



***Non-Emergent Patient Transportation in Kenora & Rainy River Districts:
An Evidence Based 3rd Party Review***

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A. Introduction: Funding & Delivery of Non-emergent Patient Transportation Across Ontario

Ontario's system of non-emergent patient care is anchored by a portfolio of large regional hospitals. These regional hospitals offer an array of sophisticated diagnostic and specialty procedures not available in smaller community hospitals. These regional "hub" hospitals have been consolidated across the province at a limited number of locations. Consolidation has helped to control patient care costs by creating high utilization locations for expensive diagnostic/specialty resources – thereby leveraging efficient economies of scale.

Ontario's dispersed portfolio of community hospitals provides accessible localized care; with medical staff acting as decision-making "triggers" in the process to provide patients with access to the more sophisticated/expensive diagnostic procedures offered at the regional "hubs".

Regionalization cannot function properly without efficient patient flow in and out of "hub" hospitals – allowing these locations to service ongoing high levels of demand. Travel distances and travel time associated with patients accessing essential medical services also increase in a highly regionalized system. *Therefore, timely and dependable transportation of non-emergent patients between the centralized regional "hub" locations and the dispersed community hospital locations is absolutely critical to the functioning of the entire non-emergent patient care system in Ontario.*

However, the non-emergent patient transportation model in Ontario is not funded or delivered in a consistent/transparent fashion across the province. Instead, ad-hoc and dissimilar urban and Northern/remote arrangements have evolved in parallel. This is problematic for local taxpayers and for patients.

i) Legislative Mandate for Non-Emergent Patient Transportation – The Ongoing Debate

There is an ongoing, vigorous debate within the broader health care community around the existence (or lack there-of) of a legislated mandate for land ambulance services to provide non-emergent patient transportation.

The Ambulance Act and associated regulations do not explicitly reference non-emergent patient transportation as a clearly delineated line of business for Ontario's land ambulance services. The Ambulance Act defines an ambulance as follows:

“... a conveyance used or intended to be used for the transportation of persons who;

- a) Have suffered a trauma or an acute onset of illness, either of which could endanger their life, limb or function;*
- b) Have been judged by a physician or health care provider designated by a physician to be in an unstable medical condition and to require, while being*

transported, the care of a physician, nurse, or other health care provider, emergency medical attendant or paramedic, and the use of a stretcher.”

However, MOHLTC has taken the position during this Review that municipal EMS service providers are obligated by law to deliver “medically necessary” services. The Ministry takes the position that non-emergent patient transportation represents one such medically necessary service. The legal basis/rationale supporting the Ministry's stated position has not been shared during this Review.

Ambulance Act regulations do explicitly reference the pre-hospital emergency response line of business. For instance, regulations require EMS providers to submit response time performance plans for their pre-hospital emergency services. CTAS defined response time targets must be set and submitted by EMS providers – and actual response time performance results are going to be publicly reported by the Ministry. No EMS performance targets or results reporting are required by MOHLTC for the “medically necessary” non-emergent patient transportation line of business.

The Ambulance Act regulation establishing mandatory province-wide response time targets for i) life threatening cardiac arrest call and ii) CTAS 1 calls, does not recognize the negative impact of Code 1-2 non-emergent transfer workload on emergency response capabilities for ambulance services operating in jurisdictions without non-paramedic transfer services.

The Ontario Association of Paramedic Chiefs (OAPC) has not taken an official position on whether non-emergent patient transportation is a mandated service delivery responsibility for EMS providers. However, in recent years OAPC Board members have publicly disputed the Ministry position that non-emergent patient transfers are mandated in law for land ambulance providers.

ii) System Planning & Funding in Urban Ontario

The funding and delivery of non-emergent patient transportation in urban Ontario has evolved according to the following realities:

- Urban EMS providers deploy the vast majority of their annual budgeted vehicle hours of service to achieve Council-approved emergency response time targets. Urban EMS providers do not typically budget for significant Code 1-2 non-emergent transfer volumes, nor do their deployment plans typically identify significant vehicle hours of service devoted to non-emergent patient transportation call volumes. In fact, urban EMS deployment plans often declare that non-emergent transfer services will be suspended entirely during times of high emergency response activity.
 - Urban EMS services have relatively high levels of system busyness – referred to in the EMS community as unit hour utilization or UHU. Urban EMS services typically strive for a ideal system busyness UHU in the range of 35 per cent. UHU above 40% is clearly understood to degrade EMS deployment plan performance, and lead to higher emergency response times. UHU below 30 per cent is deemed to be somewhat inefficient, and perhaps indicative of excess deployed EMS resources.
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- High emergency call volumes associated with population growth and “Aging Tsunami” baby boomer demographics – combined with worsening hospital emergency department off-load delays - are generating ongoing critical shortages in ambulance unit availability. The incidence of “zero units available” is growing across Ontario’s urban EMS services. There is no remaining EMS capacity (in reserve) to service demand for non-emergent patient transfers in many urban jurisdictions on many days. Significant delays in responding to scheduled requests for Code 2 non-emergent patient transfers are common – often measured in days rather than hours. An urban example in the North is warranted. The recently completed Superior North EMS (SNEMS) strategic plan documented 1,000 annual occurrences of “zero units available” for the next Code 4 emergency call in the City of Thunder Bay (see SNEMS strategic plan at www.superiornorthems.com). When a SNEMS ambulance unit finally became available, 90th percentile response times took twice as long as historic norms. Not surprisingly, Code 2 non-emergent patient transfers by SNEMS were not being executed in a timely fashion to/from the Thunder Bay airport tarmac – causing major disruption in Code 2 scheduled procedures at

TBRHSC and costly flight delays for ORNGE “Standing Offer” fixed-wing providers.

Province-wide Non-urgent Transportation Model

➤ Inconsistent Non-urgent transportation (Code 1-2) delivery & funding models across Province

1. **Urban model** typically delivered by blend of Ornge, land ambulance & non-paramedic transfer services
 - Non-paramedic transfer services contracted/funded by hospitals
 - Hospital transfer service contracts a result of unacceptable delays in EMS Code 2 service delivery due to high Code 4 UHU
2. **Non-urban model** typically delivered by Ornge & land ambulance
 - EMS direct delivery & funding...fixed cost resources with existing capacity to do Code 2 work
 - No non-paramedic transfer services involved due to lack of transfer volumes & lower EMS Code 4 workloads

- Urban hospitals have reacted to chronic delays in EMS delivery of non-emergent Code 2 patient transfers by contracting with private sector companies to deliver timely non-paramedic non-emergent patient transportation services. Urban hospitals have somehow carved out funding from within their existing budgets for these non-paramedic transportation contracts – thereby freeing up significant EMS paramedic vehicle hours to deal with

escalating demands for Code 4 emergency call volumes. Following a critical report by the Provincial Ombudsman, non-paramedic transfer agencies will soon face impending province-wide regulations around service delivery standards.

- From a funding perspective, the urban Ontario system for delivering non-emergent patient transportation is characterized by the following realities:

- ✓ Local property taxpayers fund approximately 50% of the EMS deployed resources/budgets. These resources are directed primarily towards meeting the demand for Code 4 emergency calls – not Code 2 non-emergent patient transfers.
- ✓ A robust commercial and industrial property tax base absorbs much of the fiscal burden associated with the local 50% share of budgeted EMS vehicle hours of service. Residential property taxpayers are sheltered from the full cost of the local share of the EMS budget.

- ✓ Non-emergent non-paramedic patient transfer contracts are primarily funded by province-wide revenues (e.g. income/sales taxes) funneled through regional hospital budgets. Local property taxpayers avoid these costs altogether in many urban EMS jurisdictions.

iii) Northern & Remote System Planning and Funding

The funding and delivery of non-emergent patient transportation in rural and Northern/remote Ontario has evolved according to the following realities:

- Northern/remote EMS providers deploy the vast majority their annual budgeted vehicle hours of service to achieve Code 4 emergency response coverage over large expanses of territory. EMS providers do not typically budget for *all* impossible-to-predict Code 1-2 non-emergent transfers, nor do their deployment plans identify *all* the vehicle hours of service devoted to Code 2 non-emergent patient transportation call volumes. Code 2 service delivery capacity inevitably comes at the expense of Code 4 coverage.
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- Northern/remote EMS providers do not typically grapple with high levels of system busyness or UHU – emergency call volumes are low relative to urban systems. Response times are understandably slower than in urban settings; not a surprise given the challenges of finite resources and large amounts of sparsely populated territory. Northern/remote system performance is defined by consistency of Code 4 coverage – not Code 4 response times.
 - The low-UHU “fixed” paramedic resources already in place for emergency response purposes typically deliver Code 2 non-emergent transportation. The use of paramedic resources for Code 4 response coverage and Code 2 transfer work creates an inherent tension in Northern/remote EMS services. What service delivery priority is paramount? Maintaining Code 4 coverage in an admittedly “low busyness” UHU environment, or timely provision of necessary, lower patient-acuity Code 2 transportation services? Growing demand for Code 2 transfers is linked to the increased regionalization of hospital services in recent years.
 - From a funding/taxation perspective, the non-urban Northern/remote system for delivering non-emergent patient transportation is characterized by the following realities:
 - ✓ Local property taxpayers fund approximately 50% of the EMS deployed resources. These deployed resources are directed primarily towards meeting the demand for Code 4 emergency calls – with a relatively minor share of resources made available for Code 2 non-emergent patient transfers.
 - ✓ The absence of a robust commercial and industrial property tax base to absorb any meaningful portion of the 50 percent local share of the EMS budget. Instead, residential property taxpayers absorb almost the entire 50% local share of EMS budgets. It also needs to be recognized that sparse population patterns mean the pool of residential property taxpayers is much smaller (on a per square kilometer basis) than urban Ontario. Northern population densities of 1.0-1.5 persons per km are typical – versus average provincial population
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densities of 14 persons per square kilometer. EMS costs in the Northern/remote districts are driven more by vast geography and coverage challenges than by population.

