

# Understanding variation in ambulance service non-conveyance rates: a mixed methods study

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## Plain English summary

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## Plain English summary

Of the 11 million patients calling ambulance services in England in 2015/16, around half were not taken to an emergency department; 1 in 10 patients was given telephone advice only and four in 10 patients were sent an ambulance and then left at home. Some of the 10 large ambulance services in England do much more of this 'non-conveyance' than others. Our research looked at why rates vary so much between ambulance services.

We interviewed staff and analysed data about calls in 10 ambulance services. In three ambulance services with different rates of telephone advice, we looked in detail at how they did this work. In one ambulance service, we followed up patients to measure how many people ended up in an emergency department or a hospital bed, or died within 3 days of non-conveyance.

We found that some variation in non-conveyance rates between ambulance services was likely to be due to how services calculated these rates. This was particularly the case for rates of telephone advice. Rates of non-conveyance depended on the types of patients calling, but this did not explain why ambulance services had different rates of non-conveyance. Ambulance services that had more calls dealt with by paramedics with extra training (known as advanced paramedics), and for which staff we interviewed described these advanced paramedics as forming a well-established and valued part of their service, had higher rates of non-conveyance. Ambulance services in which management viewed non-conveyance as risky, according to the staff we interviewed, had lower non-conveyance rates. A minority of patients who were left at home ended up at an emergency department within 3 days. Ambulance services can take actions to reduce variation in care offered to patients in England.

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