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Stepped care models in mental health: the evidence base

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Outline

- Background
- Aims and scope
- Methods
- Evidence for stepped care models
- Exemplar programs
- Barriers and facilitators to implementation

Stepped care: definition

- Stepped care involves the delivery of evidence-based services that increase, or decrease, in intensity, according to need. They typically:
  - Start with an evidence-based treatment of low intensity
  - Involve systematic monitoring of progress
  - Involve those who do not respond stepping up to a higher intensity treatment
- May involve adding treatments of different modalities

Low intensity treatment

- Low intensity mental health care:
  - less time from a professional
  - less time from a patient
  - lower cost
  - lower therapist expertise
- In practice, self-help treatments (books or online) most often used as the first step
- Good evidence of effectiveness for self-help treatments for depression and anxiety (particularly with therapist support)

Aims of stepped care

- Aims to:
  - retarget the continuum of services to match patient need, moving from a reliance on matched care and face to face service delivery
  - Make more efficient use of workforce and technology
- Emphasises early intervention and self-care, helping to shift the focus away from acute and crisis intervention over time
- Clinical guidelines (e.g. UK NICE guidelines) have endorsed stepped care

Report

Primary mental health care models: Rapid Literature Review (May 2016).

Meredith Harris, Carla Meurk, Nicola Reavley, Bridget Bassilios, Caroline Salom, Eryn Wright, Roman Scheurer and Jane Pirkis.

Western Victoria Primary Health Network Alliance

Aims and scope

- Focus on:
  - models of care **not** individual elements (e.g. screening, detection and case finding).
  - Clinical treatment **not** community mental health support services, promotion to healthy individuals or bed-based services
  - Interventions involving a primary care provider **not** programs delivered without clinical guidance

Methods

- Targeted searches of academic and grey literature
- Systematic reviews since 2006 but prioritising recent evidence
- Priority given to program and commissioning examples from Australia but included evidence from countries with similar health systems
- Reported quantitative data
- Exemplar programs

Results

Three recent systematic reviews

- Van Straten et al. **Stepped care treatment delivery for depression: a systematic review and meta-analysis.** Psychological medicine. 2015; 45: 231-246
- Firth et al. **The clinical effectiveness of stepped care systems for depression in working age adults: A systematic review**. *Journal of Affective Disorders.* 2015;170:119-130.
- Ho, F. Y., et **al.The Efficacy and Cost-Effectiveness of Stepped Care Prevention and Treatment for Depressive and/or Anxiety Disorders: A Systematic Review and Meta-Analysis**. Sci Rep 2016: 6: 29281.

van Straten et al. 2015

- 14 RCTs with 5194 patients (10 RCTs (4580 patients) in meta-analysis)
- Had to involve psychological therapy as at least one step
- Decisions about stepping up based on systematic clinical assessment or questionnaire, done at a pre-specified time interval with the explicit aim of determining the next treatment step
- Care as usual as a comparator
- Studies of relatively high quality

van Straten et al. 2015

- Moderate effect on depression (Cohen's d=0.34, 95% CI 0.20-0.48)
- Stepped care interventions varied greatly in number and duration of treatment steps, treatments offered, professionals involved, and criteria to step up
- Stepped care interventions based on progressive treatment intensity performed worse than those without a clear intensity order
- Limited evidence for cost-effectiveness
- Limited evidence to suggest that stepped care should be the **dominant** model
- No one optimal element of stepped care or preferred model for delivery

Firth et al. 2015

- Similar findings but also discussed longer term follow-up:
- +ve clinical outcomes maintained for long periods (12 to 24 months), but some of the benefits over care as usual lost over time
- Effective in populations with co-morbid anxiety disorders
- Recovery rates according to various measures ranged predominantly between 40% and 60%, with treatment response rates of around 60%

Ho et al. 2015

- Stepped care treatment vs. care as usual for anxiety disorders.
- At immediate post-treatment, the pooled analysis of three RCTs found that stepped care was significantly better in reducing anxiety symptoms (SMD= −0.29, 95% CI: −0.48, −0.10, $p < 0.01$, $I^2 = 0\%$).
- The pooled treatment response rate of anxiety disorders in two RCTs was significantly higher in stepped care (OR=2.38, 95% CI: 1.25, 4.52, $p < 0.01$, $I^2 = 0\%$)

Joice et al. 2010

Factors that increase the likelihood of effectiveness of stepped care:

- increase access to effective, straightforward service for all people with mental health problems
- a variety of evidence-based interventions should be available in a numerous formats
- choice and referrals systems are highly desirable
- services need to be able to respond to high volumes of referrals
- the least intensive therapy that provides significant improvement in mental health should be offered initially

Joice et al. 2010 - continued

- the stepped care system should be ‘self-correcting’, requiring monitoring of patient outcomes at every session (so that step-up or step-down may be implemented as appropriate)
- low intensity interventions seem to produce positive outcomes in the following circumstances:
  - patients are highly motivated
  - a coach/therapist guides the use of the materials
  - several low-intensity interventions are used simultaneously (e.g. bibliotherapy plus large psycho-education group).

More recent RCTs

Dutch study comparing collaborative stepped care with primary care as usual. Findings:

- both groups showed good remission at one year
- the stepped care group improved more *quickly* (58% remission at four months) than did the usual care group (32%)
- less absenteeism from work in the stepped care group over 12 months
- no change in the number of primary care visits, the intensity of care from psychiatric nurses was higher for the stepped care group
- some efficiency benefits for the stepped care model

More recent RCTs

Norwegian study comparing stepped care (including psycho-education then internet-based and face to face CBT) with usual care including face to face CBT **for anxiety disorders**. Findings:

- 45% of patients who received usual CBT and 40% who received stepped care had recovered by the end of the allocated treatment cycle.
- in the stepped care group, nearly half recovered during the lower-intensity phases of treatment.
- less clinician time was required per patient in the stepped care group, suggesting efficiency benefits.

