



Staff Report

Peterborough Regional Liaison Committee

To: Chair and Members of Committee
From: Randy Mellow, Chief of Paramedics
Date: June 11, 2020

Subject: PAR 2020 004 – PCCP 2019 Year End Performance Report

Recommendation: Receive for information

Overview:

The purpose of this report is to provide the Peterborough Regional Liaison Committee with an update regarding Paramedic Service call volume and response time statistics for the County and City of Peterborough. This report will serve as a summary of current paramedic system performance as well as anticipated requirements in order to meet future demands.

Background:

The Consolidated Municipal Services Management Agreement designates responsibility for the operation of the public ambulance service for the City and County of Peterborough to the Corporation of the County of Peterborough. Under the County's management, Peterborough County/City Paramedics (PCCP) delivers land ambulance service for the County and City.

PCCP serves a population base of 138,236 and has 3,848 square kilometers of area to cover. At maximum staffing, there are 10 ambulances on the road and the annual on-the-road staffing hours for one year is approximately 74460 for paramedics. There are 5 full time and one seasonal ambulance station located throughout the County and City of Peterborough.

PCCP Administration is responsible for developing deployment plans that establish ambulance placement, staffing and deployment patterns. This deployment plan is issued to the MOHLTC operated Central Ambulance Communications Centre (CACC) which has ultimate control over vehicle dispatch. The CACC maintains and shares data associated with many EMS performance metrics such as call volume and response time statistics. In 2009, PCCP implemented an Electronic Patient Care Report (ePCR) system providing for increased accuracy and reporting of paramedic service performance data.

For the purpose of this Departmental Update, a combination of CACC dispatch and ePCR data will be referenced to report on current PCCP call volume and response times.

Analysis:

