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The Choice and Partnership Approach to community mental health and addictions services: A realist-informed scoping review

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Abstract

Objectives: We employed a scoping review to describe the state of evidence in both published and grey literature regarding the extent, outcomes, and contextual considerations of the implementation of the Choice and Partnership Approach (CAPA) in community mental health and addictions services. We sought to describe contextual considerations for implementation in terms of the five domains of the Consolidated Framework for Implementation Research (CFIR).

Design: Scoping review.

Results: Forty-three reports describing 34 unique evaluations were included. Evaluations were observational in nature, with ten employing pre/post designs. CAPA implementation efforts, regardless of setting, were largely motivated by needs to reduce wait times and improve efficiency of services. Characteristics of individuals related to behaviour change (e.g., staff buy-in or skills) were not reported. Key themes related to the process of implementation included facilitative leadership, data-informed planning and monitoring, and CAPA training. Fidelity to CAPA was not often measured (n=8/34) despite available tools. Health system outcomes were most frequently reported (n=26/34); few evaluations (n=7/34) reported clinical outcomes, with only three reporting pre/post CAPA changes.

Conclusions: There are considerable gaps in available evidence that preclude systematic review and meta-analysis. Clinical outcomes (including the views of clients, families, and caregivers) associated with CAPA are notably underreported and represent an area for significant improvement in evaluation efforts. Consistent measurement of fidelity to the CAPA model will be necessary for ensuring the accuracy of outcomes attributed to the implementation of model. As CAPA is intended to be adaptable to local contexts and its implementation often requires system transformation, our understanding of the change processes necessary for successful implementation would be strengthened by more comprehensive consideration of contextual factors.

Strengths and limitations of this study

- A comprehensive search identified sources not found in the formal literature, allowing us to provide a broad picture of the implementation of CAPA in mental health services.
- We identified important gaps in measurement and reporting of outcomes of CAPA implementation efforts.
- We identified contextual considerations reported and absent from reporting in relation to CAPA implementation efforts.

- We followed the Consolidated Framework for Implementation Research (CFIR) to ensure thorough capture of relevant contextual constructs and to provide consistent terminology in our review.
- We recognize the possibility of publication bias introduced through the potential overrepresentation of positive experiences.

Introduction

Mental health and addictions disorders are the most common sources of morbidity among children and youth in developed countries, affecting as many as one in five by age 15.(1–5) However, long wait times or other challenges in access mean that many young people do not receive care when they need it.(6–9) The delay or absence of appropriate care during childhood and adolescence is associated with poor outcomes, including increased severity of illness and the emergence of secondary disorders.(10)

The Choice and Partnership Approach (CAPA) was developed to create an accessible, child- and family-centred model of child and adolescent mental health service delivery that better matches care to needs. CAPA incorporates several features that differentiate it from traditional models of mental health service delivery. The philosophy underlying CAPA reflects a shift in clinician stance from 'expert with power' to 'facilitator or partner with expertise' and values the expertise the client and caregivers offer.(11) CAPA emphasizes a collaborative approach to mental health care where young people, family, or caregivers (a member of a young person's support network), and clinicians jointly develop treatment goals. The model also incorporates continuous quality improvement practices and data-informed decision making to improve efficiency and effectiveness.(12)

CAPA consists of 11 key components: Leadership, Language, Handle Demand, Choice Framework, Full Booking to Partnership, Selecting Clinician, Core and Specific Work, Job Plans, Goal Setting, Peer Group Discussion, and Team Away Days. The creators of the model posit that the totality of the 11 components is greater than the sum of the parts and implementation of all components is required to successfully transform services.(11) The implication is that implementation of only select components, or a 'CAPA-lite' version of the model, is likely to lead to poor results, reflecting a failure in implementation rather than a failure of the model.(11)

The model is intended to work "in any setting, culture, health organisational system and language".(11) To date, CAPA has been implemented in community-based (or "outpatient") mental health and addictions services in the United Kingdom, Australia, New Zealand, Norway, Belgium, Ireland, and Canada.(11) Despite being grounded in evidence-informed elements such as demand and capacity theory, elimination of waste, shared decision making, and outcome measurement, there has been little evidence of formal evaluations of CAPA implementation in the published literature.(12–17) As mental health systems face significant pressures to provide timely access to effective services, there is a need to better understand the current scope of evidence and to identify any implications of context on successful implementation and expected outcomes.

The aims of this scoping review are therefore twofold: 1) to gain an understanding of the extent and outcomes of the implementation of CAPA in community mental health and addictions

services; and 2) to identify how context influences the implementation of CAPA and resulting measurement of client and system outcomes.

Methods

Overview

A scoping review approach was selected after initial searches of academic journals revealed much heterogeneity, indicating that the evaluation of the implementation and efficacy of CAPA is an emerging field of study.(18) The protocol for this scoping review was published a priori (https://bmjopen.bmj.com/content/9/12/e033247).(19)

Review Steps

This scoping review follows the steps proposed by Arksey and O'Malley (20) and revised by Levac and colleagues.(21) Our overarching program of research has adopted a realist paradigm developed by Pawson and colleagues to understand the role of context in the implementation of CAPA—specifically, how mechanisms (the implementation and individual reactions to the key components of CAPA) are influenced by context to produce expected (or unexpected) outcomes.(22,23) We incorporated the Consolidated Framework for Implementation Research (CFIR) in the analysis to ensure thorough capture of relevant constructs related to contextual barriers or facilitators, and to provide structure and consistent terminology in our review.(24) The CFIR is organized by five contextual domains: intervention characteristics, outer setting, inner setting, characteristics of the individuals involved, and the process of implementation.(24) This review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR)(25) and the Realist And Meta-narrative Evidence Syntheses: Evolving Standards (RAMESES) publication standards.(26)

Identifying the Research Question

Within our program of research, our overarching research question is, 'To what degree does CAPA work, for whom, and under what circumstances?' (https://www.healthyyoungminds.ca). This scoping review, therefore, serves both to 1) describe the extent and measurement of the outcomes of the implementation of CAPA in community mental health and addictions services; and 2) identify the role of context in implementation.

Identifying Relevant Records

We developed the search strategy in consultation with a medical librarian, balancing the need for comprehensiveness with feasibility concerns.(18,21) We conducted an initial search to familiarize ourselves with relevant terminology, which we incorporated into the search queries in multiple databases representing research from health care, social work, and social sciences. Sources included both published and grey literature. Records from January 1, 2005 to April 4, 2022 were considered for inclusion. Please see Supplementary File 1 for examples of our search queries.

Our database search was augmented by hand searching the reference lists of all included records, soliciting records from professional contacts, and by reviewing the first 100 most relevant results of a Google search for "choice and partnership approach", updated to April 4, 2022.

Selecting Records

After identifying potentially relevant literature, two members of the research team (LAC and SC) independently screened records based on title and abstract. Records that could not confidently be excluded were carried forward to full-text screening. The reviewers met at the beginning, midpoint, and end of the process to discuss challenges and resolve any ambiguity with the inclusion criteria. Any discrepancies were resolved via discussion, reaching consensus on each.

We used the following criteria to determine eligibility of records for inclusion:

1) Focused on CAPA, including its implementation, outcomes (e.g., clinical, program, or system outcomes), or a discussion of contextual factors that may impact its implementation.
2) Included data (any type).
3) Study population included child and adolescent or adult population in a community mental health and addictions setting.
4) Examined CAPA in its entirely, not just a component(s) of the model.

We did not exclude records based on methodology, quality of evidence, outcomes, the stage of CAPA implementation, record type, language, or country of publication.

Charting the Data

Team members LAC and SC independently extracted data from the eligible records using a codebook developed in consultation with team members that reflected the five domains of the CFIR (24) and included categories such as document identification, objectives, methods, contexts, implementation, and outcomes. (Please see Supplementary File 2 for the detailed codebook.) The CFIR guided both data extraction and summation/interpretation, as we explicitly and systematically considered how context(s) were described in included records related to the implementation and function of CAPA.(24)

After independently coding three records, LAC and SC compared data extraction to address any discrepancies and refine the codebook. Once completed, data extraction was reviewed for agreement and accuracy. Any discrepancies were minimal and were resolved by consensus.

Collating, Summarizing, and Reporting the Results

We followed Levac and colleagues'(21) extension of Arksey and O'Malley's approach,(20) by analyzing the data using both numerical summary and thematic analysis to create a narrative synthesis and identify knowledge gaps. Data were first summarized as frequencies and ranges. Contextual and process-oriented data were then analyzed using thematic analysis, mapped to the five CFIR domains.(24) Lastly, the resulting themes were reviewed by content experts on the team (SC, JC, DE, JM) to verify and frame findings.

Consulting with stakeholders

Following the recommendation of Levac and colleagues,(21) we included Arksey and O'Malley's optional sixth step: consultation with stakeholders to increase methodological rigour and assist in framing our findings.(20) Our research team includes researchers, clinicians, health system administrators, and policymakers. Several members of our team (SC, JC, DE, JM) are practising psychologists with direct experience in the implementation of CAPA. Further, we reviewed our results more broadly with staff, multidisciplinary clinicians, and administrators working in mental health and addictions services in different contexts (e.g., general and specialised mental health and addictions services, urban and rural settings) to assist in framing our findings.

Patient and public involvement

While our overarching program of research into the implementation of CAPA includes the involvement of clients and families or caregivers (see https://www.healthyyoungminds.ca), our review did not include direct involvement of clients (patients), families, or the public. However, its undertaking was motivated by the observed need to better understand the barriers to and facilitators of the successful implementation of a client- and family-centred model of mental health and addictions services. It is anticipated that the results of this review will inform implementation and evaluation efforts, ultimately supporting improved outcomes for young clients and their families.

Results

Our database searches yielded 183 records (70 unique). The Google search produced another 114 records (77 unique). We obtained one record by soliciting our professional contacts and 16 via hand search of the reference list of previously included records. During the full-text screening phase, 43 records (corresponding to 34 unique evaluations) met our inclusion criteria and were

included for data extraction. A detailed description of search results, along with reasons for exclusion, is presented in Figure 1.

In some instances, individual evaluations were presented in multiple formats (e.g., report, journal article, and presentation), which we refer individually to as "records". We included all records to ensure capture of contextual information, but for the purposes of synthesis of findings, we considered records at the level of the evaluation to avoid double counting. Two records (27,28) represented ad hoc summaries of CAPA evaluation efforts prior to 2010, so included several of the evaluations (n=17). No other summary or review documents were found.

Characteristics of Included Records

Characteristics of included records are listed in Supplementary File 3. Publication dates ranged from 2006 (29–31) to 2019 (32). All records were written in English. Records were limited to four regions: the United Kingdom (UK),(15,17,27–52) Canada,(13,16,53–57) New Zealand,(27,28,58–61) and Australia.(14,27,28,62,63) Despite CAPA having also been implemented in Norway, Belgium, and Ireland, we did not identify any reports from these settings in our searches. Most records (34/43) were retrieved from the grey literature; only 9 records were available in traditional academic databases.(13–15,32–35,37,62)

Most evaluations (30/34) were local or regional in scope and situated in urban centres or mixed urban, suburban, or rural settings;(13,16,29–35,37–57,60,61,63) one described a rural context.(14,62) Two represented national evaluations of child and adolescent mental health services (CAMHS) that had implemented CAPA across England(15,17) and New Zealand(58,59). Only three evaluations included services that provide care to adult and/or geriatric populations.(16,27,28,57)

The evaluations did not include any experimental designs, and few (10/34) reported pre-post comparisons.(13,14,30,34,41,43–45,52,53,55,56,62) Sampling strategies, when described (7/34 evaluations), were largely of convenience(13,15,17,32,34,37,41,53,62); none employed random selection.

Context–The Intervention

Many (16/34) evaluations reported the motivation for the implementation of CAPA, including to reduce wait times or waiting lists,(13,14,33,35,37,41,53,54,57,58,62) improve efficiency,(14,32,33,36,38,40,63) improve care quality, service user experience, or accessibility,(13,17,38,63) choice in service,(37,39,41,55,62) meet service demands or client needs or values,(14,15,17,37,40,53,55,62) provide client-focused service,(15,17,39,41,53,55) support staff,(38,41) provide transparency,(37,38) and provide meaningful data.(38) Few evaluations (n=8/34) cited theories supporting how CAPA or its components 'work'; those that did most often reported that CAPA's strength as a service delivery model is in its efficiency in

managing demand/capacity.(13–17,33,34,41,53,62,63) Fewer evaluations (n=5/34) mention that CAPA 'works' because it provides client-centred services.(17,33,39,41,57)

Context–Inner Setting

No evaluations reported the CFIR inner setting constructs structural characteristics (social architecture, age, maturity, and size of an organization or service), networks and communications within the organization, culture (i.e., norms and values), or readiness for implementation.(24) An evaluation of CAPA implementation in a specialist setting reported that clinicians felt stressed and overwhelmed by workloads prior to implementing CAPA.(38) Other sources reported organizational challenges such as staffing issues (clinical staff (63) and psychiatry(54) understaffing, mismatch of clinician skills for client population,(55) and procedural problems (e.g., complex assessment process,(62) poor throughput,(62) and arbitrary intake process(63).

Context–Outer Setting

Some (14/34) evaluations referred to constructs within the CFIR domain 'outer setting', including client needs and resources, community characteristics, and pressures, policies, or incentives that implicate the service.(24) Services described caring for complex, severely ill, or special client populations(62) dispersed populations,(62) or populations with a wide range of needs,(34) and two served specific care populations (clients with mood and anxiety disorders,(16) and learning disabilities.(32)) One reported redesigning their centralized referral system and creating specific care clinics for severely ill clients, or those requiring specialized skill sets, to support the implementation of CAPA.(13) Other considerations included culturally relevant care for Māori and Pacific clients in New Zealand,(58,59) and Indigenous and racialized communities in Nova Scotia, Canada(57).

CAPA implementation often occurred within contexts of low resources,(34,53) pressure to meet or maintain the ability to meet demand,(17,40,53,56,59,63) lack of second-tier services,(62) increasing expectations from the public,(59) challenges in access to care (due to long wait times,(15) lack of second tier services,(62) siloed or fragmented services (54,55) poor coordination of services,(55,62) or inequitable access,(17) and the need to provide high quality, evidence-based care.(15,17,34,63) The UK and New Zealand governments influenced implementation through directives aimed to ameliorate challenges in mental health service delivery by setting goals for mental health care, including wait time benchmarks.(34,41) Some services cited UK government endorsement of CAPA as a means of improving service efficiency, adding value, eliminating waste, and reducing wait times.(32,33)

Context –Characteristics of Individuals

Evaluations did not report the characteristics of individuals in the service who were implementing CAPA, such as their knowledge and beliefs about CAPA, self-efficacy, individual stage of change, identification with the service or organisation, or other personal attributes that may affect implementation.(24) One evaluation reported that major concerns for clinicians prior to adopting CAPA were that the quality of care would be negatively affected by increased client throughput, leading to poorer outcomes and that there would be difficulties in handing over families between clinicians from Choice to Partnership.(34) However, these did not emerge as major themes in their findings post-implementation.(34) Another evaluation suggested that considering individuals' readiness to change would be important for employing appropriate change strategies, such as support networks.(41)

Context–Process of Implementation

Efforts to support adaptation and planning for the implementation of CAPA were varied and included the development of implementation teams,(62) formal(41,62) or informal(55) planning meetings or Team Away Days to discuss CAPA,(17,55,59,60,62) and the collection of data regarding client needs or clinical presentations(63) or the service capacity (e.g., determining the number of available Choice and Partnership appointments or the skills within the service).(38,55,63) Services conducted waitlist blitzes (periods of time during which waitlists are reviewed for determination of individuals' eligibility for entrance to the service and match with capacity(64)),(13,17,41,43,46,55,62) articulated eligibility and redirection criteria,(55) or staggered implementation across teams to facilitate implementation.(15,62) Some adapted their services by redistributing clinicians from specialist to multidisciplinary teams,(13) creating emergency Choice appointment tiers to ensure wait time targets for both children in crisis or not in crisis,(62) creating care bundles,(38) or enhancing supports for less experienced clinicians to conduct Choice appointments, such as by pairing with more experienced clinicians or providing training.(15,17) In two instances, adaptations of CAPA such as those requiring all clients to be seen by a psychiatrist(16) or limiting the number of sessions with clients(57) were incompatible with the CAPA model.

