Use of systematic review evidence to inform local decision-making in the National Health Service: a case study of eating disorders

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Background
In the English National Health Service (NHS), Primary Care Trusts are currently responsible for commissioning a range of health services. As part of a major five-year research project, we are providing a knowledge translation service to local decision makers, translating existing evidence into actionable messages that they can use to inform local commissioning questions. We recently evaluated the evidence base for inpatient admission for adolescents with eating disorders compared with other models of service provision to support a possible reorganisation of services.

Methods
In response to a commissioning request, a researcher attended a meeting with commissioners and clinicians to clarify the research question. A concise evidence briefing was prepared using existing sources of synthesised and quality-assessed evidence. The main sources were the Cochrane Database of Systematic Reviews, the DARE: NHS EED and HTA databases and systematic reviews performed to inform the NICE guidance on eating disorders. Evidence was contextualised to the local setting and comments from commissioners were incorporated before the briefing was circulated and then discussed at a second meeting. The briefing document was evaluated using a short questionnaire.

Results
Evidence sources
A Cochrane review of alternatives to admission for young people with mental health problems found limited evidence to guide decision-making. Another systematic review by the same authors included a wider range of study designs but did not find any additional evidence relevant to young people with eating disorders.

Within the systematic reviews, one randomised trial conducted in the UK compared inpatient admission with specialist outpatient treatment and treatment as usual in the community for adolescents with anorexia nervosa. The TOuCAN trial found no differences in clinical outcomes between groups at follow-up after one and two years. Recently published five-year follow-up data (published too late for inclusion in the briefing) confirmed the earlier findings. The economic evaluation conducted alongside the trial supported the provision of specialist out-patient services on cost-effectiveness grounds. The trial also found that patients and carers valued the perceived expertise of specialist services and access to dietetic therapy, which was not always available through generic services.

Figure 1 Evidence briefing format

Evaluation and outcome
Fifteen commissioners/clinicians received the briefing of whom five (four commissioners) returned evaluations. Usefulness ratings on a 0–10 scale ranged from 8 to 10 (mean 8.5, SD 0.84). Most respondents felt that the briefing provided compared favourably to other sources of evidence. Two respondents specifically mentioned that lack of time would have prevented them performing a similarly thorough review of the evidence themselves.

The commissioning group agreed to move towards providing more services on an outpatient basis and limiting the use of inpatient placements. A process of audit and evaluation is underway to quantify the clinical and cost benefits resulting from any changes to services. The briefing document has also been used to inform strategic commissioning at a regional level.

Alternatives to inpatient admission for adolescents with eating disorders
1. NHS Bradford and Airedale currently commissions out of area placements involving long-term inpatient admission for a small number of adolescents with eating disorders. The basic cost of these placements varies from £454 to £750 per bed–day.
2. Two recent systematic reviews have evaluated the evidence for alternatives to inpatient admission for children and young people with mental health conditions. A number of different service models have been evaluated but the evidence base provides limited guidance for decision making.
3. Probably the best evidence in relation to eating disorders comes from the recent TOuCAN trial. This randomised controlled trial compared generic services, specialist outpatient services and inpatient admission for adolescents (aged 12–18) diagnosed with anorexia nervosa. The trial found no differences in clinical outcomes between groups at follow-up after one and two years.
4. The economic evaluation of the TOuCAN trial supported the provision of specialist outpatient services on cost-effectiveness grounds. In addition, patients and carers valued the perceived expertise of specialist services and access to dietetic therapy, which was not always available through generic services.
5. The findings of this trial imply that it may be possible to provide services for adolescents with anorexia nervosa in a specialist outpatient setting in a cost-effective manner without loss of clinical effectiveness.
6. No relevant evidence was found for young people with other eating disorders and it is uncertain whether findings for patients with anorexia nervosa also apply to those with bulimia nervosa or binge eating disorder.
7. The conclusions that can be drawn about the effectiveness of individual interventions that might be used within a specialist outpatient service are limited by weaknesses in the evidence base (few trials with generally small samples), the methodological quality of the available systematic reviews or both. Furthermore, it is difficult to evaluate the effectiveness of individual components separately from the programme of care as a whole.
8. The magnitude of any possible clinical or cost benefits from expanding outpatient services and/or reducing out of area inpatient placements in Bradford and Airedale is uncertain.

Figure 2 Briefing summary of service provision for adolescents with eating disorders

Conclusions
Evidence briefings based on systematic reviews can be useful for healthcare decision-makers and warrant further methodological development and evaluation. Recent government proposals for a system of commissioning led by general practitioner consortia could increase the need for such a service, with more commissioners and more services bodies and more variable levels of expertise and access to evidence based decision-making resources than under the current system.

References

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