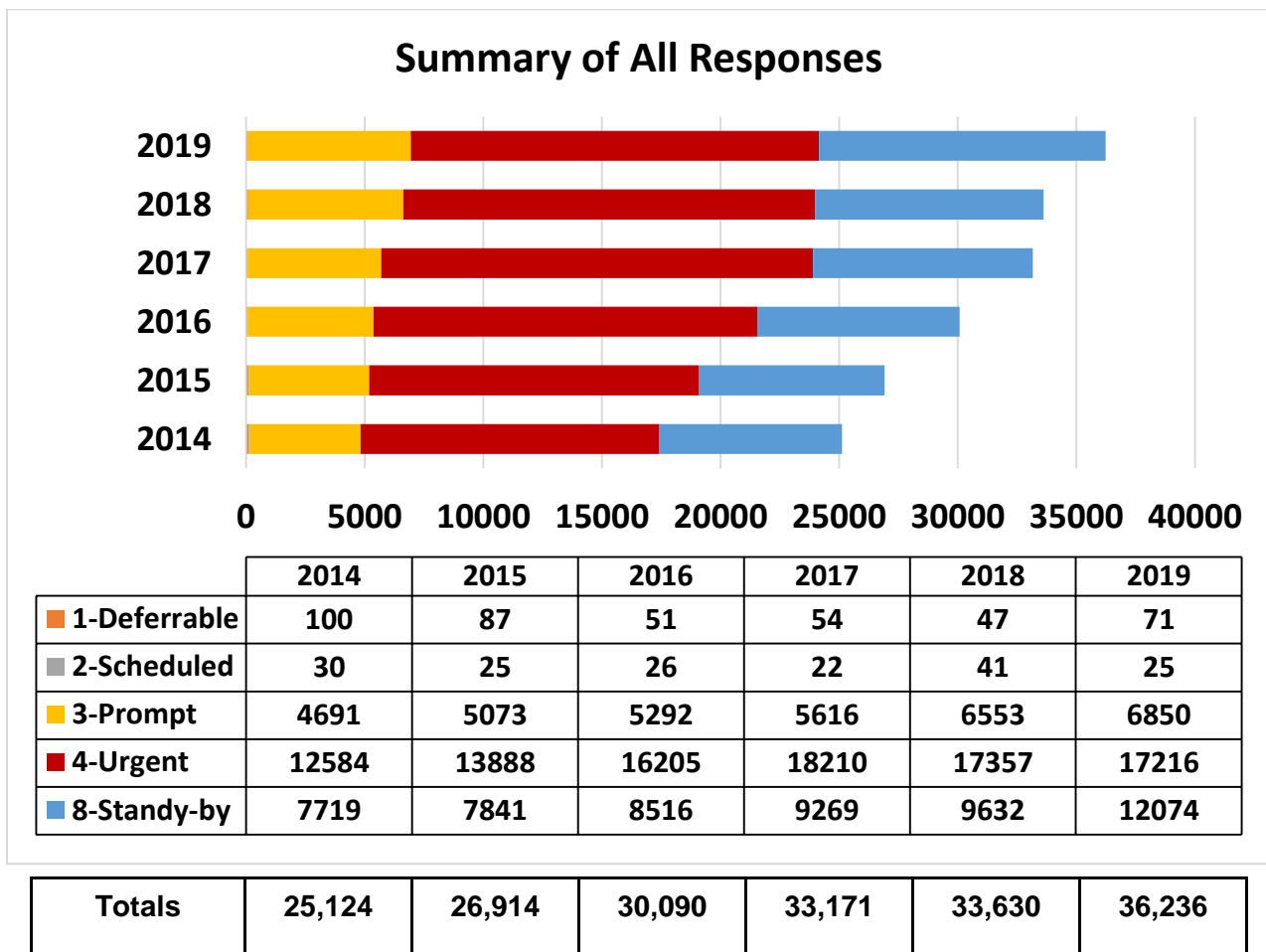
Call Volume – Vehicle Movement

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Traditionally Call Volume statistics have included all vehicle assignments in response to calls for Paramedic Service within Peterborough City & County. This statistic can be somewhat misleading when evaluating service demand and often more than one vehicle may be assigned to a response. Case in point, PCCP utilized a Paramedic Response Unit (PRU) in 2017/18 which was often assigned along with an ambulance. When the PRU program ended in 2018, there was a resultant decrease in vehicle assignments giving an appearance of decreasing demand for service. In order to more accurately demonstrate demand trends, this report provides call volume trend in both vehicle assignment and individual requests for service (patients).

In 2019, the number of Emergency/Urgent (Code 4 – Urgent/life threatening) calls dispatched was 17,216 – a decrease of 0.8% over 2018 and Prompt (Code 3 – Prompt/Serious) calls was 6,850, an increase of 4.5%. **There was an overall increase of 7.75%** for all responses including incident standby calls (Code 8). The average year over year increase for the reporting period below is 7.6% (Figure 1)

