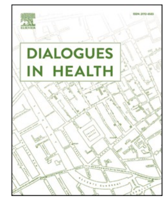
Dialogues in Health 4 (2024) 100170

Contents lists available at ScienceDirect

Dialogues in Health

journal homepage: www.elsevier.com/locate/dialog



# The future of midwife-led continuity of care: Call for a dialogue

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ARTICLE INFO

*Keywords:*
industrial complex
intuitive logics
midwife-led continuity of care
scenario development
social structures

ABSTRACT

*Background/Purpose:* Midwife-led continuity of care (MLCC) is an evidence-based care model positively influencing the health and wellbeing of women and their families. Despite the evidence, a sustainable future of the model is uncertain. The aim of this paper is to give an example of a theoretical exercise that enhances the understanding of the trends and developments impacting MLCC's future state.
*Methods:* The industrial complex theory scaffolded the theoretical approach. The intuitive logics scenario development methodology was used to structure the key variables that influence the utility of MLCC. Dimensionally structured scenarios representing the probable, possible and probable MLCC futures were written.
*Results:* Thirteen key variables that greatly impact the future MLCC, with varying degrees of certainty were identified. A theoretical framework representing two underlying meta dimensions of MLCC was constructed: *identity system of midwife-led continuity of care (fixed vs fluid)* and *embodied orientation to the world (reasoning vs meaning making)*. Within the framework, four different storylines of possible, plausible prospective futures emerged: *Sense & sensibility*, *The birth of mothers*, *Too many sisters* and *One-stop-shop*.
*Conclusion:* The paper is an example of how to approach the future of MLCC, the method serving as a tool to establish a theoretical truth of how its future state may unfold, the scenarios facilitating a dialogue among stakeholders and informing the public.

## 1. Introduction

Midwife-led continuity of care (MLCC) is a model whereby the midwife is the lead professional in planning, organising, and providing care to a woman from booking to the postnatal period in a multidisciplinary network of consultation and referral with other care providers. Care is provided by the same midwife, or by a small team of midwives, aiming to develop a partnership between the woman and midwife overtime [1,2]. The thoughts underpinning MLCC are being cared for by a known, trusted midwife or midwives, aiming to optimise bio-psychosocial processes, strengthening the opportunities for women to achieve a positive birth and positive perinatal care experiences [3,4]. On global level, MLCC shows a variety in its implementation, including non-, mal, or poorly utilisation of the model [5]. This, despite rigorous evidence showing the positive effects of MLCC, when compared with other models of care, in terms of improving short- and long-term maternal, infant, and family health and wellbeing outcomes, and care experiences [2]. Regardless of the evidence on health and wellbeing effectiveness of MLCC, and the WHO [6] recommending this model to be the childbearing woman's first choice of care, MLCC is currently being downscaled, or dismissed altogether [7].

### 1.1. Midwife-led continuity of care – a public and global challenge

Our world faces huge sustainable development challenges like climate action, poverty, inequality, the carbon emissions' crisis - having huge health and social impact. Based on the scale of health and generational wellbeing importance, the lack of, or poorly utilised MLCC also seem to represent a major public and global challenge – especially when the positive outcomes of MLCC are ignored [2,6]. Currently, in the normal birth debate, individual and anecdotal narratives, and the individual (social media) voices are privileged – winning the days from evidence, gaining momentum in politics [7,8]. Midwives are drawn into the discussion, trying to come to terms with their own thoughts and experiences. Opinions can differ or conflict [9,10], likely to contribute to duality, segregation, and opposition of the public opinion, division, and disagreement. MLCC therefore seems to have the potential to lead to political-, social-, attitude- and group polarisation when the status-quo of maternity services, including obstetric-led care and risk-management, are being protected [11,12].

