

Using Staged Care to Provide “Right Care First Time” to People With Common Affective Disorders

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An ongoing need exists for innovation in service delivery to ensure that mental health services deliver high-quality treatment and prevention in the population. This Special Article proposes the adoption of “staged care” as a population health-oriented service delivery model for packages of specialized services delivered largely in ambulatory care settings for individuals with common affective disorders. Staged care integrates measures of clinical need alongside clinical stage and personal choice to select hierarchically arranged service packages for individuals. Packages then vary according to the intensity, duration, and mix of treatment options. This Special Article describes five levels of care in staged care: self- or family-directed monitoring and

management, low-intensity services, moderate-intensity services, high-intensity services, and acute and specialist community mental health services. The care environment, treatment team, and length of treatment are also described, and provisional criteria are specified for assigning individuals to different care levels on the basis of current clinical need and clinical stage. Staged care is presented as a model that guides treatment selection and health service delivery to ensure that the high-quality care aims of “right care first time” and prevention are achieved and optimal use of available resources is considered.

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Most recent reports of global disease burden indicate that affective disorders are highly prevalent in the general population and have a large negative impact on the lives of affected individuals (1). Affective disorders are associated with increased mortality rates, general medical illness, functional impairment, and use of public services, incurring significant emotional and financial costs to the individual and the health system (2–4). In the past 2 decades, considerable attention has been given to reforming service delivery to help minimize these impacts (5). However, recent assessments of mental health care around the world suggest that only limited progress has been made toward achieving the proposed reform objectives in service delivery (6).

In this Special Article, we propose the adoption of “staged care” as a service innovation to improve the treatment for and prevention of affective disorders. This approach incorporates recent developments in clinical staging into a population health system of integrated care to deliver personalized approaches to treatment and prevention (7). Clinical staging is used alongside other measures of clinical need and personal choice to deliver hierarchically arranged service packages to accordingly stratified individuals. Such packages then vary according to the intensity, duration, and mix of treatment options. We describe the background of staged care development

and a staged care model for affective disorders across the life span and identify areas for future development.

CIRCUMSTANCES MOTIVATING STAGED CARE DEVELOPMENT

Staged care was developed against the background of ongoing discussions regarding the quality of mental health

HIGHLIGHTS

- There is an ongoing need for innovation in service delivery to ensure that mental health services deliver high-quality treatment and prevention.
- Staged care represents a population health-oriented service delivery model that incorporates clinical stage of illness and clinical need in allocation-of-care decisions to ensure that the aims of “right care first time” and prevention are achieved.
- By placing an individual on a continuum from at risk for illness to end-stage disease, service providers match treatments and preventive interventions to the current and likely course of illness.

care around the world. Initial discussions in the mid-2000s resulted in recommendations for sweeping system reform (5, 8). Mental health care was criticized at the time for being fragmented and poorly coordinated and lacking focus in addressing individual and population needs in ways that would deliver optimal health outcomes. Reform guidelines suggested that mental health services should empower collaboration between service users and providers to achieve high-quality care (5). Further, the need for coordinated care across the whole health system was emphasized to provide better integrated care to meet individual and population needs.

Since adoption of some of the key recommendations, countries have introduced integrated health care delivery models for service planning and delivery. Guidelines for affective disorders, such as those from the National Institute for Health and Care Excellence in the United Kingdom (9), suggest that optimal service delivery should be based around “stepped care.” Stepped care typically assigns patients to a low-intensity intervention according to the patient’s specific clinical need, with an option to step up the intensity of the intervention for those who do not adequately respond, in order to maximize use of limited resources (10). Other models have subsequently expanded on stepped care to include collaborative care approaches to treatment (“stepped collaborative care”), following evidence that effective depression management is team based, including shared decision making between patients and various service providers to maximize patients’ treatment engagement and psychosocial functional outcomes (11). Care managers link primary and community care providers, patients, and mental health specialists to help facilitate integrated consultation and support in managing mental illness and to coordinate care with providers in order to support self-management and delivery of personalized treatments (11).

However, 15 years on, little evidence exists for effective implementation of integrated mental health systems. For instance, the Lancet 2018 Commission on global mental health and sustainable development reported low adoption of integrated service delivery in both high-income and low-to-middle-income countries, warranting additional investment (6). The authors noted that rates of mental illness were increasing, ratings of service quality were deteriorating, care remained fragmented, and treatment access was still low. Ongoing deficiencies were argued to have resulted from systems discouraging the development of integrated care networks (e.g., fee-for-service financial structures) and disproportionate resource allocation to treating acute conditions. The authors argued for an equal emphasis on developing systems of care oriented to population health, with a stronger prevention agenda. These assessments were repeated in separate reports across several countries, challenging authorities to put prevention at the center of service delivery to reduce the burden of mental illness (12–15).

