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ASSUMPTIONS

- The aim of this paper is to project the impact of demographic change on the demand for National Ambulance Services funded by the HSE in 2017 and give a five year projection to 2022. Utilisation rates for 2015, where appropriate and applicable, were used for these projections.
- Projections of call volume into the future are calculated using population projections based on the M2F2 scenario.
- No new service improvement initiatives are included in projections of activity or costs. In addition, unmet demand and need is not reflected in the projections.
- An assumption is made that utilisation rates, unit costs, models of care and eligibility, will remain stable between 2016 and 2017.

KEY MESSAGES

- In 2015 just under 340,000 calls were received by the Pre-Hospital Emergency Care Services. Of these calls, 22% (75,387) were responded to by the Dublin Fire Brigade (DFB) and the remaining 78% (264,319) were responded to by the National Ambulance Service (NAS).
- The majority of emergency calls originate from the North Leinster region (32% of the total call volume), with the other three areas contributing equally to the call volume (22%-23%).
- The number of AS1 emergency calls received by the NAS has been rising steadily for many years with calls increasing by 8% between 2013 and 2014 and by a further 9% between 2014 and 2015. Of note, the rate of increase in the number of AS1 calls dealt with by DFB has been slower.

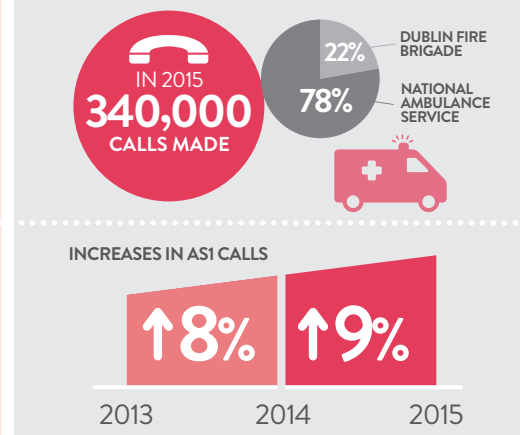
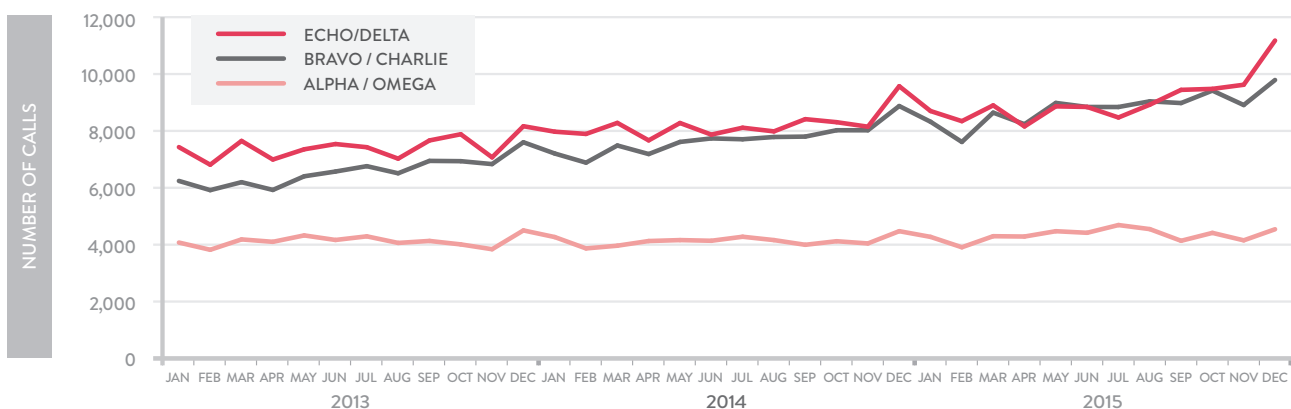


