CONFIRE ECNS Analysis

May 2025

CONFIRE
Regional Emergency Communications

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CONFIRE Dispatch Processing of EMS Calls and Disposition of ECNS Eligible Calls

May 2025

The following is an analysis of various ECNS call processing components and disposition of callers participating in the ECNS process. The analysis looks at various components in the call processing continuum including determination of ECNS eligibility, proper transfer and capture in the LowCode ECNS processing software, and final disposition of pre-hospital care. Data for this analysis was extracted from CONFIREs CAD database, the LowCode database, and ImageTrend medical records.

Tables 2 and 3 analyze these elements using two different approaches. The calculations in Table 2 represent an ideal capacity-based analysis using all EMS calls with a determinant code that qualifies for ECNS transfer based on International Academies of Emergency Dispatch (IAED) protocols. Additionally, table 2 includes eligible calls that occur during times when CONFIRE's ECNS is not staffed (2300 hrs. to 0700 hrs.).

Table 3 takes a more refined and real-world operational approach by excluding calls that, while technically eligible by determinant code, are not suitable for ECNS transfer due to situational limitations. Examples of excluded scenarios include

- The caller is a medical facility
- The caller is a minor with no adult on scene.
- The Patient is in a public place which inhibits detailed communication with the ECN
- The patient is completely immobile.
- Other inability to interrogate patient (Language barrier, uncooperative)

Additionally, Table 3 takes into account that CONFIRE's ECNS center is not staffed 24/7 and excludes calls that are received outside ECNS operational hours. With these differences, Table 2 serves as an indicator of the systems capacity with ideal circumstances, where table 3 provides a view of the practical application of the program with CONFIRE's current application and limitations. These differences are summarized below:

Summary of Methodological Differences

Feature	Table 2 – Ideal Capacity	Table 3 – Practical Application
Time of Call	All hours included	Only calls within ECNS operational hours
IAED Code Eligibility	Included	Included
Situational Limitations (e.g., public setting, minor without adult)	Included	Excluded
Purpose	Measures theoretical capacity	Measures practical effectiveness

For the purposes of this report, the remaining charts and graphs will represent the practical application methodology as described for table 3.

Table 1: EMS 911 calls for service and EMD completion for May 2025

Total Emergency EMS Calls	17,831
Total EMS Calls with Obtainable Determinant Code	13,292
Total EMS Calls with Determinant Code	12,004
% of EMD Obtainable EMS Calls with Determinant Code	90.3%

Table 2: ECNS-Eligible Calls Based on IAED Protocols (All Hours Included)

Total Calls Eligible for Low Code based on IAED protocol. All Staffed Hours:	1,536
% of EMS calls with Determinant Code Eligible for ECNS	12.8%
Total ECNS Eligible Calls Transferred to ECN (Entered in Low Code)	572
% of Eligible EMS Calls Transferred to ECNS	37.2%
% of Total EMS Calls Transferred to ECNS	3.2%

Table 3: Practical ECNS Utilization: Eligible Calls During Staffed Hours With Exclusions Applied

Total Calls Eligible for Low Code based on CONFIRE Policy:	1,480
% of EMS calls with Determinant Code Eligible for ECNS	12.3%
Total eligible calls per CONFIRE Policy during ECNS staffed Hours (0700 to 2300 hrs)	1,119
Total ECNS Eligible Calls Transferred to ECN (Entered in Low Code)	572
% of Policy Eligible EMS Calls Transferred to ECNS during staffed hours	51.1%
% of Total EMS Calls Transferred to ECNS	3.2%

Table 4:Transport/treatment status of ECNS calls May 2025.

Incoming Calls to Emergency Communications Nurse (ECN) Nurse		
	Total ECNS Transfers	601
	Transferred via CAD Service (did not connect with ECN)	29
	Calls Aborted (Hangups, disconnects)	68
	Total Calls received and completed by ECN	504
Calls Returned for Emergency Transport		
	Triage nurse returned call for Emergency Transport	110
	Number of returned calls for emergencies resulting in actual transport	84
	% of returned calls for emergency resulting in transport	76%
Non-emergency with no Alternative Transport		
	Patient had no alternative means of transport (Transport Unit Sent)	273
	Number of non-emergency ambulance responses that resulted in actual transport.	216
	% of non-emergency ambulance responses that resulted in actual transport.	79%
Total calls to reach ECN that resulted in an ambulance response		383
	% of total calls to reach ECN that resulted in ambulance response	76.0%

[1] A CAD Service transfer occurs when CAD recognizes that the call is eligible for ECNS and automatically (and often without dispatcher knowledge) moves the call to LowCode electronically, but the dispatcher is not actually moving the call forward via telephone line to live ECN. There may be a number of reasons why this occurs, but for tracking purposes, it is not counted as an actual ECNS transfer. The call is actually being handled like a standard dispatched call with no time delays.