An important gap to address is related to potential limitations of stepped collaborative care in enacting the prevention

agenda. Although stepped collaborative care may represent an innovation in mental health service delivery, it appears to have limited capacity in operationalizing prevention at both individual and population levels. At the individual level, for instance, stepped care typically stratifies individuals on the basis of current symptom expression (16). This generally results in individuals being classified into broad categories of current need, such as mild, moderate, or severe, an approach that ignores individual differences in patients’ clinical profiles relevant for optimizing treatment and prevention outcomes (17). Decisions based on current need also fail to support early detection of conditions for which early intervention approaches can be optimal (18, 19). Further, such approaches are inconsistent with the current understanding of developmental epidemiology of mental disorders (e.g., age at first onset, pathophysiology, and comorbid conditions), which suggests that affective disorders share overlapping features with other conditions (e.g., psychosis and bipolar disorder) in early-phase syndromes (20). These findings should be reflected in preventive service delivery models (21).

Further, decision rules for “stepping up” an intervention are predominantly guided by treatment outcomes (10, 16), leading to reactive clinical decision making. Moreover, progressive interventions are known to perform the worst, with little to no effect on treatment outcomes for depression (22, 23). Rates of stepping up are also low and may therefore delay access to appropriate care (16). Finally, individuals receiving low-intensity care options are more likely to not engage or drop out of treatment or to seek multiple treatment services—thereby increasing the burden on the health system (16, 23). These results suggest that the assumption that low-intensity treatments will be enough for most patients and that only a few will need a higher-intensity treatment is not well supported.

At the population level, a limited number of individuals are likely to receive high-quality integrated care via stepped care to effectively reduce the burden of disease associated with affective disorders (24). For instance, psychological interventions are generally managed in primary care as the “de facto” mental health care system, with specialist physician input reserved for individuals with severe and persistent mental illness (25). The most evidence-based model of integrated care is thus available only to patients with chronic disorders, for whom treatment is likely to have a recovery rather than a prevention orientation (26). Further, integrated care use is limited to those able to seek and engage with treatment, and population subgroups known to have poor access to services will face growing inequity in mental health care (27). Recent recommendations for integrated health care implementation advocate for system redesign toward systems of care oriented to population health to provide comprehensive promotive, preventive, and curative health services (12, 28). Notable developments in “right care first time” service delivery have emerged to achieve these objectives (29).

Here, we present staged care, which attempts to incorporate a risk-stratified approach to mental health service

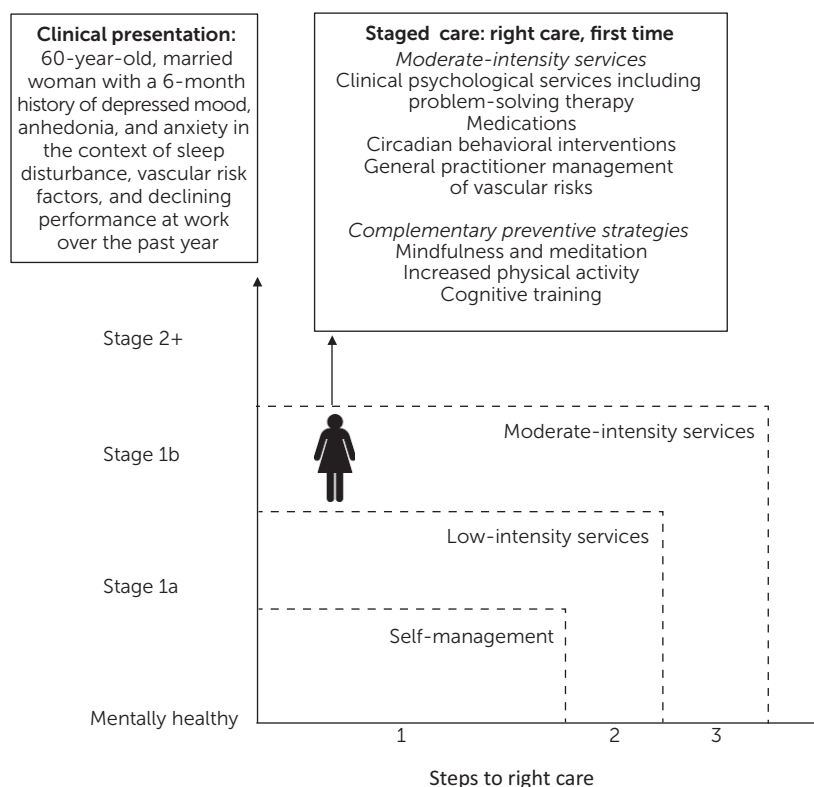
delivery (30) that actively optimizes treatment and prevention outcomes at both individual and population levels (7). Staged care incorporates recent developments in clinical staging to assimilate information into service delivery regarding the risk, onset, and trajectory of affective disorders during vulnerable life stages, including predicting their future course (21). Consequently, staged care augments existing stepped collaborative models by ensuring that resources are directed to early detection of affective symptoms and prevention of illness progression (i.e., secondary prevention) to reduce the occurrence and burden of affective disorders. The model presented here expands on the stage-based model proposed by Cross and colleagues (31) to include the vulnerable life stages of childhood, adolescence, adulthood, and older adulthood. Overall, the model provides a preliminary framework for how an evidence base around clinical staging might enhance the capacity of existing service delivery models to include a secondary prevention agenda in mental health care.