Province-wide Non-urgent Transportation Model

➤ Significant variation in services funded by local tax base

| | EMS Code 3-4 Coverage | Code 2 Inter-facility Transfers |
|-----------------------------------|---|---|
| Urban Ontario | Funded by local taxpayers (50/50 cost-sharing) Relatively high UHU | Hospital funded non-paramedic delivery model due to significant delays in EMS Code 2 response times |
| Rural & Remote Ontario | Funded by local taxpayers (50/50 cost-sharing) Low to moderate UHU | EMS paramedic delivery model funded by local taxpayers outside Code 4 deployment plan based budgets |

iv) Funding Inequities for Northern/Remote Property Taxpayers

Northern/remote residential property taxpayers in Ontario face a significantly higher tax burden for Code 1-4 land ambulance services, compared to urban residential property taxpayers.

Northern/remote residential property taxpayers lack the property tax “cushion” provided by a robust commercial/industrial tax base in urban settings. Instead, residential taxpayers in the remote North fund 50% of total Code 3-4 emergency coverage budgets. Residential property taxpayers in the remote North jurisdictions also fund 50% of additional expenses associated with budgeted up-staffing EMS vehicle hours (beyond the Code 4 deployment plan) in order to provide Code 2 patient transfer services. Up-staffing costs linked to higher-than-budgeted non-emergent call volumes are funded 100% by local taxpayers.

In urban Ontario jurisdictions, province-wide revenues (e.g. sales or income taxes) are funneled through hospital budgets to fund Code 1-2 patient transfers; delivered primarily by non-paramedic contractors – thereby reducing the EMS property tax burden on urban residential property taxpayers. This income/sales tax funded “subsidy” for residential property taxpayers in urban communities has no counterpart in the Northern/remote districts of the province. The smaller Northern/remote residential tax base absorbs a significantly higher share of total budgeted land ambulance costs to support Code 1-4 call volumes. The urban Code 2 transfer

“subsidy” is in direct contradiction of the lower ability-to-pay of the Northern/remote residential property taxpayer.

If responding to “medically necessary” Code 1-2 transfers is a legal requirement for Northern/remote EMS services, why are urban EMS providers not required to deliver these services? Why can urban EMS providers simply “opt out” of Code 2 workload (as per their deployment plans) when they decide they are too busy? Why do urban residential property taxpayers receive a significant income/sales tax funded “subsidy” for non-emergent transfer services, compared to Northern/remote residential taxpayers who absorb these costs on a less robust property tax base?

These province-wide non-emergent transportation funding and local tax burden inequities should be recognized by the Province going forward, as the Northern/remote jurisdictions across Ontario seek to rationalize non-emergent patient transportation planning, delivery and funding/taxation models - in partnership with the MOHLTC.

B. Non-Emergent Patient Transportation: “Situation Analysis” in the Kenora & Rainy River Districts

Performance Concepts Consulting has executed an evidence based **Situation Analysis** of the non-emergent patient transportation system performance in Kenora and Rainy River districts - in order to formulate a service improvement “path forward”. The *Situation Analysis* has made use of the following methodology and tools:

- Semi-structured interviews with leaders/selected staff from six Kenora & Rainy River community hospitals;
 - Semi-structured interviews with leaders/selected staff from Kenora and Rainy River EMS services;
 - Semi-structured interviews with members of the ORNGE northern Ontario management team;
 - Detailed analysis of system performance data from Kenora & Rainy River EMS;
 - Service costing analyses re. Kenora & Rainy River community hospitals, EMS services, & ORNGE.
 - Objective 3rd party review by Performance Concepts based on EMS and Non-emergent patient transportation expertise. Will assess system performance risk.
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The **Situation Analysis** has considered a range of performance issues, key findings, and risk issues that need to be considered in this Review going forward.

i) Absence of System-wide Coordination/Governance

There is a universal consensus among NW LHIN health system actors that the current non-emergent patient transportation “system” does not, in fact, function as a properly integrated patient transportation system. The system does not function well “horizontally” across the participating institutions. It is in fact more of a “non-system” according to some interviewed participants.

The actors within the non-emergent patient transportation non-system (i.e. EMS, community hospitals, ORNGE, regional “hub” hospitals) each function within limited vertical silos. Each institution’s silo has its own budgetary priorities/incentives. Each institutional silo also has its own perspective on how best to balance the overall interests of differing patients (Code 4 or Code 2) with the interests of said institution.

There is no “horizontal” coordinating body or non-emergent patient transportation governance process in place to ensure integrated patient-centric planning, and service delivery, occurs across the institutional silos. Patient interest is not always paramount. To their credit, leadership representatives from the EMS and hospital actors recognize many of the silo problems, and are committed to fundamental reform.

Performance Concepts Consulting has determined that the empirical service delivery results of the current non-emergent patient transportation non-system are not known or reported. Performance metrics and empirical targets are not yet in place. There is no system-wide performance measurement scorecard. The absence of public results reporting dilutes accountability. Performance evaluation appears to be anecdotal and ad-hoc - with EMS, ORNGE and community hospitals entering into discussions on a case-by-case basis around perceived “patient failure” events. Improved metrics and empirical system performance data are required.

Perhaps most importantly, within the current “non-system” there is no integrated funding/budget model linking the various actors; a necessity to create financial incentives for integrated

planning and operations. An integrated funding model would close existing service level gaps and create system-friendly investment “subsidies” to leverage the various participants to plan and act outside their existing limited budget silos. Existing institutional budgets are funding non-emergent patient transportation from a series of isolated “base” budgets not properly designed to do so. Funding gaps and inequities across the participating organizations are the result. These gaps have created tension and friction within the patient transportation non-system.

Non-urgent Patient Transportation System: Silo Problems

- No coordinated governance or system-wide planning model among NW LHIN hospital & EMS stakeholders
- No system-wide “horizontal” funding model – only established “vertical” budgets within individual hospitals & EMS stakeholders
 - Vertical budgets associated with other unrelated functional lines of business
- No system-wide performance metrics or results reporting

ii) EMS Response Time Erosion

Kenora and Rainy River EMS services are experiencing erosion in their Code 3-4 emergency response times due to Code 2 non-emergent transfer call volumes. The figure below sets out the issue of two distinct lines of EMS business competing for the same finite vehicle hour resources.

Risk Management Issue – EMS Response Time Erosion

- MOHLTC requires all Ontario EMS services to establish response time targets for CTAS 1-5 patient acuity categories
 - Actual EMS response times versus CTAS 1-5 targets must be reported to MOHLTC for potential on-line publication & peer comparison
- Actual response times on dispatched Code 3-4 emergency calls are degraded whenever EMS units (at bases with single unit coverage) execute an airport Code 1-2 non-urgent call, but must then clear and respond to an overlapping Code 3-4 call
 - CTAS 1-3 actual call response times may exceed their targets if enough “overlapping” call events transpire in a given year
 - Individual CTAS 1-3 “overlapping” calls almost certainly exceeding targeted response times

Provincially **mandated response time** performance targets for dispatched Code 3-4 emergency calls must be set/approved

locally in an EMS performance plan. EMS deployment plans set out the vehicle hours of coverage/resources required to meet these emergency response time targets. The deployment plan does not consider the impacts of impossible-to-predict Code 2 workload volume spikes. When overlapping Code 2/Code 3-4 calls occur within a typical Kenora or Rainy River EMS base's coverage zone, the emergency call's response time inevitably suffers. Response time targets are not achieved.

More seriously, EMS Code 4 emergency coverage can also be compromised by Code 2 workload in single-unit coverage communities. This happens when the ambulance at Base A is dispatched on a long-distance Code 4 response to a call located in the Base B coverage zone "next door". Base A now has zero resources/coverage. This "zero ambulance available" situation is triggered by the CACC when the "next door" Base B ambulance unit is already on a Code 2 non-emergent call. In Kenora district, seven of nine ambulance bases feature single ambulance deployment. In Rainy River district, all four bases feature single ambulance deployment.

The Kenora and Rainy River provincially mandated emergency response performance plans appear in the two figures below (on the next two pages). Targets are linked to patient acuity CTAS categories, despite the fact CACC dispatch is based on unrelated Code 3-4 DPCI II triage algorithms.

| KENORA EMS RESPONSE TIME PERFORMANCE STANDARDS | | | | |
|--|--|--|--------------------|-------------------------|
| Patient Acuity Level | Type of Measured Response | Target Response Time - Notified (T2) to Arrived Scene (T4) | Performance Target | Actual Performance 2011 |
| Sudden Cardiac Arrest | Defibrillator On Scene | 6 minutes (established by MOHLTC) | None | No Data Available |
| Sudden Cardiac Arrest | Paramedics On Scene with Defibrillator | 6 minutes (established by MOHLTC) | 45% | 46% |
| CTAS I (Resuscitation) | Paramedics On Scene | 8 minutes (established by MOHLTC) | 60% | 60% |
| CTAS II (Emergent) | Paramedics On Scene | 15 minutes (established by the KDSB) | 70% | 72.56% |
| CTAS III (Urgent) | Paramedics On Scene | 15 minutes (established by the KDSB) | 75% | 76.30% |
| CTAS IV (Less Urgent) | Paramedics On Scene | 20 minutes (established by the KDSB) | 75% | 76.03% |
| CTAS V (Non Urgent) | Paramedics On Scene | 25 minutes (established by the KDSB) | 75% | 84.20% |

| | RAINY RIVER EMS RESPONSE TIME PERFORMANCE PLAN | |
|---|---|--|
| Type of Call | 2012/13 Response Time Targets - EMS Notified of Call to Arrival at Scene | Recommended 2012/13 District of Rainy River Benchmark % |
| Sudden Cardiac Arrest (SCA) i.e. not breathing no pulse | Defibrillator Response Six (6) min or less Set by the MOHLTC | 45% |
| CTAS 1 (other than SCA) i.e. major shock | Paramedic Response 8 min or less Set by the MOHLTC | 50% |
| CTAS 2 (emergent care) i.e. chest pain | Paramedic Response 10 min or less Set by the RRDSSAB | 65 % or better |
| CTAS 3 (urgent care) i.e. mild asthma | Paramedic Response 15 min or less Set by the RRDSSAB | 65 % or Better |
| CTAS 4 (less urgent care) i.e ear ache | Paramedic Response 30 min or less Set by the RRDSSAB | 65% or Better |
| CTAS 5 (non urgent care) i.e sore throat | Paramedic Response 60 min or less Set by the RRDSSAB | 75 % or Better |

ii) EMS Code 3-4 Vehicle Hour Erosion

Since EMS deployment plans in Kenora and Rainy River focus exclusively on Code 3-4 coverage and response times, Code 1-2 calls can be accurately interpreted as consuming Code 3-4 response preparedness. From an EMS perspective this is seen as problematic – finite resources are being expended on lower acuity scheduled transfers at the expense of potentially higher acuity Code 4 calls that may occur at an inopportune time. The two figures below document vehicle hours deployed for Code 4 emergency coverage that are consumed by Code 2 non-emergent workload in Kenora and Rainy River districts.

