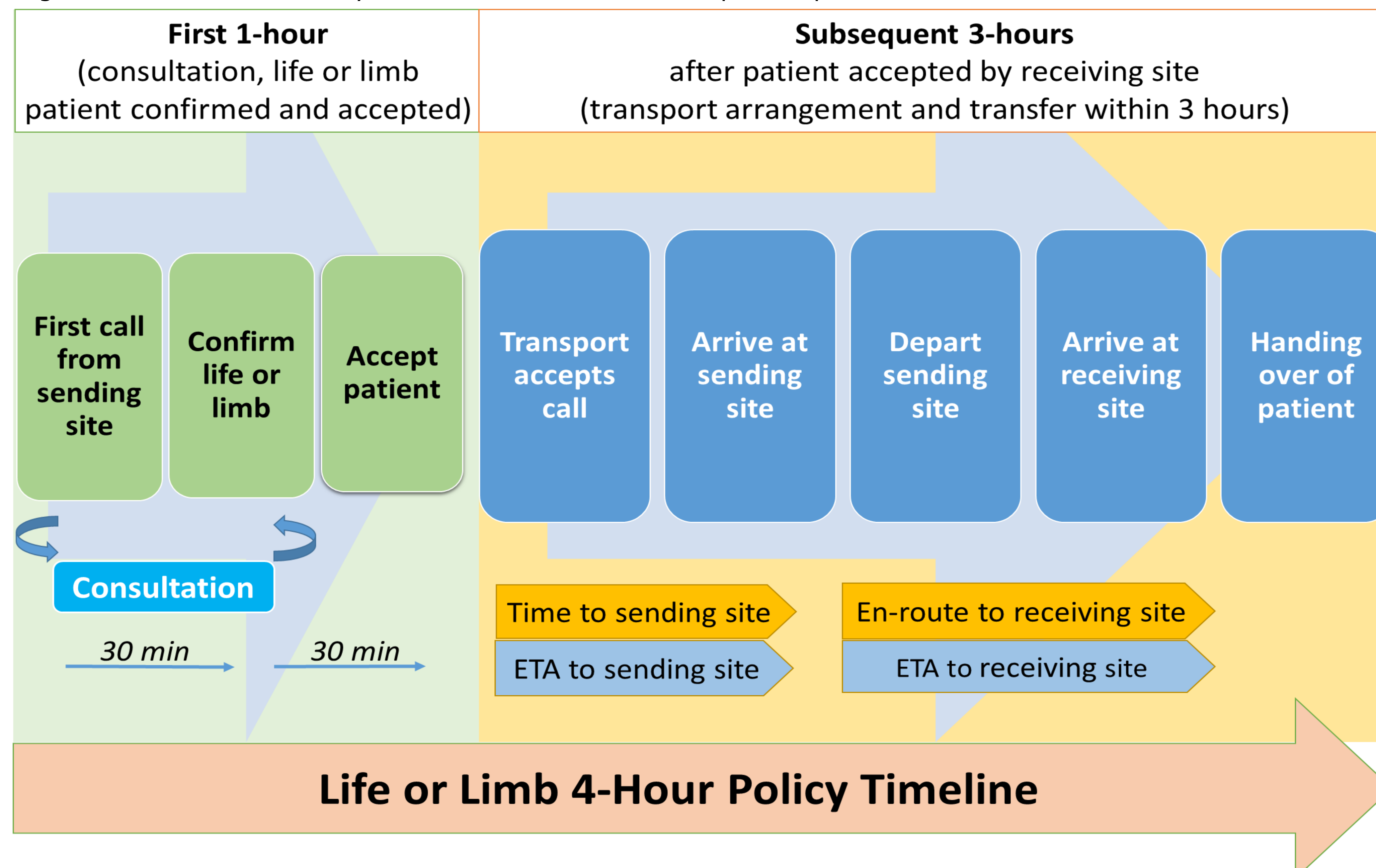
Quality care for Ontarians includes striving for the right care, at the right time, in the right place. As such, in December 2015 the Ministry of Health and Long Term Care (MOHLTC) launched the One Number to Call (ONTC) initiative to improve inter-facility transfers of critically-ill patients to appropriate level of care across Ontario's critical care health system.

ONTC is a collaborative of multiple organizations including the MOHLTC, emergency transport providers, dispatch services, and a central call centre, CritiCall Ontario. CritiCall Ontario currently facilitates the referral of patients with urgent and emergent conditions and under the ONTC initiative also coordinates transport of those critically-ill patients, confirmed as "life or limb", between sending and receiving hospitals. Phase-I of ONTC implementation focused on a cohort of patients with confirmed life or limb threatening conditions. The Provincial Life or Limb Policy ensures that no patient with a life or limb threatened condition is refused transfer to an appropriate hospital within a 'best effort window' of 4 hours.

