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ORIGINAL ARTICLE

Modifying the clinical reasoning cycle to enhance forensic mental health nursing utility

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Abstract

Forensic mental health nursing is a specialty area of practice requiring specific knowledge and skills to work collaboratively with consumers. The Clinical Reasoning Cycle has been recognised as a potential framework to support nursing practice; however, it has been identified that adaptations are required to enhance utility in a forensic mental health services. The aim of this study was to explore and finalise a version of the cycle for forensic mental health nursing practice. Focus groups and interviews were used to explore adaptations with staff from a state-wide forensic service and forensic mental health nursing academics. Data were thematically analysed. Four main themes were interpreted: (1) allegiance to the Nursing Process, (2) moving the cycle from page to practice, (3) working as a team, or not, and (4) implementation will be a marathon and not a sprint. While nursing academics were more in favour of updating the Nursing Process to ensure contemporary practice is captured, staff from the service were supportive of the adapted cycle but emphasised the need to ensure collaboration with the consumer and their supporters. The adapted cycle was seen to articulate the contribution of forensic mental health nursing care, and support for a nursing-specific cycle was embraced by other disciplines, despite some hesitation from nurses. Prior to implementation there is a need to ensure the merits of the cycle are clearly articulated, along with a range of resources and specific contextual information to ensure the cycle can be successfully applied to enhance nursing practice and consumer care.

KEYWORDS

clinical judgement, clinical reasoning cycle, consumer, forensic mental health nursing, forensic psychiatric nursing, professional identity

INTRODUCTION

Mental health nurses are required to use their clinical skills and evidence-based knowledge to deliver high-quality consumer care (Vega & Hayes, 2019). Ongoing nursing shortages and the COVID-19 pandemic continues to have an impact on practice and clinical care (Coffey et al., 2017; Turale & Nantsupawat, 2021). These ongoing issues are also present for forensic mental health nurses (FMHN) who work across a range of settings including secure inpatient hospitals, community and prison settings to deliver care to consumers who also have offending histories or are at high risk of offending (Martin et al., 2013). Working in these settings nurses are often exposed to aggression and violence and a range of other challenging behaviours that can lead to workplace trauma and distress (Newman et al., 2021).

Nursing care can be enhanced by the use of frameworks that assist in steering nursing practice, encouraging collaboration with consumers and their support structures, as well as driving sound clinical judgement, reasoning

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and reflection on practice (Maguire, Ryan, Fullam, & McKenna, 2022). Since the 1980s the Nursing Process has been one of the principal conceptual frameworks taught in pre-registration nursing programmes in developed countries (Keshk et al., 2018). While the Nursing Process has been traditionally used, there has been suggestion that the concept of the Nursing Process may be difficult to understand in practice, or as described by Zamanzadeh et al. (2015, p. 411) an "intangible understanding of the concept of nursing process has been identified as the main challenge". Alternative frameworks have been developed to assist nurses in their everyday practice such as the Clinical Reasoning Cycle (CRC; Levett-Jones, 2018). The CRC provides a systematic framework to direct nursing practice to positively influence care delivery (Levett-Jones, 2018). The CRC can be particularly helpful in assisting novice nurses in their practice (Theobald & Ramsbotham, 2019); this is important as there are more early career nurses in the workforce than ever before (Australian Institute of Health and Welfare, 2022).

BACKGROUND

The clinical reasoning cycle

The CRC was developed to address a gap in contemporary teaching and learning approaches as it was identified that some approaches did not always aid the development of the required level of clinical reasoning skills. The CRC was developed to provide an educational model to enhance clinical reasoning skills in particular for pre-registration and graduate nurses clinical reasoning skills to identify and appropriately manage 'at risk' clinical scenarios (Levett-Jones et al., 2010).

The CRC (see Figure 1) describes the complexity of nurse's decision-making, clinical reasoning and process of care planning described across eight phases. The cycle begins with considering the patient and their situation, moves to gathering cues/information, processing information, identifying problems and issues, creating goals, intervening, assessing outcomes, reflecting and determining new learnings (Levett-Jones, 2018). Figure 1 also depicts the process with descriptors under headings, which all align with the eight phases of the cycle (Levett-Jones et al., 2010).