It should be recognized that “lost” Code 4 coverage hours also represent actual delivery of medical benefits to lower acuity Code 2 transfer patients. Failure by EMS to deliver Code 2 patients to medically necessary scheduled procedures could have negative impacts on patient acuity. It also needs to be recognized that the majority of dispatched Code 4 patients are not triaged as Code 4 return-to-hospital patients when triaged on-scene by EMS paramedics. The provincially mandated DCPI-2 triage algorithm used by the CACC consistently over-triages patient acuity. Therefore “lost” Code 4 coverage hours may in fact be more accurately understood as “lost Code 3 return” coverage hours.

Kenora EMS Lost Code 4 Coverage Hours

| | 2012 Code 1 - 2 Transports | Lost Code 4 Coverage Hours | Peak Lost Code 4 Coverage Hours |
|-----------------|----------------------------|----------------------------|---------------------------------|
| Kenora | 523 | 523 | 408 |
| Kenora-Winnipeg | 162 | 1,458 | 1,137 |
| Dryden | 362 | 362 | 290 |
| Red Lake | 191 | 191 | 155 |
| Sioux Lookout | 538 | 538 | 420 |
| Ear Falls | 2 | 6 | 5 |
| Ignace | 2 | 6 | 5 |
| Nestor Falls | 1 | 5 | 4 |
| Pickle Lake | 16 | 48 | 41 |
| Sioux Narrows | 9 | 27 | 21 |
| | 1806 | 3164 | 2486 |

• When timely, these hours also represent delivered medical benefits to Code 2 transfer patients – thereby avoiding medical risk associated with missed/delayed procedures

Rainy River EMS Lost Code 4 Coverage Hours

| | 2012 Code 1-2 Transports | Lost Code 4 Coverage Hours | Lost Peak Daytime Code 4 Coverage Hours |
|-------------|--------------------------|----------------------------|---|
| Atikokan | 175 | 196 | 127 |
| Emo | 96 | 119 | 74 |
| Ft Frances | 655 | 891 | 596 |
| Rainy River | 81 | 156 | 105 |
| | 1,008 | 1,362 | 902 |

• When timely, these hours also represent delivered medical benefits to Code 2 transfer patients – thereby avoiding medical risk associated with missed/delayed procedures

While erosion in EMS resourcing capacity (due to Code 2 workload) is a fact, it is equally clear that the “lost” EMS coverage hours deliver a medical benefit for the non-emergent transportation system and its patients. The key question is a risk question: how often do Code 4 patients **actually** experience negative consequences from the “resource consumption struggle” waged between the primary Code 3-4 and secondary Code 1-2 lines of business delivered by EMS?

iii) EMS Utilization Patterns – Documenting Capacity to Deliver Code 1-2 Non-Emergent Workload

A key question to be answered in this Review is the existing capacity of EMS services to deliver the combined Code 1-4 workload in Kenora and Rainy River districts. The question of existing EMS capacity is especially important, given the absence of suitable market conditions for a private sector non-paramedic transfer service to execute Code 1-2 workload in Northern/remote communities. This EMS capacity question can be answered by calculating “unit hour utilization” or UHU for the EMS services. UHU measures the percentage of each vehicle hour of service consumed by Code 1-4 calls. The conventional wisdom in the EMS community across Ontario

holds that a UHU of 30-35% is an ideal level of system business. However, this conventional wisdom is decidedly urban in perspective. Northern/remote EMS services will not typically achieve UHU in the 30% range because population totals, population density and geography render this level of urban “busyness” unlikely. Therefore UHU in Kenora and Rainy River indicates a marginal “capacity to do work” rather than a statement on optimal system busyness. A low UHU does not indicate inefficiency – it reflects the Northern/remote reality. UHU must always be interpreted in parallel with Code 4 emergency coverage priorities.

The following two figures document UHU patterns across the EMS bases in Kenora district.

Kenora EMS Busyness: Overall Unit Hour Utilization (2012)

| All Day UHU | Deployed Vehicle hours | Code 3 Call Hours | Code 4 Call Hours | Non-Emerg Call Hours | Total Call Hours | Overall UHU |
|---------------|------------------------|-------------------|-------------------|----------------------|------------------|-------------|
| Kenora | 13,140 | 793 | 2,325 | 1,981 | 5,099 | 39% |
| Dryden | 8,760 | 329 | 880 | 362 | 1,571 | 18% |
| Red Lake | 8,760 | 244 | 520 | 191 | 955 | 11% |
| Sioux Lookout | 11,880 | 1,081 | 1,548 | 538 | 3,167 | 27% |
| Ear Falls | 8,760 | 60 | 180 | 6 | 246 | 3% |
| Ignace | 8,760 | 106 | 341 | 6 | 453 | 5% |
| Nestor Falls | 3,744 | 62 | 87 | 5 | 154 | 4% |
| Pickle Lake | 6,600 | 211 | 373 | 48 | 632 | 10% |
| Sioux Narrows | 4,380 | 170 | 364 | 27 | 561 | 13% |
| Total | 74,784 | 3,056 | 6,618 | 3,164 | 12,838 | 17% |

Kenora EMS Busyness: Peak Daytime Unit Hour Utilization (2012)

| | Deployed Vehicle hours | Code 3 Call Hours | Code 4 Call Hours | Non-Emerg Call Hours | Total Call Hours | Peak UHU Days & Evenings |
|---------------|------------------------|-------------------|-------------------|----------------------|------------------|--------------------------|
| Kenora | 8,760 | 629 | 1,775 | 1,981 | 4,385 | 50% |
| Dryden | 5,840 | 263 | 697 | 362 | 1,322 | 23% |
| Red Lake | 5,840 | 225 | 456 | 191 | 872 | 15% |
| Sioux Lookout | 7,920 | 818 | 1,211 | 538 | 2,567 | 32% |
| Ear Falls | 5,840 | 46 | 110 | 6 | 162 | 3% |
| Ignace | 5,840 | 50 | 163 | 6 | 219 | 4% |
| Nestor Falls | 3,744 | 36 | 58 | 5 | 99 | 3% |
| Pickle Lake | 5,840 | 152 | 290 | 48 | 490 | 8% |
| Sioux Narrows | 2,920 | 92 | 195 | 27 | 314 | 11% |
| | 52,544 | 2,311 | 4,955 | 3,164 | 10,430 | 20% |

Data confirms existing capacity/availability of paramedic resources to deliver non-urgent transfers on go-forward basis. Peak UHU at Kenora base is excessive.

The first figure documents the Overall UHU for Kenora EMS bases on a 24/7 annual basis for 2012. On an all-day basis, all Kenora EMS bases have a demonstrated capacity to absorb total Code 1-4 workload.

However, Code 2 workload is not typically distributed across the entire day. It is typically concentrated in a 12-16 hour daytime/early evening window. More analytical precision is required to understand Peak demand workload pressures in Kenora.

The second figure documents the Peak Daytime/Evening UHU for Kenora EMS bases for 2012. On a peak demand basis, most Kenora bases have a demonstrated capacity to absorb total Code 1-4 workload. There is one obvious exception; the Kenora base 50% UHU. This extremely high level of system busyness suggests that the combined Code 1-4 workload is not sustainable during the daytime/early evening peak. The significant amount of Code 2 workload during the 12-16 hour daytime/early evening period is the culprit – more than XX% of overall Code 2 work occurs during 2/3 of the 24-hour day. The daytime/early evening peak Code 2 workload is driven by the 9 hour long-haul Kenora-Winnipeg land transfers. Alternative

approaches to executing the Code 2 peak daytime/early evening workload at the Kenora base are necessary. Current approaches are unsustainable as modeled by UHU.

Rainy River EMS Busyness: Unit Hour Utilization (2012)

| All-Day UHU | | | | | | |
|--------------|------------------------|-------------------|-------------------|----------------------|------------------|-----------------------|
| | Deployed Vehicle Hours | Code 3 Call Hours | Code 4 Call Hours | Non-Emerg Call Hours | Total Call Hours | Unit Hour Utilization |
| Atikokan | 9,281 | 105 | 241 | 196 | 542 | 6% |
| Emo | 8,760 | 118 | 340 | 119 | 577 | 7% |
| Ft Frances | 10,219 | 341 | 842 | 891 | 2,074 | 20% |
| Rainy River | 8,760 | 97 | 171 | 156 | 425 | 5% |
| Total | 37,020 | 661 | 1,593 | 1,362 | 3,617 | 10% |

| Peak Daytime UHU | | | | | | |
|------------------|------------------------|-------------------|-------------------|----------------------|------------------|-----------------------|
| | Deployed Vehicle Hours | Code 3 Call Hours | Code 4 Call Hours | Non-Emerg Call Hours | Total Call Hours | Unit Hour Utilization |
| Atikokan | 3,091 | 40 | 111 | 127 | 279 | 9% |
| Emo | 2,917 | 47 | 139 | 74 | 259 | 9% |
| Ft Frances | 3,403 | 156 | 343 | 596 | 1,095 | 32% |
| Rainy River | 2,917 | 48 | 60 | 105 | 212 | 7% |
| Total | 12,328 | 291 | 653 | 902 | 1,846 | 15% |

Data confirms existing capacity/availability of paramedic resources to deliver non-urgent transfers on go-forward basis.

Both the Overall and Daytime Peak UHU analyses demonstrate existing capacity at all Rainy River bases to undertake the combined Code 1-4 workload. However caution should be exercised against assuming there are no coverage

or deployment challenges at Rainy River bases. Peak Daytime Code 2 workload exceeds dispatched Code 4 workload at three of the four bases. Single vehicle coverage patterns create a “zero available units” challenge on a regular basis when executing Code 2 calls.

iv) EMS Delivery of Non-Emergent Patient Transportation – Risk of Overlapping Code 2/Code 4 Calls

The competition between the non-emergent and emergency lines of business (for a finite supply of EMS deployed vehicle hours) generates *potential* risk around Code 4 coverage erosion, Code 4 response time erosion, and potential delays in scheduled Code 2 patient transfers. EMS services express grave concern around this *potential* risk event of simultaneous or overlapping Code 3-4 and Code 2 calls within a given EMS base’s coverage area. The key question is how often do the potential negative Code 4 response/coverage consequences from overlapping calls *actually* occur?