Key themes related to CAPA implementation observed across the evaluations emerged, including facilitative or engaged leadership, data-informed planning and monitoring, and training in CAPA. Facilitative leadership was identified as a key contributor to successful implementation.(15,17,29,38,41,55,59) While full commitment from senior leadership was identified to be important,(38,55,59) the need for consistent, clinically informed leadership was deemed critical to successful implementation.(15,17,59) Clinical leads and managers with clinical backgrounds offered credibility and the ability to liaise effectively with all team members(15,17) as a starting point, but alignment of the services' senior leadership was critical for consistent messaging and ongoing support during system transformation.(59) Champions or change leaders in management were noted to be influential by promoting staff buy-in,(17,41,59)

but they needed to be well-respected, knowledgeable about CAPA, responsive to staff concerns(17) and represent all parties involved(41) to be effective.

Engagement of leadership was operationalized in various ways, including through the collaboration of clinical leads or senior clinicians and service managers,(17,55,62) weekly meetings of clinical team leaders,(13) and regular email updates and weekly drop-in sessions discussion of general CAPA issues to bridge the gap between once monthly meetings.(41) Pressure to implement CAPA from senior management outside the team could lead to inadequate preparation (in terms of lack of time and/or resources, or adequately prepared team management) for implementation, which in turn may have caused resistance from the teams themselves.(17,59)

Team Away Days, one of the 11 core components of CAPA, were noted to provide opportunities for implementation planning, reflection and evaluation of CAPA to improve the service,(17,55,59,60,62) While monitoring and feedback to teams were deemed essential for identifying "teething problems"(17) or "drift"(59) during implementation, very few evaluations (n=2) reported ongoing quality monitoring activities, such as robust information and data collection systems within teams or processes for review.(40,59) Monitoring was supported by the development of process goals and metrics,(13,59) but was noted to be done largely manually by teams,(17) or as individual audits.(15,33,34,38,62) Lack of feedback was identified as a barrier to implementation.(17)

CAPA training was reported to be important for supporting successful implementation,(13,17,34,41,53,55,60) but was noted to be variable in intensity between services.(17) Importantly, training was identified as a means of providing opportunities to address misconceptions of the model,(17) which included the common misunderstanding that CAPA limits the number of sessions per client,(17,57) and the assertion that the model is based on averages without means for adjustment.(16)

Mechanisms–CAPA Components and Fidelity to the CAPA Model

From a realist lens, Pawson and Tilley conceptualized mechanisms as a combination of both resources and stakeholders' reasoning in response.(22) Accordingly, we sought to capture the reporting of the 11 key components of CAPA both in terms of resources and responses.

Of the 11 key components of CAPA, the Choice components, Choice Framework"(13–17,29,32,33,36,38,41,55,56,59,60,62) and "Handle Demand" (15,17,27,34,36,38,39,41,55,62) were most often cited, while the Choice component "Language" was cited less frequently.(15,17,36,55,62) One evaluation noted that while a change in language was met with mixed views by clinicians, particularly more experienced clinicians who held on to the traditional language of assessment and treatment, inclusive language was identified as a core theme related to successfully moving from a model of diagnostic assessment to one of joint formulation and goal development.(62)

Few evaluations reported fidelity to the CAPA model (n=8/34); those that did either counted the number of the 11 key components implemented,(15,17,27,28,59,65) or scored the CAPA Component Rating Scale (CAPA-CRS).(13,43,46,51,52,66) None reported full fidelity. In the evaluation of CAPA across England, of 53 CAMHS teams who implemented CAPA and responded to follow-up questionnaires, 28 were self-reported "medium implementers" (implemented 5-7 of the 11 components) and 18 were "high implementers" (implemented 8+ components).(15)

Context and Mechanisms of Implementation

Figure 2 depicts the frequency by which the key components and fidelity to CAPA were reported by the five CFIR context domains at the level of evaluations (to avoid upweighting cells by 'double counting' reports). Contexts at the level of the outer setting were most often described, and characteristics of individuals were least often described in evaluations of the implementation of CAPA.

Services that reported outer setting pressures such as needing to reduce wait times or increase throughput often reported implementation of the process-related components, such as Choice Framework, Care Planning, and Job Planning. Fewer reported the more philosophically oriented components such as Language or Peer Group Discussion.

Each of the five CFIR domains consist of several constructs. To further examine each of the CFIR domains, we also mapped the frequency by which the key CAPA components and fidelity to CAPA were reported by individual constructs (Figure 3). With respect to intervention characteristics, the efficiency of CAPA (e.g., clear procedures, lean thinking, queuing theory, or flow through service) was the most commonly reported of the constructs, followed by client-centred care or client choice. Those evaluations citing the efficiency of CAPA most often implemented the Choice Framework, Job Planning, and Goal Planning/Care Planning components. In terms of contexts related to outer settings, Government endorsement, external targets, or external review were the most frequently cited constructs and were associated with the implementation of the Choice Framework, Job Planning, and Goal Setting/Care Planning components. Within inner contexts, staff pressure, shortage, or morale were most often cited.

Reporting of the characteristics of individuals within teams or services (e.g., knowledge and beliefs about the model, staff buy-in, personal stage of change, staff skills) were notably absent; however, staff skills were reported in one evaluation that implemented all CAPA key components.(62)

Several constructs associated with the process of implementation were reported, most commonly relating to leadership, formal training of team members, dedicated implementation teams, and regular meetings. Less frequently, teams reported service-specific adaptations such as the

addition of Emergency Choice streams or single access points to the service. As with other constructs, these were most often reported with the implementation of Choice Frameworks.

Outcomes of Implementation

The most frequently reported outcomes were related to the health system (n=26/34 evaluations) (13–17,27,28,30,32–34,36,38–41,43–46,48–56,58–63,65) and workforce (n=19/34 evaluations)(13,15–17,27–31,34,36,38,41,44,46,49,51–56,59,60,62,63). Health system outcomes included numbers of clients seen by the team or service (including numbers of accepted referrals and first visits or Choice appointments),(13,14,16,17,27,28,34,40,44,56,59) proportions of clients going on to attend second visits or referred elsewhere,(14,17,33,34,39,41,43,44,55,60) wait times to first appointment (Choice appointment),(13–17,27,28,30,34,38–41,43–46,48,52–56,58–60,62,65) wait times from Choice to first Partnership appointment or between Partnership appointments,(13,15–17,27,28,39,44,46,49,53,56,59) wait time targets,(27,28,36,40,41,51,65) waiting lists,(17,35,53,62,63) and "no-show" or "did not attend" rates.(13,17,27,28,30,39,41,44,53,55,60)

Workforce outcomes included job satisfaction, staff stress, morale, confidence, or engagement,(15,17,27–29,31,36,38,41,44,46,51,52,59,60,63) efficiency or provider productivity,(13,44,54,56,60) collaborative teamwork or team cohesion,(15,17,27–29,31,36,54,55,60) caseloads,(44,55,60,62) and transparency or accountability between clinicians or with clients.(17,34,54,59)

Acceptability of CAPA was captured (n=16/34 evaluations) from the perspectives of children, young people, and families.(13,17,27–30,34,37,42,43,45–48,53,55,58,60,61) Measures of client and family experience included the Experience of Service Questionnaire (ESQ)(13,29,30,34,37,45,67) and the locally developed CAPA or Choice Experience Questionnaires (CEQ).(29,34,45) Clinical outcomes were infrequently captured (n=7/34 evaluations)(14,29,30,34,39,58,60) and reported only in child and adolescent services, with teams measuring service effectiveness through the capture of treatment goals,(34,39,58,60) the Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA),(14,68) the Child Behaviour Checklist (CBCL),(60,69) the Strengths and Difficulties Questionnaire (SDQ),(30,70) and an adapted clinician-rated Clinical Global Impressions Scale (CGI).(34,71) Only three evaluations reported pre-/post-CAPA changes in clinical outcomes.(14,30,34)

Follow-up periods were short, with the longest follow-up of health system outcomes reported to be 18 months following implementation,(62) and clinical outcomes to the point of closure or transfer or from the service.(14,34) The national evaluation of CAPA implementation in England included perspectives of clinicians in services with an average of 18 months following implementation (range 7-30 months).(15,17)

Discussion

In this comprehensive scoping review, we identified 43 reports stemming from 34 unique evaluations of the implementation of CAPA. The transformation of mental health services through the implementation of CAPA is often undertaken by small teams without the resources to conduct formal evaluations or research. As such, we recognized the need for an inclusive search strategy to accurately capture the scope of implementation and to identify important considerations regarding context that may not appear in the formal literature. Accordingly, we did not restrict our search by methodology, quality of evidence, outcomes, the stage of CAPA implementation, record type, language, or country of publication. While we did not assess the quality of included reports, we recognize the possibility of publication bias introduced through overrepresentation of positive experiences.

Evaluations of CAPA implementation were exclusively observational in design, with some (10/34 evaluations) including baseline or pre-CAPA data for comparison.(13,14,30,34,41,43–45,52,53,55,56,62) At a minimum, the routine inclusion of both pre- and post-CAPA implementation data would strengthen the evidence base. As CAPA is a highly complex intervention intended to be adapted to meet the needs of individual services that function in different contexts and health systems, often with limited research and/or data resources, randomised controlled trials (RCTs) are likely infeasible and may not capture noteworthy contextual considerations necessary for successful generalizability and implementation.(72) More pragmatic designs that capture important sources of heterogeneity, such as well-designed controlled before-and-after, interrupted time series, or stepped wedge cluster trial designs—provided resources are available to support the latter's complex conduct and analysis— are likely more useful for informing policy recommendations.(73,74) Mixed methods approaches would offer the opportunity for triangulation of theory, data, and previous evaluations.

Demand and capacity concepts,(75,76) lean thinking principles,(77) and queuing theory(78) all suggest that tracking demand and service capacity within a quality improvement framework to support review allows for better planning and more efficient use of resources. However, the lack of data for providing feedback to clinicians and staff and for monitoring ongoing service performance and client outcomes was identified as a common barrier. Meaningful and timely data collection is noted to be a considerable gap for many mental health services, and particularly so for small, often under-resourced teams with little access to administrative or database infrastructure or supports. A recent systematic review revealed that despite the benefits of data-driven learning health systems, there remain significant challenges in uptake in health care more broadly due to barriers related to governance and regulatory systems, and technical, quality, and interoperability problems.(79)

Meaningful evaluation of CAPA implementation would also be strengthened by consideration of fidelity to the model. The architects of CAPA strongly encourage implementation of all 11 key components; noting that "using CAPA principles" or implementing "CAPA-lite" is unlikely to

lead to meaningful system transformation or may reflect reluctance to change.(11) However, few evaluations reported fidelity to the model. This may reflect the state of change at the time of measurement, or incomplete implementation. Future evaluations should include measurement of fidelity to CAPA to ensure the accuracy of outcomes attributed to the model and to support ongoing monitoring to help prevent falling into previous ways of working. Measurement tools designed to assess fidelity to the CAPA model include the CAPA Component Rating Scale (CAPA-CRS),(66) CAPA Pragmatics Rating Scale (CAPA-PRS),(80) and the CAPA FACE: The Fidelity Assessment and Component Evaluation.(81)

Our review offers important insights into considerations of context in implementation efforts. Most evaluations reported CFIR constructs falling under the intervention characteristics, outer setting, and implementation process domains. There was limited information available regarding the inner context (e.g., team composition or service milieu) or the characteristics of individuals (e.g., staff buy-in or skills). This is notable, as the implementation of CAPA often requires significant service transformation at the heart of which clinicians and staff are required to change, which may include shifting from a known way of working (typically introduced in training) and embracing new identities and new tasks in an unfamiliar system and often while a system is under stress.(82,83) Future evaluations would be strengthened by attention to and measurement of constructs associated with the characteristics of the service team and individual members, and leadership and change processes to support the analysis of their impact on successful implementation.

The stance of CAPA, while centred on the client and family experience of care, was not reported to be the primary motivator for teams in selecting this approach to care as system accessibility problems are typically the focus for initiating change of this magnitude. While services in the United Kingdom and New Zealand cited government directives intended to improve service delivery, our review demonstrates that CAPA implementation efforts, regardless of setting, were largely motivated by needs to reduce wait times and to improve efficiency of services. As it is possible to improve initial waits to Choice (first) appointments at the expense of waits to or between Partnership appointments, it is essential to consider all wait times throughout the client experience of care.(15,17) Because improved wait times are often a side-effect of CAPA implementation, further exploration of teams' understanding of the client experience as a motivator may provide additional valuable implementation guidance.

Perhaps stemming from the motivation for implementation, or the relative ease of capture, the most commonly reported outcomes were those related to the health system (e.g., wait times, percentage of clients seen within target time periods, or attended visits) and workforce outcomes (e.g., staff experiences). While some evaluations benefited from pre- and post-CAPA implementation audits supported by service data, an important limitation of administrative data is that attended sessions do not necessarily represent those required to meet client needs, so may underestimate need.(32) A critical problem in the evaluation of CAPA, and of mental health services in general, is in the lack of measurement of client outcomes. In our review, only seven

evaluations reported clinical outcomes, all reporting positive findings. However, only three measured changes from baseline. Patient-reported outcome measures (PROMS), such as the Revised Children's Anxiety and Depression Scales or Goal Based Outcome Tool, while recommended by health care systems internationally and demonstrated to benefit shared decision making,(84) were not often reported. Of the four evaluations that reported whether goals were set,(34,39,58,60) only one captured post-treatment ratings, for which only half of the clients with baseline goals had post-treatment ratings for analysis.(34) The paucity in measurement and reporting of client outcomes is commensurate with existing literature,(85) and within mental health care has been a particular challenge as there is no standard for outcome measurement in clinical practice and recent standardization of measures for research have the potential to introduce unintended consequences including lack of transferability, and narrowness of scope.(86) Importantly, meaningful outcome measurement requires an understanding of the nuances or potential differences between measuring what matters to clients and families and what is often required for reporting to governments or other payers.

Similarly, the views of families or caregivers were underrepresented among our findings. In the national evaluation of CAPA implementation in England, a key challenge identified was that of accessing the views of families.(17) The authors noted that few attended the focus groups, and among those who did, none had heard of CAPA.(17) They posit that the topic area may not be of relevance to families, or recruitment may have been hampered by Research Ethics Committee restrictions on direct recruitment by research teams. It would also be reasonable to consider that families may not know what "CAPA" is as for them it may just be the way a team works, which may be a function of how we talk with families about the way that services work both in their delivery and evaluation.

