

Better
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Briefing

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Ethnicity and prehospital emergency care provided by ambulance services

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Key messages

- 1 Prehospital ambulance care is becoming more important as an increasingly complex health system seeks to prevent avoidable admissions to hospital.
- 2 Inequalities in prehospital care for ethnic minority groups are underpinned by problems of cultural awareness in professionals; language and communication difficulties; and a limited understanding of how the healthcare system operates for some minority groups.
- 3 These inequalities in the face of increasing diversity have elicited a range of legislative and policy responses promoting equality.
- 4 Ambulance services can also employ a number of practical measures to improve prehospital care for minority ethnic patients, including the collection of patient ethnicity data; targeted interventions; improved cultural competency; and better interpreting services.
- 5 Challenges in delivering these strategies still exist and providers should strive to embed and improve measures to meet the needs of diverse communities.

Introduction

Current health policy emphasises the avoidance of inappropriate emergency hospital admissions (Purdy, 2010) to minimise costs and risks (National Audit Office, 2011). This means that prehospital care, before the patient reaches the hospital emergency department, has become more important. Prehospital care refers to initial medical care given to an ill or injured patient, for example, by a paramedic or 'first responder' (Hanefield *et al.*, 2004).

Patients' contact with prehospital care typically does not just involve the ambulance service. Other agencies, such as NHS 111, other emergency services and possibly mental health services can play a part in the patients' prehospital care pathway prior to contact with the ambulance service, depending on their particular set of circumstances. Highly-skilled paramedics (National Audit Office, 2011) and a range of out-of-hours services (Turner *et al.*, 2013) now ensure that more patients are safely treated closer to home without having to be transported to hospital (Health and Social Care Information Centre, 2014).

The added complexity of services may increase the risk of under-use of the healthcare system, especially for those unfamiliar with how it works (Szczepura, 2005; Jayaweera, 2011; Chantkowski, 2014). People often have complex needs, which are not always effectively addressed due to fragmented provision and poor inter-agency co-ordination. This applies not just to healthcare but to public services more widely (Anderson, 2011).

There are strong links between ethnicity, deprivation, and ill-health (Psoinos *et al.*, 2011): people from minority ethnic groups are more likely both to live in deprived neighbourhoods (Garner and Bhattacharyya, 2011) and suffer poorer health outcomes (Parliamentary Office for Science and Technology, 2007). A range of personal and organisational barriers underpin the apparent inverse care law, with some people from ethnic minority groups with greater need not receiving the care they require (Tudor-Hart, 1971; Szczepura, 2005; Scheppers *et al.*, 2006).

Service providers have responded to increasing ethnic diversity through practical measures such as targeted interventions (Addo *et al.*, 2012; Gardois *et al.*, 2014) and cultural competency training (Papadopoulos *et al.*, 2004). Robust patient ethnicity data can be a key facilitator in this, but their potential is limited by incompleteness (Purdy, 2010; Psoinos *et al.*, 2011), variable protocols for data entry (Barot, 2014) and the limited use made of such data (Psoinos *et al.*, 2011; Morrison *et al.*, 2014).

This briefing paper aims to:

- Identify the barriers and facilitators to prehospital ambulance service care for minority ethnic groups;
- Examine existing responses; and
- Identify challenges for future practice.

1 Changing nature of ambulance services

Health policy increasingly aims to reduce hospital admissions to minimise costs and limit the risk of adverse consequences for patients (Purdy, 2010). Prehospital care is increasingly important in achieving this and prehospital clinical staff are now sufficiently skilled to treat patients for a wide range of conditions without needing hospital treatment (National Audit Office, 2011). Out-of-hours services, such as NHS Direct and its successor, NHS 111, are often able to deal with urgent but non-life-threatening conditions (Turner *et al.*, 2013). Between 2011-12 and 2013-14, the proportion of calls that received a face-to-face response from the ambulance service and managed to avoid the need for transport to hospital increased from 34 to 36 per cent (Health and Social Care Information Centre, 2014).

2 Minority ethnic groups may suffer from poorer prehospital care

There is evidence of unequal access to prehospital care for some minority ethnic patients, for whom barriers exist at the patient, provider and system level (Scheppers *et al.*, 2006; Psoinos *et al.*, 2011). Patient factors include culture, language and limited awareness of how the healthcare system can operate in practice for patients. Provider- and system-level factors exist in the form of poor provision of services needed to benefit particular minority ethnic groups, geographical inaccessibility and stereotypical views among providers (Szczepura, 2005).