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https://doi.org/10.1016/j.dialog.2024.100170
Received 12 November 2023; Received in revised form 20 January 2024; Accepted 23 January 2024
Available online 28 January 2024
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### 1.2. The industrial complex of midwife-led continuity of care

Public and global issues have two things in common. The first commonality is *complexity*. Complexity is shown by the variety and diversity of parties, stakeholders and systems that are entwined and have an impact on each other [13]. Additionally, population experiences and outcomes can differ from individual ones, always including alternative views [13]. The second commonality is *chaos*; representing the underlying interconnectedness that exists in apparently random or spontaneous events, including patterns, nuances, and seemingly unordered systems and unpredictability with implied sensitivity [13]. Direct and indirect activities around MLCC can be regarded as one cohesive and coherent chain of individuals, organisations, and events [14] - all showing a similarity with the industrial complex. The industrial complex is a socioeconomic concept representing an entangled, and interactive network where individual agents, parties, and stakeholders dominate, execute power and pursue own interests, regardless of, or at the expense of society and of individuals, leading to the standardisation of individuals into moulds of conformity to propel modern change constituted by science, capitalism and technology [13]. These agents, parties, and stakeholders can be found on any layer in the maternity care system, including: the individual service user or service provider (micro-level), the service user-provider dyad (meso-level) and organisational and institutional management, government, economy, and society (macro-level) [15]. The various levels contribute to complexity and chaos. The industrial complex was first mentioned by Eisenhower in his political farewell in 1961 and adopted by the author: *The Midwife-led continuity of care industrial complex*. The model helps to shape thinking and structuring the exploration of the truth of MLCC evidence of various parties and stakeholders, such as service users, practitioners, and policy makers.

The author aimed to give an example of how to construct a theoretical truth of MLCC by uncovering and enhancing the understanding and reflection of its complex and chaotic processes, connections, and underlying events, and how a future state of the care model may unfold - to challenge thinking and facilitate a dialogue among stakeholders.

## 2. Methods

### 2.1. Intuitive logics scenario development methodology

The intuitive logics scenario planning methodology was used. This methodology is a theoretically phased method of inquiry, that facilitates foreseeing the probable future of MLCC through learning from the driving trends and developments in MLCC, exploring the interconnectedness of situations and eventualities, and to understand what is significant [16–18]. The phases of the intuitive logics scenario development methodology were followed to make sense of the complexity and chaos of MLCC, through (i) providing a framework to understand trends and developments of MLCC, (ii) understanding what is important for the future of MLCC, (iii) contributing to organisational learning and exploration, and (iv) providing input for an MLCC dialogue [17–19].

The first phase of intuitive logics scenario development methodology included choosing an indicative case, scope, or issue of concern - in this case MLCC. In the second phase, the key trends and developments that make up the MLCC industrial complex, were identified. In the third phase, the MLCC key variables were clustered according to their impact and certainty (i.e. great or small, certain or uncertain) [16–18]. An intuitive categorisation of the key trends and developments resulted into a theoretical framework structured by two underlying meta dimensions of MLCC with extreme or opposite poles. The last phase of the methodology included writing scenarios that present probable, plausible, and possible future eventualities or situations of MLCC, by combining the extreme ends of the selected dimensions with the key variables [17–19] (see Fig. 1). The scenarios were drafted with the use of artificial intelligence (ChatGPT). The author entered the poles of the dimensions and

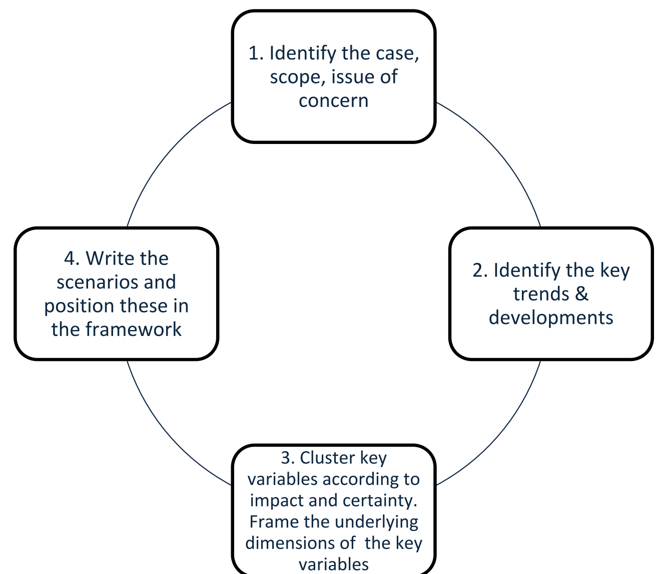


**Fig. 1.** Intuitive logics scenario development process.

the key variables as 'raw information' to draft a scenario. The author checked the accuracy, coherence, and credibility of the content and adapted the content where needed [20].