Conclusions

The transformation of mental health services to those that place clients and families at the centre of care, can measure client-centred outcomes, tailor care, and actively engage clients and families in the care process as aligned with the CAPA model, often requires major philosophical and organizational shifts in the way services are delivered and evaluated. Evaluations of implementation of CAPA in the face of complex system change would benefit from the consideration and capture of contextual factors to support its adaptation to different settings, measurement of fidelity to the model to ensure the reliability of findings and to provide feedback during ongoing implementation, consideration of constructs related to the inner contexts of services (e.g., team composition, staff pressures) and characteristics of the individuals involved in or affected by implementation (e.g., staff buy-in for the model, skills, and readiness for change), and the consistent capture of outcomes of importance to clients and families. Equally important are avenues for sharing experiences between teams, identifying facilitators and barriers to successful implementation, creating reliable evaluation and research metrics, and sharing

practice challenges that appear to be common during mental health service transformation within Western health care systems.

Author contributions

LAC, SEC, JC, DE, JM, AM, GW, and LW collaborated on the proposal and methodology. LAC and SEC jointly extracted data. LAC and SEC conducted the data analysis and initial interpretation. LAC wrote the original draft and all authors reviewed and contributed to the revision of the manuscript.

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Competing Interests

None to declare.

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Data Sharing Statement

All data included in the review are available by means of the provided references.

Ethics Approval

The IWK Health Research Ethics Board approved the overarching research project, including this review (Title: Transforming Care in Nova Scotia: Implementation of Health System Change in Child and Adolescent Mental Health and Addictions, Project #: 1024356).

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Figure Legend

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Scoping Reviews (PRISMA-ScR) flow diagram of the Choice and Partnership Approach to community mental health and addictions services

Figure 2: Key Components of CAPA by CFIR Domains

Figure 3: Key Components of CAPA by CFIR Constructs

Figure 1

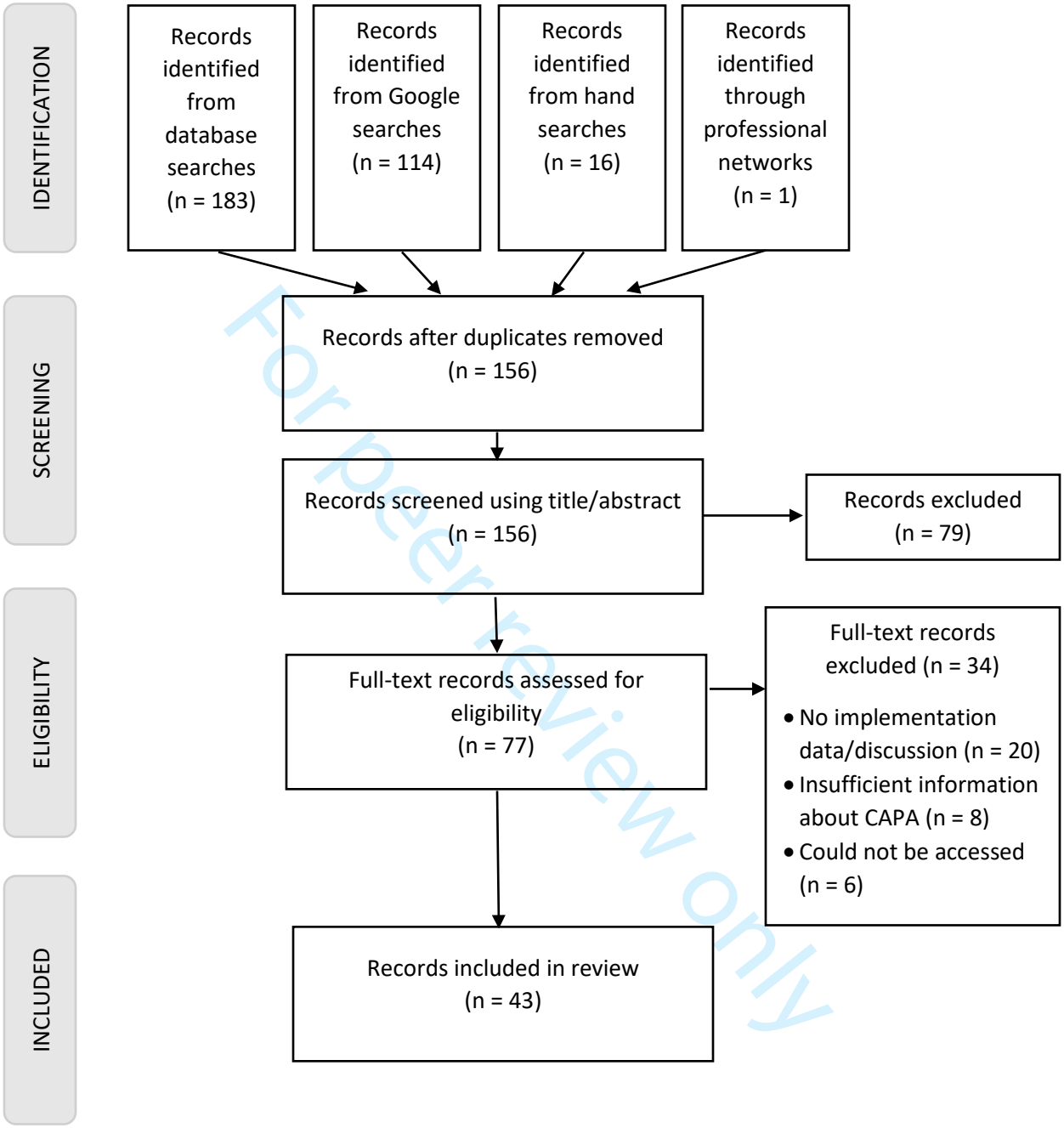
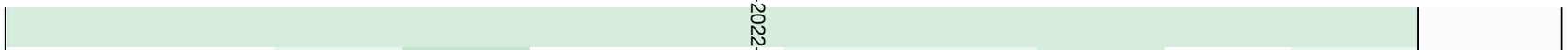
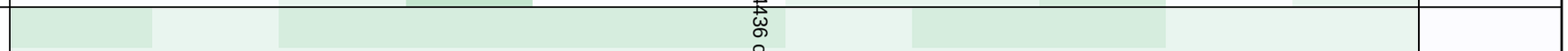
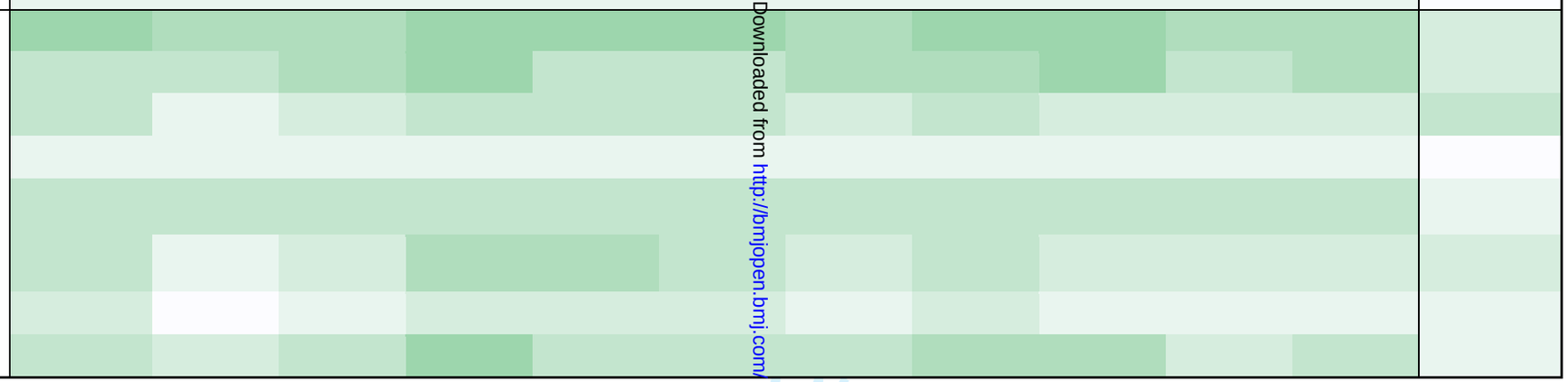


Figure 2

	CAPA Key Component											
CFIR Domain	**Leadership and Management**	**Language**	**Handle Demand**	**Choice Framework**	**Full Booking to Partnership**	**Selecting Partnership Clinician by Skill**	**Core and Specific Partnership Work**	**Job Plans**	**Goal Setting and Care Planning**	**Peer Group Discussion**	**Team Away Days**	**Fidelity to CAPA measured**
Intervention Characteristics												
Outer Setting												
Inner Context												
Characteristics of Individuals												
Process of Implementation												

Figure 3

		CAPA Key Component											
CFIR Domain	**CFIR Construct**	**Leadership and Management**	**Language**	**Handle Demand**	**Choice Framework**	**Full Booking to Partnership**	**Selecting Partnership Clinician Key Skill**	**Core and Specific Partnership Work**	**Job Plans**	**Goal Setting and Care Planning**	**Peer Group Discussion**	**Team Away Days**	**Fidelity to CAPA measured**
Intervention Characteristics	*Efficiency (clear procedures, Lean, Queuing theory, appropriate flow through service)*												
	Client-centred care, client choice												
	Measure/match demand (including meaningful data)												
	Evidence/support for model												
	Care quality												
	Improve accessibility/ improve referral pathway												
Outer Setting	*Government endorsement, external targets, external review*												
	Client need for culturally appropriate care/ cultural groups under-represented in client population												
	Specialized client population												
	General client population												
	Concerns about size of wait list/ long wait times												
	Hard to access care												
	High or increasing demand/ referrals												
	Stressed resources												

	Rural	
	Urban/Cosmopolitan	
Inner Context	*Multidisciplinary team*	
	Staff stress, burnout	
	Staff pressure, shortage, morale	
Characteristics of Individuals	*Lack of staff buy-in for model*	
	Staff skills	
Process of Implementation	*Leadership*	
	Formal training	
	Waitlist blitz	
	Emergency Choice added	
	Dedicated implementation team	
	Adapting mechanism/processes	
	Single access point	
	Regular meetings	

Supplementary File 1: Sample of database search queries

We searched the 20 databases noted below. Search queries included the terms "choice and partnership" and any of "approach, model, program" or similar terms in close proximity to the former. Queries were customized to each database but used the same search terms throughout.

Databases: PubMed, Ovid Medline, Embase, CIHAHL/ Ebsco, Web of Science, Cochrane, Dissertations & Theses Global, Nursing and Allied Health Database, Social Services Abstracts, Sociological Abstracts, Canadian Health Research Collection, health-evidence.ca, Institute for Health Economics, Grey Literature report, HSRProj, OpenDOAR, Scopus, ProQuest dissertations, OpenGrey, CADTH Grey Matters

Two examples of search queries:

MEDLINE	('choice and partnership* OR (choice and partnership*' adj2 (approach* OR model OR models OR program OR programs OR programme OR programmes))).ti,ab,kw,kf.
CINAHL	('choice and partnership*' N2 (approach or approaches or model or models or program$)) in ti,ab,subject

Supplementary File 2: Codebook for data extraction from included records

INFORMATION EXTRACTED FROM RECORDS	NOTES/INTRUCTIONS FOR REVIEWERS
Section 1 – DOCUMENT IDENTIFICATION	
Study Number	Enter the identification number of the record.
Authorship	Enter the last name of the first author.
Year	Enter the year the document was published. If the date cannot be determined from the document, write "Not reported."
Document Type	Select the item from the dropdown menu that best describes the document: - journal article - report - dissertation - abstract - book - web page - presentation notes/slideshow - media piece - other
Section 2 – OBJECTIVES	
Does this document include a research or evaluation component?	Select "Yes" from the dropdown menu if the document presents findings from a research or evaluation project. Select "No" from the dropdown menu if the document describes some feature of their implementation of CAPA (eg. their reason for transition or their implementation process) without including a data collection or analysis component.
Purpose of the document	Make a note of what the primary goal or aim of the document was as described by the author. Include the hypotheses, if any. If no aims are explicitly given, reviewers may state this and then make an inference regarding the purpose of the project.

Section 3 – METHODS	
Methodology and study or evaluation design	State whether the project uses a quantitative, qualitative, mixed methods, or review methodology. Then outline the study or evaluation design, as described by the authors. If the design is not described, enter "Not reported." Input a description of the study design based on reviewer inference if possible. Some common designs include: Quantitative: A) Experimental with controls (controlled trial) – allocation can be randomised by individual (RCT) or service/clinic (cluster RCT), quasi-randomized, or not randomized B) Experimental without controls (uncontrolled trial) – allocation can be randomised, quasi-randomised, or non-randomised in group/service without controls C) Observational, including cohort, case-control, cross-sectional, interrupted time series, controlled before and after, controlled post-test, pre- and post-test or post test. Qualitative: D) Method specified: E.g., ethnography, phenomenology, grounded theory, participatory action research, or case study E) Other – approach not defined, but used focus groups or interviews to collect data, conducted thematic analysis of transcripts, etc. Reviews/Syntheses: F) Systematic review (with or without or meta-analysis), narrative review, scoping review.
Baseline	Did the researchers measure usual care or outcomes BEFORE transitioning to CAPA? Select "Yes" or "No" from the dropdown menu.
Study period	State the period of time over which the observation(s) was (or were) conducted, if applicable.

Stakeholder/participant groups included	List the participant groups engaged/measured in this project. Common groups include: - clients/patients, or health records from clients/patients - families, caregivers - clinicians, healthcare providers - managers - administrative staff If no details about the engagement/participants are given, write "Not reported."
Numbers of participants	Provide the reported numbers of participants in each of the stakeholder groups outlined above, where applicable. Be sure to include both pre-and post-test sample sizes, or both control and experimental group sizes, where applicable. If no sample sizes or numbers of participants are given, write "Not reported."
Sampling/population characteristics	If applicable, provide details regarding the sampling strategy (e.g. convenience sample, purposive sample, randomized sample, etc.), as well as any additional participant details (e.g. limitations, participant ages, sex, gender, culture, ethnicity, socioeconomic status, etc.).
Theory	Does the document reference any theories, theoretical frameworks, principles, or models that explain the ways in which CAPA "works"? If so, list and provide a description of these, where applicable. List the references to these theories/frameworks provided by the author(s).
Data analysis	Provide a description of the procedures used to analyze the data collected in the study. If no data were analyzed, write "Not applicable."
Section 4 - CONTEXT	
Country	Enter the country in which the CAPA service or team is located.
Location	Enter any additional information regarding the location of the service(s) or team(s).