The United Kingdom population has become more ethnically diverse in recent years, with the minority ethnic population of England and Wales standing at 14 per cent in 2011, up from nine per cent in 2001 (Office for National Statistics, 2012). However, the exact nature of ethnic diversity varies between geographical areas (Chantkowski, 2014) and minority ethnic groups themselves are not homogeneous, nor do they have uniform needs (Richardson *et al.*, 2003; Scheppers *et al.*; 2006, Dees, 2007; Chantkowski, 2014).

Szczepura defined equitable care as:

“...care that does not vary in quality because of personal characteristics, such as gender, ethnicity, geographical location and socio-economic status” (Szczepura, 2005).

While the definition above offers a good starting point for providers, the existence of ethnic health inequalities shows that this ideal has not been realised. Tackling inequalities requires an understanding of why minority

ethnic groups are less likely to access health services (Szczepura, 2005) and why they are more likely to have negative experiences when they do (Department of Health, 2009). They are more prone to poorer health outcomes and existing evidence suggests that this increased risk is primarily due to three related barriers: cultural competency; language and communication; and limited understanding of the healthcare system.

Poor health outcomes

Ethnic health inequalities manifest themselves through differential rates of emergency admissions, disease prevalence, differential health outcomes and detention under the Mental Health Act 1983. General practices in deprived areas have admissions rates that are 60-90 per cent higher than in the least deprived areas (Purdy, 2010; Bankart *et al.*, 2011).

Ethnic variations in disease prevalence include that South Asians are more likely to suffer from type 2 diabetes (Mathur *et al.*, 2013; Morrison *et al.*, 2014) and coronary heart disease (CHD) than the general population (Morrison *et al.*, 2014). Service provision may be poorer for minority ethnic groups where certain diseases are more prevalent amongst these groups than the general population (Szczepura, 2005). The significant gaps in and limited use of existing patient ethnicity data exacerbate the situation.

Variations in health outcomes are also apparent. Pakistani, Bangladeshi and Black Caribbeans report the poorest health outcomes, while Indians and Chinese often report better health (Parliamentary Office for Science and Technology, 2007). Black Africans, Caribbeans and South Asians are more likely to suffer poorer outcomes from stroke than the general population (Gardois *et al.*, 2014) due to a greater likelihood of experiencing prehospital delays (Teuschi and Brainin, 2010; Addo *et al.*, 2012; Gardois *et al.*, 2014) and limited awareness of stroke symptoms (Gardois *et al.*, 2014).

In the UK, mental health is also more likely to be an issue for people from black ethnic groups. Black Africans were 2.2 times more likely than the overall population to be detained under the Mental Health Act 1983. Black Caribbeans were 4.2 times more likely, while other Black ethnic groups were 6.6 times more likely (Care Quality Commission, 2014).

Cultural awareness

Cultural competency is a key element in progressing towards more equitable access and treatment for minority ethnic groups. Lehman *et al.* (2007) broke the term down into its two constituent parts. Culture was defined as “*the learned patterns of behaviour and range of beliefs attributed to a specific group that are passed on through generations.*”, while competence describes “*behaviours that reflect appropriate application of knowledge and attitudes.*” The aim of cultural competence is to “*create a healthcare system and workforce that are capable of delivering the highest quality care to every patient regardless of race, ethnicity, culture or language proficiency.*” (Betancourt, 2005).

Provider stereotyping, often arising from a limited awareness of cultural norms and sometimes leading to antagonistic behaviours towards patients (Anderson *et al.*, 2003; Scheppers *et al.*, 2006; Chantkowski, 2014), is a significant barrier to accessing prehospital care among some minority ethnic groups (Szczepura, 2005; Chantkowski, 2014). Such stereotyping can reduce trust between patients and providers, which can lead to delays in seeking treatment or under-use of services (Anderson *et al.*, 2003; Scheppers *et al.*, 2006; Saha *et al.*, 2008; Smith *et al.*, 2010). This may lead to clinical conditions worsening, which could explain some differences in outcomes (Banks and Dracup, 2006). While discriminatory experiences can influence the health-seeking behaviour of people from some minority ethnic groups, some barriers may also be self-imposed through cultural norms. Cultural beliefs and behaviours may explain why people from some minority ethnic groups lean more towards familial or social networks for health advice or managing conditions (Dees, 2007; Salway *et al.*, 2007; Phung, 2008; Purdy, 2010; Hirsch *et al.*, 2011; Chantkowski, 2014).