Table 5:Unit responses and ambulance transport rates to ECNS calls that were returned for first responders for May 2025 (by call type). Top 20 Call Types.

Call Type	Total Calls in LowCode	Total LowCode calls referred back for a Response for medical reasons	% of Calls referred back for a response for medical reasons	Calls referred back for a response for medical reasons that transported.	% of Calls referred back for a response for medical reasons that transported.
SICK-A8	52	10	13%	8	80%
SICK-O1	44	10	13%	6	60%
FALL-A2	30	5	6%	2	40%
ABD-A1	27	4	5%	3	75%
BACK-A1	25	3	4%	1	33%
FALL-A3	21	1	1%	1	100%
SICK-A2	21	5	6%	4	80%
HL-A1	19	3	4%	3	100%
SOB - Shortness of Breath	19	5	6%	4	80%
DIA-O1	18	4	5%	2	50%
SICK-A11	17	2	3%	1	50%
TRAUMA-A3	17	2	3%	1	50%
FALL-A1	13	2	3%	2	100%
TRAUMA-A2	13	1	1%	1	100%
SICK-A3	13	1	1%	1	100%
CHOKE-O1	13	4	5%	4	100%
FALL-O1	12	2	3%	2	100%
SICK-A4	9	2	3%	2	100%
HEAD-O1	8	2	3%	2	100%
DIA-A1	8	1	1%	1	100%

Table 6: Recommended Point of Care Disposition for patients completing ECNS process for May 2025.*

Disposition of Care Text		
Seek Emergency Care as Soon as Possible	230	52.9%
Emergency Response	110	25.3%
Seek Face to Face Care within 1-4 Hours	76	17.5%
Schedule an Appointment to be Seen by a Doctor/Health Care Professional within the Next 12 Hours (same day)	14	3.2%
Schedule an Appointment to be Seen by a Doctor/Health Care Professional within the Next 1-3 Days	2	0.5%
Speak to Your Doctor/Health Care Professional to Review the Symptoms As Soon As Possible	2	0.5%
Schedule a Routine Appointment with a Doctor/Health Care Professional	1	0.2%

**This represents recommended care given by the ECN. The ECNS program does not have a mechanism to follow up on whether callers follow through with the recommendations. Also, the numbers in this table includes callers who were provided a recommendation that did not require ambulance transport, but received that transport anyway due to lack of alternative transportation (see table 3 for detail).*

Figure 1: Percentage of ECNS eligible Calls that are transferred to ECN and entered into Low Code system by date. Eligible