Summary

- The stepped care model provides effectiveness benefits for depression and anxiety disorders over usual care, potentially via early access to initial lower-intensity treatments.
- Some evidence for gains in efficiency due to the reduced therapist time required per patient, but need for more research to take into account variability between treatments provided and patient attrition.
- Some evidence for good levels of patient satisfaction with stepped care systems.

Summary

- Stepped care models appear to be somewhat more effective than usual care for the treatment of depression, however further research is needed to identify the differential benefits of individual intervention components and service configurations.

Improving access to psychological therapies (IAPT)

- UK government funded program – first line treatment option for people with depression and anxiety symptoms
- Based on a two-tiered service provider framework of low and high intensity therapists
- IAPT-trained psychological wellbeing practitioners
- Clients may self-refer in person, online, by email, phone, post or fax, or they may be referred by a carer, a GP or any other professional

Improving access to psychological therapies (IAPT)

- Patients assessed by a low intensity therapist and based on severity, are allocated to:
  - step 1 – active monitoring, advice or referral
  - step 2 – low intensity therapy
  - step 3 – high intensity therapy
  - step 4 – more complex needs
- Either remain or move up or down in treatment intensity according to symptoms severity and improvement

Improving access to psychological therapies (IAPT)

- Patients assessed by a low intensity therapist and based on severity, are allocated to:
  - step 1 – active monitoring, advice or referral
  - step 2 – low intensity therapy (CBT-based, guided self-help, delivered individually or in group therapy through face-to-face, telephone, online, or through a combination of modalities depending on patient needs and preferences)
  - step 3 – high intensity therapy (primarily individual or couples therapy face to face)
  - step 4 – more complex needs

Improving access to psychological therapies (IAPT)

- Patient outcome data routinely collected:
  - The Generalised Anxiety Disorder (GAD-7) scale
  - Patient Health Questionnaire (PHQ-9)
  - Work and Social Adjustment Scale (W&SAS)
  - IAPT Phobia Scales
- Standard practice to administer the GAD 7 and PHQ-9 at every session for all patients.
- Referral sources, the number of services delivered per patient and by provider, the number of completed course of treatment, wait times to enter services and patient attendance are routinely collected every month.

Barriers and facilitators

Barriers for patients:

- Long wait times for services, average wait time for people who entered treatment in January 2016 was 28.4 days
- Lack of awareness of services
- Personal views regarding mental health issues and treatment
- Lower acceptance of self-referrals at some sites than recommended

Facilitators:

- Free services
- Accessible across the country
- Self-referral

Barriers and facilitators

Barriers associated with implementation and service delivery:

- Large number of PWPs transitioning to high intensity services, particularly new graduates, leading to a shortage of service providers and an imbalance in the service structure.
- Therapist vacancies (232 vacancies in 2014)
- Ensuring fidelity to the IAPT program principles and consistency in the quality of services across providers
- Ensuring the accessibility of services across geographic areas
- Navigating changes in the health care system while maintaining service delivery,
- Costs of commissioning and updating therapist training programs

Barriers and facilitators

Facilitators associated with implementation and service delivery:

- Government and NHS commitment to planning, implementing and funding IAPT services
- Standardised comprehensive IAPT therapist and supervisor training programs delivered at established higher education institutions in the UK
- Cooperation from the British Psychological Society to review and provide accreditation for therapist training programs
- Trainee posts commissioned for therapists to gain hands-on experience and ease into a full caseload

Key implications

- Evidence regarding the effectiveness of stepped care systems, or of component interventions implemented within a stepped care system is still emerging, but appears positive under certain conditions.
- To maximise success:
  - draw on models of care with acceptable levels of evidence for the populations to whom they are targeted
  - programs and models are implemented in a way that maintains fidelity to the tested model
  - the redirection of existing resources or tailoring of program components to fit local needs is piloted and evaluated.

Key references

- van Straten A, Hill J, Richards DA, Cuijpers P. Stepped care treatment delivery for depression: a systematic review and meta-analysis. *Psychol Med.* 2015;45:231-246.
- Firth N, Barham M, Kellett S. The clinical effectiveness of stepped care systems for depression in working age adults: A systematic review. *J Affect Disord.* 2015;170:119-130.
- Joice A, Freeman L, Toplis L, Bienkowski G. *A review and discussion of psychological therapies and interventions delivered within stepped care service models.* Scotland: NHS Education for Scotland; 2010.
- Ho, F. Y., et al. (2016). "The Efficacy and Cost-Effectiveness of Stepped Care Prevention and Treatment for Depressive and/or Anxiety Disorders: A Systematic Review and Meta-Analysis." Sci Rep 6: 29281.
- Nordgreen T, Haug T, Öst L, Andersson G, Carlbring P, Kvale G, Tangen T, Heiervang E, Havik OE. Stepped care versus direct face-to-face cognitive behavior therapy for social anxiety disorder and panic disorder: A randomized trial. *Behav Ther.* 2016;47:166-183.
- Oosterbaan DB, Verbraak MJPM, Terluin B, Hoogendoorn AW, Peyrot WJ, Muntingh A, van Balkom AJLM. Collaborative stepped care v. care as usual for common mental disorders: 8-month, cluster randomised controlled trial. *Br J Psychiatry.* 2013;203:132-139.

Thank you

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