Language and communication

Limited language skills can significantly affect communication between patients and the ambulance service. Between 400,000 – 1,200,000 people in England and Wales are unable to communicate with health professionals due to language barriers (Aspinall, 2005; Gill *et al.*, 2009). This can make it more difficult for some patients to convey their symptoms to emergency service call handlers (Ong *et al.*, 2012) leading to erroneous diagnoses and treatment (Anderson *et al.*, 2003; Richardson *et al.*, 2003; Chantkowski, 2014). Communication problems may ultimately lead to preventable morbidity and mortality (Richardson *et al.*, 2003, Gill *et al.*, 2009, Ong *et al.*, 2012).

Limited understanding of the healthcare system

Limited understanding of a 'new' and changing healthcare system (Chantkowski, 2014) can lead to inappropriate use (Jayaweera, 2011) or under-use of services (Szczepura, 2005, Chantkowski, 2014). This can be a major cause of under- or over-use among transient populations such as new migrants, asylum seekers and Travellers. This may be heightened by a limited access to family or wider social networks (Chantkowski, 2014). Conversely, access to familial or social networks may also simplify pathways around the healthcare system, although this varies between minority ethnic groups (El Kebbi *et al.*, 1996; Scheppers *et al.*, 2006; Dees, 2007). Community organisations also often facilitate this process (Psoinos *et al.*, 2011). The sheer proliferation of agencies involved in delivering prehospital care also complicates matters further.

3 Legislative and policy responses to promote equality

Increasing diversity has elicited a range of legislative and policy responses that promote equality. Alongside these, practical measures have also been introduced by the ambulance service.

Legislative responses

The Equality Act 2010 supersedes previous anti-discrimination legislation that covered gender, race and disability. Within the Act, the Public Sector Equality Duty (PSED) sets out obligations which apply to all public bodies. Nine different protected characteristic groups are covered by The Equality Act 2010 (age, disability, gender re-assignment, marriage and civil partnership, pregnancy and maternity, race, including nationality and ethnicity, religion or belief, sex, and sexual orientation). Protected characteristic status represents the grounds upon which direct and indirect discrimination, harassment and victimisation are unlawful (Government Equalities Office, 2010). As a public body, the ambulance service is bound by the duties set out in the Equality Act 2010, in particular, the PSED, which requires public authorities to have:

"...due regard, in the exercise of their functions, to the need to eliminate discrimination, harassment, victimisation and any other conduct prohibited under the 2010 Act, to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it and to the need to foster good relations between such groups." (NHS, 2012).

When tackling ethnic health inequalities, the ambulance service needs to understand the complexity of minority disadvantage: minority positions usually comprise an intersection of disadvantages or privileges, which are a product of historical, social and political processes (van Mens-Verhulst and Radtke, 2006; Uccellari, 2008). Some people may belong to several protected characteristic groups, which can reinforce disadvantage (van Mens-Verhulst and Radtke, 2006; Uccellari, 2008).

Policy responses

As NHS organisations, ambulance services are covered by the Equality Delivery System (EDS1) and its successor, EDS2. These provide a roadmap for compliance with the PSED in the Equality Act 2010. EDS1 requires each NHS organisation to apply a set of broad goals to achieve a number of outcomes relating to equity for protected characteristic groups (NHS, 2012). To measure progress under EDS1, ambulance services are required to collect data on their protected characteristic groups. Their performance is assessed by stakeholders against each indicator. Progress is then measured against a four-level colour-coded grading scale -‘underdeveloped’, ‘developing’, ‘achieving’ or ‘excelling’ (NHS, 2013). The extent of progress informs future priorities. In November 2013, EDS2 was launched. This new framework encourages flexibility to reflect particular local needs and concerns. It also supports sharing good practice between organisations where possible (NHS, 2013).

4 Practical responses to promote equality

As well as legislative and policy responses, a number of practical measures have been introduced in order to promote and achieve equality, including targeted interventions and cultural competency training.

Patient ethnicity data collection

Ethnic monitoring in health has traditionally suffered from inconsistent recording methods. There are potential risks with both self-identification (which may create too many categories) and observer identification (which may under-estimate the size of minority ethnic groups) (Johnson, 2008). That said, collecting patient ethnicity data is now standard practice in many healthcare settings. The ethnic codes first introduced in 1995 were amended in April 2001 to match the 2001 Census groupings (Mathur *et al.*, 2013). The 16 ethnic group categories +1 (‘not stated’), defined by the 2001 Census for England and Wales, currently form the national standard for mandatory ethnicity data collection across the National Health Service (NHS) (see Table 1) (Department of Health, 2005). However, local providers can add additional ethnic codes to reflect the presence of particular minorities in certain areas, e.g. Kashmiris in Birmingham (Johnson, 2008).