THE STAGED CARE MODEL

Like stepped collaborative care, staged care is an integrated, team-based care approach to the treatment of affective disorders, with care managers responsible for care coordination of personalized service packages delivered largely in ambulatory care settings. Patients are grouped to receive hierarchically arranged service packages that vary according to the intensity, duration, and mix of treatment options. However, rather than first selecting a low-intensity intervention, staged care aims to provide “right care first time” to ensure that the primary aims of treatment and secondary prevention are achieved (7). This is done by using a risk-stratified approach (30) to selecting intervention levels by incorporating assessments of clinical stage alongside clinical need to identify patients with emerging risk. Risk stratification tools have emerged for allocating patients with chronic diseases to treatment and preventive care interventions while efficiently managing limited resources, and preliminary evidence supports the use of such tools in mental health care (30, 32). Clinical staging considers a range of factors, including symptom severity and duration, functioning, and previous treatment response, into a single prognostic index (21). Thus, any previous history of treatment resistance is included in clinical decisions at the outset of treatment, minimizing delays in access to appropriate care. The hypothetical case in Figure 1 illustrates staged care delivery.

Staged care developments follow recommendations to make clinical staging of mental disorders a priority for

FIGURE 1. Case illustration of staged care delivery of “right care first time”^a



^aFor the staging system, see Table 1.

improving health care (6). Clinical staging (Table 1) serves as an adjunct to traditional diagnostic systems by additionally placing an individual on a continuum of illness progression (19). Staging is part of the clinimetric approach to medicine, which recognizes heterogeneity in conditions, especially differences in phases of illness (subsyndromal to recurrent and treatment resistant), and is in contrast with the cross-sectional approach to diagnoses (33). Evidence is growing for the utility of using staging of mental disorders to allocate patients to treatment. For instance, different clinical stages have been shown to predict stage progression during treatment (34, 35); differential treatment attendance, duration, and rate of response (18, 36); and levels of treatment resistance (37, 38). These findings preliminarily argue for the need for stage-appropriate psychological interventions (e.g., a sequential model of psychotherapy [39]).

Clinical staging also allows segmentation of a population into relative-risk segments to organize resources so that individuals receive the right level of care they need—not more or not less (11). Namely, by distinguishing patients at higher risk for experiencing recurrent disorders (i.e., stage 2 and higher) from those at lower risk for such recurrence (less than stage 2), clinical staging recognizes that not all individuals will have chronic affective disorders (40). Furthermore, social determinants of mental health (41) are included in stage 0 to help advance a population health

TABLE 1. Clinical staging of common affective disorders for each age group across the life span

Stage	Description	Clinical features		
		Childhood (5–11 years)	Youths and adults (12–54 years)	Older adults (≥55 years)
0	"At risk": no current symptoms ^a	No current internalizing symptoms. No current impact on daily functioning, including competencies (i.e., social, school, and cocurricular) and self-care (e.g., feeding and dressing). Presence of a recognized psychosocial risk factor for childhood-onset symptoms.	No current anxiety, depressive, or psychotic symptoms. Presence of a recognized psychosocial risk factor for psychotic or severe mood disorder.	No current affective symptoms. Presence of a recognized psychosocial risk factor for late-onset affective disorder.
1a	Nonspecific symptoms	Nonspecific symptoms (e.g., sleep difficulties, social difficulties, behavioral inhibition, shyness, and worry). Mild or greater impact on daily functioning.	Nonspecific symptoms of anxiety or depression. Mild to moderate severity of symptoms. Subjective or objective evidence of mild neuropsychological deficits. Recent or mild impacts of illness on social, educational, or occupational functioning.	Within the past 5 years, mild (including subsyndromal) to moderate anxiety or depressive symptoms. Over the past 12 months, minimal to mild functional decline. May additionally include evidence of subtle subjective or objective neuropsychological impairment. ^b
1b	Attenuated syndromes	Specific symptoms of an internalizing disorder (e.g., anxiety, sadness, and somatization) that may or may not meet diagnostic thresholds. Symptoms reported in one or more environments (e.g., home, school, and cocurricular). At least a mild impact on daily functioning.	Specific symptoms of severe anxiety, moderate depression, brief hypomania, or brief psychotic phenomena. Subjective or objective evidence of at least moderate neuropsychological change. Moderate to severe impact of illness on social, educational, or occupational functioning.	Within the past 5 years, moderate anxiety or depressive syndrome. Over the past 12 months, at least mild functional impact of illness. May also include mild neuropsychological impairment. ^b
2	Discrete disorder or major syndrome	Meets criteria for an internalizing disorder (anxiety or depressive disorder). Symptoms reported in more than one environment (e.g., home, school, and cocurricular). At least a moderate impact on daily functioning.	Clear episodes of psychotic, manic, or severe depressive disorders. Full-threshold disorder, with moderate to severe symptoms and persistence over time. Typically associated with significant neuropsychological deficits. Illness is clearly having a major impact on social, educational, or occupational functioning.	Within the past 5 years, moderate to severe depressive episode (note, progression to stage 3 with persistence of ≥12 months). Over the past 12 months, evidence of moderate to severe functional decline. May also include evidence of progressive or persistent neuropsychological impairment. ^b
3	Recurrent or persistent symptoms	Symptoms of a discrete disorder lasting at least 2 years, with ≤3 months of remission. At least a moderate, clear, and persistent impact on daily functioning. Symptoms do not significantly improve after evidence-based psychological or pharmacological intervention, including a multidisciplinary, family-based treatment approach.	Incomplete remission from discrete disorder at 12 months after entry to care, following reasonable course of treatment (of at least 3 months' duration). Discrete disorder recurrence after a period of complete recovery (having fully recovered for at least 3 months). Objective evidence of deteriorating neuropsychological functioning. Illness course is associated with deteriorating social, educational, or occupational functioning due to persistence or recurrence.	Persistence of severe depressive disorder over the past 12 months, characterized by treatment resistance, possible adverse effects to general medical treatments (note, progression to stage 4 with persistence of ≥12 months). Discrete disorder recurrence after a period of complete recovery (having fully recovered for at least 3 months). Progressive functional decline characterized by impairment in instrumental activities of daily living due to persistence or recurrence. May also include evidence of progressive neuropsychological impairment. ^b