FIGURE 1: NATIONAL AS1 CALLS BY TYPE FOR 2013-2015



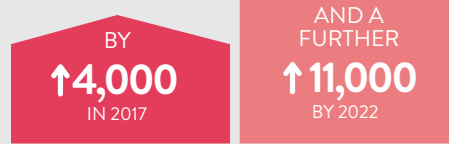
Source: National Ambulance Service

PROJECTED ACTIVITY GROWTH 2017– 2022

TOTAL AMBULANCE CALLS PROJECTED TO INCREASE



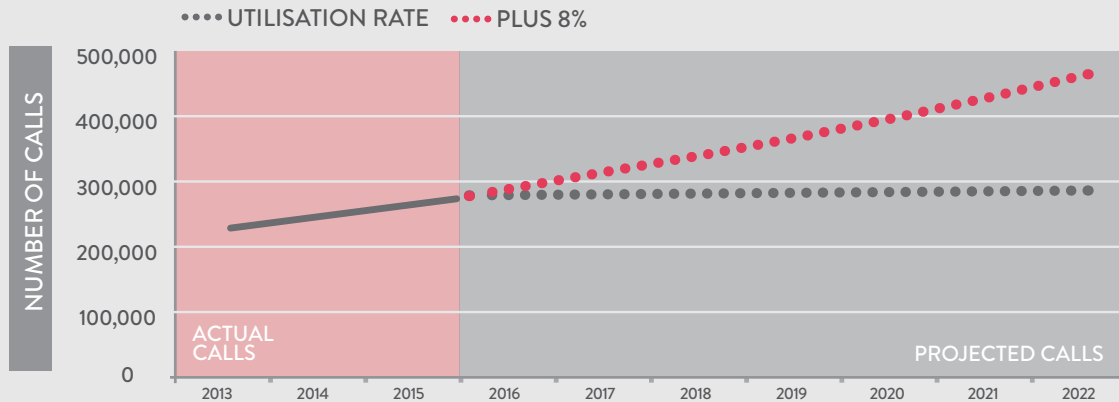
TOTAL AS1 CALLS PROJECTED TO INCREASE



- Applying the 2015 utilisation rate of 73.0/1,000 of the population, total AS1, AS2 and AS3 calls would be expected to increase by approximately 5,000 calls in 2017 and by a further 14,000 calls by 2022. This does not allow for the 8-9% rate of growth in emergency calls.

- Applying the same method to AS1 calls alone, and using the 2015 utilisation rate of 58.4/1,000, AS1 calls would be expected to increase by approximately 4,000 calls in 2017 and by a further 11,000 calls by 2022. However if the average increase of 8% in call volume seen in 2014 and 2015 for AS1 calls continues, AS1 calls will increase by 45,000 by 2017 and by 194,000 by 2022.

PROJECTED CALL GROWTH – AS 1 CALLS

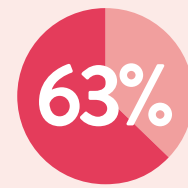


Source: National Ambulance Service, Central Statistics Office

HOSPITAL TURNAROUND TIMES

The turnaround time is a measurement of the time from the point of arrival of the ambulance to the emergency department up until the point when care of the patient has been handed over to the clinical staff and the ambulance and crew are ready to respond to the next incident.

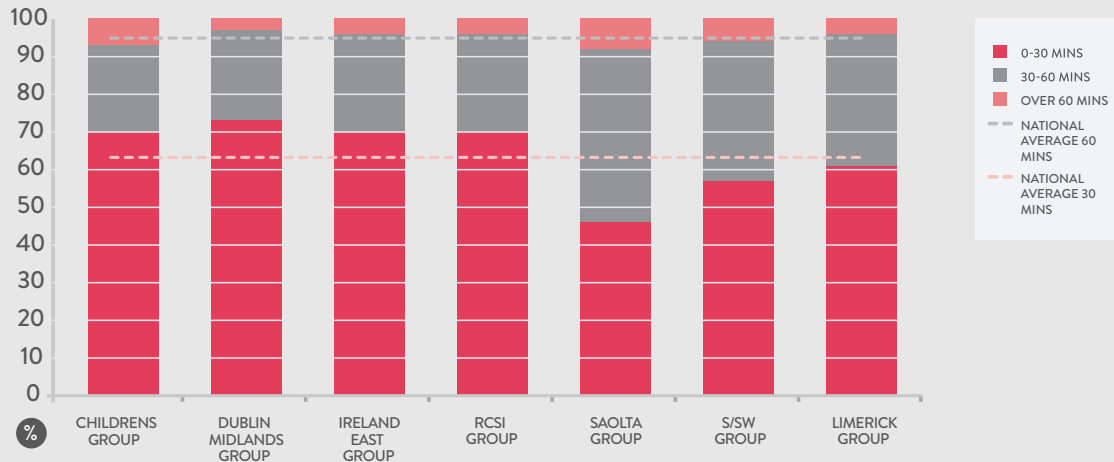
- Prolonged hospital turnaround times, caused by ED pressures, are limiting availability of emergency ambulances. In 2015 only 63% of vehicles and crews were available within the target turnaround time of 30 minutes or less. NAS estimates that during the first part of 2016, the delays in turnaround times were the equivalent of 10 ambulances out of service every day.



OF AMBULANCES MET THE TARGET TURNAROUND TIME OF

30 MINUTES OR LESS

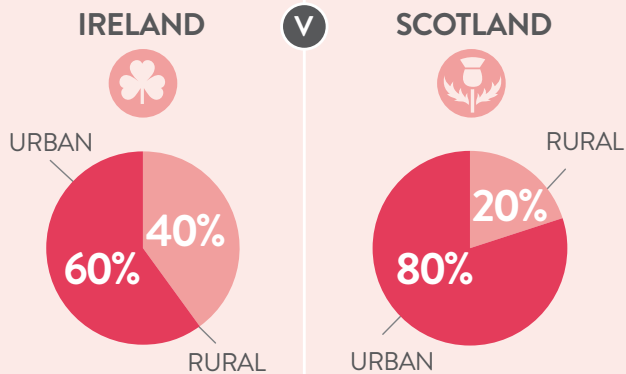
AMBULANCE TURNAROUND TIMES BY HOSPITAL GROUP 2015



PATIENT TRANSFERS

Emergency ambulance usage for patient transfers increased by 7% between 2013 and 2014 but decreased by 26% between 2014 and 2015.