Table 1: Ethnic group 16 +1 codes

A: White	D: Black or Black British
British	Caribbean
Irish	African
Any other White background	Any other Black background
B: Mixed	E: Chinese or other ethnic group
White and Black Caribbean	Chinese
White and Black African	Any other
White and Asian	Not stated
Any other mixed background	Not stated
C: Asian or Asian British	
Indian	
Pakistani	
Bangladeshi	
Any other Asian background	

Patient ethnicity data are essential to measure progress against EDS1 and EDS2 to ensure compliance with the Equality Act. Data such as differential disease prevalence (Szczepura, 2005; Psoinos *et al.*, 2011) can also be used to predict hospital admission and readmission (Purdy, 2010; Mathur *et al.*, 2013), whilst ethnic monitoring can help profile the ambulance service's population. Such data also have the potential to inform targeted interventions; improve cultural sensitivity; and inform provision of interpreting and translation services.

Targeted interventions

Patient ethnicity data could be used to inform targeted interventions to tackle ethnic health inequalities. Netto *et al.*'s systematic review identified five general principles for adapting health interventions for minority ethnic groups:

- publicising at community events;
- tackling cost barriers to participation in the interventions;
- sensitivity to linguistic barriers;
- compatibility with cultural values;
- awareness of different levels of acculturation (Netto *et al.*, 2010).

Such interventions can aim to improve health outcomes, raise awareness of symptoms and encourage minority ethnic groups to use prehospital care appropriately.

For example, interventions to increase stroke awareness use various publicity techniques to reduce prehospital delays and problems of symptom awareness (Gardois *et al.*, 2014) and, to varying extents, adhered to the five principles above (Netto *et al.*, 2010). However, limited evidence exists on their effectiveness among minority ethnic groups, since there is no clear relationship between stroke awareness, uptake of emergency medical services and shorter prehospital delays (Gardois *et al.*, 2014).

Cultural competency

Service providers can use patient ethnicity data to identify trends and compare health outcomes across communities. This information can be used to monitor and tailor cultural competency training for staff to reflect local needs and to ensure services are equally accessible and reflective of the demographic characteristics of the area (Psoinos *et al.*, 2011). Clinical practice may also be informed by ethnicity, including the recognition of cultural norms that may impact upon healthcare delivery (Morrison *et al.*, 2014). In minority ethnic groups, there is a greater reliance on the family to manage illness (Dees, 2007; Salway *et al.*, 2007; Phung, 2008; Hirsch *et al.*, 2011) which could result in delays in seeking care, during which time, conditions may worsen (Anderson *et al.*, 2003; Banks and Dracup, 2006). NHS Trusts and public healthcare providers have invested heavily in staff cultural competence training (Papadopoulos *et al.*, 2004). Despite this investment, cultural competency is often not fully embedded into NHS practices due to contextual factors, including limited resources and regional variations in the extent of ethnic diversity (Mathur *et al.*, 2013).

Staff cultural competency training needs to raise awareness of how different minority groups view healthcare, whilst acknowledging their needs and experiences are not homogenous. In this way it can help build greater trust between service users and providers. As such, "*Race equality training should focus on the development of professional practice emphasising the interpersonal interactions between service users and practitioners and the organisational processes that lead to unequal treatments and outcomes*" (Bennett *et al.*, 2007). In practical terms, patient ethnicity data can help to profile the nature of ethnic diversity locally, which can then be used to tailor staff cultural competency training more effectively.

Interpreting services

A limited ability to communicate symptoms with care staff, ranging from call handlers to paramedics, can have consequences including an increased risk of morbidity and mortality. Interpreting services are available across prehospital care. The London Ambulance Service (LAS) sought to tackle the increasing number of languages spoken by its population by providing them with a linguistic support service. By using Language Line Services (LLS), LAS crews, nurses, telephone operators and patients have access, usually in less than a minute, to experienced and qualified interpreters for more than 170 languages from any telephone using a free (0845) number (Lawrence, 2007).

5 Challenges for future practice

Each of the potential solutions has implications and challenges for future practice which are outlined below.