Forensic mental health nursing and the clinical reasoning cycle

The CRC was developed in the context of general health care, therefore, many of the prompts designed to explain the cycle and assist with use in practice focus on physical health care (Levett-Jones, 2018). FMHN is a specialist area of practice, where nurses work with consumers who have severe mental illness and have offended or considered at high risk of offending. There are complexities involved in everyday nursing care in FMH which are not necessarily present within generalist settings (e.g. assessing/addressing offending behaviour, and cognitive bias related to working with offence behaviour). There are also other distinct differences due to the impact legislation can have on consumer care, long-term admissions (sometime years-decades), at times ruptured or strained family/carer relationships, and consumer experience of stigma and discrimination (Maguire, Garvey, Ryan, et al., 2022; Maguire, Ryan, Fullam, & McKenna, 2022; Martin et al., 2012).

In a recent program of research, nurses working across a state-wide FMH service were provided with education on the Nursing Process (NP) and the CRC, followed by a series of questions and group discussion using the Nominal Group Technique (a structured technique used to reach group consensus on a topic or issue) (Maguire, Garvey, Ryan, et al., 2022). The study was designed to determine which framework would be most suitable across the range of settings in the FMH service (secure inpatient, prisons, community and courts). The nurses in this earlier study selected the CRC; however, suggested adaptations were necessary to ensure utility in a FMHN context, as the original version of the CRC does not capture some of the unique aspects of care (Maguire, Garvey, Ryan, et al., 2022).

FMH services in the past have been criticised for delivering custodial and compulsory treatment and care (Maguire, Ryan, Fullam, & McKenna, 2022). The challenge for forensic services is to deliver recovery-oriented care in partnership with consumers and their supporters (Maguire & McKenna, 2021). Furthermore, like other services, FMH services must also move towards the reduction/elimination of restrictive practices (e.g. restraint), while also working with a consumer group who most often end up in forensic services due to their violent behaviour (Trestman, 2017). In this context, having a framework to guide practice is important, and clinical reasoning is one way of assisting nurses to work collaboratively to address complex consumer needs with potential to improve consumer outcomes. Against this background, the aim of this study was to finalise adaptations to the FMH version of the CRC, known as the FMHN-CRC, and to ensure the framework is able to support evidence-based FMHN practice across a range of settings to enhance consumer care and nursing practice.

METHODS

Design

Findings from a previous study proposed a number of changes to the CRC (see Figure 1 for the original CRC diagram with prompts and see Table 1 for suggested

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FIGURE 1 Original Clinical Reasoning Cycle (Levett-Jones et al., 2010).

TABLE 1 Changes suggested for the Forensic Mental Health Nursing-Clinical Reasoning cycle (FMHN-CRC).

Changes suggested from previous study	Changes made to FHMN-CRC prior to staff focus groups
Include more prompts in the recall section	Prompts added
	Recall section: physiology, pathophysiology, pharmacology, epidemiology and context of care put back into the cycle
Include more prompts to catch bias	Check and reflect boxes added to the following boxes: describe, review, process information, synthesis, select and contemplate
Include consumer and team goals	In establishing goals: consumer/family/carer/supporter goals added
Include stakeholder impact	Added in the Describe box
Ethical issues rather than ethics	Changes to ethical issues in review box
Add FMHN before CRC	Clinical Reasoning Cycle changes to: Forensic Mental Health Nursing Clinical Reasoning Cycle
Remove consumer carer supporters from the middle of the diagram	Placed in a ring around the inside of the CRC model

changes which were made prior to phase one of this study, see Maguire, Garvey, Ryan, et al., 2022). These changes were made to the original version and then explored in two phases. Phase one included three discreet focus groups with staff from across a state-wide FMH service. After these focus groups, data were analysed and changes were made to the CRC based on the focus group feedback. Phase two commenced to seek feedback from nurses with an academic lens. A further focus group and interview were then conducted with FMHN academics (see Figure 2).

The groups and interviews were conducted by TM, LG, JR and MO researchers with qualitative experience, additionally TM and JR have extensive FMHN experience and MO has extensive MHN experience. A week prior to focus groups all participants were emailed a

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document introducing the CRC, and the FMHN-CRC with adaptations made during the course of the study highlighted in yellow. Participants were requested to familiarise themselves with the documents before attending the focus group. Before commencement of the focus group/interview, participants were provided with a brief overview of the CRC and suggested changes. The study has been reported using EQUATOR network recommendations for qualitative research (COREQ; Tong et al., 2007).

Setting

Phase one of this study was conducted both at the Victorian Institute of Forensic Mental Health (Forensicare) and online, whereas Phase two was conducted online with FMHN academics from various countries across the world. Forensicare provides a range of FMH services across Victoria, Australia. The service delivers care to people who have a serious mental illness and have committed and offence, or are deemed to be a high risk of committing an offence. There are three directorats, a secure inpatient hospital (136 beds) at the Thomas Embling Hospital services providing mental health care in prisons throughout Victoria, and a community service that provides programmes largely for people who have a major mental illness and offended or are at high risk of doing so. With recent service expansion Forensicare now has over 500 nurses.