Figure 1

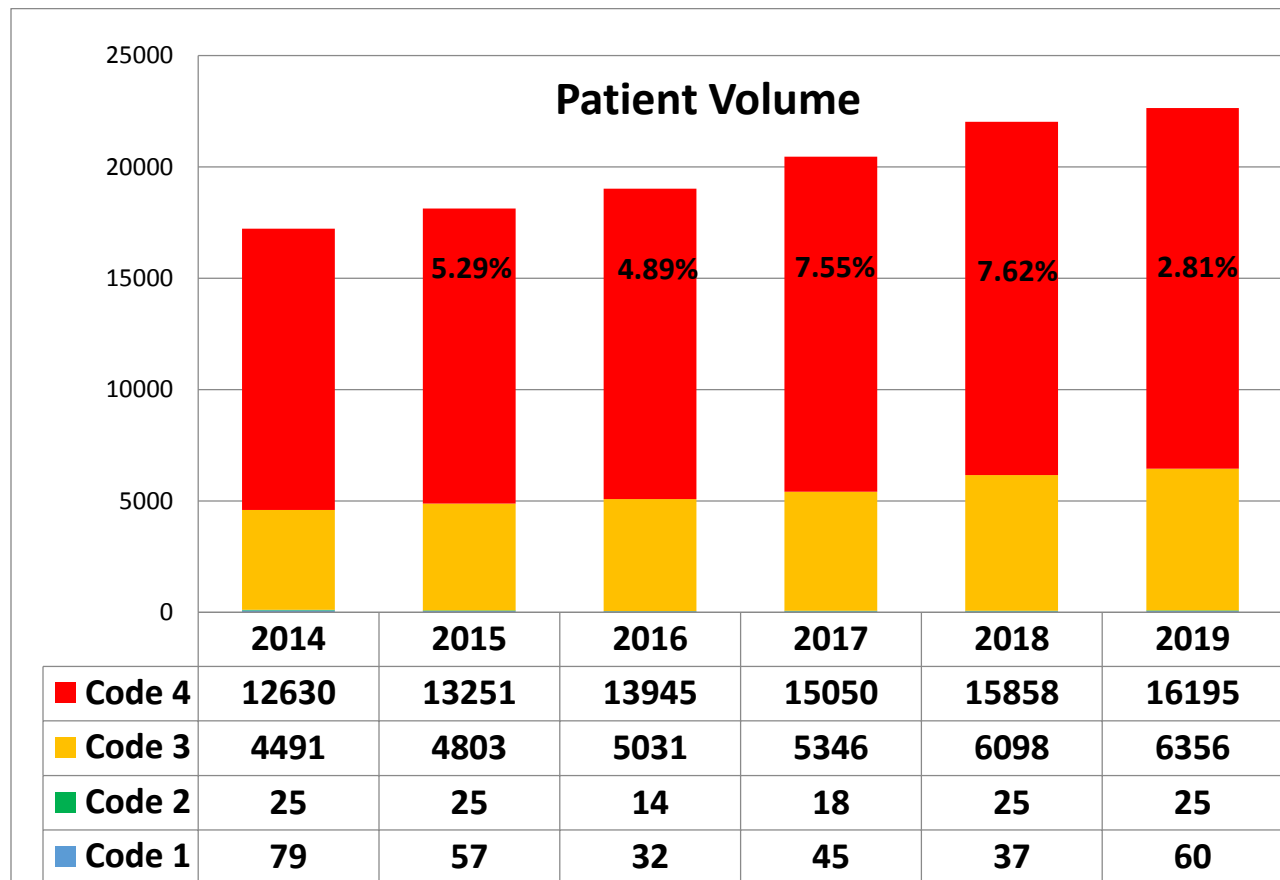


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Patient Call Volume

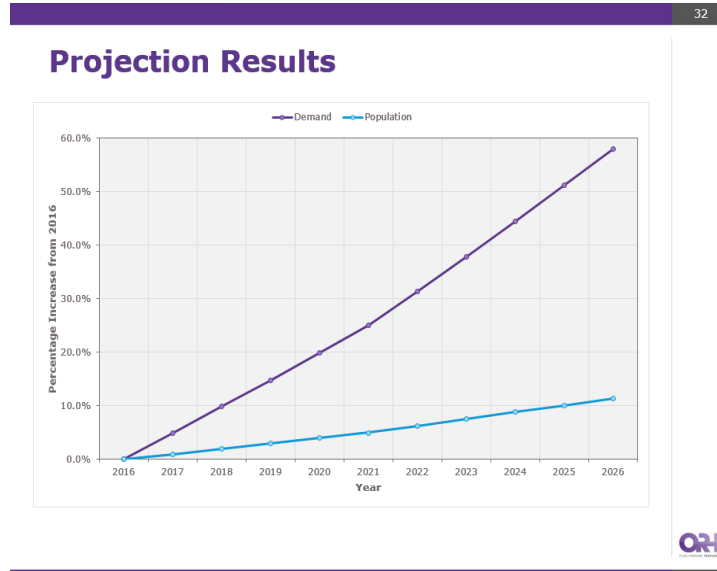
An analysis of individual patient call volume is represented in Figure 2, which provides a more meaningful representation of actual demand for service. While deployment strategies over the past have reduced vehicle movement associated with service demand, the actual volume of patient responses continued to increase at an accelerating rate (7.62% increase in 2018). This trend has turned in **2019 with the overall increase patient volume levelling somewhat at 2.81%.**