continued

TABLE 1, *continued*

Stage	Description	Clinical features		
		Childhood (5–11 years)	Youths and adults (12–54 years)	Older adults (≥55 years)
4	Severe, persistent, and unremitting symptoms	Chronic symptoms lasting at least 5 years. Severe, clear, and persistent impact on daily functioning, including both competencies (i.e., social, school, and cocurricular) and self-care (e.g., feeding and dressing). Symptoms not significantly improved after at least 5 years of evidence-based psychological or pharmacological intervention, including a multidisciplinary, family-based treatment approach.	Severe, persistent, and unremitting illness assessed after at least 24 months of engagement with relevant specialized clinical services and provision of a reasonable range of medical, psychological, and social interventions. Objective evidence of severe deterioration in neuropsychological functioning. Evidence of marked deterioration in social, educational, or occupational functioning due to persistence or recurrence.	Severe depressive disorder, characterized by lack of treatment response, possible adverse effects to general medical treatments, and lasting at least 2 years. Progressive functional decline, characterized by impairment in instrumental activities of daily living, need for caregiver support, or need for nursing home or high-level home care. May also include objective evidence of severe deterioration and impairment in neuropsychological function. ^b

^a Risk factors associated with criteria for at-risk stages (stage 0) are provided in the table in the online supplement.

^b Neuropsychological impairment is typically characterized by executive dysfunction, slowed processing speed, and learning and memory deficits (64).

approach to prevention (see table in the online supplement to this article), although strategies for primary prevention and health promotion to address these risk factors require further development. Nevertheless, by placing individuals along a continuum of risk, staged care enhances the logic, timing, and focus of treatment and prevention by matching intervention levels to the current and likely course of illness (19, 39, 42). Efficiencies are gained by preventing adverse health events, such as onset, recurrence, inpatient admission, and multiple episodes of failed care, that would incur further burden on the health system (43, 44).

Table 2 summarizes the five levels of care, including the care environment and treatment team, in staged care. Treatments at lower-intensity levels are primarily managed by referring physicians, with care managers assisting in coordination of self-management support, low-intensity psychological interventions, and outcome monitoring (45). Uses of community resources and prevention services are included at this level to optimize primary prevention outcomes, especially for individuals in groups that have social, economic, or environmental risks (44). Assertive case management and specialized medical or psychological consultation happen within moderate to higher levels of intervention, targeting individuals at risk for the onset of acute or persistent disorders (stage 1b and higher). Importantly, access to specialist services is recommended at earlier clinical stages (e.g., for stage 1b, including attenuated syndromes) for which treatments can be maximally effective to prevent illness progression (31). Treatments are coordinated according to shared management plans, which include scheduled patient follow-ups and collaborative multidisciplinary service management (46).