Participants and recruitment

Purposive sampling was used for both cohorts in this study.

Forensicare staff – Phase one

Senior staff from across the service (medical, nursing, lived experience, psychology, social work and occupational therapy) were emailed about the study and asked to suggest potential participants who would have approval to attend a one-off focus group. This inclusion criterion was determined based on staff whose discipline senior considered them to have a sound understanding of practice frameworks, assessment, decision-making and addressing ethical issues, and who had approval from them as the discipline senior to attend a focus group during work hours. The decision to include all disciplines was based on the premise that FMH services generally work in a multidisciplinary manner, therefore, important to include perspectives from other disciplines. An email was then sent to suggested staff as determined by the senior disciplines to the staff members detailing the study. The staff members were requested to indicate their interest to participate in the focus group by responding to the email invitation.

Consent for the study was gained via paper or electronic consent forms, where staff signed and returned consent forms by either emailing or handing a signed copy to the research team. A total of 12 staff members took part (n=11 females, n=1 male), n=2 from the prisons, n=6 from the inpatient setting, n=2 from the community arm of the service and n=2 from across the service (roles that cover the three directorates). There were n=4 nurses n=4 occupational therapists, n=2 lived experience team members, n=1 social worker and n=1 medical staff.

Forensic mental health nursing academics – Phase two

FMHN who have published in peer reviewed journals over the past five years and who held senior nursing positions were identified by searching the peer reviewed FMHN literature. These nurses were sent an email outlining the study from the contact address cited in the publication. The nursing academics were asked to express their wish to participate by replying to the email. Consent for the study was gained via electronic consent forms, where participating experts returned signed forms by email. A total of seven FMH nursing academics participated (n=4 female, n=3 male) n=2 from Canada, n=1 from New Zealand, n=1 from Finland, n=1 from Scotland, n=1 from England, n=1 from the Netherlands.

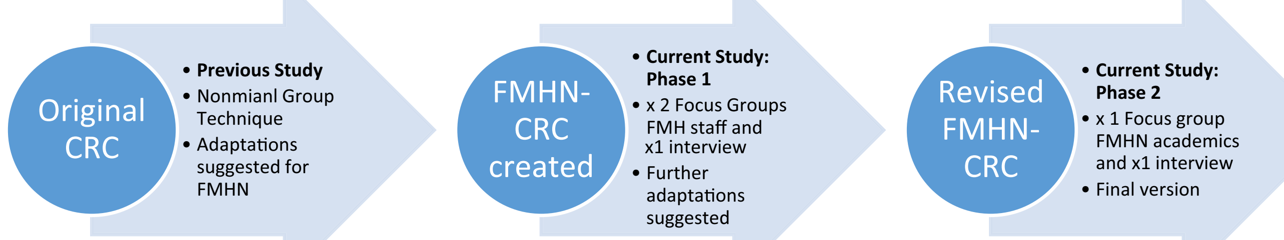

FIGURE 2 Development phases of the FMHN-CRC.

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Academics from Australia were also invited, but did not respond.

Data collection

Data were collected from three focus groups and two interviews with a total of 21 participants, Phase one included two focus groups (two online and one face-to-face) with Forensicare staff and one interview and Phase two included one focus group with FMHN academics, and one interview (online). Phase one comprised focus group one with $n=6$ participants, focus group two with $n=5$, and one interview. Phase two incorporated an interview $n=1$ and focus group $n=7$. For the online focus groups and interviews, Microsoft Teams was used, and the one-face-to-face focus group took place in a quiet room in one of the rehabilitation units at the secure inpatient service. There were two researchers present in each focus group, TM was the moderator for all focus groups, LG monitored and took notes for phase one (Forensicare focus groups) and JR monitored and took notes for the first phase two (FMHN academic) interview, and MO monitored and took notes for the second phase two focus group. All focus groups and interviews were audio-recorded and lasted between 55 min and 1 h. A focus group guide was used for structure and was based on the study objectives. Confidentiality was retained by de-identifying the data and appointing a unique participant number. The letter 'S' was used for the Forensicare staff in this study, and the letter 'N' were used for the forensic mental health nursing academics in this study.