### 2.2. Information retrieval propositional content

An information retrieval approach was used where the author actively sought and acquired and re-conceptualised information from own research , inherently making judgements about the usefulness or interest of the sources in relation to the topic of interest [21]. As a conduit for input, the author actively engaged with own qualitative and quantitative research that included practice observations, survey output and dialogues with women, practising midwives and policy makers to identify trends and developments related to MLCC utility. This research was predominantly performed in various European countries. The author looked for epistemic modality in the results paragraphs of the papers by annotating the significant findings (i.e. p-values), strong assumptions (i.e. the words must, necessary), and probable and possible propositions (i.e. correlations or associations, the words possible, possibility, suggest, might) that coincided with MLCC [21]. Drawing on own research facilitated a process of understanding, synthesis, and analysis of the MLCC key variables and the underlying dimensions [22,23]. This approach assisted to illuminate contextual dimensions and to better understand how the trends and developments of MLCC contributed to shaping its future, as it appeared to the author.

## 3. Results

### 3.1. Micro- and meso-key trends and developments – women and midwives

Micro- and meso-trends and developments are those on individual service provider and service user level and between service providers and users - women and midwives and between midwives [15].

#### 3.1.1. Women's perceptions

From a human-focused and egalitarian perspective, recognising the worth and the need of respecting the woman's lived experiences, the uniqueness of the individual woman, reported outcomes of wellbeing, experiential knowledge, and embodied knowledge, give a voice to women's own truth [24–26]. According to women, relational midwifery, interpersonal action care components such as participation

in care, self-determination, and shared decision-making contribute to shaping care, birth experiences and maternal emotional wellbeing [27–29]. When women are asked to compare the midwife providing continuity of care with other maternity care providers, the MLCC midwife is the best evaluated professional regarding interaction and collaboration, and maternal satisfaction [28].

#### 3.1.2. Philosophy of care

A philosophy of care underpins and informs the midwife's pragmatic utility of MLCC [30]. A core philosophical foundation scaffolds the midwife's collaborative and interpersonal actions and her relationship with the woman, and what the midwife strives to achieve [31–33]. Midwives' intentions to adhere to their philosophy of care are high [33]. Remaining loyal to the philosophy of care can be difficult when professional collectiveness is lacking and when continuity of care is regarded as practising outside the social norm of maternity services [34,35]. Not able to remain loyal to ideations and intentions can cause a discrepancy between the intention to and reality of providing MLCC [35]. MLCC requires a socialisation process and transformative learning or growth of (student)midwives, which ideally should be a collective midwifery profession process [32].

#### 3.1.3. Barriers

The MLCC model does not suit all midwives – mostly depending on home situation, family commitments, the roster, rotation, undefined working hours, skill set, being on-call, financial rewards, and work percentages [14]. By embracing the MLCC evidence, the midwife's work-life balance can be at stake, making the midwife apprehensive to provide MLCC or even considering or leaving this service or the profession altogether. To tackle this, a midwife-centred approach would be of merit.

### 3.2. Macro trends and developments – a wider context

Macro trends and developments are those on intra-professional, multi-professional, organisational,

institutional, political and social level [15]. Organisation and culture are known to affect implementation and sustainability of evidence-based practices in healthcare [36].

#### 3.2.1. Norms and values

The midwife functions in a wider healthcare context and often experiences duality, conflicts, and a-synchronicity between her/his own values and those of the woman, between her/his own values and those of inter- and multidisciplinary colleagues, and between her/his own values and policies, guidelines, standards, the system of the healthcare organisation and social norms, evidence, and women's rights [34]. Conflicting values have an impact on professional and personal life, indicating the need to guard the wellbeing of midwives [37]. Like midwives, the birthing woman experiences disparities between her own values and the institutional rules, boundaries, and regulations when it comes to giving [34,38]. Birth and midwifery care are embedded in a much wider context – an ecological system of social, historical, political, and cultural features and human behaviour [39]. Certain *a priori* macro-level societal aspects such as the overall traditional norms and values about reproduction, birth, and motherhood shape the woman's subordinate position and reproductive role in society when compared to men. Societal acceptance of the patriarchal and the hierarchical (over)medical and techno-medical dominant ethos of the maternity community exercise power over the birthing woman. This ethos is embodied in reproductive health and hospital protocols, policies, rules, and guidelines and in the dynamics of medicalisation. According to feminism, midwives are regarded at the lower end of the medical hierarchy and subordinate to obstetricians within medical institutions. Androcentric bias is believed to be deeply embedded in working environments in maternity services [39].