Staged care matches the five levels of intervention according to individual multidimensional needs assessed at the outset of treatment (Table 3 and Figure 2) (47). This includes assigning individuals to levels of care on the basis of

clinical need, according to assessments of symptoms, impairment, and risk severity, as well as clinical stage as an additional layer that considers risk for illness progression (19, 34). Other psychosocial and comorbid conditions that are determinants of treatment engagement and outcomes, such as socioeconomic status, social and occupational functioning, general medical health, and alcohol and drug misuse—referred to as “illness extension” considerations—as well as the patient’s preferences, guide treatment personalization (17). Staged care allows for individual values and preferences in treatment planning by layering intervention levels so that patients can select from lower-intensity interventions on the basis of their preference (48). Care managers should ensure appropriate length of treatment and frequency of clinical review, considering the risk for chronicity of impairment and illness progression associated with higher clinical stages (above stage 1b). Research involving youths suggests a 12-month program of clinical care and assertive follow-up for those presenting at stage 1b (36). By contrast, a greater proportion of those at earlier stages achieve functional recovery during the course of care and do so at a faster rate, compared with those at later stages (34, 40). At the later stages, recovery is expected to be more difficult; therefore, individuals are recommended to stay connected to care for at least 2–5 years (19). Continuous review and outcome monitoring using measurement-based systems enables evidence-informed decisions to guide changes in treatment, enabling effective responses to increasing need, or to chart clearer pathways to discharge from service.

STAGED CARE ACROSS THE LIFE SPAN

Childhood (5–11 Years)

Epidemiological research indicates that half of all anxiety disorders emerge in childhood; therefore, intervening in

TABLE 2. Descriptions of the five levels of care in the staged care model of treatment

Level of care	Description	Care environment	Care team
1: Self- or family-directed monitoring and management	Evidence-based digital therapies and other forms of self-help for the individual and his or her family or caregiver(s)	Online, over the telephone, in the community, and possibly in integrated settings (e.g., schools and workplaces)	Low-intensity workforce with appropriate vocational skills, training, and qualifications. Active coordination with patient's primary or referring physician (e.g., general practitioner).
2: Low-intensity services	Services that can be accessed quickly, without need for formal referral and through a range of modalities (i.e., face-to-face, group, telephone, and digital interventions), which typically involve few or short sessions	Online, over the telephone, in the community, and possibly in integrated settings (e.g., schools and workplaces)	Low-intensity workforce, as well as psychologists and other appropriately trained and qualified allied health professionals. Active coordination with patient's primary or referring physician (e.g., general practitioner).
3: Moderate-intensity services	Structured, frequent, and intensive interventions delivered regularly, combined with assertive case management	Community locations (e.g., consulting rooms), outreach to residential environments (e.g., elder care facilities and schools), if appropriate, via telephone or videoconferencing (e.g., for persons in remote communities) and online (e.g., health professional-assisted e-therapies)	Active general practitioner management, including mental health assessment and development of integrated care management plans (e.g., mental health treatment plan). Integrated care involving multidisciplinary team or agency of specialist physicians and allied health professionals. Possible inclusion of case manager: for a child, a psychologist, developmental pediatrician, specialist psychiatrist, neuropsychologist, occupational therapist, speech pathologist, or dietitian; for a youth, a psychologist, developmental pediatrician, specialist psychiatrist, or drug and alcohol worker; for an adult, a psychologist, psychiatrist, mental health nurse, social worker, drug and alcohol worker, physiotherapist, occupational therapist, and dietitian; for an older adult, a psychologist, psychiatrist, geriatrician, neuropsychologist, physiotherapist, occupational therapist, and dietitian.
4: High-intensity services	Intensive intervention that may involve multidisciplinary or multiagency support and involvement of family or caregivers to provide coordinated care for patients with more complex needs (e.g., comorbid conditions and social and environmental risk factors)	Services in community locations (e.g., consulting rooms), outreach to residential environments (e.g., elder care facilities and schools). Face-to-face services are preferred.	Level 3 care team, plus case manager
5: Acute and specialist community mental health services	Specialist health care facilities (typically state or territory mental health services)	Face-to-face services in community locations with outreach to the person within his or her home or other environments (e.g., elder care facility). Specialist inpatient or residential care in a hospital environment, community-based intermediate care, subacute unit, or crisis respite center.	Level 4 care team with higher-tier state or territory mental health services

these early years is critical to effective early intervention (49). Multiple causal factors are implicated in childhood-onset problems, including neurobiological and psychological factors, intersecting with parent-child interactions and other setting conditions that affect the family (50). As such, staged care for childhood-onset affective problems considers both current symptom expression (i.e., intensity and type) and the functional impact of symptoms and risk factors (i.e., child temperamental, developmental, social, and environmental factors and family factors) that contributed to symptom onset (51). Staged care ensures that the full spectrum of mental health in childhood is recognized by allocating children with different degrees of care need, whether such care is self- and family-directed monitoring and management or tertiary specialist services that provide face-to-face, multidisciplinary care.

Table 1 outlines the proposed criteria for clinical staging for affective syndromes among children ages 5–11. These criteria follow established staging principles (52) but are notably tentative in the absence of specific research on staging in childhood. Symptoms include a range of non-specific (e.g., social difficulties and shyness) to specific internalizing difficulties to ensure that the full spectrum of phenomenology is considered. This is important because traditional diagnostic approaches may struggle to triage children who do not necessarily meet diagnostic criteria for an internalizing disorder. Whether symptoms occur in one or more environments also is considered, because knowledge about effects of the environment on symptom expression provides information about the nature and extent of difficulties and potential factors underlying these difficulties that is clinically useful for allocating children to the appropriate intervention level. Assessing daily functioning provides an indication of the functional impact of symptoms and includes both competencies (i.e., social, school, and cocurricular) and self-care (e.g., feeding and dressing). A child who is assigned to stage 4 is expected to be affected in both daily competencies and self-care, whereas children assigned to lower stages (i.e., stages 1a to 3), may exhibit functional impairment in one of these subdomains.