Data analysis

Focus group and interview data were analysed utilising the Reflexive Thematic Approach proposed by Braun and Clarke (2019), a six-stage method that requires researchers to be reflective and have considered engagement with the data, and reflexive and considered engagement with the analytic process (Braun et al., 2018). Data analysis was led by TM and LG, additional researchers (JR and MO) were engaged to verify the analytical process, confirm thoughts and delve into interpretations of the data, to attain generalisability of the ideas and confirm representativeness of the data. Following professional transcription of the focus group and interview data verbatim and field notes, TM listened to all focus groups and interviews, and checked all transcripts for accuracy against the audio file. The transcripts were then subject to analysis by researchers TM and LG. After becoming familiar with the data, initial codes were created using open coding, where comparable statements were identified and assigned codes. Collection of codes into possible themes then occurred. Themes were then subject to review by examining the coded extracts, and then the entire data set. The research team convened to consider final themes, which led to the interpretation of four themes. These themes were then defined and labelled. The writing up of this paper was the final phase. All research team members are nurses and have qualitative analysis experience.

Ethical considerations

Approval for access to Forensicare and to include Forensicare staff in this study was granted by the Forensicare Operational Research Committee. Ethical requirements were met by the researchers. Approval to conduct this study was granted by the Swinburne University Ethics Committee (Project ID: 6171). No ethical issues were encountered in this study.

RESULTS

Before presenting the themes, it is worth presenting the changes that were made following the first phase of focus groups/interview with the Forensicare staff. Table 2 details the suggested changes from staff. The changes were suggested based on (1) a desire to ensure the FMHN-CRC emphasised the importance of consumer family/carer/supporter involvement at all stage of the cycle and (2) the language reflects a strengths-based approach to care (e.g. 'needs' rather than 'issues or problems'). Feedback from the FMHN academics was related to the choice of model (the NP versus the CRC) and emphasis about the importance of an underlying theoretical framework as opposed to recommended changes/additions to the FMHN-CRC.

Four themes were interpreted from the data related to the suggested adaptations and implementation of the FMHN-CRC which were (1) allegiance to the Nursing Process, (2) moving the cycle from page to practice, (3) working as a team or not, and (4) implementation will be a marathon not a sprint.

Theme one: Allegiance to the nursing process.

This theme presents the views of the participants regarding the use of the Clinical Reasoning Cycle. For the FMHN academics who were trained in the NP there was a sense of allegiance to the NP, even though there was recognition that it may be more general health oriented, and nursing focused as opposed to consumer focused, and perhaps not as strengths based, with both identified as important components to include in FMHN.

> I need to declare my own bias because when I trained beginning of the eighties,

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TABLE 2 Changes made to the FMHN-CRC after the first phase.

Changes suggested from Forensicare phase one	Changes made for FMHN academics phase two
Describe box: suggested adding engage the person/family/carers/supporters to learn about their situation	Added as suggested
Review box: suggest adding that information needs to be gathered from a range of sources	Added as suggested
Interpret box: change compare normal versus abnormal to compare behaviour	Added as suggested
Synthesis box: change the word problems/issues to needs	The phase title identity problems and issues and the synthesis box called Identity problems all changes to needs
Evaluate box: suggest adding: Ask yourself as well as their family/carers/supporters if the situation has improved	Added as suggested
Clinical Reasoning Cycle: suggest this is placed back in the centre of the cycle	Placed back in the centre with FMHN at the start
Suggest there is an outer or inner ring that surrounds the cycle and states: consumer/carers/family and supporters	Text placed in the outside ring with: consumer/carers/family and supporters

> the Nursing Process was drummed into us from day one… it was just ingrained and I didn't even know that…I didn't even know that the thinking had shifted away from it… and if I look back on it, maybe the problems are that it is clinician-centric and, yes, we should be putting people at the center… It's not really a strength-based model as it was projected.
>
> (N4)

> I know when it first came out, like a hundred years ago, it didn't fit very well with mental health nursing or psychiatric nursing. It was much more geared toward physical illness and problems in that regard.
>
> (N5)

There was also some discussion about the nursing diagnosis aspect of the NP, where it was acknowledged that this aspect is not really used in FMHN, and if it is used then there can be complications related to licencing as the term ‘nursing diagnosis' is protected.

> I think the one that kind of irked me a little (about the NP) was the identified problems and issues and that was in relation to nursing diagnosis. In terms of wording like that, that's not what we would tend to use.
>
> (N2)

> We just finished a piece of work … and we did not use nursing diagnosis and there were a couple of reasons for that. One, it was very expensive to use the language of nursing diagnoses, because they tend to have a market on that … I think we've struggled with that a bit, using nursing diagnoses.
>
> (N5)

Some of the FMHN academics suggested the NP could be updated to include what was missing, rather than adopting a new framework.