Performance Concepts and Interdev Technology have executed a special data report/analysis tracking the incidence of actual overlapping Code 2/Code 3-4 calls in both the

Kenora and Rainy River Districts. The figures on the next two pages document the frequency of Kenora EMS and Rainy River EMS overlapping calls in 2012 (by base).

Risk Posed by Overlapping Code 1-2/Code 3-4 Calls – Kenora Bases

| All-Day UHU | | | |
|---------------|---------------------------------------|----------------------|---------------------------------------|
| 2012 | Code 1-2 & Code 3-4 Overlapping Calls | Total Code 3-4 Calls | Overlapping Calls as % Total Code 3-4 |
| Kenora | 297 | 3,118 | 10% |
| Dryden | 40 | 1,209 | 3% |
| Red Lake | 19 | 833 | 2% |
| Sioux Lookout | 62 | 2,629 | 2% |
| Ear Falls | 0 | 187 | 0% |
| Ignace | 17 | 283 | 6% |
| Nestor Falls | 2 | 108 | 2% |
| Pickle Lake | 3 | 523 | 1% |
| Sioux Narrows | 0 | 365 | 0% |
| Total | 440 | 9,255 | 5% |

Kenora EMS experienced 440 overlapping Code 1-2/Code 3-4 calls – representing approximately 5 percent of the 9,255 total Code 3-4 calls in 2012. The occurrence of overlapping calls is concentrated at the Kenora base – which experienced 297 overlapping events. The Kenora base has a high Peak daytime/evening UHU, including a large number of Code 2 response hours. It is not surprising that this base is the primary engine of adverse overlapping call risk events.

Risk Posed by Overlapping Code 1-2/Code 3-4 Calls – Rainy River Bases

| 2012 | Overlapping Code 1-2/Code 3-4 | Total Code 3-4 Call | Overlapping Calls as % Code 3-4 |
|--------------|-------------------------------|---------------------|---------------------------------|
| Atikokan | 2 | 284 | 1% |
| Emo | 0 | 264 | 0% |
| Ft Frances | 43 | 1075 | 4% |
| Rainy River | 0 | 262 | 0% |
| Total | 45 | 1885 | 2% |

Rainy River EMS experienced 45 overlapping Code 1-2/Code 3-4 calls – representing approximately 2 percent of the 1,885 Code 3-4 calls in 2012. Virtually all Rainy River EMS overlapping calls occurred at the Ft. Frances base – which has a Peak Daytime UHU of 32 percent. Rainy River EMS employs aggressive and expensive up-staffing practices to avoid higher levels of overlapping calls.

The overall incidence of the overlapping calls risk event is relatively minor across the two EMS services. The Kenora base is the notable exception, where the combination of a high Peak UHU and high incidence of overlapping calls indicates

significant performance issues requiring resolution. Non-emergent transfer restructuring at the Kenora base is essential.

v) Patient Care and Control – the Nurse Escort Challenge

The non-emergent patient transportation “non-system” is struggling to deal with an overarching service delivery challenge – the care and custody of the patient during transport.

The service delivery challenge begins with the reality that regional “hub” hospitals like TBRHSC (or the Winnipeg hospitals) have historically been unwilling to accept care and control of Code 2 transfer patients arriving for tests/diagnostic treatments. The “hub” hospitals already have patient flow challenges of their own. Their resources are often stretched thin, and the prospect of staff dealing with additional patient workload is problematic. The regional “hub” hospital position is understandable from a silo-based perspective.

However, the “hub” hospital position on patient care and control creates a care and control “ripple effect” among other actors in the non-system:

- ORNGE is unwilling to accept patient care and control for Code 2 patients – fearing their medics will be stranded with the patient at the “hub” hospital in the event of delays in scheduled procedures. A stranded medic means a stranded aircraft, and further potential delays in transporting other patients. ORNGE also pays tarmac-delay financial penalties in the event of a stranded medic. Therefore, ORNGE requires a medical escort from the community hospital of origin as a pre-condition of transport. The ORNGE position is understandable from a silo-based perspective.
 - On lengthy land ambulance transfers of non-emergent patients, EMS services have adopted the same position on patient care and control as ORNGE. Kenora and Rainy River EMS services do not accept patient care and control for non-emergent transfers - thereby avoiding medics/ambulances becoming stranded at the destination hospital when there is a delay around scheduled tests/procedures or patient flow problems. The EMS services require their ambulances to quickly return to their optimal Code 3-4 deployment positions as soon as possible. The EMS
-

position is understandable from a silo-based perspective.

- The community hospital of origin therefore retains care and control for non-emergent transfer patient. A nurse escort travels with the patient to and from the destination hospital. Typically nurses are staffing these patient escort duties on their days off from their scheduled floor shifts at the hospital. They are paid overtime rates for this work. Floor staffing schedules at the community hospitals of origin are often compromised or disrupted by the need for nursing staff to act as patient escorts. Additional overtime staffing is often required when nurse escorts are delayed at the receiving regional “hub” hospitals. The community hospitals are therefore left “holding the bag” in terms of non-emergent transfer patient care and control. Nurse escorts are being provided by the community hospitals of origin at significant unbudgeted cost. The decision to send an escort is a non-medical decision. It is essentially being made by other actors in the non-system striving to avoid the risk associated with delays in scheduled tests/procedures at the receiving “hub”

hospital. The financial interests and operational priorities of other actors are trumping any medical basis for sending/not sending nurse escorts. Community hospital costs for nurse escorts exceed \$300,000 on an annual basis.

Unbudgeted Hospital Costs for Non-emergent Patient Transfers

- **Community hospital Nurse Escort “line item” budget \$ and staffing hours do not exist**
 - No established Ministry funding allocation
 - Nurse hours are offered voluntarily on days off and funded from existing budgets as paid overtime...very limited latitude to send straight-time scheduled nurses “off the floor” given thin day-to-day staffing patterns and typical patient work loads
- **Costs consist of staff work hours, cab/medivan repatriation, and staff travel expenses.**
- **Annual costs approximately \$300,000 + for Kenora and Rainy River community hospitals**

Stranded nurse escorts and patients also represent a material source of medical risk to patients. The full resources of the receiving hospital are not necessarily available to the non-

emergent patient in some circumstances. The stressful experience of being stranded at the destination hospital for a long stretch of hours has reportedly prompted nursing staff in some hospitals to become reluctant in offering their days off to provide patient escort services.

vi) Coding Issues for Transfer Patients Requiring Scheduled Tests/Procedures

Community hospital patients (un-well but in stable medical condition) often require medically necessary scheduled tests/procedures at a regional “hub” hospital. Once a scheduled slot at the receiving “hub” hospital has been secured, nursing/admin staff from the sending hospital request air transportation with ORNGE. Or if land ambulance transportation is appropriate, the CACC is called upon to arrange an EMS patient transfer. These scheduled non-emergent patients are typically assigned a Code 2 transfer status. Code 2 status provides EMS with adequate time to arrange the logistics of the transfer, including any necessary ambulance unit up-staffing to protect Code 3-4 deployment plan coverage.

The transfer patient coding decision (i.e. degree of urgency) is made by physician(s) at the community hospital of origin - or alternatively by an ORNGE physician located in Toronto. The transfer coding decision is made on a case-by-case basis, reflecting each individual physician’s medical/professional judgment. Performance Concepts Consulting is not aware of any universal medical protocol/tool used by community hospital physicians in Kenora or Rainy River districts to achieve consistency when assigning transfer codes to patients with scheduled tests/procedures.

While a Code 2 transfer designation is applied to most un-well but stable patients requiring scheduled tests/procedures, physicians do periodically arrive at a different coding conclusion. If a delay in transporting a stable but unwell patient to an important scheduled test/procedure could result in a *projected* erosion in the patient’s near term condition, physicians are up-coding the transfer to an emergent Code 3. By doing so, physicians are compelling the CAAC to deploy an immediate EMS ride to the airport or to the receiving hospital. If CAAC summons an ambulance to an airport tarmac Code 3, ORNGE secures certainty that its fixed-wing SOA plane can pick up the transfer patient without delay or financial penalty.

When dispatched Code 3 for a scheduled patient transfer, EMS has no time to organize up-staffing to preserve Code 4 deployment plan coverage.

This sub-set of up-coded patients is deemed by physicians to be both *scheduled and urgent*. Physician up-coding of *scheduled but urgent* transfer patients (to compel an immediate EMS ride) creates unnecessary erosion of EMS Code 4 coverage. Alternative coding/administrative solutions are necessary.

vii) EMS Wait Times at Receiving Hospitals

Transfer patients and nurse escorts require timely return rides from receiving hospitals to the community hospital of origin. For lengthy Code 2 land transfers, the return ride presents a regulatory and logistics challenge. EMS services are anxious to complete a Code 2 land transfer as quickly as possible, and have the ambulance return to its Code 4 coverage zone. EMS services also note the MOHLTC BLS standard requires a prompt turnaround by land ambulances at the end of a call. EMS Management contends CACC operating standards and practices also require quick ambulance release (20 minutes).

However, actual EMS practices in the North do vary considerably in terms of wait time practices at Code 2 transfer destination hospitals. Some EMS services are waiting for Code 2 patients well beyond an hour. Immediate turnaround for EMS also has budget benefits associated with limiting the duration of any up-staffed coverage. Not unreasonably, community hospitals feel EMS should wait at the receiving hospital for a medically appropriate amount of time to provide a ride back for the patient and the nurse escort. In urban areas of the province, a non-paramedic non-emergent transfer service - executing the same Code 2 call - would have no regulatory obstacle preventing them from waiting a medically appropriate amount of time to return a patient and nurse escort to the hospital of origin. A BLS regulatory standard “clarification” from MOHLTC for Northern/remote EMS could provide equity across urban and Northern/remote service delivery models; concerning the clinical importance of timely and reliable patient return after a non-emergent trip to a “hub” regional hospital.

The following figure documents the existing hospital wait time policies of Kenora EMS and Rainy River EMS. During this Review, Kenora EMS implemented a reduced one-hour

hospital wait time policy. In de-facto terms, this translates as a “no wait-time” policy. A transfer patient cannot be processed in and out of a receiving hospital (with treatment) in an hour.