It should be noted that unique to assigning levels of care in childhood, in addition to considering symptoms and functional impairment of the child, clinical staging also considers the psychological well-being of the parents or primary caregivers and family functioning. These additional factors (i.e., parent or caregiver distress and family functioning) are included because they will have a role in selection of appropriate intervention approaches (e.g., individual, parent directed, or family-based intervention). Concomitant challenges, such as child behavioral problems or parent's substance use and poor occupational functioning, are considered illness extension factors within the childhood context and are also used to determine levels of care.

Youths and Adults (12–54 years)

The criteria developed by Hickie and colleagues (34) for determining clinical stage for youths form the basis of staged

care for both youths and adults (Table 1). Criteria for staging for youths have been previously reported and will not be repeated here (34, 35). The clinical staging criteria specified by Hickie et al. (34) are supported by research showing internal consistency and graded clinical severity, distress, functional impairments, and neuropsychological profiles across stages in youth populations (34, 53).

The youth-based staging criteria are used for adults because of a lack of research findings suggesting the onset of affective syndromes beyond those reported in the youth model (49, 54). Therefore, affective disorders in adulthood are assessed by using established criteria for youths. Importantly, higher clinical stages recognize the risks that accumulate with increasing recurrence of depressive episodes from adolescence through adulthood (55, 56), including psychological, biological, and neurocognitive mechanisms underlying recurrence and chronicity (56, 57). Correlates of affective disorders, such as general medical health, neuropsychological functioning, and alcohol or other substance use (i.e., illness extension), that may predict recurrence of mental illness are also considered by using multidimensional assessments in treatment (42). These factors represent potential targets for collaborative intervention for adults. Through personalized service packages, staged care tries to ensure that sufficient care is provided to address multimorbidity in adulthood.

Older Adults (≥55 Years)

Applications of clinical staging to older adults are relevant for those presenting with new-onset symptoms, as well as for those presenting with a recurrence or in the context of lifelong illness (58). Research has shown that in later life the presentation, etiology, and symptom course, as well as risk and protective factors, are distinct from those of earlier-onset affective disorders, highlighting the utility of identifying late-onset depression phenotypes (59). Approximately half of those experiencing major depression in later life do so for the first time (59), which begs the question, What causes an older adult to become depressed? It is important to consider the concept of “vascular depression,” which describes a syndrome whereby depression occurs for the first time in later life in association with underlying cerebrovascular disease (60). There is considerable evidence demonstrating associations between the onset of depression in later life and vascular risk factors and white matter lesions, observed with neuroimaging (61). This neurological observation, in turn, is associated with distinct neuropsychological profiles, including slowed processing speed, executive dysfunction, and poor memory (62, 63). Although treatment may be associated with some improvements, such deficits among older adults can often persist despite symptom resolution (64).

Research also highlights that late-life depression is associated with sleep disturbance, mild cognitive impairment (65), medical comorbid conditions (66), underlying brain disease (65), and psychosocial factors, such as stressful life

TABLE 3. Assignment of individuals to levels of care in the staged care model

Level of care, stage, need, and other considerations	Assignment criteria		
	Childhood (5–11 years)	Youths and adults (12–54 years)	Midlife and older adults (≥55 years)
1: Self- or family-directed monitoring and management Clinical stage Clinical need	Stage 1a Mild affective symptoms (mild internalizing symptoms and mild impact on daily functioning) AND mild parent and family impact (mild or no parental distress and mild or no impact on family functioning)	Stage 1a Mild anxiety, mood, or psychosis symptoms (no risk for harm to self or others, low levels of distress, and mild impact on functioning)	Stage 1a Mild depressive symptoms (no risk for harm to self or others; low levels of distress) AND/OR mild cognitive symptoms (subtle objective neuropsychological impairment or subjective or informant-rated cognitive decline; mild impact on functioning) AND/OR recognized risk factor for late-onset depression or cognitive decline
Other	Preference for self- or family-directed management	Preference for self- or family-directed management	Preference for self- or family-directed management
2: Low-intensity services Clinical stage Clinical need	Stage 1a Mild affective symptoms (mild internalizing symptoms and mild impact on daily functioning) AND mild parent and family impact (mild or no parental distress and mild or no impact on family functioning)	Stage 1a Mild anxiety, mood, or psychosis symptoms (no risk for harm to self or others, low levels of distress, and mild impact on functioning)	Stage 1a Mild depressive symptoms (no risk for harm to self or others and low levels of distress) AND/OR mild cognitive symptoms (subtle objective neuropsychological impairment or subjective or informant-rated cognitive decline and mild impact on functioning) AND/OR recognized risk factor for late-onset depression or cognitive decline
Other	Preference for self- or family-directed management	Preference for self- or family-directed management	Preference for self- or family-directed management
3: Moderate-intensity services Clinical stage Clinical need	Stage 1b Moderate affective symptoms (moderate internalizing symptoms and mild to moderate impact on daily functioning) AND/OR moderate parent and family impact (moderate parental distress and moderate impact on family functioning)	Stage 1b Moderate anxiety, mood, or psychosis symptoms (moderate levels of distress, moderate or lower risk for harm to self or others, and moderate or lower impact on functioning) OR severe anxiety, mood, or psychotic symptoms with mild risk for harm and mild functional impact (severe levels of distress, mild or lower risk for harm to self or others, and mild or lower impact on functioning)	Stage 1b Moderate depressive symptoms (moderate levels of distress, moderate or lower risk for harm to self or others, and moderate or lower impact on functioning) OR severe depressive symptoms with mild risk for harm and mild functional impact (severe levels of distress, mild or lower risk for harm to self or others and mild or lower impact on functioning) AND/OR progressive or persistent cognitive decline