> What is wrong with the Nursing Process if you extend it with the facets we missed today, like the consumer perspective and more precise descriptions of a diagnosis?
>
> (N3)

> So change it (the NP), turn it into a strength-based model.
>
> (N4)

While there was support to retain the NP, there was one FMHN academic who was aware of the CRC prior to the study and had seen a service using the CRC (but had not used or applied the CRC themselves). This participant could see the merits of the CRC and was supportive of the idea of a structured framework that everybody signs up to and implements; however, they did suggest the need to have an “underlying theoretical model” (N1). By comparison, in the Forensicare focus groups, there was no discussion at all about retaining the NP or any suggestions to update, their focus was on using the adapted FMHN-CRC and there was a sense that it was aligned to current practice and could assist in highlighting the specialist skills FMHN have.

> This is a part of our everyday treatment and care planning and collaboration with consumers and carers, and then informs the treatment and care planning with the whole

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> MDT … it (the CRC) isn't talking a different language.
>
> (S8)

> It looks really positive (the CRC), if it can be incorporated into documents like the Intensive Care Review and easily transferred rather than adding to the workload, but just complementing what nurses are already doing.
>
> (S1)

> We have specialized skills as well, and sometimes that does get lost. Having forensic mental health nursing in the cycle is really important for our own nursing profession, it says this is my specialty and we can be discipline specific and strengthen practice.
>
> (S7)

A factor influencing this difference in opinion among the Forensicare staff and FMHN academics may be due to the differing context of the participants. In some Australian universities, undergraduate nurses are being taught the CRC as part of a comprehensive nursing degree, therefore, most of the Forensicare staff were familiar with the CRC. However, overseas, undergraduate programmes are sometimes speciality programmes (e.g. nurses undertake a specific mental health nursing qualification as opposed to a comprehensive nursing qualification) and are, therefore, not exposed to the CRC.

> So they taught this in our first year of grad (the CRC), I would say quite early on … the CRC you can follow those steps and we saw the problem, we collected the information we needed and we've considered this and we've come to this evaluation.
>
> (S8)

> That makes sense (using the CRC) in Australia because your undergraduate program is adult health and then you go on to do mental health afterwards. Whereas our undergraduate program is mental health.
>
> (N2)

Theme two: Moving the cycle from page to practice

The second theme illustrates how participants expressed the need to ensure there was context provided to explain how the FMHN-CRC would work to move from a concept into practice. The need for context was founded from questions about how the cycle would be practically applied across the different sites (inpatient, community, prisons), with different systems, documentation and legislative requirements. The version of the cycle with the prompts was seen as helpful in assisting nurses to understand how the cycle is applied in practice.

> Having it applicable to the relevant documents which we utilize in the system and even having examples of how it's applicable to those documents and how each of the different segments of the cycle apply and how could they can be utilizing the process … It would be really helpful to have it applied in that real life setting and really useful to apply it to this document we use across these prison sites and have it used across those systems.
>
> (S1)

> They are only as good as how useful they are in real life in real time (frameworks). I always like the idea of having the suggestions for each arrow and each stage (in the CRC).
>
> (S4)

There was also discussion among the participants about what, if any theory underpinned the cycle. Participants identified the importance of having a theoretical basis to support and substantiate the cycle.

> Some of my reflection was, is there something else to guide the nurses in what you expected each of these stages as well, a particular lens or particular theory that would inform each of those stages?
>
> (S2)

> I wondered, is there a selected theoretical framework to guide what's happening, particularly those steps around how you are reviewing and how you're interpreting and synthesizing
>
> (S14)

> I think we've lost quite a lot without having an underlying theoretical base to support conceptual frameworks like this …. I do think something like a framework like this is really helpful, but needs to have an underlying theoretical model.
>
> (N1)

To assist with the understanding and application of the FMHN-CRC participants were keen to have access to a

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range of resources including a manual to provide background and context, as well as documents that map how the cycle is to be used and applied in practice across the settings. One participant suggested having an expert nurse "who could explain in a video how this process would look like in day-to-day care and showing in the video which steps they are talking… would maybe make it more alive to more junior nurses, how thinking goes through the cycle" (N6). Participants from all focus groups also suggested the need for a plain language version of the FMHN-CRC, as well as multiple versions in a range of different languages.

Theme three: Working as a team or not

This theme relates to the overall way the cycle should be viewed within clinical practice. Whilst the CRC is predominately a nursing concept within the generalist setting, there was a differing of opinions among the participants as to whether to follow this pattern within the FMH care setting. There were views put forward by the participants about the reluctance for nurses to "own the cycle" and, therefore, have the word nurse in the title. In the Forensicare focus groups that included nurses, some of the nurses indicated that they were hesitant to have nurse included in the title as nurses work as part of a team and did not want to exclude other members of the team.