The 4-hour target under the Life or Limb Policy is divided into the first 1 hour, during which a consultation with a referring hospital takes place and the patient is confirmed and accepted for transfer. During the subsequent 3 hours, transport arrangements are made and the patient is transferred. The operationalization of the policy in its simplest form is presented as Figure 1.

The ONTC initiative streamlines services and provides a single point of contact for Emergency Department physicians through CritiCall Ontario. By providing consultation and transport coordination, life or limb threatened patients will receive timely access to care at the closest, most appropriate hospital and via the most appropriate method of transport (air or land ambulance).

Figure 1: Life or Limb Policy timeline of 4 hours for transport of patients to definitive care



## OBJECTIVES

- Facilitate transport arrangements for life or limb threatened patients
- Improve inter-facility transfer times
- Ensure confirmed life or limb patients receive timely access to definitive care via the most appropriate method of transport

## METHODS

- Call centre data from CritiCall Ontario
- Statistical process control charts were used to compare pre-post implementation periods
- Time series regression analysis was done to assess the effect of ONTC intervention

Pre-Implementation: Feb 2014-Nov 2015  
ONTC launch: Dec 2015  
Post-Implementation: Jan 2016-Jun 2016

## ACKNOWLEDGEMENT

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## RESULTS

- Following ONTC intervention, the median transfer time for life or limb patients from time of acceptance to arrival at receiving hospital decreased (Figure 2)
- The number of patients transferred to receiving hospitals within the policy specified timeline also increased (Figure 3)
- Segmented time series regression analysis indicated that the above findings were not statistically significant

Figure 2: Median transfer time for life or limb patients from time of acceptance to arrival at receiving hospital: Pre/Post ONTC implementation