Issue: EMS Wait Times at Hospital to Repatriate Code 2 Patients

- Kenora EMS deployment plan contains a hospital “wait time” standard
 - Code 2 transfer unit will wait 1 hour at receiving hospital before returning to base
 - In practical terms this standard results in no viable treat & return – a one-way ride for patient & stranded Nurse Escort
- Rainy River EMS deployment plan contains a hospital “wait time” standard
 - Wait time equivalent to EMS unit “return time to base of origin”. Some exceptions near end of shift.

Potential high acuity Code 4 patients, as opposed to actual lower acuity Code 2 patients, are the priority for EMS. However, most dispatched Code 4 calls (i.e. DCPI II triage algorithm) end up as Code 3 “returns” to hospital based on

paramedic CTAS assessments of the patient. It is not clear that implementing medically appropriate wait time policies at receiving hospitals for *existing* Code 2 patients represents a credible risk management problem for *potential* Code 3 “return” patients.

viii) Winnipeg EMS Land Transfers

As already documented, the Kenora EMS base is staggering under an excessively high Peak Daytime UHU of 55 percent. In 2012, approximately 1,300 hours of deployed Code 4 coverage at the Kenora base was consumed by Code 1-2 workload. The Kenora EMS base represents the single largest source of non-emergent and emergent patient transportation risk in the Kenora and Rainy River districts.

Non-emergent patient transfers from the Lake-of-the-Woods hospital to various Winnipeg hospitals (including repatriation) are a major risk event for Kenora EMS. In the past two years, Kenora EMS have executed 80+ annual non-emergent transfers to Winnipeg. Winnipeg transfers have an average duration of 9-10 hours. The one-way transfer distance of 210 km requires a 2.5-3 hour window of patient isolation on the

road – a reality that entails a material medical risk for some un-well patients. The length of the Winnipeg transfer leg represents a vexing issue for efficiently repatriating low acuity non-emergent patients from Winnipeg.

These Winnipeg transfers have generated more than 800 hours of lost Code 4 coverage annually. Code 3 up-coding by physicians and the CAAC operated by Lake-of-the-Woods exacerbates the situation by eliminating a “window of EMS prep time” that is necessary to arrange up-staffed Code 4 coverage relief. It is the somewhat desperate situation at the Kenora base that prompted Kenora EMS to implement the current 1-hour hospital wait time standard – a source of friction vis-à-vis other actors in the non-emergent delivery model.

Kenora EMS Land Transfers to Winnipeg

| Lost Code 4 Coverage Winnipeg Transfers CTAS 4-5 | # Transfers | Lost Code 4 Hours |
|--|----------------|----------------------|
| 2011 | 86 | 860 |
| 2012 | 81 | 810 |

Average transfer duration an estimated 9-10 hours

210 km transfer distance (Ornge fly/no fly trigger distance is 240 km)

ix) ORNGE Non-Emergent Flight Capacity & Fly/No Fly Protocols

The Provincial Auditor’s 2012 Special Review of ORNGE established a number of key observations set out in the figures below:

Ornge: Key Province-wide Actor in Non-urgent Transfers Model

➤ Auditor General's 2012 audit of Ornge positions two key issues for this Review

1. 240 km distance trigger is a "must transport" business rule for Ornge, however actual transport activity covers a broader distance range
 - Audit notes high levels of inter-facility air transport from 140 km to 240+ km
 - Audit notes absence of Ornge compliance tracking re. actual fly/no fly decisions versus distance triggers
2. Ornge aircraft purchases in recent years have exceeded internal Ornge estimates of "demand" requirements
 - Capacity to deliver additional Code 2 fixed wing aircraft transfers in NW LHIN if current land transfer distances & high volumes merit resources?

The observations by the Auditor General confirm that ORNGE has significant flexibility to adjust its current administrative practices establishing a 240km "Fly/No Fly" distance trigger for inter-facility transfers. The Auditor General notes that the "trigger" for inter-facility transfers province-wide ranges from 140 km up to 240 km. The Auditor General also recognizes the absence of compliance tracking by ORNGE re. actual "Fly/No Fly" transfer leg distances versus the 240 km trigger.

There is a compelling case to be made that the current ORNGE 240 km "minimum trigger" for non-emergent fixed wing air transfers, de-facto creates excessively lengthy EMS non-emergent land transfers in the North. EMS land transfer "legs" exceeding 200 km and approaching 3 hours of ambulance road time for the un-well patient are not uncommon in the NW LHIN, and across the entire remote North. Land ambulance transfers of 200+ km and 3-hour road time are relatively rare in urban or sub-urban southern Ontario.

2012 Auditor General Special Report

- *"...Ornge's own analysis indicated that six airplanes and nine helicopters would be sufficient to serve the province's needs. However, Ornge bought 10 new airplanes and 12 new helicopters, as well as the 11 used helicopters to use while awaiting delivery of the new aircraft. It also planned to continue to use aircraft service providers for some flights."*

The observations by the Auditor General in the 2012 Special Report also confirm that ORNGE has existing surplus capacity in its province-wide fixed wing fleet.

Current ORNGE fleet capacity creates a window of opportunity to consider a revised 200 km “minimum trigger” for fixed-wing non-emergent patient transfers in the remote North. A revised trigger would apply to Code 2 transfer legs where annual volumes merit a fixed-wing solution. The volume of lengthy EMS land transfers would be reduced.

x) Form 1 Psychiatric Patients & Police Escorts

Once a person taken into custody by police is made subject of a Form 1, their condition is deemed to be a medical issue. Subsequently it will become the responsibility of the health facility to monitor and supervise the patient. The health care facility is also responsible for arranging the transfer of the patient to a psychiatric facility. The OPP provides security escort services for Form 1 psychiatric cases being transported by EMS to a health care facility. Escort services can be executed according to the following options:

- 1) A police officer will ride in the ambulance and a second officer will follow in a police vehicle to allow for adequate communications and necessary back up.
- 2) Both officers will follow the ambulance in a police vehicle.
- 3) If air transportation is required, both officers will accompany the patient and health care professionals in the aircraft. This will only occur if return flights are guaranteed for the officers.

Community hospitals in Kenora and Rainy River districts reimburse the OPP on a cost recovery basis, with terms set out in non-contractual MOU documents. Kenora EMS transports to a psychiatric treatment facility located within the District, while Rainy River EMS must transport its Form 1 patients to Kenora or Thunder Bay psychiatric facilities.

There is no established budget line at community hospitals to fund OPP security escort services. The volume of Form 1 transfers in both Districts is increasing over time.

xi) Towards a Performance Report Card for Non-Emergent Patient Transportation

There is no performance indicator report card currently in place for non-emergent patient transportation in the NW LHIN. Integrated service delivery performance (from a patient perspective) is neither measured nor publicly reported. Public accountability reporting and service delivery improvement efforts both require measurement of key performance results.

The following set of figures set out a draft report card consisting of key performance indicators (KPI).

Non-Urgent Patient Transfer Scorecard

■ **Service Outputs & Efficiency**

1. **Annual EMS Code 1-2 transfers (3-year trend line)**
 - # transfers, transfer hours and Code 1-2 UHU by Base
 - Cost per transfer hour (deployed & up-staffed)

2. **Annual Ornge Code 1-2 transfers (3-year trend line)**
 - # transfers, transfer hours & Code 1-2 UHU
 - Cost per transfer hour (fixed wing SOA)

The above key performance indicators (KPI) answer two fundamental management questions:

- How many units of non-emergent patient transportation (outputs) are being delivered?
- What is the cost/price of non-emergent patient transportation unit of service?

The same indicators are applied to both land ambulance (EMS) and ORNGE.

Non-Urgent Patient Transfer Scorecard

▪ **Business Process Execution**

1. % of Code 2 transfers where patient arrives on-time for the test/procedure - as originally scheduled (3-year trend line)
2. % of Code 2 transfers where patient test/procedure must be re-scheduled due to absence of timely transportation (3-year trend line)
 - EMS transport failure
 - Ornge transport failure
3. % of Code 2 transfers to TBRHSC featuring EMS/Ornge paramedic care/control of patient without a Nurse Escort (3-year trend line)

The above key performance indicators (KPI) measure the effectiveness of business process execution. Code 2 patient transfer success rates, Code 2 patient transfer failure rates, and “no Nurse Escort” Code 2 rates will improve accountability reporting and enable target setting for future integrated system planning. Key performance indicators will apply to both EMS and ORNGE.

The key performance indicators (KPI) set out in the figure below both focus on patient-centric outcomes. From a patient perspective, a timely EMS/ORNGE ride is of critical importance. The share of total Code 2 transfers with “0 delay days” is a meaningful KPI. The number of annual accumulated “ride delay days” (between originally scheduled procedure slots and subsequently scheduled EMS/ORNGE rides) is also an appropriate KPI.

Non-Urgent Patient Transfer Scorecard

▪ **Patient Impact**

1. % Code 2 transfers featuring 0 “days of delay” between available scheduled test/procedure slot & availability of EMS/Ornge ride (3-year trend line)
2. # accumulated Code 2 patient test/procedure “days of delay” between available scheduled test/procedure slot & availability of EMS/Ornge ride (3-year trend line)

C. Non-Emergent Patient Transportation: Findings & Recommendations

This Review's **Findings and Recommendations** have been organized into the following three categories:

1. **System-wide Restructuring** dealing with integrated system business planning, operational coordination, and performance indicator derived results reporting.
2. **Funding Restructuring** to reduce silo-based decision-making, address gaps in the current funding arrangements, and create financial incentives for patient-centric integrated service delivery. A go forward "gap funding" budget has been developed for MOHLTC consideration.
3. **Service Delivery Restructuring** that addresses the need to change/improve specific processes, practices and policies of various actors in the NW LHIN non-emergent patient transportation "line-of business". Entirely new delivery models for non-emergent patient transportation were initially considered in this Review – for instance the possibility of a combined Kenora-Rainy River EMS non-paramedic transfer service. However, the NW LHIN 2012 Review in Thunder Bay District – as well as the recent failure of the Timiskaming non-paramedic transfer service pilot project in the NE LHIN – have confirmed that paramedic based delivery is the only viable, cost-effective option in Northern/remote jurisdictions with relatively low, widely dispersed transfer volumes.