> Personally, I would rather not have nursing on there because, we all work together when it comes to these issues with our patients, we all work collaboratively. So if we want to achieve the same goals in a multidisciplinary team, we should all be working in the same kind of motion.
>
> (S8)

However, there was also support and strong desire voiced from some nurses in the Forensicare and nursing academic focus groups for the inclusion of nurse in the title to demonstrate how FMHN contribute to care within the team.

> This is a model that is informed by nursing practice and that it's true to nursing practice, but it's also inviting in input from other professionals.
>
> (S11)

> Having the forensic mental health nursing title is important for our own nursing profession. It's okay to own it and start saying, this is my specialty. We have standards of forensic mental health nursing, this is all part of it … We can be discipline specific. I don't think we do that enough, and I think this really could strengthen those processes to say this is what I am, this is what I do, I am accountable because I do all these things and this is where my strengths lie within this discipline.
>
> (S7)

> I don't get the reticence about using the word nursing. I'm proud of the fact that I'm a nurse and I'm also proud to work as part of a multidisciplinary team and I don't get this resistance to take away nurse. That's our role so why not use the word nursing because that's who it's intended for? Why do we need to take the word nursing out? It feels as though it's being diminished and watered down constantly and that is a real concern for me. I do feel strongly that it's quite essential, to have the word nurse (in the CRC).
>
> (N2)

There was also positive support from the other disciplines for nurses owning the cycle. It was suggested there would be real advantages to having a framework rather "than just not having a model or not having a process" (S14)

> I wouldn't be offended if I saw that this was nursing clinical reason cycle … And I think we are doing the same things, but we do have perhaps a different way to label it … As a discipline, we're probably approaching this from a slightly different perspective, and if this is the nursing way to approach it, then I think we're all coming to the same place, that's the important thing.
>
> (S8)

> You do the art and you speak the science, this would really help me feel a little bit more aligned to my professional identity and I don't think it excludes other disciplines, it just escalates your priority on what you are doing and why you're doing it to work with patients. I don't see it excluding other disciplines. I think it would help people to know how to work interdisciplinary.
>
> (S7)

The other disciplines also suggested that the cycle aligned with their discipline-specific model as demonstrated in the following quote, "It (the CRC) is almost identical to the seven-step therapeutic reasoning process that we have selected and then adapted in our (discipline) team" (S14), highlighting the relevance of the cycle to the team approach to care identified by participants.

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Theme four: Implementation will be a marathon not a sprint

The final theme reflects the practice reality and challenges when working to implement changes to practice such as introducing the FMHN-CRC into the clinical settings. While there was support from the Forensicare staff to introduce the FMHN-CRC, it was not without consideration of the possible challenges and what might be required to support implementation.

> It's (implementation) really slow and painful. Very long timeframe. I think realistically it's not something that's going to happen in six months or a year, maybe in two or three years, to see traction takes time.
>
> (S14)

The participants also commented on the best approach to implementing the change within the FMH setting. According to them, it was important to get buy-in of staff and a gradual approach was necessary to fully embed the changes into clinical practice.

> If we market it as a marathon, so people know that we're looking to implement cultural change, but not in five minutes. People need to know that this is something we want to work on over time. This is a long-term cultural goal and change and we're not going to get it in five minutes.
>
> (S7)

While challenges were evident, participants did not consider them to be insurmountable, rather potentially requiring careful consideration prior to implementation to ensure success while also taking into account the current barriers (e.g. staffing shortages, nursing workforce predominantly comprised of junior/less experienced FMHN and ongoing COVID-19 challenges).

DISCUSSION

In this study, staff across one state-wide FMH service and FMH nursing academics from locations across the world were able to identify adaptations to the CRC, these adaptations produced a bespoke CRC for FMNH practice, the FMHN-CRC (see Figure 3). The changes suggested were perceived to assist the application and implementation of the cycle for FMHNs.

This study has highlighted some of the anticipated challenges associated with the introduction of new frameworks to guide practice. Often the introduction of any change of practice can be met with hesitation or pull to maintain status quo (Cabral & Carthy, 2017). The FMHN experts questioned the need for a new model and suggested updating or enhancing the existing NP. The suggestion to update/enhance the NP to ensure it is more aligned with contemporary mental health nursing practice from the FMHN experts in part may have been due to the differences in undergraduate nursing training across the world, and a need for more context surrounding the FMHN-CRC. Some countries such as the UK offer undergraduate courses for a range of specialty areas of practice including mental health nursing. While countries such as Australia offer generic nursing courses and, therefore, the courses cover a broad range of practice areas (e.g. surgical nursing, primary health care and MHN), specialisation then occurs after graduation with the additional option of postgraduate study (Hemingway et al., 2016; Maguire, Ryan, Mawren, et al., 2022).