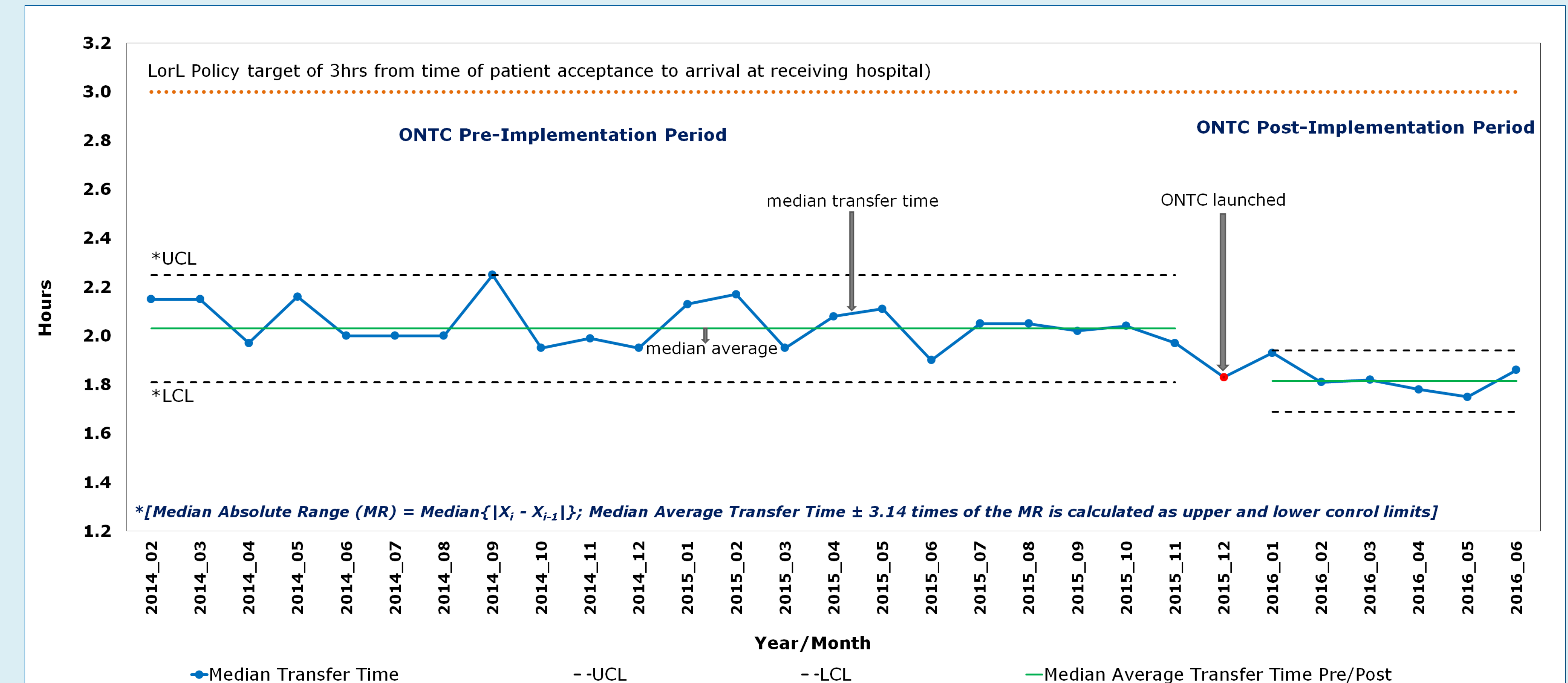
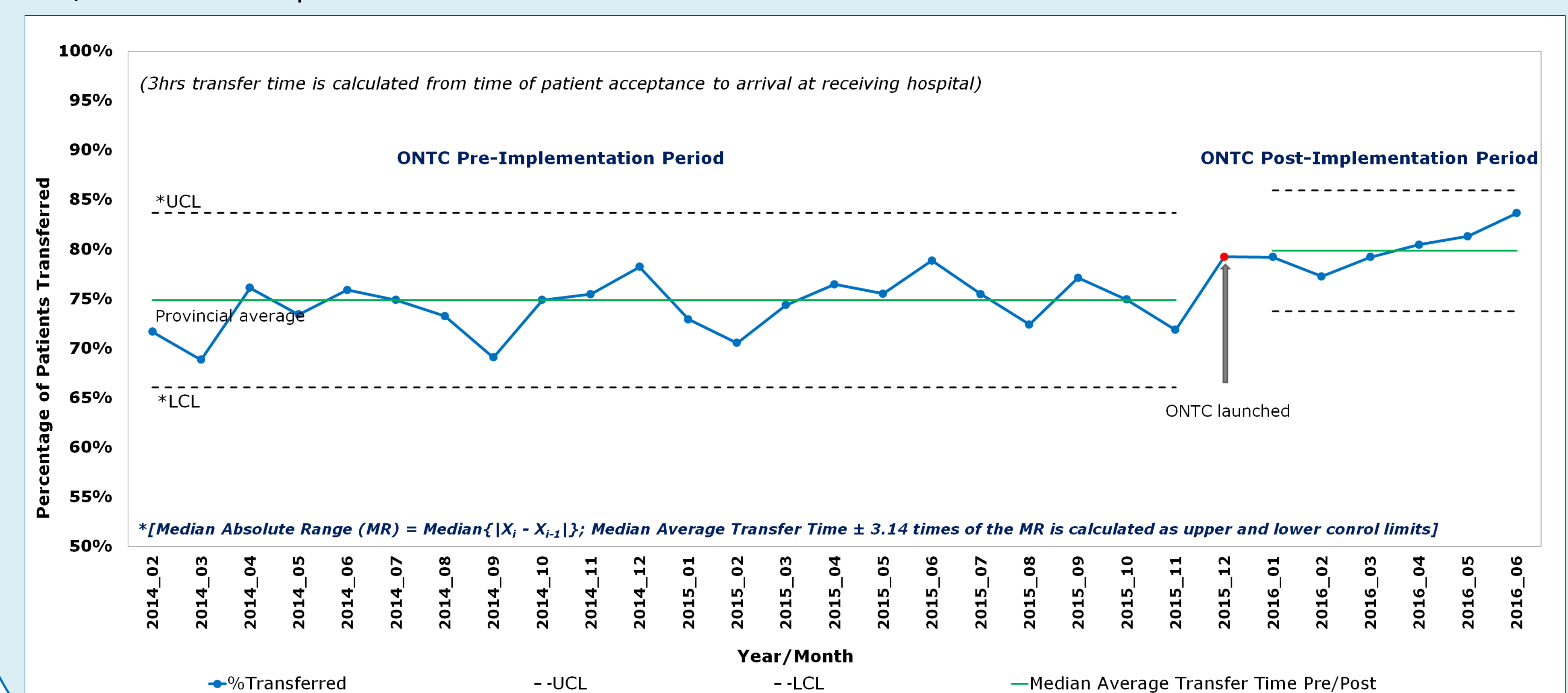


Figure 3: Percentage of life or limb patients transferred to receiving hospitals within three hours: Pre/Post ONTC implementation



## CONCLUSIONS/IMPLICATIONS

- Early findings show promising results. It is envisioned that when fully implemented, ONTC will improve patients' critical care journey and transfer times.
- 1-year process evaluation of the ONTC initiative is in-progress.
- The 2<sup>nd</sup> phase of ONTC may include updated technology for live data sharing among all transport providers and the call centre.
- This initiative highlighted improved partnerships between transport providers (land and air), the central call centre CritiCall Ontario and a team of diverse stakeholders, including Critical Care Services Ontario and various branches across the MOHLTC.
- Future phases of the ONTC initiative may benefit from improved data quality from all providers required for ongoing evaluation and performance management.