Figure 2

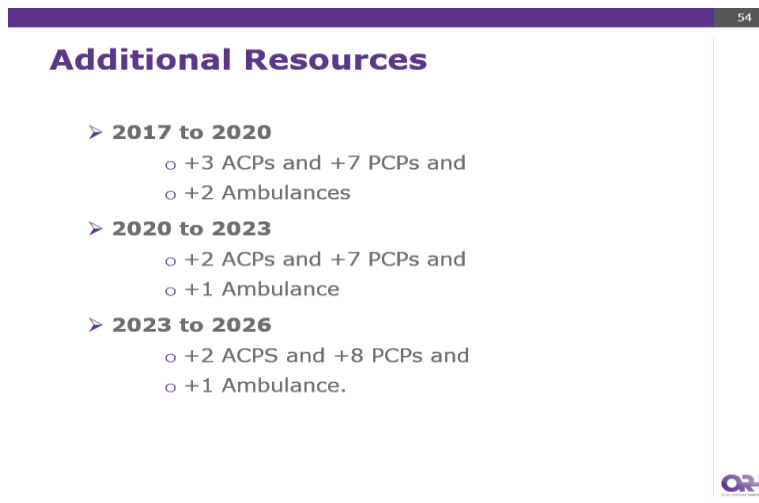


In 2016, the County commissioned a 10 Year Facility and Resource Plan, which included Call Volume analysis and projection. In this report, call volume was projected to increase at a compounding rate of approximately 5% per year. (Figure 3)

Figure 3



In order to meet the projected demand and maintain established performance targets, the report recommended additional resources as described in Figure 3, which includes additional 24 hours of ambulance coverage per day being added between 2017 and 2020.



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While the 2019 Patient Volume has levelled off slightly, the year over year average remains at 5.63% and aligned with the 10 Year Plan projection.

Ambulance Offload Delay Pressures (Figure 4)

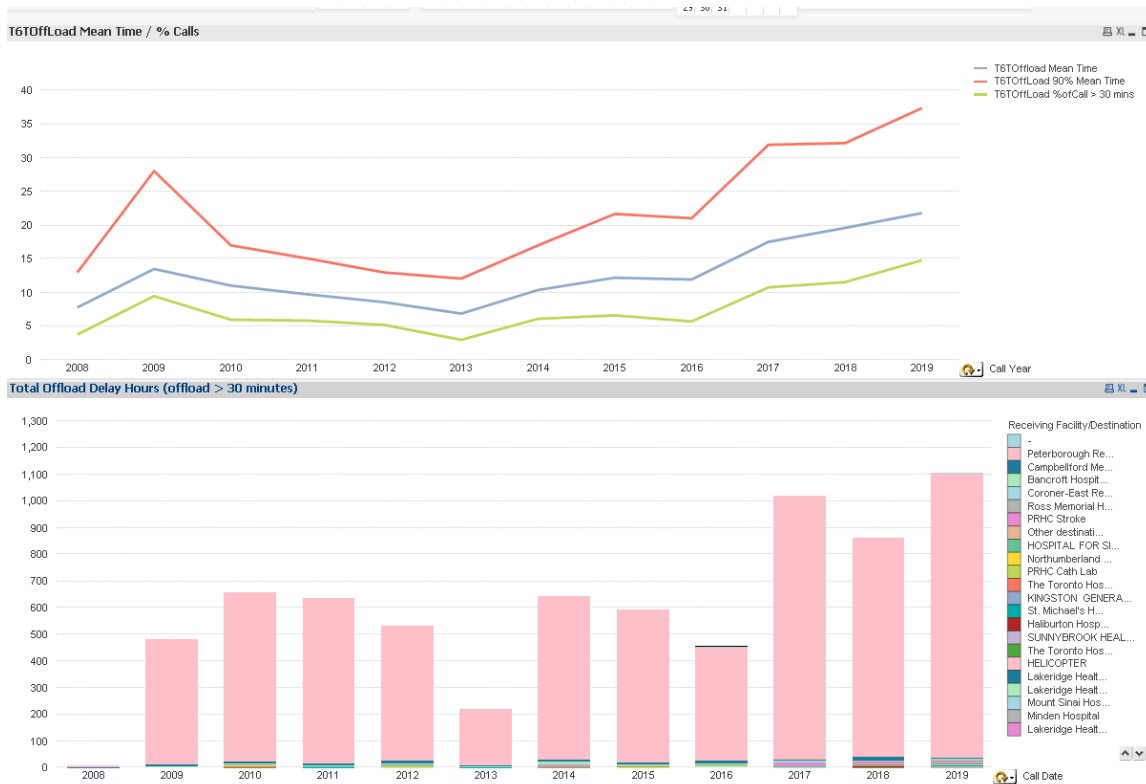
Peterborough County/City Paramedics continue to work together with Peterborough Regional Health Centre (PRHC) to reduce patient off load delays. The hospital is funded by the Ministry of Health for one 24 hour registered nurse who oversees the triaging and placement of patients who is brought in by ambulance within the emergency department.