Characteristics of Individuals	Outline in point form any key factors described by the author(s) about the characteristics of individuals which comprise the team or service in which CAPA is implemented. Relevant kinds of details may include: - the characteristics of the individual staff and teams that impacted implementations (e.g. staff attitudes, buy-in, skills, knowledge of the intervention, etc.)
Inner Setting	Outline in point form any key factors described by the author(s) about the internal setting or environment in which CAPA is implemented (i.e. within the team or service). Relevant kinds of details may include: - client/patient needs - the service/team/organizations internal culture, communications, and climate that impacted implementation
Outer Setting	Outline in point form any key factors described by the authors about the outer setting (external to the service or team). Relevant characteristics may include: - community characteristics (such as urban or rural, socioeconomic characteristics) - the networking the service/team/organization has with other organizations - the external pressures from other organizations, policies, or incentives that impacted the implementation of CAPA - other social, cultural, or resource considerations
Rationale for choosing CAPA	Provide any description given by the author(s) regarding why CAPA was implemented. This can include a description of the problem(s) or issue(s) CAPA was chosen to address, as well as the process by which CAPA was chosen. If provided, include descriptions of the intervention characteristics that led to selection of CAPA as an appropriate model of care, such as its relative advantage over other models, its level of complexity as an intervention, and/or its cost.
Evidence Strength and Quality	If provided, state any explicit reference made by the authors to the evidence used to select the model. Sources of evidence may include published literature, guidelines,

	anecdotal stories from colleagues, information from a competitor, client experiences, results from a local pilot, and other sources.
Section 5 - IMPLEMENTATION	
Date of Implementation	State the year CAPA was implemented. If not stated in the document, write "Not reported."
Adaptation, planning, and process of implementation	If provided, state the ways in which CAPA was adapted to fit the local context and the rationale provided for these adaptations. This could include additional consultations to determine ways to adapt the model, or other adaptation procedures. If provided, state the process by which implementation of CAPA was planned by the service(s)/team(s) in the document. This may include convening planning committees or teams or conducting large-scale strategic planning procedures. If provided, give a description of the steps and procedures executed in order to implement/transition to CAPA.
Engaging leadership	If provided, give descriptions of any ways in which leaders or "champions" that spearheaded CAPA were attracted to or engaged in the planning and/or implementation of CAPA.
Fidelity to CAPA Model	Provide any description of compliance to the CAPA model that was given by the authors. This may include qualitative descriptions or quantitative measures such as ratings on the Pragmatic Rating Scale (PRS) or other instruments. Include the scoring from any quantitative measures provided by the author(s).
Quality Monitoring and Evaluation	If provided, give a description of how feedback on CAPA is collected and considered. Note that the document under review may itself be part of a quality monitoring or evaluation process.

Key Components Described	Describe the activities mentioned in the document undertaken to adhere to the 11 Key Components, 7 HELPFUL habits, and/or 4/5 Big Ideas of CAPA. The components include: - Leadership and management - Language - Handle demand - Choice framework - Full booking to partnership - Selecting partnership clinician by skill - Core and specific partnership work - Job plans - Goal setting and care planning - Peer group discussion - Team away days The 7 HELPFUL Habits include: - Handle Demand - Extend Capacity - Let go of Families - Process Map - Flow Management - Use Care Bundles - Look After Staff The 4 [5] Big Ideas include: - Choice - Core and Specific Partnership Work - Selecting Core Partnership Clinician - Job Planning - [Peer Group Discussion] If all components are described, write "All Components." If all habits are described, write "All Habits." If no elements are mentioned by name, write "None reported."

Relative Importance	If provided, give a description of which components of CAPA were considered more/less important to the overall implementation of CAPA.
Other implementation efforts	Describe any activities undertaken to adhere to CAPA that may not fit into the 11 Key Components, 7 HELPFUL Habits, or 4/5 Big Ideas described above.
Section 6 - OUTCOMES	
Health System Outcomes	E.g., number of patients/visits, wait times, prescription drug use, cost of service, emergency department visits
Acceptability Outcomes	E.g., client/family satisfaction, therapeutic alliance
Clinical Outcomes	E.g., symptoms, diagnostic categories
Emotional Outcomes	E.g., attitudes, feelings, well-being, burnout, values, beliefs; toward self, others
Functioning and Coping Outcomes	E.g., quality of life, self-care, resilience, coping
Relationship Outcomes	E.g., relationship with peers/teachers, family interaction, interpersonal conflict, communication
Compliance/ adherence Outcomes	E.g., appointment attendance
Workforce Outcomes	E.g., staff/clinician rates of turnover, efficiency, engagement, morale, satisfaction
Other Outcomes	Describe any other outcomes used that do not fit into the above categories, e.g., educational, justice outcomes.
Main findings	Write a brief 1-2 sentence describing the main findings, e.g. "The authors found that CAPA reduced waiting times by 25%."
Accounting for demographics	For quantitative analysis: Describes any variables the authors found to predict or explain differences in the outcomes or reveal how CAPA may have impacted different groups in different ways. Typical covariates include gender, age, race, education level, and symptom severity. We are interested in knowing if some groups benefited more than others. Report only those covariates that the authors tested. For qualitative analyses: If applicable, describe the ways in which analyses accounted for the population characteristics of the participants in the research.
Section 7 - Takeaways	

Barriers and Facilitators	What challenges or barriers to successful implementation of CAPA were described? What facilitators or supports to implementation were identified? State any factors the author(s) believed hindered/facilitated the implementation of CAPA. Note that these may be related to the environmental/context details reported in Section 3.
Study Limitations Identified by Authors	Summarize any limitations the authors identified in their methods or project approach, where applicable.
Study Limitations Identified by Reviewers	Summarize any limitations that you as a reviewer identify in the document that may not be discussed by the authors.
Research Recommendations	Summarize any recommendations provided by the author(s) regarding what methods, designs, topics, etc. should be included in future research.
Recommendations for Implementation or Policy	Summarize any recommendations provided by the author(s) regarding how they could have better adhered to CAPA in implementation or policies to support the model.
Congruence with Data	Do the recommendations the authors provide above follow directly from their data and findings, or their review of other evidence? Alternatively, are they based on anecdotes or speculation? Briefly state the source of these recommendations, where applicable.
Notes	Input any additional notes, comments or points of interest that may not be easily captured in the above sections.

Supplementary File 3: Characteristics of Included Records

RECORD	COUNTRY	RECORD TYPE	DESIGN	NUMBER/TYPE OF PARTICIPANTS, DATA
Clark 2018[13,a]	Canada	Journal article	Pre-post	154 pre-, 794 post-CAPA client records (wait times) 81 youth, 125 parent ESQ surveys
Wilson 2015[33]	Scotland	Journal article	Descriptive	2896 patient records (appointments)
Naughton 2018[14,d]	Australia	Journal article	Pre-post	33 pre-, 77 post-CAPA clients (Diagnoses and outcomes)
Naughton 2015[62,d]	Australia	Journal article	Pre-post	134 pre-, 338 post-CAPA client records (wait times) Clinician, manager meeting notes
Fuggle 2016[34]	England	Journal article	Pre-post	92 pre-, 66 post-CAPA client outcomes Clinician focus group
Robotham 2010[15,e]	England	Journal article	Descriptive	Phase I: 114 CAMHS teams Phase II: 53 CAMHS teams Phase IIIa: 6 CAMHS teams Phase IIIb: 62 clinicians and staff (Implementation and staff experiences)
York 2012[58,c]	New Zealand	Abstract	Not reported	Administrative data (wait times), families' satisfaction
Hong 2014[63]	Australia	Abstract	Descriptive	Administrative data (wait times)
Clark 2012[53,a]	Canada	Report	Pre-post	114 clinicians, 218 parents/caregivers post CAPA Administrative data (wait times)
Chugg 2009[35]	England	Journal article	Not reported	Administrative data (waiting lists)
Department for Children, School and Families 2009[36,f]	England	Policy/ practice guideline	Not reported	Administrative data (wait times)
Taylor 2010[37]	Scotland	Journal article	Descriptive	133 families (satisfaction)
Abidi 2014[54,a]	Canada	Presentation	Not reported	Administrative data (wait times)
Curtis 2010[38]	England	Report	Descriptive	Administrative data (capacity and demand, wait times)
Quintana 2017[16]	Canada	Thesis	Other	Administrative (HR resources, numbers of session, wait times)
Perry 2014[39]	England	Presentation	Descriptive	Administrative data (capacity and demand)

Murphy (n.d.)[55]	Canada	Presentation	Pre-post	Administrative data (waits times, no shows, flow, appointments) Satisfaction, team feedback
Falconer 2016[59,c]	New Zealand	Presentation	Descriptive	52 clients Implementation, wait times
Robotham 2009[17,e]	England	Report	Descriptive	Questionnaires: Phase 1a: 213 clinicians, staff Phase 1b: 53 CAMHS teams Phase 1c: 7 CAMHS teams Phase 2: 7 parents, 7 children/youth Focus groups/Interviews: Phase 2: 6 CAMHS teams, 3 parents, 6 children
Gardner (n.d.)[56,a]	Canada	Presentation	Pre-post	1521 Administrative data (wait times, referrals)
Boyd 2016[40]	Scotland	Report	Descriptive	Administrative data (wait times)
Black (n.d.)[60,b]	New Zealand	Presentation	Descriptive	52 children/families Clinician, staff feedback
York 2012[27,c,e]	Australia, New Zealand, United Kingdom	Presentation	Summary of research	Administrative data (wait times, capacity and demand, referrals) Client/ family feedback (survey, interview) Clinician, staff feedback Referrer feedback
Cooney 2019[32]	Scotland	Journal article	Descriptive	106 clients'/ family's administrative data (wait times, flow)
Brown 2021[57]	Canada	Report	Descriptive	116 surveys with clinicians, staff 50 interviews with clinicians, staff, and clients 3 focus groups with 14 service providers
Jones 2012[41]	England	Dissertation	Pre-post	Administrative data (wait times, attendance, referrals, flow) Clinician, staff feedback
Kingsbury 2006[29,b,g]	England	Web report	Descriptive	Client feedback from 100 families Focus group with clinician, staff
New Ways of Working 2008[42,b]	England	Web report	Descriptive	48 client/ family feedback
Kingsbury and York 2007[64,b]	Not reported	Web report	Descriptive	113 clinicians and managers Administrative data (wait times)
Stockbridge 2007[43,b]	England	Web report	Pre-post	Administrative data (wait times) Client/ family satisfaction
Jenkin 2006[30,b]	Scotland	Presentation	Pre-post	Administrative data (wait times) Clinician, staff feedback Referrer feedback

Chaloub 2009[44,b]	England	Presentation	Pre-post	Administrative data (wait times, flow) Clinician, staff feedback (3 teams)
Greaney 2009[61,b]	New Zealand	Presentation	Descriptive	Focus groups with 53 clients Youth and youth consumer advisor feedback
Barnes 2009[45,b]	England	Presentation	Pre-post	Administrative data (wait times) Family feedback Referrer feedback
Burhouse 2013[46,b]	England	Web report	Not reported	Administrative data (wait times) Client/ family feedback Clinician, staff feedback
Botros 2009[47,b]	England	Presentation	Descriptive	43 client/ family feedback
Thorpe 2010[48,b]	England	Presentation	Descriptive	132 client/ family feedback
Kingsbury 2006[31,b,g]	England	Web report	Descriptive	Focus group with clinicians
Fell 2010[49,b]	England	Presentation	Not reported	Administrative data (wait times) 17 clinicians' feedback
Stapley 2007[50,b]	England	Presentation	Not reported	Clients
Splevins 2007[51,b,f]	England	Web report	Descriptive	Clients
Unknown 2008[52,b]	England	Web report	Descriptive	Administrative data (wait times) Clinician, staff feedback
York nd[28,b,c,e]	Australia, New Zealand, United Kingdom	Presentation	Summary of research	Administrative data (wait times) Clinician, staff feedback

[a] Clark 2018, Clark 2012, Abidi 2014, and Gardner 2016 stem from the same evaluation.
[b] Kingsbury 2006 (1), New Ways of Working 2008, York 2007, Stockbridge 2007, Jenkin 2006, Chaloub 2009, Greaney 2009, Barnes 2009, Barnes 2009, Burhouse 2013, Botros 2009, Thrope 2010, Kingsbury 2006 (2), Fell 2010, Stapley 2007, Splevins 2007, Black n.d., and Unknown 2008 are captured in both York 2012 (2) and York n.d.
[c] York 2010 (1) and Falconer 2016 stem from the same evaluation and are both captured in both York 2012 (2) and York n.d.
[d] Naughton 2015 and Naughton 2015 stem from the same evaluation.
[e] Robotham 2009 and Robotham 2010 stem from the same evaluation and both are captured in both York 2010 (2) and York n.d.
[f] Splevins 2007 is reported as one of the case studies in Department of children, schools and families 2009.
[g] Kingsbury 2006 (1) and Kingsbury 2006 (2) report some of the same data and both are captured in both York 2012 (2) and York n.d.

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist: The Choice and Partnership Approach to community mental health and addictions services: A realist-informed scoping review

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	2 (Amended as per BMJ Open requirements)
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	4,5
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	5,6
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	5,19
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	6
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	5,6, Supplementary File 1
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Supplementary File 1
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	6
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	6, Supplementary File 2
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	6,7 Supplementary File 2

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	N/A
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	6,7
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	7, Figure 1
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	Supplementary File 3
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	N/A
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	8-13
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	Figures 2 and 3
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	13-16
Limitations	20	Discuss the limitations of the scoping review process.	13
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	16
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	17

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMAScR): Checklist and Explanation. Ann Intern Med. 2018;169:467–473. doi: 10.7326/M18-0850.

BMJ Open

The Choice and Partnership Approach to community mental health and addictions services: A realist-informed scoping review

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Keywords:	MENTAL HEALTH, Child & adolescent psychiatry < PSYCHIATRY, Organisation of health services < HEALTH SERVICES ADMINISTRATION & MANAGEMENT

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The Choice and Partnership Approach to community mental health and addictions services: A realist-informed scoping review

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Key words: Mental Health Services; Health Care Quality, Access, and Evaluation; Implementation Science; Choice and Partnership Approach; Scoping Review

Word count: 5676

Abstract

Objectives: The Choice and Partnership Approach (CAPA) was developed to create an accessible, child- and family-centred model of child and adolescent mental health service delivery that is adaptable to different settings. We sought to describe the state of evidence regarding the extent, outcomes, and contextual considerations of CAPA implementation in community mental health services.

Design: Scoping review.

Data Sources: Published and grey literature were searched using MEDLINE, Embase, CINAHL, PsycINFO, Scopus and Google to July 13 and 20, 2022, respectively.

Eligibility Criteria: We included reports focused on the implementation, outcomes (clinical, programme or system), or a discussion of contextual factors that may impact CAPA implementation in either child and adolescent or adult mental health services.

Data Extraction and Synthesis: Data were extracted using a codebook that reflected the five domains of the Consolidated Framework for Implementation Research (CFIR) and reviewed for agreement and accuracy. Data were synthesized according to the five CFIR domains.

Results: Forty-eight reports describing 36 unique evaluations were included. Evaluations were observational in nature; ten employed pre-post designs. CAPA implementation, regardless of setting, was largely motivated by long wait times. Characteristics of individuals (e.g., staff buy-in or skills) were not reported. Processes of implementation included facilitative leadership, data-informed planning and monitoring, and CAPA training. Fidelity to CAPA was infrequently measured (n=9/36) despite available tools. Health system outcomes were most frequently reported (n=28/36); few evaluations (n=7/36) reported clinical outcomes, with only three reporting pre/post CAPA changes.

Conclusions: Gaps in evidence preclude a systematic review and meta-analysis of CAPA implementation. Measurement of clinical outcomes represents an area for significant improvement in evaluation. Consistent measurement of model fidelity is essential for ensuring the accuracy of outcomes attributed to its implementation. An understanding of the change processes necessary to support implementation would be strengthened by more comprehensive consideration of contextual factors.

Strengths and limitations of this study

- A comprehensive search was employed to capture sources not found in the formal literature to provide a broad picture of the implementation of CAPA in mental health services.
- The Consolidated Framework for Implementation Research (CFIR) was followed to ensure thorough capture of relevant contextual constructs and to provide consistent terminology in our review.
- We recognize the possibility of publication bias introduced through the potential overrepresentation of positive experiences.
- While we did not assess the quality of included reports in order to include all relevant literature, we recognize this may have limited our ability to assess gaps in the literature.