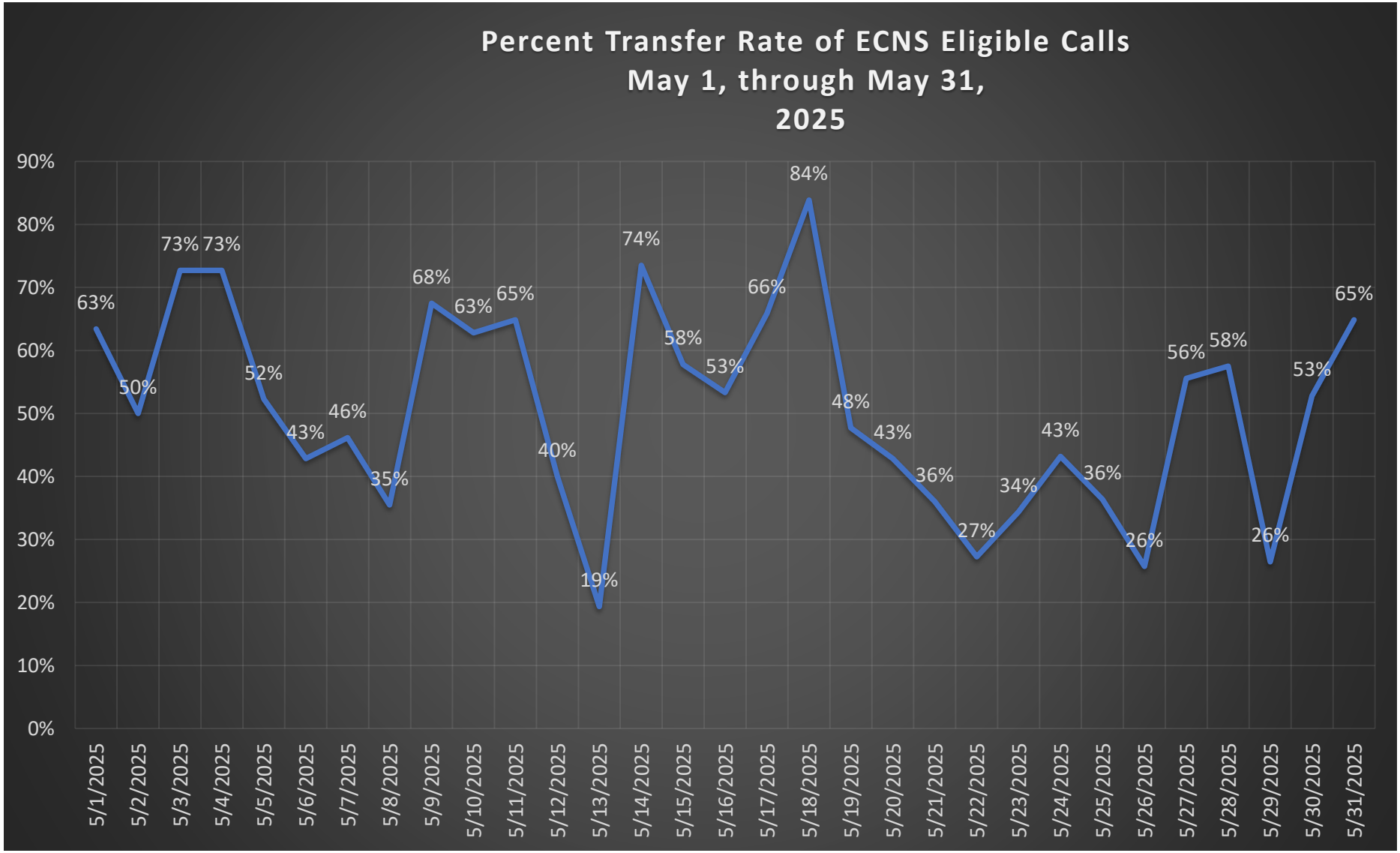


Figure 2:Total number of ECNS eligible calls and the number of them that were transferred to an ECN/entered into Low Code by date.