Following the introduction of the Offload Nurse Program, some improvements were experienced in length of Offload Delays. Despite those efforts however, increased patient visits to the emergency room by both walk in patients and patients arriving by ambulance results in cumulative lost hours in hospital being similar to previous levels.

On average PCCP delivers approximately 45 patients per day to PRHC emergency room.

Ambulance Offload delay time means all minutes >30 minutes in the Offload phase of patient transfer. Calculation = Time Arrive Hospital to Offload Time less 30 minutes.

Figure 4



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As demonstrated in Figure 4, the cumulative hours of ambulance offload delay decreased in 2018 to a total of 870 hours however, the **cumulative hours have climbed to 1,070 hours in 2019.**

Ambulance Availability Levels

Figure 5 below, demonstrates an analysis of the number of minutes that PCCP deployed resources (ambulances) were available to respond to 911 calls broken down by number of ambulances available.

In 2019, the maximum number of regularly deployed ambulances totalled 10 during daytime hours and 7 during night shifts.

Where the graphs indicate negative available units, this represents demand for service that exceeds the deployed number of ambulance. i.e. more calls for service than ambulances available. In those occurrences, the additional calls were serviced either by “upstaffed units” called in on overtime or service was provided by another neighboring municipal ambulance service.

Figure 5

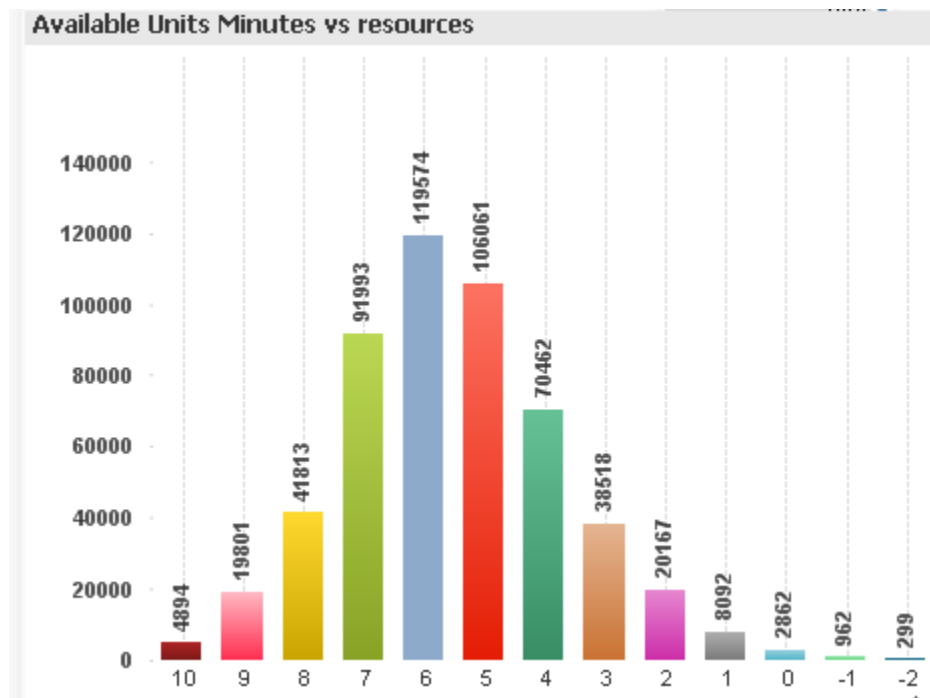


Figure 5 demonstrates that in 2019 for a period of **47 hours and 42 minutes, full-deployed resource levels were committed to responses.** In the previous year, the total time at full resource deployment was 64 hours 214 minutes.

This significant improvement in resource availability is most likely attributable to the anticipated mitigating effect of the additional 24-hour ambulance deployed in April of 2019. PCCP Administration will continue to monitor this performance metric through 2020.