#### 3.2.2. Midwifery care portrayed in the media

Many pregnant women read blogs, websites, and join online fora - serving as resources of information about care during pregnancy, labour, and birth which show a predominant portrayal of routinely provided, protocol-based standardised care, and medicalised and technocratic birth [40,41]. There is little to no portrayal of midwife-led care or continuity of carer. When MLCC is not publicly presented as the norm or when midwives are portrayed as practising under the auspices of the medical profession [40,41], women might be perceived as alternative, irresponsible, a bad mother, when it comes to wanting MLCC. Being aware of the rather opinionated, dogmatic, and domineering nature of social media, women might risk how they are perceived and validated by others when choosing MLCC, not allowing to act differently than expected or generally accepted [39].

#### 3.2.3. Sociodemographic developments

Maternal sociodemographic factors (background, social economic status, age), pre-existing morbidity and multimorbidity and geographical area are trends and developments which need to be considered while implementing MLCC [27,42].

### 3.3. Key variables

A total of 21 key trends and developments were extracted [16–18]. The trends and developments are shown in Table 1, presented as micro/meso-and macro key variables of MLCC.

### 3.4. Four-quadrant model of impact and certainty

The key variables were clustered according to their impact and certainty [16–18]. More than half of the variables, 13/21 (72%), were assigned great impact with varying certainty – certain or uncertain, as shown in Table 2.

### 3.5. Theoretical framework: dimensions of the future

Based on the assumed underlying dimensions of the 13 variables with great impact on the complexity and chaos of MLCC, a framework with two opposite poles was constructed [16–18]. The key variables indicate that there are two different dimensions that determine the future of MLCC: (1) The 'makeup' of the organisational culture – called *The identity system of midwife-led continuity of care* and (2) how stakeholders perceive MLCC– called *The embodied orientation to the world*. Each quadrant will have its own scenario, A, B, C, D respectively (see Fig. 2).

The horizontal axis represents the continuum of "The identity system":

**Table 1**
Micro- and micro-level key variables of midwife-led continuity of care.

| Micro/Meso-Level Variables | Macro-Level Variables |
|---|---|
| Philosophy/ belief | Rules and regulations of maternity services |
| Outcomes of pregnancy & birth | (Social) media portrayal/ communication about risks of mortality and morbidity |
| Maternal wellbeing | Social norms (reproduction, birth, motherhood) |
| Maternal experiences | Women's position in society |
| Otherness (of women & midwives) | Hierarchical structure of maternity services |
| Socialisation of midwife-led continuity of care | (Over)medicalisation/ technocratic ethos |
| Collectiveness (midwives) | Feminism |
| How midwives organise their work | Maternal socio-demographic factors |
| Work-life balance of midwives | Maternal pre-existing (multi)morbidity |
| Midwife-centred approach | Geographical area |
| Midwives' wellbeing | |

**Table 2**
2 x 2 matrix: key variables of midwife-led continuity of care.

| | Impact | |
|---|---|---|
| Certainty | small | great |
| **Uncertain** | Collectiveness (midwives) | Philosophy/ belief (midwives) |
| | Otherness (women/ midwives) | Socialization of midwife-led continuity of care |
| | Hierarchical structure of maternity services | Women's position in society |
| | Maternal experiences | Social norms (pregnancy, birth, motherhood) |
| | How midwives organize their work | Feminism |
| | | Midwife-centred approach |
| | | (Social) media portrayal/ communication about risks of mortality and morbidity |
| **Certain** | Work-life balance of midwives | Outcomes of pregnancy & birth |
| | Midwives' wellbeing | Maternal wellbeing |
| | Geographical area | Sociodemographic factors |
| | | Pre-pregnancy (multi)morbidity |
| | | Rules and regulations of maternity services |
| | | (Over)medicalization/ technocratic ethos |

