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How do Community First Responders contribute to rapid emergency response and recovery?

SAPC National Conference, University of Central Lancashire, Preston, 06 July 2022

Professor Niro Siriwardena[1], Dr Gupteswar Patel[1], Dr Viet-Hai Phung[1], Dr Murray Smith[1], Dr Mehrshad Hosseini[1], Dr Vanessa Botan[1], Dr Zahid Asghar[1], Dr Colin Ridyard[1] , Dr Julie Pattinson[1], Dr Elise Rowan[1], Professor Roderick Ørner[1], Ian Trueman[2,], Amanda Brewster[3], Pauline Mountain[3], Robert Spaight[4], Jason Evans[5].
[1] Community and Health Research Unit (CaHRU), School of Health and Social Care, University of Lincoln, [2] School of Health & Social Care, University of Lincoln, [3] Healthier Ageing Patient and Public Involvement (HAPPI) group, [4] East Midlands Ambulance Service NHS Trust (EMAS), [5] West Midlands Ambulance Service NHS Trust (WMAS).

Background

- Community First Responder (CFR) schemes have provided prehospital emergency care since the 1990s.
- A CFR "*is a member of the public who receives basic emergency care training and volunteers to help their community by responding to appropriate medical emergencies while an ambulance is en route*" (Phung, Trueman, Togher, *et al*., 2017).
- Around 2,500 CFR schemes, with over 11,000 volunteers in UK.
- Usually run as independent charities or through ambulance trusts.

Methods

- 47 semi-structured stakeholder interviews in six ambulance service regions from April 2020 until December 2021.
- Thematic analysis using NVivo 12.
- Actor-Behavioural change-Causal pathway theory.

Ambulance service	CFRs	CFR leads	Ambulance staff	Commissioners	Patients/relatives	Total
EMAS	6	2	0	1	1	10
SCAS	3	3	0	0	2	8
SECAMB	3	7	1	0	0	11
SWASFT	0	1	0	0	0	1
WMAS	3	2	3	1	0	9
YAS	6	0	0	0	2	8
Total	**21**	**15**	**4**	**2**	**5**	**47**

How CFRs respond to calls

- Alert from control room.
- Rapid emergency response in rural communities.
- Share information with ambulance crew and control room.
- Stabilising patients' conditions and taking observations on-scene.
- Hand over to ambulance crew.

"*Generally, what happens, when I phone the CRD to respond to an alert coming through, I would say that I am 8 minutes away, and if there is a crew that is due to get there sooner than me, or at the same time, then the CRD will say that they will leave it for the crew.*" YAS CFR.

"*I've always been quite impressed actually that they can get there that bit quicker than an ambulance sometimes, and it does save precious time.*" EMAS patient.

"*We do a set of obs and we arrive and then we phone one of our professional desks, and give them the obs and then we discuss with them whether that patient is suitable for lifting; and then we left them with the manga. We then do a second set of obs and talk to them, and then an ambulance won't come if we say we've had a discussion.*" SCAS CFR Lead manager.

"*We go, and then the crew turn up. I wouldn't say we hand over because the patient is theirs, and then I will stay for a bit, and then I will think that I'm not really needed anymore.*" YAS CFR.

"*our job is to make sure that they stay alive until the ambulance gets there.*" WMAS CFR.

How other stakeholders view CFRs

- Low public recognition but value having CFRs being able to help.
- Ambulance staff see CFRs as supportive, helpful and often complementary in rural communities.
- Commissioners feel CFRs are a valuable extra resource that can respond to emergencies in rural communities.

"*I think there is a role for CFRs if they are structured properly to provide that extra layer of cover*." EMAS Commissioner.

"*Sometimes, we will find that the CFRs are more than happy to go and get the ambulance ready, get the stretcher out or the carry chair, speak to family, make a path through the house to get the carry chair out so we can get them to the ambulance. It's just little things that make our lives a little bit easier*." WMAS ambulance staff.

"*I think we're just relieved that they've got there before the ambulance and somebody can take the pressure off me, more than anything, because I'm not medically trained in as much as I couldn't treat him as such. It's just nice to know that somebody else has got there first that can; has got some knowledge to be able to be there for him and treat him.* ." EMAS patient.

"*But I think that anybody that is in a position of needing to phone for an ambulance, I don't think that bothered who turns up, just so long as somebody turns up and can do the business, you know*?" YAS patient.

Barriers and facilitators to effective functioning of rural CFRs

- **Barriers**
  - Remoteness and difficult roads means longer travel times.
  - Longer waiting heightens patient anxieties.
  - Poor rural mobile signals.
  - Fuel scarcity.
- **Facilitators**
  - Fast response in remote, rural communities.
  - Trained volunteers respond in emergencies.
  - Complements ambulance service.

"*They're waiting such a long time for somebody to arrive, they're going to get more panicked.*" EMAS CFR.

"*The furthest I'll go is to drive about 10 to 12 miles, which on country lanes can take you a long while….During the petrol crisis, I said I just would stay local. I'm back to travelling distances again now, which can be quite difficult when it is country lanes.*" SECAMB CFR.

"*The GPS is very good if it works in the middle of the forest, which it doesn't usually. Then we have concerns that if we got into trouble, and we need help, that isn't necessarily available to us because of the signal.*" SCAS CFR lead manager.

"*They tend to have a little bit more appreciation of the scene, and things like family members and next of kin, and I think they have a lot to offer in that setting.*" WMAS ambulance staff.

Examples of innovations

Categories	Attributes of innovations	Innovations
Process	**Roles**	• Lifting fall patients using riser. • CFRs attending road traffic collision cases. • CFRs in a social care role.
	Skills	• New CFR training for non-injury falls and riser use.
Technology	**ICT**	• Navigation map and live tracking. • Handover to ambulance staff EPRF. • Radio with panic button.
	Transport	• Dedicated car for CFRs.
	Health technology	• Entonox training and use.

Strengths and limitations

- Builds on previous CFR interview study by encompassing other ambulance services.
- Involves other key stakeholders, including patients, commissioners and ambulance staff.
- CFRs and CFR leads over-represented.
- Patients, ambulance staff, and commissioners under-represented.
- Some ambulance services more represented than others.

Conclusion

- Availability of prehospital care in community influenced by patient's living conditions, e.g., rurality, and innovations in CFR practices.
- CFRs liaise with control room and ambulance staff to deliver rapid prehospital care in rural communities.
- The three agencies share info between them, which may inform diagnoses and treatment.
- We conceptualised how CFRs operated and concluded that they are valuable in delivering prehospital care in rural communities.

References

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