The **Findings and Recommendations** are based on the full range of change management and performance improvement issues already identified and explored in the Situation Analysis section of this report. The Funding Restructuring recommendations are critical – they are the glue that holds the entire restructuring package together. All other non-financial recommendations pre-suppose the new funding recommendations being implemented in meaningful fashion by MOHLTC.

While the **Findings and Recommendations** have been successfully "stress tested" for relevance and practicality with all participating NW LHIN stakeholders, Performance Concepts Consulting has advanced them from the perspective of an independent third party according advocating for the overriding interests of emergent and non-emergent patients. Individual institutions/stakeholders among the Kenora and Rainy River community hospitals, ORNGE, the land ambulance EMS services, and the TBRHSC/Winnipeg "hub" hospitals may (or may not) support specific recommendations.

Recommendation

System Restructuring Action #1-A

Establish a NW LHIN Non-Emergent Patient Transportation Coordination Panel with the following “integration” mandate:

- 1. Annual Business Planning***
- 2. System Business Rules & Dispute Resolution***
- 3. Annual Results Reporting***



Findings/Commentary

- Situation Analysis established the range of “silo” problems associated with the current “non-system” for Non-emergent patient transportation
- Currently there are no coordination bodies/mechanisms to properly integrate patient transportation silos across stakeholders

Implementation

- Q1 2014 is achievable timeframe to create Coordination Panel – including recommended Plan-Deliver-Evaluate mandate
-

Recommendation

System Restructuring Action #1-B

Establish NW LHIN Coordination Panel, Co-Chairs & key stakeholder membership to oversee required Non-Emergent Patient Transportation system integration & improvements

- ***Rotating Co-Chairs from a selected EMS service & community hospital (2 year cycle)***
- ***Coordination mandate, not a binding/voting governance mechanism (LHIN secretariat support)***
- ***Ensure system reform issues from Kenora, Rainy River, & Thunder Bay districts integrated/resolved across entire LHIN***
- ***Rotating representatives from cross-section of NW LHIN community hospitals...however any/all hospitals can participate on any issue they deem important***
- ***All 3 EMS services in NW LHIN represented...also ORNGE, TBHRSC, Winnipeg hospitals, CACC, MOHLTC***

Findings/Commentary

- Situation Analysis concludes governance “overload” in NW LHIN. Coordination & problem-solving mandate preferred option.
- LHIN secretariat support will enable Panel to execute the required work plan re. business planning and results reporting.

Implementation

- Q1 2014 is an achievable timeframe to create proposed Coordination Panel – including initial membership and secretariat
-

Recommendation

System Restructuring Action #1-C

Coordination Panel to develop an annual system-wide Non-Emergent Patient Transportation business plan for the entire NW LHIN. The business plan will feature evidence based system performance targets & consensus based implementation actions.

- ***Initiate ongoing plan-deliver-evaluate system planning & management cycle***
- ***Combine the business plan with annual integrated system budget - building on already-established EMS & hospital resources/budgets***

Findings/Commentary

- Situation Analysis concludes #1 system management priority is a performance measurement supported business plan with performance targets – linked to new integrated system budget/funding model
- Patient-centric performance targets need to be linked to practical implementation action items in order to achieve improvement in Non-emergent patient transportation system

Implementation

- Q3 2014 is an achievable timeframe for recommended new Panel to prepare initial 2015 business plan
-

Recommendation

System Restructuring Action #1-D

Coordination Panel to design & oversee annual Non-Emergent Patient Transportation results report card, derived from evidence based key performance indicators (KPIs).

- **Key performance indicators (KPIs) addressing service delivery outputs, unit costs, timely business process execution, patient impacts**
- **KPIs set out in this report to form basis of report card put forward by Coordination Panel**
- **Important system-wide accountability tool...annual public reporting to DSABS, hospital boards & MOHLTC in 2015**
- **Report Card indicator data trends to support Panel's annual business plan target setting process**

Findings/Commentary

- Non-emergent patient transportation “Report Card” will include EMS, community hospital, and ORNGE performance data trends. Report Card will address fundamental “good management” service efficiency results, as well as patient-centric effectiveness outcomes (i.e. timely provision of transportation to meet test/procedure scheduling requirements).

Implementation

- Q3 2014 is an achievable timeframe for confirming key performance indicators, and confirming data collection responsibilities across stakeholders to populate indicators during 2015.
-

Recommendation

Funding Restructuring Action #2-A

Implement a 2014 NW LHIN “integrated’ funding model for Non-Emergent Patient Transportation

- **The proposed integrated funding model would feature MOHLTC annual gap reduction (\$) funding to be allocated by MOHLTC based on proposed new Coordination Panel input**
- **Funding would be incremental - building on existing community hospital, TBRHSC, ORNGE & EMS resources. Focus on eliminating high-priority systemic gaps in Code 2 service delivery processes & practices**
- **Funding model should have due regard for the realities of the Northern local tax base, and should attempt to blunt the province-wide funding inequities disadvantaging Northern actors in the Non-Emergent Patient Transportation system.**

Findings/Commentary

- Situation Analysis confirms absence of an integrated funding model for the Non-emergent Patient Transportation “line of business” across Kenora and Rainy River districts. Funding gaps encourage silo-based policies and decision-making by stakeholders. Gaps must be reduced/removed.
- Funding gaps cannot be realistically addressed by Northern/remote local tax base - already is over-burdened with Non-emergent transportation costs vs. urban Ontario where non-paramedic transfer services are funded 100% by provincial revenue streams.

Implementation

- Q1 2014 is an achievable timeframe for implementing an initial EMS and community hospital “gap funding” arrangement, pending MOHLTC support for a system-wide “gap funding” budget for 2015 – a budget that would also include ORNGE flight hours for current Kenora-to-Winnipeg land transfer leg.

Recommendation

Funding Restructuring Action #2-B

Initial 2014 Non-Emergent Patient Transportation “integrated” gap budget funding priorities to include the following:

- **EMS up-staffing costs generated by Code 1-2 workload at EMS bases with an annual peak daytime UHU > 35%**
- **EMS up-staffing costs for single unit coverage bases required to do Code 1-2 transfers outside their established response zones (calls significantly compromising Code 4 coverage)**
- **ORNGE fixed wing air transport replacing EMS land transfer “legs” greater than 200 kilometres & annual volumes > 50 trips**
- **Patient “care & control” staffing investments at TBRHSC (or in Winnipeg) that significantly reduce the need for community hospital nurse escorts**
- **Expanded non-paramedic transfer contracted service hours to improve timeliness of Code 2 patient transfers from T-Bay Airport tarmac to TBRHSC**
- **Re-imburement to hospitals for police escort costs for Psychiatric “Form 1” patients**
- **New non-paramedic transfer service hours to repatriate low risk Ontario patients back from Winnipeg Code 2 procedures (originally delivered to Winnipeg by EMS or ORNGE)**

Implementation

- Q1 2014 is an achievable timeframe for implementing an initial EMS and community hospital “gap funding” arrangement, pending detailed preparation of a system-wide “gap funding” budget for 2015
-

Recommendation

Funding Restructuring Action #2-C

Initial 2014 Non-Emergent Patient Transportation “integrated” budget gap reduction funding priorities to include the following budgeted amounts:

| Non-Urgent Patient Transportation: Recommended Gap Budget for MOHLTC Funding Consideration | Gap Budget Rationale & Commentary | Recommended Gap Budget Amount |
|--|--|---|
| <p>ORNGE Assumption of Kenora to Winnipeg Transfer “Leg” for Code 2 Non-Emergent Patients</p> | <p>Reduction in patient risk & condition erosion during a 200km one-way transfer with no hospital between destination points</p> <p>Claw back of estimated 1,000 Code 4 coverage hours for Kenora EMS</p> <p>Some fiscal room for ORNGE may be available due to reduced tarmac detention fees at T-Bay airport due to Ambutrans assumption of Code 2 transport to TBRHSC</p> | <p>Estimated annual 60 trips for total of \$250,000</p> <p>Assume \$50,000 offset from T-Bay tarmac saving</p> <p>Net new cost \$200,000</p> |
| <p>Offset Funding for Community Hospital Nurse Escort Costs (5 year transition funding)</p> | <p>Community hospital costs are driven by receiving hospital patient care & control policies</p> <p>No established patient transportation cost centre in hospital budgets...robbing other program priorities within hospital</p> | <p>Estimated \$300,000 across Kenora & Rainy River Districts annually</p> <p>Funding phased out once Regional hospital care and control barriers resolved (Example: LHIN/TBRHSC pilot to establish Transfer Nurse to assume care and control)</p> |

| Non-Urgent Patient Transportation: Recommended Gap Budget for MOHLTC Funding Consideration | | |
|--|--|---|
| | Gap Budget Rationale & Commentary | Recommended Gap Budget Amount |
| Offset Funding for Kenora EMS Unbudgeted Code 2 Costs (i.e. Upstaffing) | Automatic upstaffing to maintain Code 4 Coverage MOHLTC to cover 75% of incremental costs for Code 1-2 transfers, reflecting reduced Northern remote fiscal capacity & urban hospital based funding model with negligible local funding burden | 75% of \$328,000 annually \$246,000 Net incremental \$ requirement |
| Offset Funding for Rainy River EMS Unbudgeted Code 2 Costs (i.e. Upstaffing) | Automatic upstaffing to maintain Code 4 Coverage MOHLTC to cover 75% of incremental costs for Code 1-2 transfers, reflecting reduced Northern remote fiscal capacity & urban hospital based funding model with negligible local funding burden | 75% of \$55,000 annually \$41,000 Net incremental \$ requirement |

Recommendation

Funding Restructuring Action #2-D

The three NW LHIN EMS services to develop common 2014 business plan performance targets for Code 1-2 Non-Emergent Patient Transportation - distinct from their existing performance plan targets developed primarily for pre-hospital emergency Code 3-4 response.

Findings/Commentary

- Situation Analysis confirms inequities in province-wide funding of Non-emergent patient transportation. Local North/remote tax base overburdened versus urban jurisdictions. New business plan performance target achievement dependent on new funding model.
- Draft Key Performance Indicators set out in this Report can be used to derive annual performance targets.

Implementation

- Q1 2014 is an achievable timeframe for implementing an initial cycle of EMS data collection for recommended targets.
-

Recommendation

Funding Restructuring Action #2-E

NW LHIN community hospitals to develop common business planning performance targets related to timely, patient-centric non-emergent transportation.