Introduction

Mental health and addictions disorders are the most common sources of morbidity among children and youth in developed countries, affecting as many as one in five by age 15.(1–5) However, long wait times or other challenges in access mean that many young people do not receive care when they need it.(6–9) The delay or absence of appropriate care during childhood and adolescence is associated with poor outcomes, including increased severity of illness and the emergence of secondary disorders.(10)

The Choice and Partnership Approach (CAPA) was developed to create an accessible, child- and family-centred model of child and adolescent mental health service delivery that better matches care to needs. CAPA incorporates several features that differentiate it from traditional models of mental health service delivery. The philosophy underlying CAPA reflects a shift in clinician stance from 'expert with power' to 'facilitator or partner with expertise' and values the expertise the client and caregivers offer.(11) In response to a family-oriented recovery focus philosophy of mental health care in recent years, CAPA emphasizes a collaborative approach to mental health care where young people, family, or caregivers (a member of a young person's support network), and clinicians jointly develop treatment goals. The model also incorporates continuous quality improvement practices and data-informed decision making to improve efficiency and effectiveness.(12)

CAPA consists of 11 key components: Leadership, Language, Handle Demand, Choice Framework, Full Booking to Partnership, Selecting Clinician, Core and Specific Work, Job Plans, Goal Setting, Peer Group Discussion, and Team Away Days. The creators of the model posit that the totality of the 11 components is greater than the sum of the parts and implementation of all components is required to successfully transform services.(11) The implication is that implementation of only select components, or a 'CAPA-lite' version of the model, is likely to lead to poor results, reflecting a failure in implementation rather than a failure of the model.(11)

The model is intended to work "in any setting, culture, health organisational system and language".(11) To date, CAPA has been implemented in community-based (or "outpatient") mental health and addictions services in the United Kingdom, Australia, New Zealand, Norway, Belgium, Ireland, and Canada.(11) Despite being grounded in evidence-informed elements such as demand and capacity theory, elimination of waste, shared decision making, and outcome measurement, there has been little evidence of formal evaluations of CAPA implementation in the published literature.(12–17) As mental health systems face significant pressures to provide timely access to effective services, there is a need to better understand the current scope of evidence and to identify any implications of context on successful implementation and expected outcomes.

The aims of this scoping review are therefore twofold: 1) to gain an understanding of the extent and outcomes of the implementation of CAPA in community mental health and addictions

services; and 2) to identify how context influences the implementation of CAPA and resulting measurement of client and system outcomes.

Methods

Overview

A scoping review approach was selected after initial searches of academic journals revealed much heterogeneity, indicating that the evaluation of the implementation and efficacy of CAPA is an emerging field of study.(18) The protocol for this scoping review was published a priori (https://bmjopen.bmj.com/content/9/12/e033247).(19)

Review Steps

This scoping review follows the steps proposed by Arksey and O'Malley (20) and revised by Levac and colleagues.(21) We recognize that the evaluation of formative outcomes in addition to traditionally reported summative outcomes is necessary to establish the success of implementation of health care interventions such as CAPA, as well as support sustainability and dissemination in other contexts.(22) Our overarching program of research has adopted a realist paradigm developed by Pawson and colleagues to aid in understanding the role of context in the implementation of CAPA—specifically, how mechanisms (the implementation and individual reactions to the key components of CAPA) are influenced by context to produce expected (or unexpected) outcomes.(23,24) The Consolidated Framework for Implementation Research (CFIR) offers a comprehensive framework for capturing information about context in that it encompasses many implementation theories while including important constructs not included in individual theories.(22) We employed the CFIR in the analysis to ensure thorough capture of relevant constructs related to contextual barriers or facilitators of implementation, and to provide structure as well as to use consistent terminology in our review that would also allow comparison with other studies employing the CFIR.(22) The CFIR is organized by five contextual domains: intervention characteristics, outer setting, inner setting, characteristics of the individuals involved, and the process of implementation.(22) This review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR)(25) and the Realist And Meta-narrative Evidence Syntheses: Evolving Standards (RAMESES) publication standards.(26)

Identifying the Research Question

Within our program of research, our overarching research question is, 'To what degree does CAPA work, for whom, and under what circumstances?' (https://www.healthyyoungminds.ca). This scoping review, therefore, serves both to 1) describe the extent and measurement of the outcomes of the implementation of CAPA in community mental health and addictions services; and 2) identify the role of context in implementation.

Identifying Relevant Records

We developed the search strategy in consultation with a medical librarian.(18,21) Sources included both published and grey literature. We conducted an initial search to familiarize ourselves with relevant terminology, which we incorporated into the search queries in multiple databases representing research from health care, social work, and social sciences (MEDLINE, Embase, CINAHL, PsycINFO, and Scopus). Records from January 1, 2005 to July 13, 2022 were considered for inclusion. Please see Supplementary File 1 for our full search strategies.

Our database search was augmented by hand searching the reference lists of all included records, soliciting records from professional contacts, and by reviewing the first 100 most relevant results of Google searches for "choice and partnership approach" and for "CAPA", updated to July 20, 2022.

Given the iterative nature of scoping reviews, we revised several aspects of the search strategy after publishing the study protocol. Deviation from the search methods outlined in the protocol include the databases that we searched, and the search terms used. The following databases were excluded due to their lack of unique or relevant content: Academic Search Premier, ERIC, Cochrane, Dissertations Abstracts, NCBI Bookshelf, PubMed Central and the Canadian Health Research Collection. Web of Science was excluded due to subscription cancellation at the researchers' institutional library and replaced with Scopus. The database and grey literature searches were also expanded to include the term 'CAPA', in an effort to capture literature referring to the program by acronym only. As the term 'CAPA' is not specific to the Choice and Partnership Approach, the grey literature (Google) search added the terms 'approach' or 'model' or 'program' or 'programme' to improve the relevance of the search using the acronym.

Selecting Records

After identifying potentially relevant literature, two members of the research team (LAC and SC) independently screened records based on title and abstract. Records that could not confidently be excluded were carried forward to full-text screening. The reviewers met at the beginning, midpoint, and end of the process to discuss challenges and resolve any ambiguity with the inclusion criteria. Any discrepancies were resolved via discussion, reaching consensus on each.

We used the following criteria to determine eligibility of records for inclusion:

1) Focused on CAPA, including its implementation, outcomes, or a discussion of contextual factors that may impact its implementation.
2) Outcomes may include clinical, programme or system outcomes.
3) Study population included child and adolescent or adult population in a community mental health and addictions setting.
4) Context or setting was not limited.
5) Examined CAPA in its entirely, not just a component(s) of the model.

We did not exclude records based on methodology, quality of evidence, outcomes, the stage of CAPA implementation, record type, language, or country of publication.

Charting the Data

Team members LAC and SC independently extracted data from the eligible records using a codebook developed in consultation with team members that reflected the five domains of the CFIR (22) and included categories such as document identification, objectives, methods, contexts, implementation, and outcomes. (Please see Supplementary File 2 for the detailed codebook.) The CFIR guided both data extraction and summation/interpretation, as we explicitly and systematically considered how context(s) were described in included records relative to the implementation and function of CAPA.(22)

After independently coding three records, LAC and SC compared data extraction to address any discrepancies and refine the codebook. Once completed, data extraction was reviewed for agreement and accuracy. Any discrepancies were minimal and were resolved by consensus.

Collating, Summarizing, and Reporting the Results

We followed Levac and colleagues'(21) extension of Arksey and O'Malley's approach,(20) by analyzing the data using both numerical summary and thematic analysis to create a narrative synthesis and identify knowledge gaps. Data were first summarized as frequencies and ranges. Contextual and process-oriented data were then analyzed using thematic analysis, mapped to the five CFIR domains.(22) Lastly, the resulting themes were reviewed by content experts on the team (SC, JC, DE, JM) to verify and frame findings.

Consulting with stakeholders

Following the recommendation of Levac and colleagues,(21) we included Arksey and O'Malley's optional sixth step: consultation with stakeholders to increase methodological rigour and assist in framing our findings.(20) Our research team includes researchers, clinicians, health system administrators, and policymakers. Several members of our team (SC, JC, DE, JM) are practising psychologists with direct experience in the implementation of CAPA. Further, we reviewed our results more broadly with staff, multidisciplinary clinicians, and administrators working in mental health and addictions services in different contexts (e.g., general and specialised mental health and addictions services, urban and rural settings) during a day-long research workshop to assist in framing our findings and developing the recommendations presented in our discussion section.

Patient and public involvement

While our overarching program of research into the implementation of CAPA includes the involvement of clients and families or caregivers (see https://www.healthyyoungminds.ca), our review did not include direct involvement of clients (patients), families, or the public. However, its undertaking was motivated by the observed need to better understand the barriers to and facilitators of the successful implementation of a client- and family-centred model of mental

health and addictions services. It is anticipated that the results of this review will inform implementation and evaluation efforts, ultimately supporting improved outcomes for young clients and their families.

Results

Our database searches yielded 953 records (664 unique). The Google searches produced another 134 records. We obtained one record by soliciting our professional contacts and 16 via hand search of the reference list of previously included records. During the full-text screening phase, 170 records were assessed for eligibility and 48 records (corresponding to 36 unique evaluations) met our inclusion criteria and were included for data extraction. A detailed description of search results, along with reasons for exclusion, is presented in Figure 1.(27)

In some instances, individual evaluations were presented in multiple formats (e.g., report, journal article, and presentation), which we refer individually to as "reports". We included all reports to ensure capture of contextual information, but for the purposes of synthesis of findings, we considered reports at the level of the evaluation to avoid double counting. Two reports (28,29) represented ad hoc summaries of CAPA evaluation efforts prior to 2010, so included several of the evaluations (n=17).

Characteristics of Included Reports

Characteristics of included reports are listed in Supplementary File 3. Publication dates ranged from 2006 (30–32) to 2022 (33). All reports were written in English. Reports were limited to four regions: the United Kingdom (UK),(15,17,28–32,34–57) Canada,(13,16,33,58–63) New Zealand,(28,29,64–67) and Australia.(14,28,29,68,69) Despite CAPA having also been implemented in Norway, Belgium, and Ireland, we did not identify any reports from these settings in our searches.

Most evaluations (n=31/36) were local or regional in scope and situated in urban centres or mixed urban, suburban, or rural settings;(13,16,30–32,34–37,39–54,56,58–62,66,67,69) one described a rural context.(14,68) Two represented national evaluations of child and adolescent mental health services (CAMHS) that had implemented CAPA across England(15,17) and New Zealand(64,65). Only three evaluations included services that provide care to adult and/or geriatric populations.(16,28,29,62)

The evaluations did not include any experimental designs, and few (n=10/36) reported pre-post comparisons.(13,14,31,36,43,45–47,54,58,60,61,63,68) Sampling strategies, when described (n=7/36 evaluations), were largely of convenience(13,15,17,34,36,39,43,58,68); none employed random selection.

Context–The Intervention

Many (n=20/36) evaluations reported the motivation for the implementation of CAPA, including to reduce wait times or waiting lists,(13,14,33,35,37,39,43,55,57–59,62,62–64,68) improve efficiency,(14,34,35,38,40,42,69) improve care quality, service user experience, or accessibility,(13,17,40,56,69) choice in service,(39,41,43,60,68) meet service demands or client needs or values,(14,15,17,39,42,58,60,68) provide client-focused service,(15,17,41,43,58,60) support staff,(40,43) provide transparency,(39,40) and provide meaningful data.(40) Few evaluations (n=10/36) cited theories supporting how CAPA or its components 'work'; those that did most often reported that CAPA's strength as a service delivery model is in its efficiency in managing demand/capacity.(13–17,33,35,36,43,55,58,63,68,69) Fewer evaluations (n=5/36) mention that CAPA 'works' because it provides client-centred services.(17,35,41,43,62)

Context–Inner Setting

No evaluations reported the CFIR inner setting constructs of 'structural characteristics' (e.g., the social architecture, age, maturity, and size of an organization or service), 'networks and communications within the organization', 'culture' (i.e., norms and values), or 'readiness for implementation'.(22) An evaluation of CAPA implementation in a specialist setting reported that clinicians felt stressed and overwhelmed by workloads prior to implementing CAPA.(40) Other sources reported organizational challenges such as staffing issues (clinical staff (69) and psychiatry(59) understaffing, mismatch of clinician skills for client population,(60) and procedural problems (e.g., complex assessment process,(68) poor throughput,(68) and arbitrary intake process(69).

Context–Outer Setting

Some (n=14/36) evaluations referred to constructs within the CFIR outer setting domain, including 'client needs and resources', 'community characteristics', and 'pressures, policies, or incentives that implicate the service'.(22) Services described caring for complex, severely ill, or special client populations(68) dispersed populations,(57,68) or populations with a wide range of needs,(36) and two served specific care populations (clients with mood and anxiety disorders,(16) and learning disabilities.(34,57)) One reported redesigning their centralized referral system and creating specific care clinics for severely ill clients, or those requiring specialized skill sets, to support the implementation of CAPA.(13) Other considerations included culturally relevant care for Māori and Pacific clients in New Zealand,(64,65) and Indigenous and racialized communities in Nova Scotia, Canada(62).

CAPA implementation often occurred within contexts of low resources,(36,58) pressure to meet or maintain the ability to meet demand,(17,42,58,61,65,69) lack of second-tier services,(68) increasing expectations from the public,(65) challenges in access to care (due to long wait times,(15) lack of second tier services,(68) siloed or fragmented services,(59,60) or poor

coordination of services(60,68)), or inequitable access,(17) and the need to provide high quality, evidence-based care.(15,17,36,69) The UK and New Zealand governments influenced implementation through directives aimed to ameliorate challenges in mental health service delivery by setting goals for mental health care, including wait time benchmarks.(36,43) Some services cited UK government endorsement of CAPA as a means of improving service efficiency, adding value, eliminating waste, and reducing wait times.(34,35)

Context –Characteristics of Individuals

Evaluations did not report the characteristics of individuals in the service who were implementing CAPA, such as their knowledge and beliefs about CAPA, self-efficacy, individual stage of change, identification with the service or organisation, or other personal attributes that may affect implementation.(22) One evaluation reported that major concerns for clinicians prior to adopting CAPA were that the quality of care would be negatively affected by increased client throughput, leading to poorer outcomes and that there would be difficulties in handing over families between clinicians from Choice to Partnership.(36) However, these did not emerge as major themes in their findings post-implementation.(36) Another evaluation suggested that considering individuals' readiness to change would be important for employing appropriate change strategies, such as support networks.(43)

Context–Process of Implementation

Efforts to support adaptation and planning for the implementation of CAPA were varied and included the development of implementation teams,(68) formal(43,55,68) or informal(60) planning meetings or Team Away Days to discuss CAPA,(17,55,60,65,66,68) and the collection of data regarding client needs or clinical presentations(69) or the service capacity (e.g., determining the number of available Choice and Partnership appointments or the skills within the service).(40,60,69) Services conducted waitlist blitzes (periods of time during which waitlists are reviewed for determination of individuals' eligibility for entrance to the service and match with capacity(70)),(13,17,43,45,48,60,63,68) articulated eligibility and redirection criteria,(60) or staggered implementation across teams to facilitate implementation.(15,68) Some adapted their services by redistributing clinicians from specialist to multidisciplinary teams,(13) creating emergency Choice appointment tiers to ensure wait time targets for both children in crisis or not in crisis,(68) creating care bundles,(40) or enhancing supports for less experienced clinicians to conduct Choice appointments, such as by pairing with more experienced clinicians or providing training.(15,17) In two instances, adaptations of CAPA such as those requiring all clients to be seen by a psychiatrist(16) or limiting the number of sessions with clients(62) were incompatible with the CAPA model.