Generic undergraduate nursing courses have been subject to criticism for putting the MHN profession at a disadvantage due to lack of mental health content and placement opportunity, resulting in nurses entering MHN having insufficient opportunities to gain experience in MHN (Edward et al., 2015). This lack of training and limited clinical placement opportunity may result in graduate nurses entering their career with inadequate knowledge and experience of MHN (Maguire, Ryan, Mawren, et al., 2022; Procter et al., 2011), or a lack of exposure to MHN to support selecting this as a career option. In Australia there is a recognised shortage of skilled MHN, which is an ongoing problem that continues to worsen (Happell & McAllister, 2015). This is where having a framework such as the FMHN-CRC to guide practice, particularly for the novice nurse, or nurses transitioning from generalist areas into FMHN may be particularly helpful, where they may lack exposure and/or experience in FMHN. In addition, some of the nurses involved in the focus groups were aware of the CRC, as this was taught in their undergraduate training due to the CRC being embedded in undergraduate education, so the cycle and the process were familiar to them, as opposed to the FMHN nursing academics, where only one nurse was aware of the CRC.

One of the barriers identified in this study was the lack of context surrounding the FMHN-CRC. Context is needed to ensure that people understand how the cycle is used in practice (including how the CRC links to documentation, articulates care and how the CRC differs from the Nursing Process). Prior to any implementation there will need to be information for nurses, other disciplines as well as consumers/families/carers to ensure people are aware of the FMHN-CRC and understand how the cycle will be applied and enhance practice. In a study by De Beuf et al. (2020) which explored staff perceptions of the implementation of a new risk assessment instrument into a service, they found communication to be a key factor in ensuring buy-in, developing enthusiasm and fostering involvement. Other suggested strategies included ensuring the rationale for introducing something new was

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1. Consider the consumer's situation

Describe the context, the person and their situation.
Engage the person, their family/carers/ supporters, to learn their situation.
Check and reflect your thinking isn't shaped by assumptions/preconceptions.
Check and reflect you're not locking onto salient factors too soon.

2. Collect cues/information

Review current information (e.g. handover, notes, history, collateral, offence history, risk assessments, results of investigations, AOD, nursing/medical assessment), and individual needs (e.g. trauma, cultural, gender, responsivity).
Engage the person, their family/carers/ supporters, to collect cues and information.
Gather new information (e.g. undertake holistic assessment and determine the person's needs).
Recall knowledge such as physiology, pathophysiology, pharmacology, epidemiology, context of care, ethical issues and legislation.
Consider situational factors that may have led to the offending or presenting behaviours.
Check and reflect cues without relying on incomplete information, opinion, or intuition/ hunches.

3. Process information

Analyse data to understand the signs/ symptoms and behaviour.
Distinguish relevant from irrelevant information, recognise inconsistencies, narrow down information to what's important and recognise gaps in cues collected.
Discover new relationships or patterns, cluster cues together to identify relationships between them.
Infer and make deductions or form opinions that flow logically by interpreting subjective and objective cues. Consider alternatives and consequences.
Engage the person, their family/carers/ supporters, in processing the information.
Check and reflect you're not accepting/making judgements without sufficient evidence and before fully verifying.
Check and reflect that you and members of the team are able to present/critique alternative positions and express differing opinions related to care.

4. Identify needs

Synthesise facts and inferences to make a definite clinical judgement about the person's situation and needs.
Engage the person, their family/carers/ supporters, regarding their needs.
Consider supporting and disconfirming evidence.
Check and reflect that you're not making judgements about an individual or events based on preconceptions or similarity to an event/person, without considering the differences.

5. Establish goals

Describe what the person, their family/carers/ supporters/stakeholders, nurses/team want to happen, and a desired outcome/timeframe.

6. Take action

Select a course of action from the alternatives available.
Engage the person, their family/carers/ supporters, in deciding the course of action.
Check and reflect that you're not maintaining your initial decision regardless of new information indicating that it was incorrect.

7. Evaluate outcomes

Evaluate the effectiveness of actions and outcomes.
Ask if the situation improved, both from your perspective and that of the person and their family/carers/supporters.