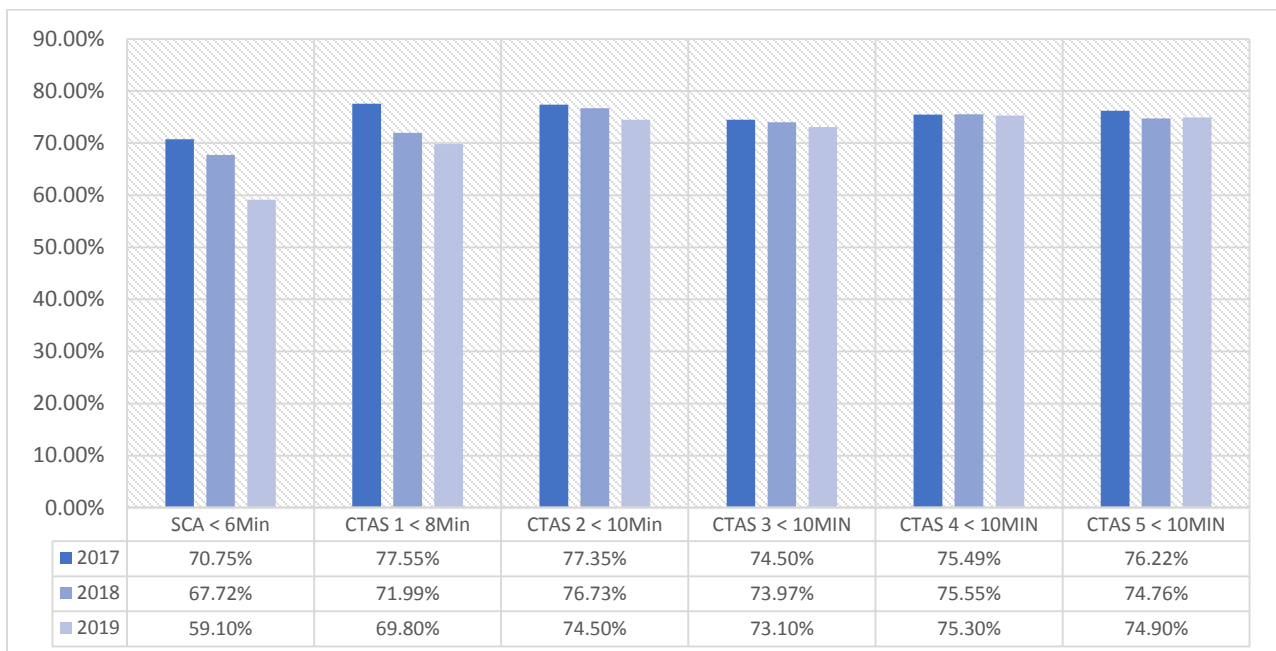
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Response Time Performance:

Figure 6 below depicts County and City response times to specific patient acuity (CTAS) levels. PCCP was successful in achieving all 6 targets included in the new provincially mandated and Council approved response time plan in 2019. However, as previously predicted, 2019 performance in several high acuity categories did deteriorate with SCA (Sudden cardiac Arrest) - 6 minute target witnessing the largest delay.

Response times will continue to be monitored closely by PCCP Administration for anticipated improvement through deployment strategies in 2020.

Figure 6



PERFORMANCE TARGETS					
SCA 6 MINS.	CTAS 1 8 MINS	CTAS 2 10 MINS.	CTAS 3 10 MINS.	CTAS 4 10 MINS	CTAS 5 10 MIN
50 %	66%	65%	65%	65%	65%

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Financial Impact

There are no direct financial impacts associated with this report. All aspects of staffing and performance monitoring have been anticipated in the approved 2020 budget.

Anticipated Impacts on Local and/or First Nations Communities

This report is intended to inform and assist the County in meeting its mandate to provide Paramedic Services meeting the needs of the local and First Nations Communities.

Link to County of Peterborough Strategic Plan Priorities

Collaboration Shared Services

Improved Essential Infrastructure

Financial Sustainability and Fiscal Responsibility

In consultation with:

1. CAO Troy Speck

Communication Completed/required:

N/A

Attachments

None

Respectfully Submitted,
Original Signed by
Randy Mellow
Chief of Paramedics

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