Key themes related to CAPA implementation observed across the evaluations emerged, including facilitative or engaged leadership, data-informed planning and monitoring, and training

in CAPA. Facilitative leadership was identified as a key contributor to successful implementation.(15,17,30,40,43,60,65) While full commitment from senior leadership was identified to be important,(40,60,65) the need for consistent, clinically informed leadership was deemed critical to successful implementation.(15,17,65) Clinical leads and managers with clinical backgrounds offered credibility and the ability to liaise effectively with all team members(15,17) as a starting point, but alignment of the services' senior leadership was critical for consistent messaging and ongoing support during system transformation.(65) Champions or change leaders in management were noted to be influential by promoting staff buy-in,(17,43,65) but they needed to be well-respected, knowledgeable about CAPA, responsive to staff concerns(17) and represent all parties involved(43) to be effective.

Engagement of leadership was operationalized in various ways, including through the collaboration of clinical leads or senior clinicians and service managers,(17,60,68) weekly meetings of clinical team leaders,(13) and regular email updates and weekly drop-in sessions discussion of general CAPA issues to bridge the gap between once monthly meetings.(43) Pressure to implement CAPA from senior management outside the team could lead to inadequate preparation (in terms of lack of time and/or resources, or adequately prepared team management) for implementation, which in turn may have caused resistance from the teams themselves.(17,65)

Team Away Days, one of the 11 core components of CAPA, were noted to provide opportunities for implementation planning, reflection and evaluation of CAPA to improve the service,(17,60,65,66,68) While monitoring and feedback to teams were deemed essential for identifying "teething problems"(17) or "drift"(65) during implementation, very few evaluations (n=2) reported ongoing quality monitoring activities, such as robust information and data collection systems within teams or processes for review.(42,65) Monitoring was supported by the development of process goals and metrics,(13,65) but was noted to be done largely manually by teams,(17) or as individual audits.(15,35,36,40,68) Lack of feedback was identified as a barrier to implementation.(17)

CAPA training was reported to be important for supporting successful implementation,(13,17,36,43,58,60,66) but was noted to be variable in intensity between services.(17) Importantly, training was identified as a means of providing opportunities to address misconceptions of the model,(17) which included the common misunderstanding that CAPA limits the number of sessions per client,(17,33,62) and the assertion that the model is based on averages without means for adjustment.(16)

Mechanisms–CAPA Components and Fidelity to the CAPA Model

From a realist lens, Pawson and Tilley conceptualized mechanisms as a combination of both resources and stakeholders' reasoning in response.(23) Accordingly, we sought to capture the reporting of the 11 key components of CAPA both in terms of resources and responses.

Of the 11 key components of CAPA, the Choice components, Choice Framework"(13–17,30,34,35,38,40,43,60,61,65,66,68) and "Handle Demand" (15,17,28,36,38,40,41,43,60,68) were most often cited, while the Choice component "Language" was cited less frequently.(15,17,38,60,68) One evaluation noted that while a change in language was met with mixed views by clinicians, particularly more experienced clinicians who held on to the traditional language of assessment and treatment, inclusive language was identified as a core theme related to successfully moving from a model of diagnostic assessment to one of joint formulation and goal development.(68)

Few evaluations reported fidelity to the CAPA model (n=9/36); those that did either counted the number of the 11 key components implemented,(15,17,28,29,65,71) or scored the CAPA Component Rating Scale (CAPA-CRS).(13,45,48,53–55,72) None reported full fidelity. In the evaluation of CAPA across England, of 53 CAMHS teams who implemented CAPA and responded to follow-up questionnaires, 28 were self-reported "medium implementers" (implemented 5-7 of the 11 components) and 18 were "high implementers" (implemented 8+ components).(15)

Context and Mechanisms of Implementation

Figure 2 consists of a heat map that depicts the frequency by which the key components and fidelity to CAPA were reported by the five CFIR domains at the level of evaluations (to avoid upweighting cells by 'double counting' reports). Cells with higher intensity shading represent larger numbers of evaluations in that cell. Outer setting factors were most often described, and characteristics of individuals were least often described in evaluations of the implementation of CAPA.

Services that reported outer setting pressures (e.g., needing to reduce wait times or increase throughput) often reported implementation of the process-related components of CAPA, such as Handle Demand, Choice Framework, Care Planning, and Job Planning. Fewer reported the more philosophically oriented components such as Language, Peer Group Discussion, or Team Away Days.

Each of the five CFIR domains consist of several constructs. To further examine each of the CFIR domains, we also mapped the frequency by which the key CAPA components and fidelity to CAPA were reported by individual CFIR constructs (see Figure 3 heat map). With respect to intervention characteristics, the efficiency of CAPA (e.g., clear procedures, lean thinking, queuing theory, or flow through service) was the most commonly reported construct, followed by client-centred care or client choice. Those evaluations citing the efficiency of CAPA most often implemented the Choice Framework, Job Planning, and Goal Planning/Care Planning components. In terms of outer setting constructs, Government endorsement, external targets, or external review and long wait times were the most frequently cited and most often reported the implementation of the Leadership and Management, Choice Framework, Job Planning, and Goal

Setting/Care Planning components. Within inner contexts, staff pressure, shortage, or morale were most often cited.

Reporting of the characteristics of individuals within teams or services (e.g., knowledge and beliefs about the model, staff buy-in, personal stage of change, staff skills) were notably absent; however, staff skills were reported in one evaluation that implemented all CAPA key components.(68)

Several constructs associated with the process of implementation were reported, most commonly relating to leadership, formal training of team members, dedicated implementation teams, and regular meetings. Less frequently, teams reported service-specific adaptations such as the addition of Emergency Choice streams or single access points to the service. As with other CFIR constructs, these were most often reported with the implementation of Choice Frameworks.

Outcomes of Implementation

The most frequently reported outcomes were related to the health system (n=28/36 evaluations) (13–17,28,29,31,34–36,38,40–43,45–48,50–55,57–61,63–69,71) and workforce (n=19/36 evaluations)(13,15–17,28–32,36,38,40,43,46,48,51,53,54,58–61,65,66,68,69). Health system outcomes included numbers of clients seen by the team or service (including numbers of accepted referrals and first visits or Choice appointments),(13,14,16,17,28,29,36,42,46,61,65) proportions of clients going on to attend second visits or referred elsewhere,(14,17,35,36,41,43,45,46,60,66) wait times to first appointment (Choice appointment),(13–17,28,29,31,36,40–43,45–48,50,54–61,63–66,68,71) wait times from Choice to first Partnership appointment or between Partnership appointments,(13,15–17,28,29,41,46,48,51,58,61,63,65) wait time targets,(28,29,38,42,43,53,71) waiting lists,(17,37,56,58,68,69) and "no-show" or "did not attend" rates.(13,17,28,29,31,41,43,46,58,60,66)

Workforce outcomes included job satisfaction, staff stress, morale, confidence, or engagement,(15,17,28–30,32,38,40,43,46,48,53,54,65,66,69) efficiency or provider productivity,(13,46,59,61,66) collaborative teamwork or team cohesion,(15,17,28–30,32,38,59,60,66) caseloads,(46,60,66,68) and transparency or accountability between clinicians or with clients.(17,36,59,65)

Acceptability of CAPA was captured (n=16/36 evaluations) from the perspectives of children, young people, and families.(13,17,28–31,36,39,44,45,47–50,58,60,64,66,67) Measures of client and family experience included the Experience of Service Questionnaire (ESQ)(13,30,31,36,39,47,63,73) and the locally developed CAPA or Choice Experience Questionnaires (CEQ).(30,36,47) Clinical outcomes were infrequently captured (n=7/36 evaluations)(14,30,31,36,41,64,66) and reported only in child and adolescent services, with teams measuring service effectiveness through the capture of treatment goals,(36,41,64,66) the Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA),(14,74) the

Child Behaviour Checklist (CBCL),(66,75) the Strengths and Difficulties Questionnaire (SDQ),(31,76) and an adapted clinician-rated Clinical Global Impressions Scale (CGI).(36,77) Only three evaluations reported pre-/post-CAPA changes in clinical outcomes.(14,31,36)

Follow-up periods were short, with the longest follow-up of health system outcomes reported to be 18 months following implementation,(68) and clinical outcomes to the point of closure or transfer or from the service.(14,36) The national evaluation of CAPA implementation in England included perspectives of clinicians in services with an average of 18 months following implementation (range 7-30 months).(15,17)

Discussion

In this comprehensive scoping review, we identified 48 reports stemming from 36 unique evaluations of the implementation of CAPA. CAPA has been implemented in countries with differing health systems and opportunities for private/public health insurance. However, regardless of country of implementation, the transformation of mental health services through the implementation of CAPA is often undertaken by small teams without the resources to conduct formal evaluations or research. As such, we recognized the need for an inclusive search strategy to accurately capture the scope of implementation and to identify important considerations regarding context that may not appear in the formal literature. Accordingly, we did not restrict our search by methodology, quality of evidence, outcomes, the stage of CAPA implementation, report type, language, or country of publication. While we did not assess the quality of included reports in order to include all relevant literature and provide a comprehensive overview of the scope of implementation, we recognize this may have limited our ability to assess gaps in the literature.(78) We are also aware of the possibility of publication bias introduced through overrepresentation of positive experiences.

Evaluations of CAPA implementation were exclusively observational in design, with some (n=10/36 evaluations) considering baseline or pre-CAPA data for comparison.(13,14,31,36,43,45–47,54,58,60,61,63,68) At a minimum, the routine inclusion of both pre- and post-CAPA implementation data would strengthen the evidence base. As CAPA is a highly complex intervention intended to be adapted to meet the needs of individual services that function in different contexts and health systems, often with limited research and/or data resources, randomised controlled trials (RCTs) are likely infeasible and may not capture noteworthy contextual considerations necessary for successful generalizability and implementation.(79) More pragmatic designs that capture important sources of heterogeneity, such as well-designed controlled before-and-after, interrupted time series, or stepped wedge cluster trial designs—provided resources are available to support the latter's complex conduct and analysis— are likely more useful for informing policy recommendations.(80,81) Mixed methods approaches would offer the opportunity for triangulation of theory, data, and previous evaluations.

Demand and capacity concepts,(82,83) lean thinking principles,(84) and queuing theory(85) all suggest that tracking demand and service capacity within a quality improvement framework to support review allows for better planning and more efficient use of resources. However, the lack of data for providing feedback to clinicians and staff and for monitoring ongoing service performance and client outcomes was identified as a common barrier. Meaningful and timely data collection is noted to be a considerable gap for many mental health services, and particularly so for small, often under-resourced teams with little access to administrative or database infrastructure or supports. A recent systematic review revealed that despite the benefits of data-driven learning health systems, there remain significant challenges in uptake in health care more broadly due to barriers related to governance and regulatory systems, and technical, quality, and interoperability problems.(86)

Meaningful evaluation of CAPA implementation would also be strengthened by consideration of fidelity to the model. Our review captured inaccuracies in the interpretation and application of CAPA, which likely contribute to unsuccessful implementation.(16,17,33,62) The architects of CAPA strongly encourage implementation of all 11 key components; noting that “using CAPA principles” or implementing “CAPA-lite” is unlikely to lead to meaningful system transformation or may reflect reluctance to change.(11) However, few evaluations reported fidelity to the model. This may reflect the state of change at the time of measurement, or incomplete implementation. Future evaluations should include measurement of fidelity to CAPA to ensure the accuracy of outcomes attributed to the model (both positive and negative) and to support ongoing monitoring to help prevent falling into previous ways of working. Without measuring and reporting on the fidelity to the CAPA components, it is impossible to know what in the implementation of “CAPA” was changed in the way the service was organised and what the client and family may have experienced in their care. Incomplete or unsuccessful implementation that results in poor outcomes may be incorrectly reported as CAPA "doesn’t work”. Measurement tools designed to assess fidelity to the CAPA model include the CAPA Component Rating Scale (CAPA-CRS),(72) CAPA Pragmatics Rating Scale (CAPA-PRS),(87) and the CAPA FACE: The Fidelity Assessment and Component Evaluation.(88)

Our review offers important insights into considerations of context in implementation efforts. Most evaluations reported CFIR constructs falling under the ‘intervention characteristics’, ‘outer setting’, and ‘implementation process’ domains. There was limited information available regarding the inner context (e.g., team composition or service milieu) or the characteristics of individuals (e.g., staff buy-in or skills). This is notable, as the implementation of CAPA often requires significant service transformation at the heart of which clinicians and staff are required to change, which may include shifting from a known way of working (typically introduced in training) and embracing new identities and new tasks in an unfamiliar system and often while a system is under stress.(89,90) Future evaluations would be strengthened by attention to and measurement of constructs associated with the characteristics of the service team and individual

members, and leadership and change processes to support the analysis of their impact on successful implementation.

The stance of CAPA, while centred on the client and family experience of care, was not reported to be the primary motivator for teams in selecting this approach to care as system accessibility problems are typically the focus for initiating change of this magnitude. While services in the United Kingdom and New Zealand cited government directives intended to improve service delivery, our review demonstrates that CAPA implementation efforts, regardless of setting, were largely motivated by needs to reduce wait times and to improve efficiency of services. As it is possible to improve initial waits to Choice (first) appointments at the expense of waits to or between Partnership appointments, it is essential to consider all wait times throughout the client experience of care.(15,17) Because improved wait times are often an outcome of CAPA implementation, further exploration of teams' understanding of the client experience as a motivator may provide additional valuable implementation guidance.

Perhaps stemming from the motivation for implementation, or the relative ease of capture, the most commonly reported outcomes were those related to the health system (e.g., wait times, percentage of clients seen within target time periods, or attended visits) and workforce outcomes (e.g., staff experiences). While some evaluations benefited from pre- and post-CAPA implementation audits supported by service data, an important limitation of administrative data is that attended sessions do not necessarily represent those required to meet client needs, so may underestimate need.(34) A critical problem in the evaluation of CAPA, and of mental health services in general, is in the lack of measurement of client outcomes. In our review, only seven evaluations reported clinical outcomes, all reporting positive findings.(14,30,31,36,41,64,66) However, only three measured changes from baseline.(14,31,36) Patient-reported outcome measures (PROMS), such as the Revised Children's Anxiety and Depression Scales or Goal Based Outcome Tool, while recommended by health care systems internationally and demonstrated to benefit shared decision making,(91) were not often reported. Of the four evaluations that reported whether goals were set,(36,41,64,66) only one captured post-treatment ratings, for which only half of the clients with baseline goals had post-treatment ratings for analysis.(36) The paucity in measurement and reporting of client outcomes is commensurate with existing literature,(92) and within mental health care has been a particular challenge as there is no standard for outcome measurement in clinical practice and recent standardization of measures for research have the potential to introduce unintended consequences including lack of transferability, and narrowness of scope.(93) Importantly, meaningful outcome measurement requires an understanding of the nuances or potential differences between measuring what matters to clients and families and what is often required for reporting to governments or other payers.

Similarly, the views of families or caregivers were underrepresented among our findings. In the national evaluation of CAPA implementation in England, a key challenge identified was that of accessing the views of families.(17) The authors noted that few attended the focus groups, and

among those who did, none had heard of CAPA.(17) They posit that the topic area may not be of relevance to families, or recruitment may have been hampered by Research Ethics Committee restrictions on direct recruitment by research teams. It would also be reasonable to consider that families may not know what "CAPA" is as for them it may just be the way a team works, which may be a function of how we talk with families about the way that services work both in their delivery and evaluation.