- **Hospitals to track forecast versus actual “medically necessary” Code 1-2 Nurse Escort volumes, hours or replacement staff hours (straight time & overtime funded)**
- **Each community hospital should initiate detailed hourly effort and cost monitoring – including staffing “ripple effect” when Nurse Escorts’ scheduled floor shifts need to be re-assigned following long transfers.**

Findings/Commentary

- Situation Analysis confirms community hospitals experiencing fiscal pressures and HR disruption associated with provision of Nurse Escorts (not medically required). Estimated costs of at least \$300k cross Kenora and Rainy River districts. Community hospital funding for Nurse Escorts being carved out of existing patient care budgets – mostly at overtime pay rates.

Implementation

- In Q3 2013, each community hospital should initiate detailed effort and cost monitoring re. Nurse Escorts – including staffing “ripple effect” when Nurse Escort floor shifts need to be re-assigned following long transfers. Up-coded Code 3 transfers should also be tracked – if they are still occurring.
-

Recommendation

Funding Restructuring Action #2-F

ORNGE to develop 2014 performance targets & internally approved gap reduction budget for SOA fixed wing service delivering Code 1-2 Non-Emergent Patient Transportation

- **Present MOHLTC with 2014 ORNGE gap funding budget that includes new Code 2 air transfer “legs” replacing previous long-haul land EMS transfer “legs” > 200 km & 50+ annual trips**
 - **Also replacing EMS Code 2 transfer “legs” with average road travel time 2.5 hours or greater**

Findings/Commentary

- Situation Analysis confirms significant system benefits associated with ORNGE implementing Code 2 air transfers to replace long-haul EMS land transfer legs. Medical risk reduced for some patients. Deployed Code 4 coverage (800+ annual hours) would be re-instated for Kenora EMS base, resulting in a needed reduction in peak daytime/evening UHU. Potential cost difference per patient is substantial, but justified by non-financial benefits presented in Situation Analysis.

Implementation

- Q1 2014 is an achievable timeframe for implementing an initial ORNGE “gap funding” arrangement, pending detailed **internal** reparation of a system-wide ORNGE “gap funding” budget for 2015. Initial 2014 “gap funding” to be directed to 215 km Kenora-to-Winnipeg transfer leg.
-

Recommendation

Service Delivery Restructuring Action #3-A

In parallel with MOHLTC gap funding reforms, Councils, DSABs & EMS services commit to ongoing Paramedic-based direct delivery of Non-Emergent Patient Transportation Services across the Kenora and Rainy River districts. Direct paramedic delivery is the only viable option in Northern/emote systems with highly dispersed, relatively low Code 2 call volumes – as demonstrated by 2012 Thunder Bay District Review, and by the failed 2013 Timiskaming non-paramedic transfer service pilot project funded by the NE LHIN.

- ***Regardless of intergovernmental debate concerning Ambulance Act legislative mandates, Service Boards & EMS across the NW LHIN should recognize Code 1-2 Non-Emergent Patient Transportation as a legitimate “line of business” to be delivered primarily by EMS paramedics***
 - ***Local taxpayers have invested significant “fixed costs” in EMS paramedic services. These EMS services have sufficient overall resource capacity to deliver Code 1-2 Non-urgent Patient Transportation in addition to Code 3-4 pre-hospital emergency medical services.***
 - ***Non-paramedic transfer services can play an important role in urban Thunder Bay and repatriating Winnipeg non-emergent patients, but are not feasible in a non-urban environment across much of NW LHIN. Paramedic delivery is the only viable option.***

Findings/Commentary

- Situation Analysis includes review of EMS workload capacity (UHU). Confirms existing EMS “fixed” staffing capacity to deliver Non-emergent patient transportation “line of business”. Kenora base the exception with peak daytime/evening UHU of 50 percent. Up-staffing unavoidable across both EMS services to maintain Code 4 coverage, despite manageable UHU.

Implementation

- No implementation required beyond District Service Boards and EMS accepting the overall direction of *Findings and Recommendations* of this report.

Recommendation

Service Delivery Restructuring Action #3-B

Consolidate and expand the existing TBRHSC non-paramedic, non-emergent patient transportation contract in Thunder Bay under the oversight of Superior North EMS – eliminating expensive airport tarmac delays for ORNGE and delivering timely patient movement to TBRHSC

- **Initiate 2014 contract expansion (to approximately 5,000 hours) to provide new transport hours devoted to timely Thunder Bay airport tarmac Code 2 trips to TBRHSC – thereby reducing excessively high Code 3-4 UHU for Superior North EMS urban bases**
- **Contract expansion in 2014 to also include new transport hours devoted to land based repatriation of medically appropriate patients back to community hospitals after Code 2 scheduled TBRHSC tests/procedures**
 - **Accomplished via patient repatriation “hand-offs” from non-paramedic contracted provider to Kenora or Rainy River EMS paramedics as required to complete repatriation to patient’s hospital of origin**
- **Advocate for MOHLTC funding of expanded non-paramedic contract, recognizing potential system-wide benefits & cost savings to NW LHIN community hospitals, ORNGE, Kenora EMS & Rainy River EMS**

Findings/Commentary

- Contracted transfer service (e.g. Ambutrans) delivery of Code 2 transfers at Thunder Bay airport tarmac already underway. ORNGE achieving significant \$ reduction in tarmac-delay penalty fees. NW LHIN’s 2012 review of Non-emergent patient transportation in Thunder Bay district endorsed contract expansion and transfer of contract from TBRHSC to Superior North EMS. Thunder Bay Council has endorsed contract consolidation under SNEMS, subject to MOHLTC funding.

Implementation

- No implementation required beyond District Service Boards and EMS accepting the overall direction of *Findings and Recommendations* of this report.

Recommendation

Service Delivery Restructuring Action #3-C

Implement evidence based Nurse Escort decision-making model between NW LHIN community hospitals, TBRHSC & Winnipeg receiving hospitals. Secure BLS regulatory standard “special circumstances” exemption for Northern/remote EMS services executing lengthy non-emergent transfer legs.

- ***Establish consistent patient acuity checklist tools at all NW LHIN community hospitals by end of Q1 2014 in order to make evidence based Yes/No decisions for sending a Nurse Escort***
- ***Consider recently developed TBRHSC patient acuity checklist tools as potential models for wider application across NW LHIN community hospitals***

Findings/Commentary

- Situation Analysis confirms community hospitals providing Nurse Escorts for Non-emergent transfers due to “silo” based inflexibility around patient care and control – not medically derived decision. Medically derived patient acuity checklist tools are being developed at TBRHSC, and can be shared across community hospitals.

Implementation

- Q1 2014 implementation of patient acuity checklist tools is achievable. On-going tracking of medically necessary Nurse Escort trips versus “care and control” trips will help drive system-wide change in handing off care and control to receiving “hub” hospitals – thereby reducing need/cost for community hospital Nurse Escorts.
-

Recommendation

Service Delivery Restructuring Action #3-D

Modify existing Code 2 patient coding admin practices at Kenora and Rainy River community hospitals to create new “Urgent But Scheduled” Code 2 transfer arrangement with EMS services (6 month or 1-year pilot period)

- **Establish two distinct Code 2 patient coding admin processes – the existing “non-urgent and scheduled” category plus a new “urgent but scheduled” category. Categories differentiated by EMS preparation “window” of time to pick up patient.**
- **EMS to promptly respond to “urgent but scheduled” Code 2 admin requests following a 5-hour preparedness window (to arrange up-staffing coverage when deemed necessary).**
- **“Non-urgent but scheduled” calls subject to existing “window of prep time” for EMS to respond.**
- **Community hospital medical staff will make the final call on when this new “urgent but scheduled” Code 2 admin practice is to be invoked**
 - **Deepest understanding of patient care issues/requirements**
 - **Periodic peer review with EMS re. disputed decisions to invoke new Code 2 admin practice**
- **No Code 3 up-coding of “scheduled but urgent” non-emergent patient transfers by hospital medical staff, ORNGE physicians or CACC. ORNGE & community hospital physicians to be briefed by EMS Chiefs & hospital executive management on new “urgent but scheduled” coding admin arrangements.**

Implementation

- Q1 2014 implementation of pilot (to test recommended Code 2 “urgent but scheduled” admin practices in Kenora district community hospitals) is achievable - including physician orientation sessions. Rollout in Rainy River to follow in 2015.

Recommendation

Service Delivery Restructuring Action #3-E

Implement evidence based adjustment of the existing ORNGE “Fly/No Fly” 240 km distance trigger across Kenora and Rainy River districts

- ***New “Fly/No Fly” Trigger: Air transfers for Code 2 trip “legs” of 200 + km and historic trip volumes exceeding 52 annual Code 2 transfers (CTAS 4-5)***
- ***New “Fly/No Fly” Trigger: Air transfers for current EMS Code 2 land transfer “legs” requiring 2.5+ hours of average road travel time – applied only to “urgent but scheduled” patient transfers***
- ***Utilize ORNGE SOA fixed wing contracted providers & consider adopting regularly scheduled transfer flight model (weekly or twice weekly) for legs where volumes warrant***
 - ***Benefit: Reduced patient risk by minimizing “on the road” time outside a medically staffed facility***
 - ***Benefit: Reduced EMS Code 4 overage erosion caused by long duration land trips***
 - ***Benefit: Side steps land trip repatriation problems associated with insufficient EMS turnaround wait times at receiving hospitals***

Findings/Commentary

- Situation Analysis confirms significant non-financial benefits that justify increased utilization of ORNGE’s contracted SOA aircraft capacity. Patient cohorting on high volume transfer legs to Winnipeg will reduce overall cost per patient hour.

Implementation

- Q3 2014 implementation of an identified ORNGE high-volume Code 2 trip “leg” is achievable – assuming parallel rollout of the initial 2014 “gap funding” budget allocation by province. Full rollout for all eligible Code 2 trip legs is achievable by Q1 2015.