EDS1 and EDS2

While EDS1 and EDS2 provide practical guidance for ambulance services, there are problems going forward. Ambulance services decide which protected characteristic groups should be prioritised based on local need. Therefore, in some ambulance services, minority ethnic groups assume a higher priority than in others. Furthermore, ambulance services have the flexibility to adopt EDS1 or EDS2 as they see fit. In doing so, they adopt different measures of progress towards achieving equality. Inconsistent measurement of progress makes it more difficult to compare services.

Patient ethnicity data

Gaps in patient ethnicity data are an ongoing problem. For example, data on languages spoken remains a glaring omission (Aspinall, 2005; Gill *et al.*, 2009). Ambulance services are currently awaiting guidance from the Department of Health (DH) about how to address this (Barot, 2014). Patient ethnicity data are collected in many different ways and there is a lack of integration of data in the UK on minority ethnic groups, their health outcomes and the quality of care they receive, unlike in the US (Szczepura, 2005). Moreover, not enough is made of existing data (Morrison *et al.*, 2014) for reasons such as lack of systems or institutional racism (Psoinos *et al.*, 2011).

There are sometimes deficiencies in cultural competency training delivery. One solution would be to adopt Bennett *et al.*'s (2007) suggestion, applied in the mental health setting, that, "*training for race equality should form part of the wider framework for reducing race inequality, embedded within the organisation's clinical governance systems.*"

Targeted interventions

Potential targeted interventions should start by using data to map the local minority ethnic population and by determining the gaps in care quality for particular local communities. Those involved in developing interventions should build strong working relationships with key local stakeholders which would enable them to promote a message outlining the benefits of participation to the individual themselves and to the wider community to which they belong. Key messages could be targeted through foreign language media and community events (DCLG, 2008).

The increasing use of Patient and Public Involvement (PPI) groups has given patients a greater role in shaping how healthcare is delivered. There needs to be greater involvement of minority ethnic groups in PPI groups to ensure that health services become more culturally sensitive. One potential solution would be to integrate PPI groups into each ambulance service's EDS or EDS2 strategy as London Ambulance Service (LAS) has done (London Ambulance Service, 2012). However, difficulties in engaging some hard-to-reach minority ethnic groups continue to limit the effectiveness of using PPI to promote cultural sensitivity in service delivery.

Interpreting services

Providing medical services to patients who do not speak English increases average health care costs by £29 per person which itself may be an underestimate (Gill *et al.*, 2009). Given the existing constraints on NHS budgets, such provision may not be seen by managers as a priority (Gerrish *et al.*, 2004). Inevitably, there are ongoing concerns about the availability of interpreting services in the UK. These may be inaccessible at certain times or unable to provide necessary languages or dialects (Gerrish *et al.*, 2004). Despite the clear budgetary constraints, it is nonetheless imperative that the importance of providing interpreting services to reflect the ethnic diversity of the ambulance service population is recognised and built in to everyday procedures. A more integrated approach to using patient ethnicity and language data would help to inform such improvements.

Good practice

Interpreting services

South East Coast Ambulance Service (SECAmb) collects statistics on the volume of calls to Language Line as well as their linguistic breakdown. This enables them to ascertain where demand for their interpreting services comes from. They use data to show trends over time. For instance, in 2012-13 and 2013-14, the five most common languages requiring Language Line were the same, albeit in a slightly different order. These were Polish, Slovak, Russian, Lithuanian and Czech. SECAmb also analyse data to show changes in demand for particular languages over time. Over the same period, there were sizeable increases in demand for these five languages, although the biggest increases were for Portuguese and Bulgarian, where the volume of calls to Language Line more than doubled. These two sets of data can illustrate the demand for interpreting services, which may help service providers make decisions about where to direct these resources most effectively.

Conclusion

Increasing population diversity means that equality and equity are now high priorities for ambulance services. Minority ethnic groups often have greater health needs but are less likely to access prehospital care due to a range of personal and organisational barriers. A co-ordinated response needs better patient ethnicity data and greater patient and public involvement from minority ethnic groups.

Patient ethnicity data can inform targeted interventions, the nature of cultural competency training for staff, and decisions about translation and interpreting service provision. There remain significant barriers to maximising the potential of patient ethnicity data, notably its lack of completeness and inconsistent application. Standardising recording procedures would help improve this.

Greater involvement of minority ethnic patients and public in shaping the delivery of ambulance services to the EDS / EDS2 may also help to make them more culturally competent and equitable.

Further research should focus on determining and explaining variations in prehospital care for the range of conditions seen. Qualitative research with patients themselves, relatives and other agencies would help to understand these barriers better. This would inform strategies to tackle ethnic health inequalities in prehospital care where these exist.

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