Conclusions

The transformation of mental health services to those that place clients and families at the centre of care, can measure client-centred outcomes, tailor care, and actively engage clients and families in the care process as aligned with the CAPA model, often requires major philosophical and organizational shifts in the way services are delivered and evaluated. Evaluations of implementation of CAPA in the face of complex system change would benefit from the consideration and capture of contextual factors to support its adaptation to different settings, measurement of fidelity to the model to ensure the validity and reliability of findings and to provide feedback during ongoing implementation, consideration of constructs related to the inner contexts of services (e.g., team composition, staff pressures) and characteristics of the individuals involved in or affected by implementation (e.g., staff buy-in for the model, skills, and readiness for change), and the consistent capture of outcomes of importance to clients and families. Equally important are avenues for sharing experiences between teams, identifying facilitators and barriers to successful implementation, creating reliable evaluation and research metrics, and sharing practice challenges that appear to be common during mental health service transformation within Western health care systems.

Author contributions

LAC, SEC, JC, DE, JM, AM, GW, and LW collaborated on the proposal and methodology. LAC and SEC jointly extracted data. LAC and SEC conducted the data analysis and initial interpretation. LAC wrote the original draft and all authors reviewed and contributed to the revision of the manuscript.

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Competing Interests

None to declare.

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Data Sharing Statement

All data included in the review are available by means of the provided references.

Ethics Approval

The IWK Health Research Ethics Board approved the overarching research project, including this review (Title: Transforming Care in Nova Scotia: Implementation of Health System Change in Child and Adolescent Mental Health and Addictions, Project #: 1024356).

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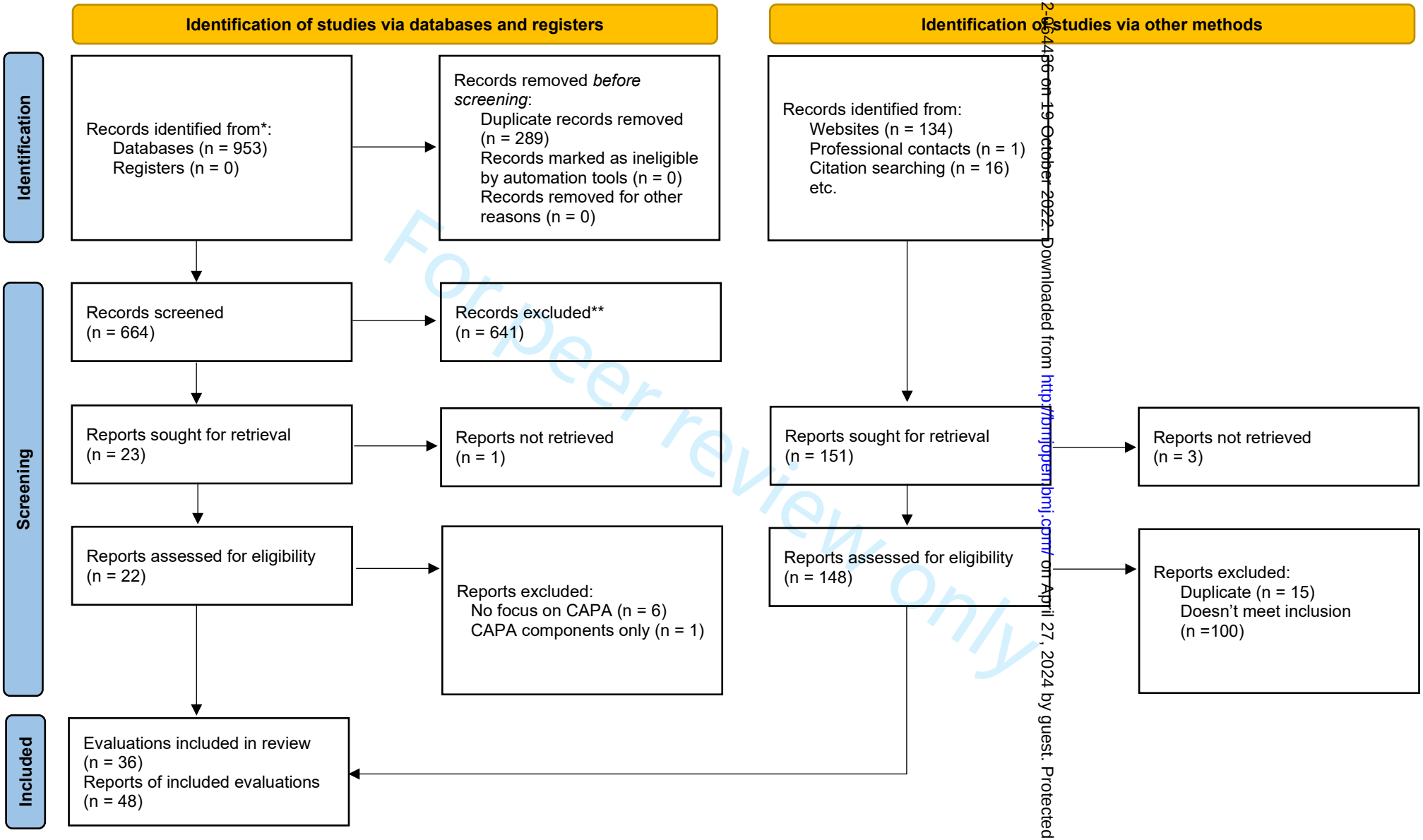
Figure Legend

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Scoping Reviews (PRISMA-ScR) flow diagram of the Choice and Partnership Approach to community mental health and addictions services

Figure 2: Heat Map Depicting Frequencies of Evaluations Reporting Key Components of CAPA by CFIR Domains

Figure 3: Heat Map Depicting Frequencies of Evaluations Reporting Key Components of CAPA by CFIR Constructs

Figure 1



PRISMA 2020 flow diagram *From:* Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

Figure 2

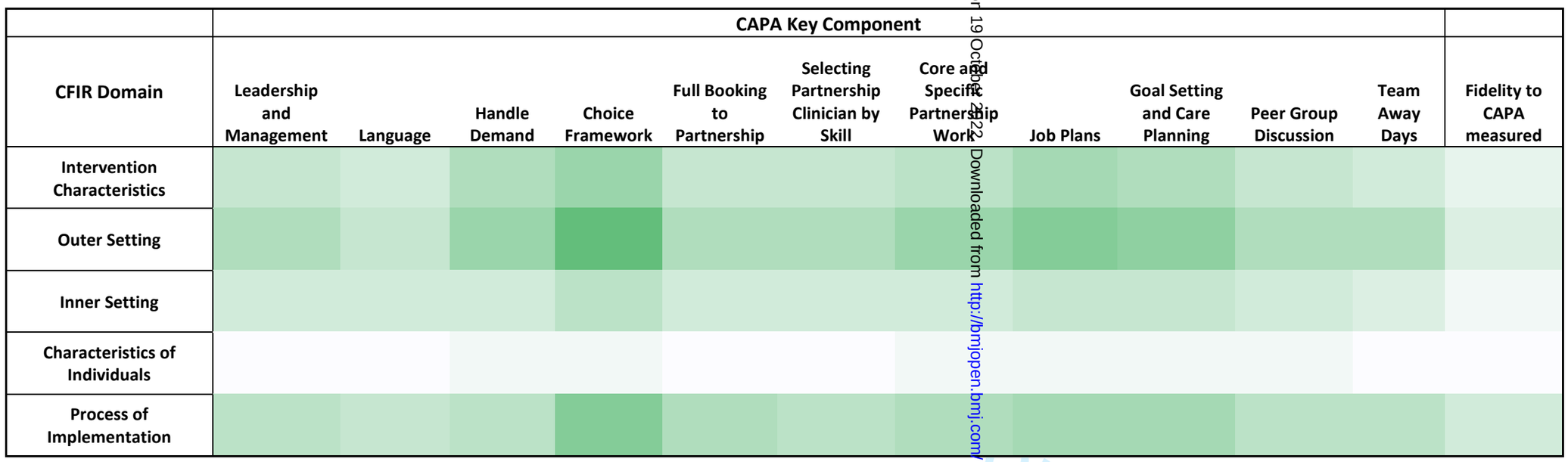


Figure 3

		CAPA Key Component											
CFIR Domain	**CFIR Construct**	**Leadership and Management**	**Language**	**Handle Demand**	**Choice Framework**	**Full Booking to Partnership**	**Selecting Partnership Clinician by Skill**	**Core and Specific Partnership Work**	**Job Plans**	**Goal Setting and Care Planning**	**Peer Group Discussion**	**Team Away Days**	**Fidelity to CAPA measured**
Intervention Characteristics	*Efficiency*												
	Client-centred care												
	Measure/match demand												
	Evidence/support for model												
	Care quality												
	Improve accessibility												
Outer Setting	*External targets/policies*												
	Cultural considerations												
	Specialized client population												
	Wait times/wait lists												
	Hard to access care												
	High demand/ referrals												
	Stressed resources												
	Rural												
	Urban/Cosmopolitan												
Inner Setting	*Multidisciplinary team*												
	Staff stress, burnout												
	Staff pressures, morale												
Characteristics of Individuals	*Lack of staff buy-in*												
	Staff willingness to change												
	Staff skills												
Process of Implementation	*Leadership*												
	Formal training												
	Waitlist blitz												
	Implementation team												
	Adapting processes												
	Regular meetings												

Supplementary File 1: Search Strategies

The search strategies for all databases are as follow:

MEDLINE (Ovid)

#	Searches	Results
1	("choice and partnership*" adj2 (approach* or model? or program? or programme?)).ti,ab,kf.	10
2	(CAPA and (approach* or model? or program? or programme?)).ti,ab,kf.	138
3	1 or 2	139
4	limit 3 to yr="2005 -Current"	124

Embase (Elsevier)

No.	Query	Results
#1	('choice and partnership*' NEAR/2 (approach* OR model$ OR program$ OR programme$)):ti,ab,kw	15
#2	capa:ti,ab,kw AND (approach*:ti,ab,kw OR model$:ti,ab,kw OR program$:ti,ab,kw OR programme$:ti,ab,kw)	214
#3	#1 OR #2	215
#4	(#1 OR #2) AND [2005-2022]/py	196

CINAHL (EBSCO)

#	Query	Limiters/Expanders	Results
S1	TI (("choice and partnership*" N2 (approach* or model# or program# or programme#))) OR AB (("choice and partnership*" N2 (approach* or model# or program# or programme#)))	Expanders - Apply related words; Apply equivalent subjects Search modes - Boolean/Phrase	11
S2	TI ((CAPA and (approach* or model# or program# or programme#))) OR AB ((CAPA and (approach* or model# or program# or programme#)))	Expanders - Apply related words; Apply equivalent subjects Search modes - Boolean/Phrase	65
S3	S1 OR S2	Expanders - Apply related words; Apply equivalent subjects Search modes - Boolean/Phrase	67
S4	S1 OR S2	Limiters - Published Date: 20050101-20221231 Expanders - Apply related words; Apply equivalent subjects Search modes - Boolean/Phrase	59

PsycINFO (EBSCO)

#	Query	Limiters/Expanders	Results
S1	TI (("choice and partnership*" N2 (approach* or model# or program# or programme#))) OR AB (("choice and partnership*" N2 (approach* or model# or program# or programme#)))	Expanders - Apply related words; Apply equivalent subjects Search modes - Boolean/Phrase	7
S2	TI ((CAPA and (approach* or model# or program# or programme#))) OR AB ((CAPA and (approach* or model# or program# or programme#)))	Expanders - Apply related words; Apply equivalent subjects Search modes - Boolean/Phrase	49
S3	S1 OR S2	Expanders - Apply related words; Apply equivalent subjects Search modes - Boolean/Phrase	49
S4	S1 OR S2	Limiters - Published Date: 20050101-20221231 Expanders - Apply related words; Apply equivalent subjects Search modes - Boolean/Phrase	41

Scopus (Elsevier)

History Count	Search Terms	Results
1	TITLE-ABS-KEY ("choice and partnership*" W/2 (approach* OR model* OR program*))	14 document results
2	TITLE-ABS-KEY (capa AND (approach* OR model* OR program*))	639 document results
3	(TITLE-ABS-KEY ("choice and partnership*" W/2 (approach* OR model* OR program*))) OR (TITLE-ABS-KEY (capa AND (approach* OR model* OR program*)))	641 document results
4	(TITLE-ABS-KEY ("choice and partnership*" W/2 (approach* OR model* OR program*))) OR (TITLE-ABS-KEY (capa AND (approach* OR model* OR program*))) AND (PUBYEAR > 2004)	533 document results

Google (Grey Literature)

History Count	Search Terms	Results
1	("choice and partnership" AND (approach OR model OR program OR programme)) OR ("CAPA" AND (approach OR model OR program OR programme))	About 30,100 results
2	"choice and partnership approach"	About 21,400 results

Supplementary File 2: Codebook for data extraction from included records

INFORMATION EXTRACTED FROM RECORDS	NOTES/INTRUCTIONS FOR REVIEWERS
Section 1 – DOCUMENT IDENTIFICATION	
Study Number	Enter the identification number of the record.
Authorship	Enter the last name of the first author.
Year	Enter the year the document was published. If the date cannot be determined from the document, write "Not reported."
Document Type	Select the item from the dropdown menu that best describes the document: - journal article - report - dissertation - abstract - book - web page - presentation notes/slideshow - media piece - other
Section 2 – OBJECTIVES	
Does this document include a research or evaluation component?	Select "Yes" from the dropdown menu if the document presents findings from a research or evaluation project. Select "No" from the dropdown menu if the document describes some feature of their implementation of CAPA (eg. their reason for transition or their implementation process) without including a data collection or analysis component.
Purpose of the document	Make a note of what the primary goal or aim of the document was as described by the author. Include the hypotheses, if any. If no aims are explicitly given, reviewers may state this and then make an inference regarding the purpose of the project.

Section 3 – METHODS	
Methodology and study or evaluation design	State whether the project uses a quantitative, qualitative, mixed methods, or review methodology. Then outline the study or evaluation design, as described by the authors. If the design is not described, enter "Not reported." Input a description of the study design based on reviewer inference if possible. Some common designs include: Quantitative: A) Experimental with controls (controlled trial) – allocation can be randomised by individual (RCT) or service/clinic (cluster RCT), quasi-randomized, or not randomized B) Experimental without controls (uncontrolled trial) – allocation can be randomised, quasi-randomised, or non-randomised in group/service without controls C) Observational, including cohort, case-control, cross-sectional, interrupted time series, controlled before and after, controlled post-test, pre- and post-test or post test. Qualitative: D) Method specified: E.g., ethnography, phenomenology, grounded theory, participatory action research, or case study E) Other – approach not defined, but used focus groups or interviews to collect data, conducted thematic analysis of transcripts, etc. Reviews/Syntheses: F) Systematic review (with or without or meta-analysis), narrative review, scoping review.
Baseline	Did the researchers measure usual care or outcomes BEFORE transitioning to CAPA? Select "Yes" or "No" from the dropdown menu.
Study period	State the period of time over which the observation(s) was (or were) conducted, if applicable.