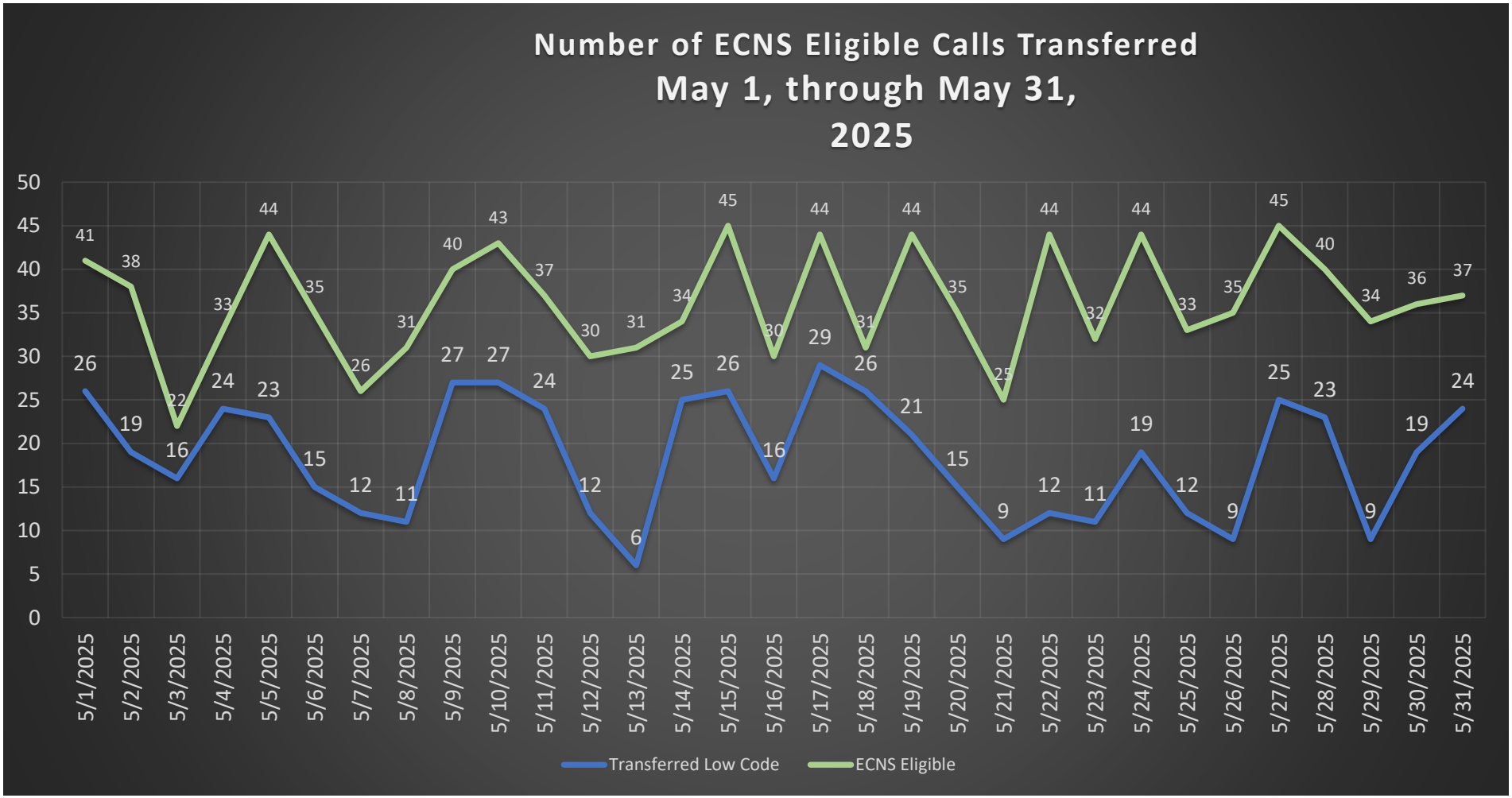
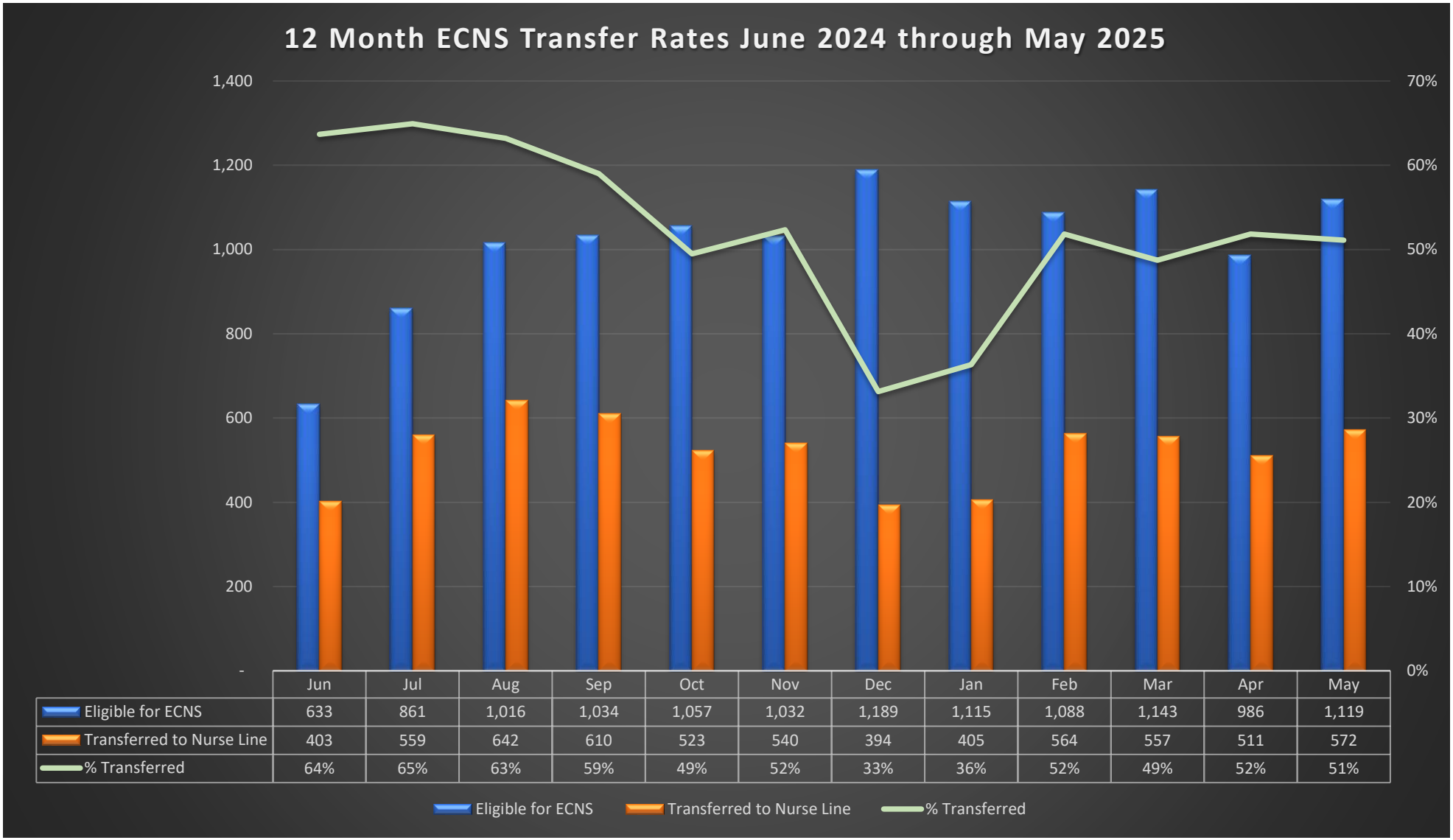