CALL MIX

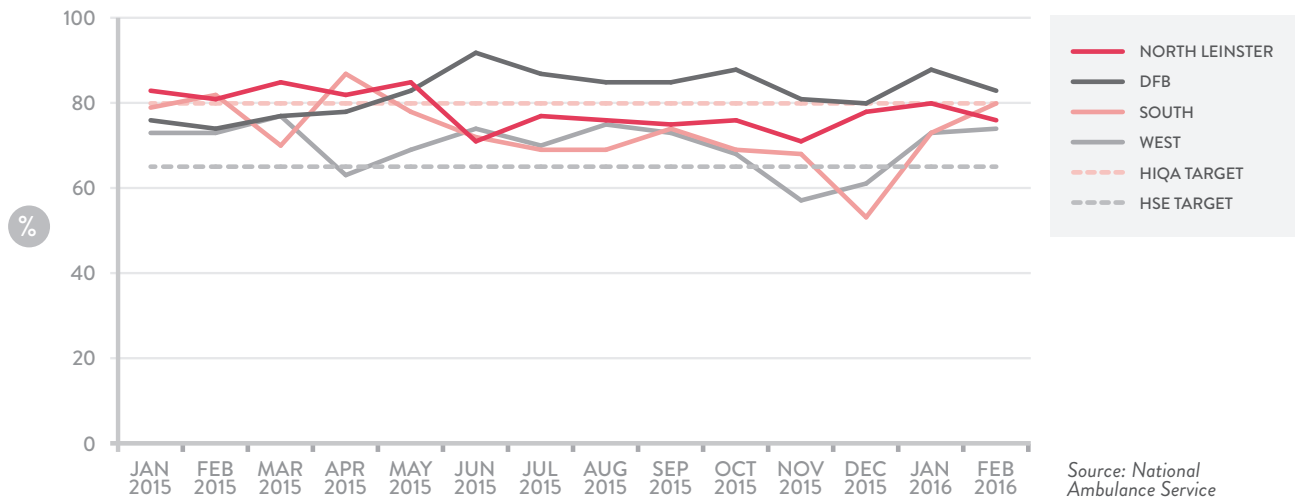


- Ireland has a low number of emergency calls per head of the population when compared to the UK and countries further afield.
- Ireland's call mix is unique, with a high proportion of calls arising from rural areas. In comparison to the Scottish Ambulance Services where 80% of calls arise in urban areas and 20% in rural areas. The NAS manages a much higher proportion of rural calls at 40% and a lower proportion of urban calls at 60%. This has significant implications for NAS service planning and for achievement of response time targets.

EMERGENCY RESPONSE TIMES BY AREA

While response-time indicators are in widespread use as a method to evaluate the quality of service provided by Pre-Hospital Care Services, they should not be examined in isolation (HIQA, 2014). The international evidence reflects the importance of the development of clinical outcome indicators, which appear to be a more appropriate benchmark of performance (HIQA, 2014).

The HIQA target response time for ECHO calls for 2016 is to respond to 80% of calls within 18 minutes and 59 seconds. During 2015, 76% of Clinical Status 1 ECHO calls were responded to within the target response time. A breakdown of the response times by region reveals that between January 2015 and December 2015, DFB was the only service able to achieve the target response time.

FIGURE 2: REGIONAL % OF CLINICAL STATUS ECHO INCIDENTS RESPONDED TO WITHIN 18 MINUTES & 59 SECONDS OR LESS

With regard to DELTA calls, no area was able to meet the HIQA target of 80% during 2015. Examination of the data shows a downward trend in proportion achieving target response times for DELTA incidents.

Of note, there are a number of influential factors to be considered when interpreting the above data, such as geography, demography, transport, road and health infrastructures and the amount of resources available. The recently completed capacity review of Pre-Hospital Emergency Care in Ireland will serve to inform strategic planning in this area going forward (Lightfoot, 2015). NAS are changing its model of service delivery towards the use of dynamic deployment points where all resources in a region are deployed across that region as a fleet, to improve response times. Dynamic deployment has already commenced in the Roscommon area during 2015.

EMERGENCY AEROMEDICAL SERVICE



↑ INCREASED DEMAND IN
EMERGENCY AEROMEDICAL
SERVICE + IRISH COAST GUARD

- A significant increase in demand for the Emergency Aeromedical Service and the Irish Coastguard service has been seen in 2015. This upward trend is expected to continue due to reconfiguration of hospital services within hospital groups.
- Pre-Hospital Emergency Care Services should consider expansion of their Community First Responder Schemes in rural areas, in order to improve patient outcomes and response times.

RESEARCH AND DATA NEEDS

- The paper-based pre-hospital patient care record does not facilitate in-depth analysis of service user data by age and gender. However, the introduction of the electronic patient care record from quarter four 2016, will address this deficit and the first year of data will be available for analysis in late 2017.
- There is a need to analyse data collected from the new electronic patient care record, relating to demographic, socio-economic and health-related factors in order to predict and manage future demand for the emergency ambulance services in Ireland.
- Research is required to understand patterns of Irish Ambulance Service use and its users.
- Clinical outcome indicators should be developed as a matter of priority.