Dealing with emergencies in the GP setting

After a number of emergency situations in a short period, a general practice undertook quality improvement measures to ensure better preparedness

Labelled plastic bags with all medication and equipment specific for a particular emergency

THREE EMERGENCIES OCCURRED at our GP surgery in Limerick over the course of four weeks. The first was a psychiatric patient who was very high and required emergency IM haloperidol; the medication was in the surgery but could not be located quickly.

The second was a septic patient who required IM ceftriaxone due to a penicillin allergy; ceftriaxone was easily located but all equipment necessary for administration was spread out and disorganised. The third was a child who came in off the street, unknown to the practice, with an anaphylactic reaction; we luckily had a junior Anapen handy in a known location. These emergencies highlighted the lack of adequate emergency response preparedness of our surgery, and the need to be better organised, trained, and prepared for such emergencies.

General practice surgeries have an equal or greater throughput of patients than many hospital services, exposing them to the same types of medical emergencies as hospital doctors.[1]

Given the current state of emergency departments across Ireland with extended wait times, patients are avoiding them and using GP services more often, both during normal business and out-of-hour services.[2,3,4]

As patient behaviours change, the importance for GP surgeries to be ready and equipped to manage emergencies is ever-increasing.[5]

In order to be more prepared for emergencies at our GP surgery, we followed a basic approach:

- Identify emergencies
- Identify medications and equipment needed
- Gather equipment into designated bags
- Outline procedure for each emergency
- Devise system for periodic training and equipment check
- Train staff.

Based on our surgery staff knowledge, consulting with out-of-hours GP surgery services, and reviewing general practice handbooks, our surgery identified the following emergencies which required our preparation:

- Acute coronary syndrome (myocardial infarction)
- Anaphylaxis
- Cardiac arrest
- Convulsions
- Hypoglycemia
- Overdose
- Psychiatric
- Respiratory failure (ie. asthma attack).

Next, we identified the necessary medication and equipment for each emergency; items required were determined based on clinical experience, consultation with out-of-hour GP services, and general practice handbooks.

All equipment was divided per emergency into 'emergency packs' (see photos); each pack consists of a labelled plastic bag with all medication and equipment specific for that emergency. The purpose of this was to localise all essential medication and equipment into one grab-and-go pack,

thus eliminating the need to collect individual items. This is in order to save time and reduce stress in the event of an emergency.

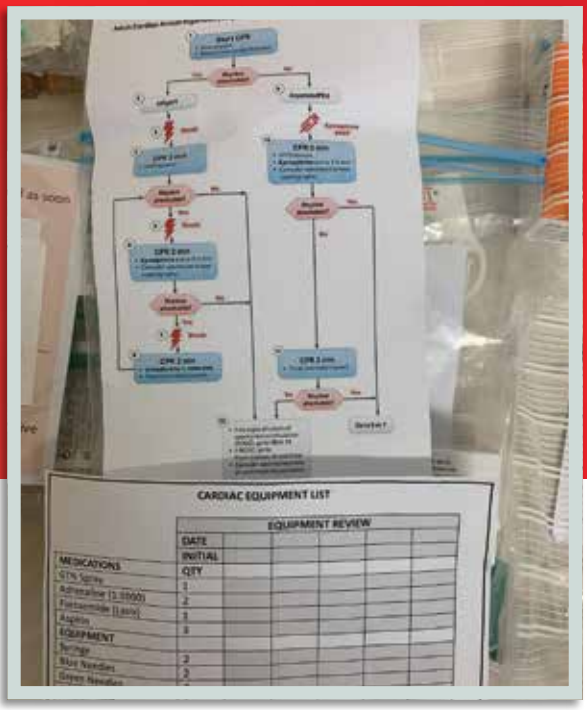
Within each 'emergency pack' is a simplified, half-page, checklist and a bullet-point procedure outlining the necessary steps to be taken for that given emergency. Dosages, frequencies, routes of administration, and timeframes are included in the procedures to streamline treatment and minimise errors.

Having medication and equipment ready to go in packs alone does not make for an effective emergency response; there needs to be a system surrounding these items to make the programme effective as a whole. As such, we implemented a system to train staff and maintain packs.

Within each 'emergency pack' is an equipment checklist that will be checked off each time it is inspected. Regular inspection of the 'emergency packs' is completed every three months to ensure all medications and equipment are present and in date for at least the next three months. Deficiencies will be noted and addressed promptly. Revision training on select emergencies will be done every three months to ensure all staff are up to date with emergency procedures.

Although infrequent, emergencies in the GP setting are increasing; whether that be an emergency presenting to the surgery or a delay in ambulance attendance.[4] This was our approach to becoming better prepared for emergencies.

There any may other ways to prepare, and resources are available to help GP surgeries. No matter what actions you take, the goal is to be prepared so you can attend to emergencies in a timely, specific, and competent manner.



Within each 'emergency pack' is a simplified, half-page checklist and a written procedure outlining the necessary steps to be taken for a given emergency

Authors: Omair Khan, GP registrar, Meadowsprings Medical Centre, Limerick; Claire Lawless, sessional GP and previous registrar at Meadowsprings; Criona Burns, GP and adjunct associate professor of clinical general practice, UL Medical School; Mathew Loss, third-year medical student, UL Medical School

Acknowledgement:
Thanks to Shannondoc for its help and insights

References
1. Rochfort A. Managing Health and Safety in General Practice. Irish College of General Practitioners 2001
2. Donnelly E. People 'frightened' by long wait times are avoiding Irish emergency departments. [online] Business Post 2023. Available at: www.businesspost.ie/health/people-frightened-by-long-wait-times-are-avoiding-irish-emergency-departments/ [Accessed 30 Jul. 2023]
3. Cullen P. Patient safety: Only three hospitals in Ireland admitting emergency department patients on time, report finds. [online] The Irish Times 2023. Available at: https://www.irishtimes.com/health/2023/03/10/patients-left-waiting-over-target-times-in-23-out-of-26-hospitals-report/
4. Greig P, Maloney A, Higham H. Emergencies in general practice: could checklists support teams in stressful situations? British Journal of General Practice 2020; 70(695): 304-305. doi:https://doi.org/10.3399/bjgp20x709373
5. Ramanayake RPJC, Ranasingha S, Lakmini S. Management of emergencies in general practice: Role of general practitioners. Journal of Family Medicine and Primary Care 2014; 3(4): 305. doi:https://doi.org/10.4103/2249-4863.148089