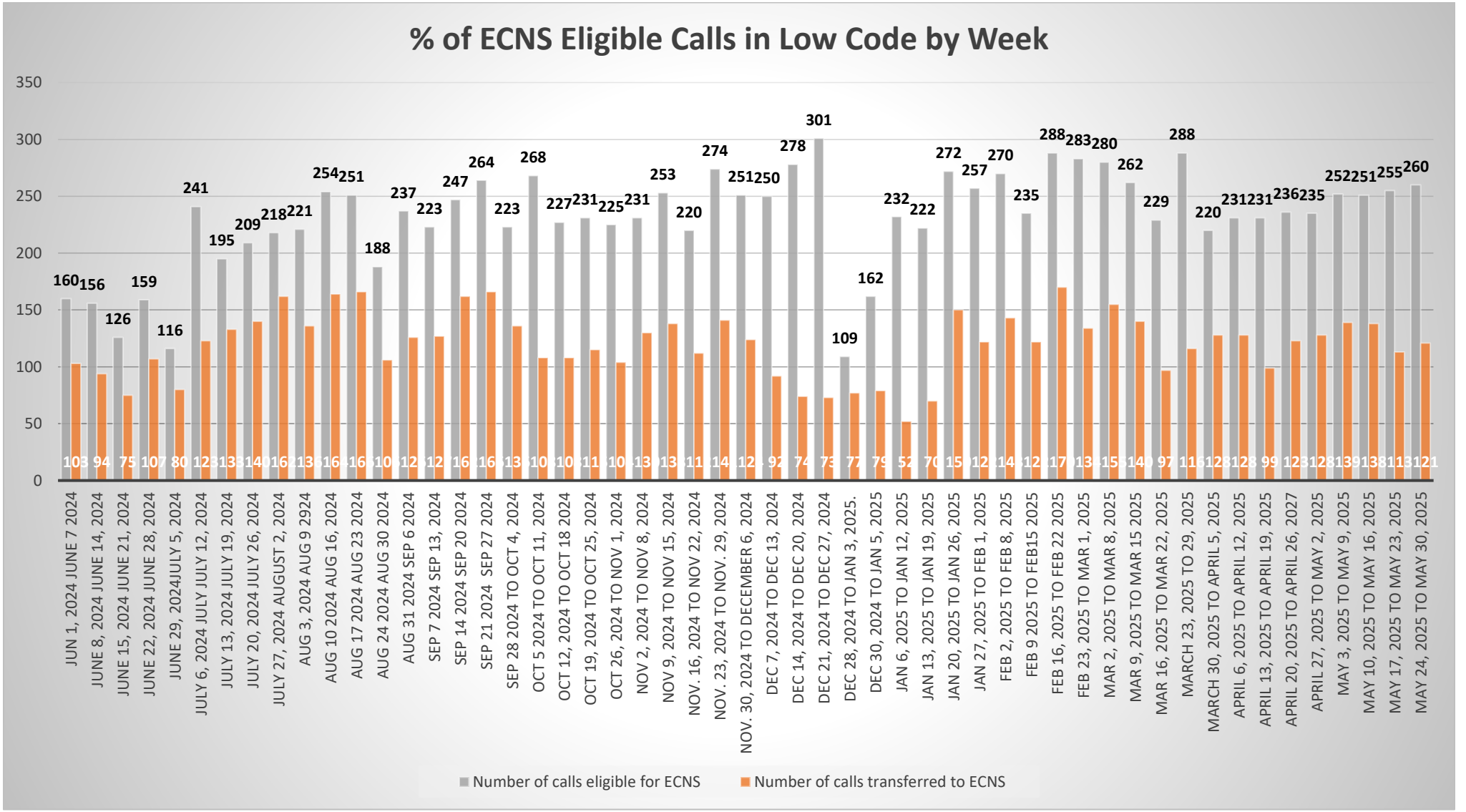