Recommendation

Service Delivery Restructuring Action #3-F

Initiate ORNGE fixed-wing SOA air transport of Code 2 Non-emergent patient transfers between Lake of Woods & Winnipeg hospitals

- **EMS delivers Code 2 patient to Kenora airport as per recommended new coding admin practices**
- **ORNGE SOA fixed wing contracted provider (i.e. Primary Care Paramedic) delivers patient to Winnipeg airport tarmac**
 - **ORNGE to conduct detailed assessment of Scheduled Code 2 transfer run (weekly or 2x weekly) plus “urgent but scheduled” Code 2 trips as required**
- **Winnipeg airport tarmac-to-hospital transfers by private non-paramedic transfer service or Winnipeg EMS**
 - **Nurse Escorts required throughout process at this time**
- **Repatriation of expected majority of lower risk patients by Winnipeg hospitals – to be executed by non-paramedic transfer service, or by ORNGE (according to case-by-case logistics).**

Findings/Commentary

- Situation Analysis confirms Lake of Woods to Winnipeg Code 2 transfer “leg” meets Recommendation #3-E criteria for ORNGE assumption. ORNGE servicing of the Lake of Woods to Winnipeg “leg” would cost an estimated \$3,600-\$4,000 per single patient trip. Cohorts of patients (2) would cost \$1,800 - \$2,000 per single patient trip. Comparative EMS transfer “leg” cost would be estimated \$1,120 per single patient trip. ORNGE would commit to 80 annual SOA transfers for total estimated cost of \$320,000 – with cost completely offset by reduced tarmac penalty fees at Thunder Bay airport resulting from new Ambutrans service levels.

Implementation

- Q3 2014 implementation of a new ORNGE high-volume Code 2 trip “leg” is achievable – assuming parallel rollout of the initial 2014 “gap funding” budget allocation by MOHLTC.

Recommendation

Service Delivery Restructuring Action #3-G

While Recommendation #3-F decision-making/planning is pending at ORNGE, conduct a LHIN funded 8-month pilot project to consolidate Lake of Woods to Winnipeg long-run EMS land transfers by initiating a scheduled Code 2 transfer leg (Monday-Wednesday-Friday scheduled runs) plus “urgent but scheduled” Code 2 trips as required

- ***New delivery model; Paramedics in a de-commissioned ambulance (i.e. covered markings, no CACC radio) that is not included in the EMS deployment plan – a new EMS operated “pilot” transfer service vehicle with medical capabilities of staffed paramedics (NE LHIN Sudbury pilot project model)***
- ***Patient “slot scheduling decision” to a Winnipeg destination hospital would be driven by timing of scheduled trips to Winnipeg (not vice versa)***
- ***Ideally deliver scheduled Code 2 transfer runs, including repatriation, to Winnipeg with more than one patient in a customized vehicle (80+ transfers per year)***
- ***Since ambulance decommissioned, no regulatory problem waiting for patients/nurse escorts for the repatriation trip back to Lake of Woods***

Findings/Commentary

- Situation Analysis confirms scheduled EMS transfer “legs” would eliminate the logistical difficulties around “scheduled non-urgent” Code 2 calls. Kenora base’s struggles to secure available up-staffing crews would be replaced by a more rational model where preferred scheduled test/procedure slots are selected based on predictable/dependable transfer vehicle availability. Code 2 Trip delays/lateness would decrease significantly. The “urgent but scheduled” Code 2 transfers would continue to be executed right away – within new five hour “window” recommended in this Review.

Implementation

- Q2-Q3 2014 implementation of a new ORNGE high-volume Code 2 trip “leg” is achievable should approach prove feasible at operational level – assuming parallel rollout of the initial 2014 “gap funding” budget allocation by province.

Recommendation

Service Delivery Restructuring Action #3-H

EMS services in NW LHIN should implement reasonable, medically appropriate wait times at destination hospitals in order to repatriate Code 2 patients & Nurse Escorts (1 year pilot)

- ***Pending a Northern/remote “special circumstances” exemption from BLS standard governing patient wait times, Kenora & Rainy River EMS should voluntarily adjust current Code 2 patient wait time standards in deployment plans to account for realistic, competently executed hospital processing times for scheduled tests & procedures. Proposed new Coordination Panel to devise medically appropriate EMS patient wait times for common test/procedure profiles.***
- ***New medically appropriate pilot wait time policies should be made permanent once 2014 MOHLTC Non-urgent transportation gap reduction budget funding is provided***

Findings/Commentary

- Situation Analysis confirms importance of EMS wait times to overall Non-emergent transfer process. Without reasonable EMS wait times, patient returns are unnecessarily delayed, and nurses are reluctant to serve as escorts over possibility of being stranded at receiving hospital. Medical risk posed by Code 4 coverage erosion is real, but limited – majority of dispatched Code 4 calls are in fact Code 3 hospital returns. Provincial “gap funding” should address any up-staffing cost concerns.

Implementation

- Immediate reversal of Kenora EMS 1-hour wait time policy (back to 3 hours) should be enacted Q3 2013. Medically appropriate wait times should be enacted Q1 2014 (assuming provincial gap funding is agreed to by MOHLTC).
-

Recommendation

Service Delivery Restructuring Action #3-I

EMS services should repeal the existing administrative practice of postponing Code 2 transfers of elderly, infirm patients late in the daytime staff shift; subject to the following conditions:

- ***MOHLTC provision of recommended “gap” budget funding - designed to improved Code 2 scheduling flexibility & provide timely transportation***
- ***Adoption of recommended “urgent but scheduled” Code 2 coding processes by hospitals, and the subsequent elimination of Code 3 up-coding of scheduled procedures***
- ***Particular focus on not refusing Nursing Home calls late in EMS shift – avoid elderly infirm patients in Emergency Department hallways over night***

Findings/Commentary

- Situation Analysis confirms community hospital patient flow problems arising from EMS failure to transport patients (late in day) back to Homes for Aged facilities. No alternative but EMS to return wheelchair patients in many communities. Overnight stays in a hospital hallway, due to no EMS late-in-the-day transfer policy, could compromise patient wellness. Existing EMS practice can be repealed if recommended conditions met.

Implementation

- Q2 2014 repeal of existing Code 2 postponement practice is achievable if provincial “gap funding” put in place as recommended in Q1 2014.
-

Recommendation

Service Delivery Restructuring Action #3-J

Consider risk management based revisions to selected CACC deployment decisions in the remote North

- ***Peer evaluate CACC deployment decision to pull EMS unit out of Base B to service a Base A Code 4 call (when Base A unit on a Code 2 airport call)***
 - ***Northern Ontario CACC staff & EMS peers to deliver evaluation***
 - ***Why needlessly compromise Code 4 coverage in Base B catchment area when it is a virtual certainty the Base A unit will clear its Code 2 transfer & be re-assigned to the Base A Code 4 call before the Base B unit arrives?***
 - ***CACC one-size-fits-all procedure to deploy the nearest available ambulance unit is a “made in urban Ontario” deployment decision that does not always fit in the North?***

Findings/Commentary

- Situation Analysis has revealed absence of MOHLTC support for this recommendation. However, recommended peer review will demonstrate the need to tailor CAAC dispatch risk management policies to the realities of the remote North.

Implementation

- Q4 2014 is an appropriate time period to initiate the recommended peer review of selected CAAC risk management policies.
-

Recommendation

Service Delivery Restructuring Action #3-K

Kenora & Rainy River district community hospitals & EMS services fully participate in upcoming NW LHIN 2013 pilot project (emerging from 2012 Thunder Bay District Reference Model study) with TBRHSC to reduce the need/costs for community hospital Nurse Escorts

- ***Focus on providing dedicated nursing resources within TBRHSC to assume Code 2 patient care & control after patient hand-off from ORNGE or EMS***
 - ***Staffing located within specific TBRHSC business units featuring high volume of Code 2 transfers***

Findings/Commentary

- The NW LHIN pilot is being designed to permit TBRHSC to assume care and control for Code 2 transfer patients for the duration of their time in hospital for tests/procedures. Kenora and Rainy River EMS services and community hospitals have an opportunity to shape the details of the pilot project design and implementation.

Implementation

- Participation in the pilot project design & implementation should proceed immediately.
-

Recommendation

Service Delivery Restructuring Action #3-L

NW LHIN 2013 pilot project (emerging from 2012 Thunder Bay District Reference Model study) mandate should be expanded to investigate feasibility of establishing similar Code 2 patient “care and control” staffing resources in Winnipeg hospitals

- ***Focus on dedicated staffing resources/strategies within Winnipeg hospitals to assume Code 2 patient care & control***
 - ***Staffing located within specific Winnipeg hospital business units featuring high volume of Code 2 transfers***

Findings/Commentary

- The NW LHIN pilot at TBRHSC will resolve important Code 2 patient “care and control” issues. These same “care and control” issues will remain unresolved for patients receiving tests/procedures in Winnipeg. – unless a similar staffing solution is undertaken.

Implementation

- The LHIN pilot project mandate expansion should be considered immediately, with a second phase of work in Winnipeg planned and initiated by Q3 2014.
-

Recommendation

Service Delivery Restructuring Action #3-M

ORNGE should participate in upcoming NW LHIN 2013 pilot project with TBRHSC(emerging from 2012 Thunder Bay District Reference Model study) to reduce the need/costs for community hospital Nurse Escorts

- ***Accept medically appropriate Code 2 patients without requiring community hospital Nurse Escorts***
 - ***Care & control of patient according to ORNGE policy re. “matching” a primary care paramedic to Code 2 patients delivered by fixed wing SOA providers***
 - ***Transfer patient care & control at TBRHSC after a ride provided by non-paramedic contractor such as Ambutrans***
 - ***Scope expansion to include Winnipeg “hub” hospitals in order to serve ALL patients’ interests in Thunder Bay, Kenora and Rainy River Districts***

Findings/Commentary

- The NW LHIN pilot is being designed to permit TBRHSC to assume temporary “care and control” for Code 2 transfer patients for the duration of their time in hospital for tests/procedures. ORNGE can adopt a policy to assume Code 2 patient “care and control” from the hospital of origin (i.e. without Nurse Escorts) once TBRHSC has implemented the pilot project staffing solution.

Implementation

- Participation in the pilot project design & implementation should proceed immediately.
-

Recommendation***Service Delivery Restructuring Action #3-N***

Conduct 3rd party “progress assessment” of NW LHIN Non-urgent patient transportation system (i.e. measurable results) at end of 2015.

- ***Patient risk assessment***
- ***Gap funding based improvements***
- ***Process & integration improvements***

Findings/Commentary

This Recommendation will ensure that Kenora and Rainy River health sector leadership monitors/advocates for patient-centric progress that should occur when executing the change management actions in this Review.