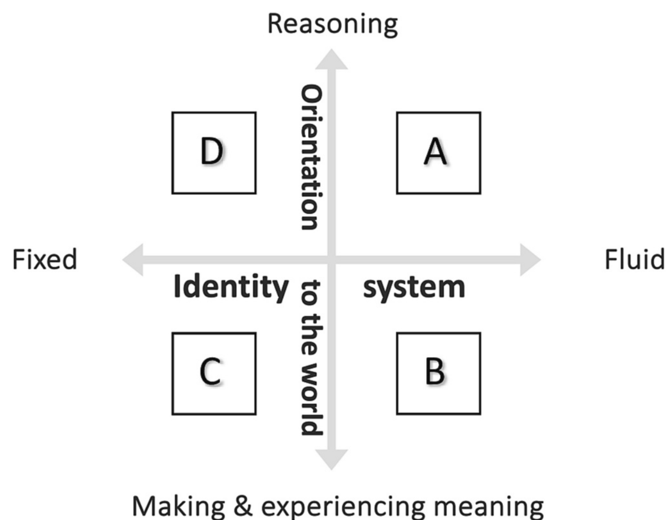


**Fig. 2.** Framework dimensions of midwife-led continuity of care and scenarios.

- At the left end of the axis, *fixed* refers to a system that is resolute, providing a singular, pragmatic voice and perspective, not per se requiring in-depth knowledge of MLCC.
- *Fluid*, on the right end of the axis, refers to a system that evolves and adapts like a living organism, requiring a deep understanding of the story of MLCC.

The vertical axis represents the continuum of "Embodied orientation to the world":

- At the top end of the axis, *reasoning* refers to intellectualist conception to structure understanding of, and engagement with the world of MLCC, producing various kinds of judgements and generating knowledge and thinking.
- *Making & experiencing meaning*, on the bottom end of the axis, refers to constituting a way of being in, and engaging with MLCC in a deep visceral manner, producing emotional response patterns and feelings that lie at the heart of the capacity to understand the situation we find ourselves and making it meaningful.

### 3.6. Scenarios

As a last step of the intuitive logics scenario development methodology, four scenarios were written by combining intuition and imagination with analytical rigour [16–18] – making sense of the complexity and chaos in the dynamics of MLCC (Fig. 3). The scenarios were placed in the four quadrants and written from the perspectives of different stakeholders.

#### 3.6.1. Scenario A. Sense and sensibility

The first scenario is shaped by an orientation of reasoning and a fluid system: "I am Jenny and am a maternity service manager in a hospital. I have witnessed the transformative changes in midwifery and the childbearing society over the years, and this knowledge has shaped my approach as a manager. I hold a deep admiration for midwives, as they form the backbone of our service. In recognising the significance of continuity of care, I have entrusted midwives with the autonomy to create their own rosters and determine the most effective ways to provide consistent support. I understand the need for flexibility and acknowledge that midwives may occasionally require a break from the demands of continuous care to ensure their life balance. By granting them this opportunity, I aim to maintain a sustainable work environment. Evaluation among women in our region shows that not all women want midwife-led continuity of care. As a result, our target is for 60% of women in our local service to receive this model of care, allowing for a balance between different care preferences and providing midwives with the necessary space to thrive. In collaboration with obstetricians, I seek ways to incorporate their perspectives but without compromising the autonomy of midwives in decision-making processes. Recognising the importance of empathy and sense of shared understanding in healthcare, I made a deliberate and strategic decision to ensure that 80% of our obstetricians are female and have personal experience as mothers themselves. Our hospital public relation department portrays the value of midwifery and the continuity model. Messages highlight the relationship built between the midwives and the women they care for, and how this fosters a sense of trust and understanding. They showcase stories of positive birth experiences, testimonials from mothers, and statistics portraying our commitment to safe and supportive care. The messaging aims to instil confidence in the public."