continued

TABLE 3, *continued*

Level of care, stage, need, and other considerations	Assignment criteria		
	Childhood (5–11 years)	Youths and adults (12–54 years)	Midlife and older adults (≥55 years)
Other	Moderate impairment in child behavioral problems OR parents report moderate impairment in occupational functioning or moderate substance use	Mild to moderate illness extension (mild to moderate impairment in general medical health, social connectedness, or occupational functioning and mild to moderate substance use)	Mild to moderate illness extension (mild to moderate impairment in general medical health, social connectedness, or occupational functioning and mild to moderate substance use)
4: High-intensity services Clinical stage Clinical need	Stage 2 Severe affective symptoms (severe internalizing symptoms and moderate to severe impact on daily functioning) AND/OR moderate to severe parent and family impact (moderate to severe parental distress and moderate to severe impact on family functioning) AND/OR moderate risk to the child's general medical health (self-injurious behavior, very low weight, or other physiological indicators of risk)	Stage 2 Severe mood or psychosis symptoms, with moderate risk for harm and moderate functional impact (severe levels of distress, moderate or lower risk for harm to self or others, and moderate or lower impact on functioning)	Stage 2 Severe depressive symptoms with moderate risk for harm and moderate functional impact (severe levels of distress, moderate or lower risk for harm to self or others, and moderate or progressive impact on functioning) AND/OR evidence of progressive cognitive decline suggesting probable early dementia
Other	Severe impairment in child behavioral problems OR parents report severe impairment in occupational functioning or severe substance use	Severe illness extension (severe impairment in general medical health, social connectedness, or occupational functioning or severe substance use)	Severe illness extension (severe impairment in general medical health, social connectedness, or occupational functioning or severe substance use)
5: Acute and specialist community mental health services Clinical stage Clinical need	Stage ≥3 Severe affective symptoms (severe to very severe internalizing symptoms and severe to very severe impact on daily functioning) AND/OR severe parent and family impact (severe parental distress and severe impact on family functioning) AND/OR high risk to the child's general medical health (self-injurious behavior, very low weight, or other physiological indicators of risk)	Stage ≥3 Severe mood or psychosis symptoms, with high risk for harm and high functional impact (severe levels of distress, high risk for harm to self or others, and severe impact on functioning)	Stage ≥3 Severe depressive symptoms, with high risk for harm and high functional impact (severe levels of distress, high risk for harm to self or others, and severe or progressive impact on functioning) AND/OR clear diagnosis of dementia (e.g., Alzheimer's disease, vascular dementia, frontotemporal dementia, or dementia with Lewy bodies) AND/OR high or greater risk to older adult's general medical health (e.g., frailty and mobility)

continued

TABLE 3, *continued*

Level of care, stage, need, and other considerations	Assignment criteria		
	Childhood (5–11 years)	Youths and adults (12–54 years)	Midlife and older adults (≥55 years)
Other	Severe impairment in child behavioral problems OR parents report severe impairment in occupational functioning or severe substance use	Severe illness extension (severe impairment in general medical health, social connectedness, or occupational functioning or severe substance use)	Severe illness extension (severe impairment in general medical health, social connectedness, or occupational functioning or severe substance use)

events (e.g., bereavement, caregiving responsibilities, loss of independence, loneliness and social isolation, and financial difficulties) (59). The proposed clinical staging model for affective disorders occurring in later life (Table 1) assumes that several diverse pathophysiological mechanisms, as well as their interactions with the psychosocial context, may underpin mood disturbance in the early clinical stages in later life, likely leading to several distinct trajectories, ranging from a pattern of consistently low symptoms to the evolution of a chronic, unremitting illness characterized by persistent depression (67). Further, the model proposes that even sub-syndromal depressive symptoms impart a longitudinal risk for adverse clinical outcomes (67) and considers relevant phenotypes, such as concomitant cognitive impairment (68); genetic contributors (69); and etiological factors, such as underlying cerebrovascular disease (70). Such features are not necessarily unique to depressive disorders and may in fact confer vulnerability to a range of illness trajectories, particularly other neurodegenerative diseases characterized by depressed mood, motor change, and cognitive impairment.

