Community paramedics may have a future role in providing a complementary service to general practice, potentially easing GP and hospital workload and enhancing patient care

Pictured above are (l-r): community paramedics Declan Smith and Brendan Finan with Dr Seamus Clarke

New primary care roles – wave of the future?

THE RECENT LAUNCH of an EU-funded cross-border community paramedic marked a collaboration between the Co-operation and Working Together (CAWT) Health and Social Care Partnership, the Northern Ireland Ambulance Service, Scottish Ambulance Service and the HSE's National Ambulance Service. This has brought about the establishment of community paramedic services in Ireland and Northern Ireland. The four pilot areas identified for this scheme were Buncrana, Co Donegal, Clones, Co Monaghan, Castlederg, Co Tyrone in Northern Ireland and the Argyle & Bute region in South West Scotland.

Community paramedicine internationally is a relatively new and evolving healthcare model that involves paramedics operating in expanded roles by assisting in the provision of primary healthcare and public health to the community. The community paramedic concept began in Europe and has since spread internationally where there are large rural areas with limited access to healthcare. The role of a community paramedic is a community-focused extension of the emergency response and transportation paramedic model that has evolved within traditional ambulance service provision.

Some of our population do not access or increasingly are unable to access primary care and so use the emergency medical system to receive healthcare in non-emergency situations. The community paramedic is a new role within our ambulance services, introduced into practice with the launch of the CAWT pilot programme. This pilot scheme will attempt to develop an alternative way of providing community-based clinical assessment and/or treatment which can potentially avoid unnecessary referral to hospital. This will be through the development of appropriate referral pathways for patients not just to GP services but also services based in the hospital and primary care team settings.

The four community paramedics working in counties Donegal and Monaghan are very experienced advanced paramedics, having worked for many years in the ambulance service. An advanced paramedic is a practitioner who is State-registered with the Pre-Hospital Emergency Care Council and licensed to assess many urgent medical problems and

deliver a wide range of medications or interventions for these situations in a pre-hospital setting. The community paramedics in the pilot programme in Donegal and Monaghan have undergone an accredited enhanced training course over nine months with Glasgow Caledonian University along with their colleagues from Northern Ireland and Scotland.

This training, as well as being theoretical, also involved clinical placements to enhance their skills in assessment and treatment of non-acute patients in the community setting. These additional clinical and interventional skills will support existing local GP, primary healthcare and ambulance services in all three jurisdictions. The community paramedics see patients both in their own clinical space and are also able to respond to house call requests in a designated ambulance response vehicle. Patients seen by community paramedics come from low acuity calls received by the National Ambulance Service through the 999 system.

The community paramedic then liaises with the GP/primary care team member/ambulance service as to the best treatment pathway for that patient. The community paramedic can also organise referral and transportation of a patient to an appropriate facility if necessary. In some circumstances the community paramedic can monitor the patient's progress by reassessing the patient later that day or in the following days.

The following list gives a general synopsis of the additional training that community paramedics have and their role. They can:

- Take a detailed clinical diagnostic health history, interpret findings, make decisions on treatment and management of patients and where appropriate, discharge
- Decide when to refer patients to an appropriate setting (ED or MAU) and by what means: emergency ambulance, intermediate care vehicle or self-present
- Perform a full physical assessment to include skills of inspection, palpation, percussion and auscultation
- Examination of the cardiovascular system to include 12-lead ECG, blood pressure, etc
- Examine and assessment of the respiratory system to include Spo2 and ETCO2 monitoring. Management of exacerbation of COPD, pulmonary oedema, asthma, etc
- Diagnosis of infection/sepsis
- Examination of the abdomen
- Neurological assessment
- Manage and treat minor and acute undiagnosed illness
- Assessment and diagnosis of minor injuries. Examination of skin, face, neck, ear, nose and throat
- Clinical assessment, management and treatment of minor musculoskeletal system injuries
- Treatment of moderate pain
- Treatment of glycaemic exacerbations
- Male re-catheterisation
- Supra-pubic re-catheterisation.

They are also available for the assessment and treatment of life-threatening emergencies in the community.

Managing patients

The increasing prevalence of chronic disease within the community requires more episodes of emergency or urgent care in managing exacerbations of these conditions. The current response of always transporting such patients to an emergency department when an ambulance is called is not the most appropriate way of managing many of these patients.

The community paramedic role will support and develop existing community schemes while working with other local healthcare professionals in the areas in which they are based, creating a more integrated and patient-centered approach.

The National Ambulance Service in Ireland has recognised the change in national patient demographics and the population use of their services. The demand on the Ambulance Service had increased by 10% in 2013 and 6% per annum since then. Transportation of patients to hospital under the current model of service delivery is not always appropriate but alternative routes of care must be developed so that their primary aim of responding to urgent or emergency situations is fulfilled.

> "The **demand on ambulance services** had **increased by 10%** in 2013 and by 6% per annum since then."

The new 'community paramedic specialist' programme will allow experienced 'advanced paramedics' specialising in community paramedicine and based in specific geographical areas to support and improve the efficiency of healthcare services for patients by adopting alternative care pathways for patients that they were unable to access previously from the ambulance service.

Practical aspects

The community paramedics are available from 9am to 9pm each day including weekends and bank holidays. They are tasked by the National Ambulance Service National Emergency Operations Centre to low acuity calls received through the 999 system. They have not replaced an emergency ambulance response from the Ambulance Service if a 999/112 call is made but will respond along with an emergency ambulance to life-threatening incidents such as cardiac arrest in the pilot areas.

So far, some of the tasks that the community paramedics have carried out are: treatments of asthma/COPD exacerbation, minor laceration closure, domiciliary short-term intravenous fluid administration for dehydration in the older person, falls assessment in the patient's home, and chest pain assessment. They have dealt with sepsis and other urgent cases which have received earlier assessment and treatment. They have conducted home visits to patients at

high risk of hospitalisation in a preventative role.

Locally, the community paramedics have been welcomed by the community itself and are seen as providing an additional service that is complementary to that provided by GPs. Their availability to GPs in the area when challenging emergency situations present is also welcome. This is made possible as their vehicle is a fully equipped response vehicle containing monitoring and treatment equipment many GPs could never afford.

GPs, community paramedics and public health nurses have conducted joint visits to patients, avoiding sometimes avoidable hospitalisation, particularly of vulnerable older people. The National Institute for Health and Care Excellence (NICE) in the UK indicates that studies suggest in monetary terms, each community paramedic individually can save the NHS up to £72,000 per year by treating a certain demographic of patients in the community.

> “Community paramedics will provide **safe and effective care** to patients **in their own homes** and communities.”

The project that recently commenced is enabling community paramedics to provide safe and effective care to patients in their own homes and communities in conjunction with existing service providers and is already reducing unnecessary ambulance transports to EDs from the border/rural areas which the project covers.

As our health service goes through the most fundamental reform in its history we are likely to witness major modifications to our pre-hospital emergency care services and their very definition in Ireland.

Paramedicine now has the potential to play a significant role in healthcare provision by bridging current service and interdisciplinary gaps and enhancing patient care.

Declan Smith and Brendan Finan are community paramedics with the HSE Ambulance Service based in Clones, Co Monaghan and Seamus Clarke is in practice in Clones, Co Monaghan