8. Reflect on the process and new learnings

Contemplate what you've learnt from this process, and what you'd do differently next time. What else do you need to know? What are the reflections from the consumer and their family/carers/supporters?
Engage and reflect with the person, their family/carers/supporters, to see what they've learnt from the process, what they'd have liked to be different and what else they need to know.
Check and reflect that you're not attributing positives outcomes to your actions while blaming negative outcomes on outside factors.

FIGURE 3 The Forensic Mental Health Nursing-Clinical Reasoning Cycle (FMHN-CRC).

shared, and providing practical information related to workflow. The lack of information about the FMHN-CRC and how this would be applied in practice may also have contributed to some reservation from the FMHN academics. Therefore, it would be important to include a communication plan which emphasises how the CRC differs from the NP, and why this model may be beneficial in enhancing nursing practice and consumer care.

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One possible factor that may support acceptance and uptake of the FMHN-CRC when it is eventually introduced across the service might be the early engagement of the nurses in this project, as it was the nurses from the service who initially selected the CRC, and who have been involved in the adaptations. Other studies have also highlighted the importance of involving nurses from the service to ensure implementation success (Busca et al., 2021; Dogherty et al., 2013).

For the Forensicare nurses, the hesitation was centred around concerns that having the word nurse in the title might exclude other disciplines, and how the FMHC-CRC would be applied in practice. The reluctance to have the word nurse in the title of the adapted CRC was raised by some nurses in the preceding study and again in this study. Interestingly nurses concern about excluding other disciplines by 'owning' the cycle was not met with concern from the other disciplines. In contrast the other disciplines were supportive, considered that the proposed FMHN-CRC aligned with other discipline frameworks and would assist in articulating nursing care. Other studies have suggested that the identification of nurses' contribution to consumer outcomes and teamwork can in fact be a facilitator in the preparation of introducing new initiatives (Busca et al., 2021), and as suggested by participants in this study, might actually assist in informing how to work in a multidisciplinary manner.

The contribution of nursing practice is important, as there remains a lack of acknowledgement that MHN have a specific skill set, which also may hinder highly skilled nurses practising or extending their scope of practice (Lakeman & Hurley, 2021). This may be especially pertinent in FMHN where for many years there has been discussion about whether FMHN was specialist practice or advanced practice and whether FMNH was a subspecialty of forensic nursing or a subspecialty of MHN (Martin et al., 2013; Robinson & Kettles, 2000). It is crucial that FMHNs are able to define the requisite knowledge, skills and identify their role within the mutlidisplinary team and their contribution to care (Martin et al., 2013).

Limitations

While this study sought to include all disciplines from across the service, we did not get representation from psychology, due to staffing shortages. While there was participation from the FMHN academics from across six different countries there was no representation from any FMHN academic based in Australia which may have been valuable, given the difference in nursing undergraduate programmes internationally. Two of the intended focus groups ended up being interviews with one participant. While this is not ideal, the other participants who indicated they would attend, did not (due to staffing shortages due to the ongoing COVID-19 pandemic). Prior to conducting the interview with just one participant the researchers checked with these participants to ensure they were comfortable and agreeable to participate.

CONCLUSION

Participants were engaged to finalise adaptations to the CRC to create the FMHN-CRC. The responses from the participants in this study highlight the importance of collaboration in care with consumers who find themselves in a FMH setting. This study also emphasised the importance of articulating the unique knowledge and skills of FMHNs, where the FMHN-CRC may assist in ongoing efforts to define the specific knowledge, skills, identity and the unique contribution to care FMHN provide. Prior to implementation there is a need to ensure the FMHN-CRC is clearly articulated and clear information is provided in ways that support the shift from page to practice for all.

RELEVANCE FOR CLINICAL PRACTICE

Often there is an assumption that frameworks designed for other areas of health and/or nursing care can be slotted into FMH settings (e.g. Safewards). One issues with this assumption is the absence of key factors inherent in FMH settings that contribute to care delivery, for example, the influence of offending behaviour and the knowledge and skills needed for working in this setting to provide effective and holistic care (Maguire, Garvey, Ryan, et al., 2022; Maguire, Ryan, Fullam, & McKenna, 2022; Maguire, Ryan, Mawren, et al., 2022). The FMHN-CRC could be used to outline care contribution, promote collaborative ways of working with the consumer/supportive network and broader FMH team and articulate the specialist skills of FMHN (Lakeman & Hurley, 2021).

AUTHOR CONTRIBUTIONS

All authors listed meet the authorship criteria according to the latest guidelines of the International Committee of Medical Journal Editors, and all authors are in agreement with the manuscript.

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CONFLICT OF INTEREST STATEMENT

The authors report no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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