It is highly likely that older adults in the early phases of illness will have mixed symptoms (and syndromes) that range across various diagnostic categories. Consequently, individuals with the same formal diagnosis (e.g., major depressive episode) may be at different clinical stages because of other concurrent factors, such as neuropsychological impairment, evidence of underlying neurobiological change (e.g., extensive white matter change), symptom typology or severity, level of disability or functional decline, or a specific clinical profile indicating greater severity (risk for harm, need for hospital admission, treatment resistance, psychomotor change, or psychotic features).

ISSUES AND FUTURE DIRECTIONS

Staged care is presented here as a service innovation to advance the prevention agenda of high-quality care in mental health. The model represents a preliminary framework, with initial support coming from developments in clinical staging of mental disorders. The following points address challenges and suggested priorities for future research, implementation, and evaluation of staged care.

There is a clear need to establish valid criteria for assessing clinical staging across the life span. Empirical validation of the aging model, which is not yet published, is under way at the University of Sydney's Brain and Mind Centre. The present article also includes the first attempt to stage childhood disorders; however, staging criteria for this developmental period are tentative until research of staging of childhood disorders is conducted and subjected to review over time. Furthermore, research is needed to determine whether staging has practical clinical utility. Specific areas for future empirical research and review include examining reliability in clinical stage assessment, patient characteristics associated with clinical stages, subtypes of illness trajectories, role of clinical stage in treatment processes and outcome, stage-appropriate interventions, and predictors of clinical stage transitions (e.g., 18, 35, 39, 52).

Challenges associated with implementing staged care into practice also warrant attention. Reviewed findings suggest that service delivery implementation can vary according to health settings, workforce capacity, and insurance and payment issues (71). However, because staged care is proposed as a population health-oriented system of care, the model seeks to break down artificial boundaries by guiding service delivery across the whole system. This entails reorienting systems, structures, and incentives so that the benefits of integrated care extend to the whole population (12, 28). The term “ambulatory care setting” is used conceptually to include all nonhospital health services across the health care spectrum where staged care is applied, from services provided by a single clinic with primary and specialist care (e.g., ambulatory care center) to coordination of several clinics delivering different aspects of an intervention (72). Research is needed to support the development of such interconnected care systems, as well as of common assessment protocols and information-sharing facilities that ensure efficient pathways among services (31).

The areas of clinimetrics and staging in mental health require information that is not included in common diagnostic approaches to assessment (33). As such, providers will need to be educated on how to conduct assessments for clinical staging. Such training is related to knowledge exchange regarding the types of measures for symptoms,

functionality, and mental health history that are used during assessment. In line with this, developing support tools for clinical decision making that use psychometrically supported measures to stage patients may assist practitioners and may be an efficient and time-saving strategy for facilitating the process of triaging patients (73). The InnoWell Platform is an example for how new health information technologies support assessment, triaging, referral, and shared decision making in stage-based care (74). Further development of such tools represents an important direction in translating staged care into practice.

Finally, any service reform should include an evaluation of whether it enhances outcomes beyond usual care or other health service models. To this end, frameworks to evaluate staged care implementation ideally include elements of the service model (access and intake, assessment, treatment planning, treatment and intervention, progress monitoring, and exit and referral) assessed against domains of safety and clinical quality domains (including accessibility and equity; acceptability and satisfaction; workforce competence and capability; efficiency, expenditure, and cost; effectiveness and outcomes; appropriateness; and care continuity and coordination) (74, 75).

CONCLUSIONS

In this article, we present a model of staged care intended for use in mental health service delivery. Staged care incorporates clinical stage alongside clinical need to triage individuals into hierarchically arranged services according to intensity, type, and duration. The main objective of staged care is to ensure that individuals receive the right level of care the first time, such that the primary and secondary objectives of optimizing treatment and prevention outcomes are achieved. Further translational research, including determining steps for system redesign, is needed in evaluating how staged care might be implemented in real-world contexts. Nevertheless, by shifting toward a population health-oriented service delivery model with goals of prevention, staged care developments may guide future reform in reducing the burden of disease associated with affective disorders while providing efficient methods for managing limited resources.

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FIGURE 2. A model of staged care for common affective disorders across the life span^a

Current clinical need (symptoms, functional impairment, risk)	Current clinical stage			
	Stage 1a Review at least every 3 months 3 months of care	Stage 1b Review at least every month 12 months of care	Stage 2 Review every 3 months 2–5 years of care	Stages 3 and 4 Review every 6 months Ongoing care
Very mild	Self- or family-directed monitoring and management			
Mild	Low-intensity services			
Moderate	Moderate-intensity services			
Severe		High-intensity services		
Very severe			Acute and specialist community services	

^a Reprinted from Cross et al. (31) with permission from Wiley.

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