Birmingham and Solihull NHS
Mental Health NHS Foundation Trust

Evaluation of a pilot service: Does the presence of a mental health nurse practitioner have an impact on the outcomes of patients telephoning the NHS 111 line?

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Introduction

111 is the default NHS non-emergency number available 24 hours a day, 365 days a year. They ask callers a series of questions to assess the symptoms and immediately direct the person to the appropriate medical care.

There is no single established and dedicated telephone helpline for patients with mental health needs across the West Midlands. Many people will call 999 or present to the accident and emergency department (ED) if they have a crisis episode, irrespective of whether they have a co-existing physical health need or not.

On 17 March 2014 mental health nurses began sitting alongside call handlers and clinical advisors in the 111 call centre, for dedicated shifts, in order to assess, intervene and signpost effectively.

Method

BSMHFT teamed up with NHS England, West Midlands Ambulance Service and Vocare to pilot mental health nurse input to the NHS 111 call centre for the West Midlands.

The 8-week proof-of-concept pilot, which began on Monday 17 March, saw BSMHFT mental health nurses sitting alongside 111 call centre staff.

The key aims were:

- **To support and enable call centre handling staff fielding calls relating to mental health;**
- **To take direct clinical calls from callers to offer advice and signposting;**
- **To support an evaluation to guide a future service delivery model.**

Referrals to the mental health nurses were tracked and outcomes of the calls (disposals) were recorded and compared to disposals by the call centre staff.

The service was programmed to run seven days per week. Operating times were set at 14.30-22.30 on weekdays and 10.00-23.00 on weekends. These shifts were created as an initial proposal to blend staffing and shift resource allocation with an assumption that callers were more likely to make contact out of hours after GP surgeries and community mental health teams were closed.

Date from a pre-pilot sample group (21.2.15-16.3.15) were compared to a pilot group (17.3.15-26.8.15).

Results

737 calls were transferred to the NHS 111 mental health nurse over 129 operational days during the pilot period. Data were compared with a pre-pilot control group (*n*=512) of callers to the NHS 111 helpline with a mental health related diagnosis that were handled by a regular call handler or clinician and not the mental health team.

Pre-pilot calls to ED, out of hours GP and self-care were 7%, 74% and 0% respectively whereas in the pilot group the results were 1.8%, 6.1% and 38.8% respectively. Of significance in the pilot extension there were 3.7% of callers being referred to their local mental health crisis resolution team which had not been a referral route earlier.

The NHS 111 Team at Birmingham and Solihull Mental Health NHS Foundation Trust

Discussion

Mental health nurses in the 111 call centre appear to reduce the utilisation of primary care out of hours resources and increase caller self-management through assessment and intervention. Diversion from a clinical advisor to a mental health nurse also frees up capacity to receive other non-mental health related calls.

Reduction in referral to ED appears significant. Where a patient can have their mental health need addressed by telephone or diverted to appropriate mental health specific services rather than be diverted to an already overburdened ED department then clear benefits are identified. However, the pilot data should be viewed with caution as in some cases an ambulance is deployed to the patient home and in those cases conveyance to ED may be the outcome. In the pilot group an ambulance was deployed to the patient in *n*=24 (3.3%) cases. In addition, the longer term follow up of the patients was not evaluated and therefore it cannot be concluded that patients do not access services in the immediate period post intervention (e.g. accept the NHS 111 intervention but then self-present to the ED soon afterwards).

The operating times may well impact upon the caller numbers and also likely outcome. Patients that called after 23.00 until the following day were never offered this service, and the period between 14.30-17.00 weekdays received the least number of calls pro rata, suggesting the notion that during core working hours patients are accessing other services for mental health distress, whether through primary or secondary care. There is anecdotal evidence that callers who are proactively called back by the mental health nurse for a follow up call are less likely to escalate to an ED admission or ambulance call out but further analysis of this is required.

Not all callers to 111 with a mental health issue are put through to the mental health nurse routinely. As such, the acuity of the cases may well be greater in those that are.

Further cost-benefit analysis is required as is the need to understand the longer term impact of the pilot on individual callers and their mental health journey.

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