Figure 3: 12-month analysis of ECNS eligible calls and rates of transfer to ECN/Low Code system.



	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Eligible for ECNS	633	861	1,016	1,034	1,057	1,032	1,189	1,115	1,088	1,143	986	1,119
Transferred to Nurse Line	403	559	642	610	523	540	394	405	564	557	511	572
% Transferred	64%	65%	63%	59%	49%	52%	33%	36%	52%	49%	52%	51%

Figure 4: Number of eligible ECNS calls and rates of transfer from June 2024 through May 2025.



Reasons why ECNS Eligible Calls were not Transferred to the ECNS Nurse Line

May 2025

CONFIRE's CAD is programmed to prompt the dispatcher each time a call is determined to be eligible for transfer to the ECNS system. Eligibility is based on the established determinant code for the call. The dispatcher has the option of bypassing ECNS and sending a standard response for the call but must provide a reason for doing so from a pre-defined list. Below is a summary of reasons calls were not transferred.

These determinations are based on the information that the dispatcher has available and how they interpret the information, so there is a level of subjectivity. Furthermore, because it is a pre-defined list, the categories may not cover the specific situation of each call. Therefore, the dispatcher needs to make a judgement call as to the closest matching category, not necessarily the exact situation.

Table 7: Dispatcher response as to why eligible calls were not transferred to ECNS.

Disposition Text from CAD	Number of Calls	% of Total Eligible Calls Not Sent to LowCode
*Call Taker decided to not send incident to LowCode, with reason: ECN NOT AVAIL= No ECN staff at CONFIRE and REMSA or hold music on transfer (Sup Approval)	783	82.6%
*Call Taker decided to not send incident to LowCode, with reason: ECN NOT AVAIL= No ECN staffing or hold music on transfer	0	0.0%
*Call Taker decided to not send incident to LowCode, with reason: INABILITY TO INTERROGATE PT= Inability to talk, belligerent, RP not at same location	0	0.0%
*Call Taker decided to not send incident to LowCode, with reason: MEDICAL FACILITY RP= RN/Dr requesting 911 AND is at PT bedside	26	2.7%
*Call Taker decided to not send incident to LowCode, with reason: PT COMPLETE IMMOBILITY= Cannot move, bedridden or on the ground unable to get up	0	0.0%
*Call Taker decided to not send incident to LowCode, with reason: PT IN PUBLIC PLACE= PT is in an area where large crowds are gathering (i.e. sports complex)	0	0.0%
*Call Taker decided to not send incident to LowCode, with reason: QUICK LAUNCH= CPR, UNC, CP, SOB, CVA	99	10.4%
*Call Taker decided to not send incident to LowCode, with reason: REOPENED CALL= Reopened call	10	1.1%
*Call Taker decided to not send incident to LowCode, with reason: RP IS MINOR= PT is a minor at school or NO adult on scene	30	3.2%
*Call Taker decided to not send incident to LowCode, with reason: TEST/REOPENED CALL= Test or reopened call	0	0.0%
*Call Taker decided to not send incident to LowCode, with reason: MEDICAL FACILITY RP= Staff requesting 911 or PT directed by medical facility to call 911	0	0.0%

***Call Taker decided to not send incident to LowCode, with reason: RP IS MINOR= RP is a child caller <16 or RP is a minor calling for minor PT**	0	0.0%
*** Call Taker decided to not send incident to LowCode, with reason: PUBLIC SERVICE= A public service has been dispatched**	0	0.0%