Stakeholder/participant groups included	List the participant groups engaged/measured in this project. Common groups include: - clients/patients, or health records from clients/patients - families, caregivers - clinicians, healthcare providers - managers - administrative staff If no details about the engagement/participants are given, write "Not reported."
Numbers of participants	Provide the reported numbers of participants in each of the stakeholder groups outlined above, where applicable. Be sure to include both pre-and post-test sample sizes, or both control and experimental group sizes, where applicable. If no sample sizes or numbers of participants are given, write "Not reported."
Sampling/population characteristics	If applicable, provide details regarding the sampling strategy (e.g. convenience sample, purposive sample, randomized sample, etc.), as well as any additional participant details (e.g. limitations, participant ages, sex, gender, culture, ethnicity, socioeconomic status, etc.).
Theory	Does the document reference any theories, theoretical frameworks, principles, or models that explain the ways in which CAPA "works"? If so, list and provide a description of these, where applicable. List the references to these theories/frameworks provided by the author(s).
Data analysis	Provide a description of the procedures used to analyze the data collected in the study. If no data were analyzed, write "Not applicable."
Section 4 - CONTEXT	
Country	Enter the country in which the CAPA service or team is located.
Location	Enter any additional information regarding the location of the service(s) or team(s).

Characteristics of Individuals	Outline in point form any key factors described by the author(s) about the characteristics of individuals which comprise the team or service in which CAPA is implemented. Relevant kinds of details may include: - the characteristics of the individual staff and teams that impacted implementations (e.g., staff attitudes, buy-in, skills, knowledge of the intervention, etc.)
Inner Setting	Outline in point form any key factors described by the author(s) about the internal setting or environment in which CAPA is implemented (i.e. within the team or service). Relevant kinds of details may include: - the service/team/organization's internal culture, communication, and climate that impacted implementation
Outer Setting	Outline in point form any key factors described by the authors about the outer setting (external to the service or team). Relevant characteristics may include: - community characteristics (such as urban or rural, socioeconomic characteristics) - client/patient needs - the networking the service/team/organization has with other organizations - the external pressures from other organizations, policies, or incentives that impacted the implementation of CAPA - other social, cultural, or resource considerations
Rationale for choosing CAPA	Provide any description given by the author(s) regarding why CAPA was implemented. This can include a description of the problem(s) or issue(s) CAPA was chosen to address, as well as the process by which CAPA was chosen. If provided, include descriptions of the intervention characteristics that led to selection of CAPA as an appropriate model of care, such as its relative advantage over other models, its level of complexity as an intervention, and/or its cost.
Evidence Strength and Quality	If provided, state any explicit reference made by the authors to the evidence used to select the model. Sources of evidence may include published literature, guidelines,

	anecdotal stories from colleagues, information from a competitor, client experiences, results from a local pilot, and other sources.
Section 5 - IMPLEMENTATION	
Date of Implementation	State the year CAPA was implemented. If not stated in the document, write "Not reported."
Adaptation, planning, and process of implementation	If provided, state the ways in which CAPA was adapted to fit the local context and the rationale provided for these adaptations. This could include additional consultations to determine ways to adapt the model, or other adaptation procedures. If provided, state the process by which implementation of CAPA was planned by the service(s)/team(s) in the document. This may include convening planning committees or teams or conducting large-scale strategic planning procedures. If provided, give a description of the steps and procedures executed in order to implement/transition to CAPA.
Engaging leadership	If provided, give descriptions of any ways in which leaders or "champions" that spearheaded CAPA were attracted to or engaged in the planning and/or implementation of CAPA.
Fidelity to CAPA Model	Provide any description of compliance to the CAPA model that was given by the authors. This may include qualitative descriptions or quantitative measures such as ratings on the Pragmatic Rating Scale (PRS) or other instruments. Include the scoring from any quantitative measures provided by the author(s).
Quality Monitoring and Evaluation	If provided, give a description of how feedback on CAPA is collected and considered. Note that the document under review may itself be part of a quality monitoring or evaluation process.

Key Components Described	Describe the activities mentioned in the document undertaken to adhere to the 11 Key Components, 7 HELPFUL habits, and/or 4/5 Big Ideas of CAPA. The components include: - Leadership and management - Language - Handle demand - Choice framework - Full booking to partnership - Selecting partnership clinician by skill - Core and specific partnership work - Job plans - Goal setting and care planning - Peer group discussion - Team away days The 7 HELPFUL Habits include: - Handle Demand - Extend Capacity - Let go of Families - Process Map - Flow Management - Use Care Bundles - Look After Staff The 4 [5] Big Ideas include: - Choice - Core and Specific Partnership Work - Selecting Core Partnership Clinician - Job Planning - [Peer Group Discussion] If all components are described, write "All Components." If all habits are described, write "All Habits." If no elements are mentioned by name, write "None reported."

Relative Importance	If provided, give a description of which components of CAPA were considered more/less important to the overall implementation of CAPA.
Other implementation efforts	Describe any activities undertaken to adhere to CAPA that may not fit into the 11 Key Components, 7 HELPFUL Habits, or 4/5 Big Ideas described above.
Section 6 - OUTCOMES	
Health System Outcomes	E.g., number of patients/visits, wait times, prescription drug use, cost of service, emergency department visits
Acceptability Outcomes	E.g., client/family satisfaction, therapeutic alliance
Clinical Outcomes	E.g., symptoms, diagnostic categories
Emotional Outcomes	E.g., attitudes, feelings, well-being, burnout, values, beliefs; toward self, others
Functioning and Coping Outcomes	E.g., quality of life, self-care, resilience, coping
Relationship Outcomes	E.g., relationship with peers/teachers, family interaction, interpersonal conflict, communication
Compliance/ adherence Outcomes	E.g., appointment attendance
Workforce Outcomes	E.g., staff/clinician rates of turnover, efficiency, engagement, morale, satisfaction
Other Outcomes	Describe any other outcomes used that do not fit into the above categories, e.g., educational, justice outcomes.
Main findings	Write a brief 1-2 sentence describing the main findings, e.g. "The authors found that CAPA reduced waiting times by 25%."
Accounting for demographics	For quantitative analysis: Describes any variables the authors found to predict or explain differences in the outcomes or reveal how CAPA may have impacted different groups in different ways. Typical covariates include gender, age, race, education level, and symptom severity. We are interested in knowing if some groups benefited more than others. Report only those covariates that the authors tested. For qualitative analyses: If applicable, describe the ways in which analyses accounted for the population characteristics of the participants in the research.
Section 7 - Takeaways	

Barriers and Facilitators	What challenges or barriers to successful implementation of CAPA were described? What facilitators or supports to implementation were identified? State any factors the author(s) believed hindered/facilitated the implementation of CAPA. Note that these may be related to the environmental/context details reported in Section 3.
Study Limitations Identified by Authors	Summarize any limitations the authors identified in their methods or project approach, where applicable.
Study Limitations Identified by Reviewers	Summarize any limitations that you as a reviewer identify in the document that may not be discussed by the authors.
Research Recommendations	Summarize any recommendations provided by the author(s) regarding what methods, designs, topics, etc. should be included in future research.
Recommendations for Implementation or Policy	Summarize any recommendations provided by the author(s) regarding how they could have better adhered to CAPA in implementation or policies to support the model.
Congruence with Data	Do the recommendations the authors provide above follow directly from their data and findings, or their review of other evidence? Alternatively, are they based on anecdotes or speculation? Briefly state the source of these recommendations, where applicable.
Notes	Input any additional notes, comments or points of interest that may not be easily captured in the above sections.

Supplementary File 3: Characteristics of Included Records

REPORT ID	COUNTRY	RECORD TYPE	DESIGN	NUMBER/TYPE OF PARTICIPANTS, DATA
Clark et al. 2018[13,a]	Canada	Journal article	Pre-post	154 pre-, 794 post-CAPA client records (wait times) 81 youth, 125 parent ESQ surveys
Wilson et al. 2015[35]	Scotland	Journal article	Descriptive	2896 patient records (appointments)
Naughton et al. 2018[14,b]	Australia	Journal article	Pre-post	33 pre-, 77 post-CAPA clients (Diagnoses and outcomes)
Naughton et al. 2015[68,b]	Australia	Journal article	Pre-post	134 pre-, 338 post-CAPA client records (wait times) Clinician, manager meeting notes
Fuggle et al.[36] 2016	England	Journal article	Pre-post	92 pre-, 66 post-CAPA client outcomes Clinician focus group
Robotham et al. 2010[15,c]	England	Journal article	Descriptive	Phase I: 114 CAMHS teams Phase II: 53 CAMHS teams Phase IIIa: 6 CAMHS teams Phase IIIb: 62 clinicians and staff (Implementation and staff experiences)
York and Wilson 2012[64,d]	New Zealand	Abstract	Not reported	Administrative data (wait times), families' satisfaction
Hong et al. 2014[69]	Australia	Abstracts	Descriptive	Administrative data (wait times)
Clark et al. 2012[58,a]	Canada	Report	Pre-post	114 clinicians, 218 parents/caregivers post CAPA Administrative data (wait times)
Chugg 2009[37]	England	Journal article	Not reported	Administrative data (waiting lists)
Department for Children, School and Families 2009[38,g]	England	Policy/ practice guideline	Not reported	Administrative data (wait times)
Taylor and Duffy 2010[39]	Scotland	Journal article	Descriptive	133 families (satisfaction)
Abidi 2014[59,a]	Canada	Presentation	Not reported	Administrative data (wait times)
Curtis et al. 2010[40]	England	Report	Descriptive	Administrative data (capacity and demand, wait times)
Quintana 2017[16]	Canada	Thesis	Other	Administrative (HR resources, numbers of session, wait times)

Perry et al. 2014[41]	England	Presentation	Descriptive	Administrative data (capacity and demand)
Murphy et al. (n.d.)[60]	Canada	Presentation	Pre-post	Administrative data (waits times, no shows, flow, appointments) Satisfaction, team feedback
Falconer and Milnes 2016[65,d]	New Zealand	Presentation	Descriptive	52 clients Implementation, wait times
Robotham 2009[17,c]	England	Report	Descriptive	Questionnaires: Phase 1a: 213 clinicians, staff Phase 1b: 53 CAMHS teams Phase 1c: 7 CAMHS teams Phase 2: 7 parents, 7 children/youth Focus groups/Interviews: Phase 2: 6 CAMHS teams, 3 parents, 6 children
Gardner et al. (n.d.)[61,a]	Canada	Presentation	Pre-post	1521 Administrative data (wait times, referrals)
Boyd and Wilson 2016[42]	Scotland	Report	Descriptive	Administrative data (wait times)
Black (n.d.)[66,e]	New Zealand	Presentation	Descriptive	52 children/families Clinician, staff feedback
York and Kingsbury 2010(b)[28,c,d,e,h]	Australia, New Zealand, United Kingdom	Presentation	Summary of research	Administrative data (wait times, capacity and demand, referrals) Client/ family feedback (survey, interview) Clinician, staff feedback Referrer feedback
Cooney et al. 2019[34]	Scotland	Journal article	Descriptive	106 clients'/ family's administrative data (wait times, flow)
Brown et al. 2021[62,f]	Canada	Report	Descriptive	116 surveys with clinicians, staff 50 interviews with clinicians, staff, and clients 3 focus groups with 14 service providers
Jones 2012[43]	England	Dissertation	Pre-post	Administrative data (wait times, attendance, referrals, flow) Clinician, staff feedback
Kingsbury and York 2006[30,e,h]	England	Web report	Descriptive	Client feedback from 100 families Focus group with clinician, staff
Kingsbury and York 2008[44,e]	England	Web report	Descriptive	48 client/ family feedback
Kingsbury and York 2007[71,e]	Not reported	Web report	Descriptive	113 clinicians and managers Administrative data (wait times)

Stockbridge and Thompson 2007[45,e]	England	Web report	Pre-post	Administrative data (wait times) Client/ family satisfaction
Jenkin 2006[31,e]	Scotland	Presentation	Pre-post	Administrative data (wait times) Clinician, staff feedback Referrer feedback
Chaloub 2009[46,e]	England	Presentation	Pre-post	Administrative data (wait times, flow) Clinician, staff feedback (3 teams)
Greaney 2009[67,e]	New Zealand	Presentation	Descriptive	Focus groups with 53 clients Youth and youth consumer advisor feedback
Barnes 2009[47,e]	England	Presentation	Pre-post	Administrative data (wait times) Family feedback Referrer feedback
Burhouse 2006[48,e]	England	Web report	Not reported	Administrative data (wait times) Client/ family feedback Clinician, staff feedback
Botros 2009[49,e]	England	Presentation	Descriptive	43 client/ family feedback
Thorpe 2010[50,e]	England	Presentation	Descriptive	132 client/ family feedback
Kingsbury 2006[32,e,h]	England	Web report	Descriptive	ESQ, Choice questionnaire (families) Focus group with clinicians
Fell 2010[51,e]	England	Presentation	Not reported	Administrative data (wait times) 17 clinicians' feedback
Stapley 2007[52,e]	England	Presentation	Not reported	Clients
Splevins 2007[53,e,g]	England	Web report	Descriptive	Clients
Unknown 2008[54,e]	England	Web report	Descriptive	Administrative data (wait times) Clinician, staff feedback
York and Kingsbury 2010(a)[28,c,d,e,h]	Australia, New Zealand, United Kingdom	Presentation	Summary of research	Administrative data (wait times) Clinician, staff feedback
Clark and Pajer 2016[63,a]	Canada	Presentation	Descriptive, pre-post	Administrative data (wait times) Client satisfaction
Fitzpatrick and Wynn 2016[55]	Wales	Web report	Descriptive	Administrative data (wait times) CAPA Fidelity (CAPA Component Rating Scale)
Johnstone et al. 2022[33,f]	Canada	Journal article	Descriptive	50 interviews (clinicians), focus groups, online survey (115 participants)
Trafford Council (n.d.)[56]	England	Report/plan	Descriptive	Administrative data

Jones 2011[57,i]	England	Journal article	Descriptive	Administrative data

[a] Clark et al. 2018, Clark et al. 2012, Abidi 2014, Gardner et al. 2016, and Clark and Pajer 2016 include information from the same evaluation.
[b] Naughton et al. 2018 and Naughton et al. 2015 stem from the same evaluation.
[c] Robotham et al. 2010 and Robotham 2009 stem from the same evaluation and both are captured in both York and Kingsbury 2010(a) and York and Kingsbury 2010(b)
[d] York and Wilson 2012 and Falconer and Milnes 2016 stem from the same evaluation and are both captured in both York and Kingsbury 2010(a) and York and Kingsbury 2010(b)
[e] Black (n.d.), Kingsbury and York 2006, Kingsbury and York 2008, Kingsbury and York 2007, Stockbridge and Thompson 2007, Jenkin 2006, Chaloub 2009, Greaney 2009, Barnes 2009, Burhouse 2006, Botros 2009, Thorpe 2010, Kingsbury 2006, Fell 2010, Stapley 2007, Splevins 2007, Unknown 2008, are captured in both York and Kingsbury 2010(a) and York and Kingsbury 2010(b)
[f] Johnstone et al. 2022 includes information reported in Brown 2021
[g] Splevins 2007 is reported as one of the case studies in Department of Children, Schools and Families 2009.
[h] Kingsbury and York 2006 and Kingsbury 2006 report some of the same data and both are captured in both York and Kingsbury 2010(a) and York and Kingsbury 2010(b)
[i] Jones 2011 stems from the Curtis et al. 2010 evaluation.

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	2-3
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	5
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	4-5
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	5
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	6
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	6
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Supplementary file 1
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	6-7
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	7
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	Supplementary file 2
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	N/A
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	7

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	Figure 1
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	Supplementary File 3
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	N/A
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	8-14
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	8-14
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	14-17
Limitations	20	Discuss the limitations of the scoping review process.	14
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	17
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	18

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMAScR): Checklist and Explanation. Ann Intern Med. 2018;169:467–473. doi: 10.7326/M18-0850.