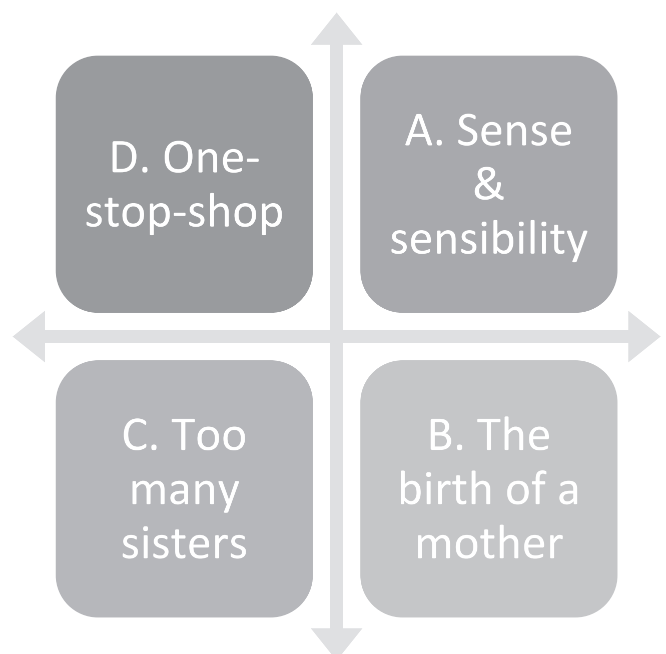


**Fig. 3.** Positioning of the scenarios.

#### 3.6.2. Scenario B. The birth of mothers

The second scenario is shaped by a fluid system and an orientation of making & experiencing meaning: "I am Monica, a soon-to-be granny. I find happiness in witnessing my daughter, Marjorie, embark on her journey towards motherhood. I can't help but reflect on the stark differences between our experiences. During my time, pregnancy was often reduced to a mere checklist of societal expectations, captured in carefully curated Facebook posts. Oh, the burden, all for the sake of social validation. But Marjorie, she has discovered a different path. She has found a midwife-moderated Facebook community, where meaningful conversations flourish, where respect is paramount, and confidentiality is sacred. This support system extends beyond the digital realm, as they organise meetups and monthly gatherings at the local midwives' practice. Within the walls of this converted community hall, funded by the local government, Marjorie and her fellow mothers-to-be delve into the true essence of pregnancy, birth, and motherhood – conversations guided by the midwives. These sessions equip Marjorie for the transformative journey that lies ahead. The midwives who guide and support the group are more than healthcare professionals - they are beacons of understanding and compassion, but it goes beyond that. The pictures adorning the walls, accompanied by snippets of their life stories, paint a vivid portrait of the individuals behind the professionals. Marjorie gets to truly know these remarkable midwives. In this inclusive haven, women from all walks of life unite, transcending societal boundaries and celebrating the diversity that motherhood encompasses. Lifelong friendships are formed within these walls. Marjorie's midwives adapt to here needs, offering both practice visits and home visits, ensuring convenience and comfort throughout her pregnancy. I was even invited to one of these visits, where, amidst the warmth and intimacy, we delved into the intricacies of our mother-daughter relationship and its influence on Marjorie's perception of motherhood. The midwife's thought-provoking questions about prenatal screening and the uncertainties of labour revealed a deep commitment to guiding Marjorie through the complexities of life's choices and challenges. And when the time comes for Marjorie to give birth, she has the freedom to choose her birthing environment. Nothing is set in stone. The midwife, a steadfast presence, accompanies Marjorie wherever she goes, ensuring unwavering support and guidance. It is a reminder that the true essence of life's most precious moments lies in the relationships we foster."

#### 3.6.3. Scenario C. Too many sisters

The third scenario is shaped by a fixed system and an orientation of making & experiencing meaning: "I am Nadia, I was born in the confines of Kenya, now trapped in a deprived urban area as a single mum receiving governmental financial assistance. Carrying my third child within me, my body is riddled with high blood pressure, diabetes, and the burden of relying on anti-depressants to survive. The maternity system and protocols feel stifling and impersonal. I am assigned a lovely midwife, called Rebecca, a fleeting glimmer of compassion. However, any semblance of consistent care is shattered as I am shuffled between different specialised midwives, all lovely women, but all claiming that my vulnerability necessitates such fractured attention. Of course, I am vulnerable; I am mortal, plagued by ill health and consumed by the love I hold for my children. I am only human, and vulnerability is an inherent aspect of life itself. I accept this reality, but it seems the system cannot. The fragmented nature of my care reflects the fragmented pieces of my being. Each different midwife assigned to oversee my blood pressure, my diet, and my mental health is undoubtedly well-meaning, but the continuous stream of assessments and interventions perpetuates a pervasive and continuing medicalised approach. This ceaseless parade of unfamiliar faces threatens to overshadow the profound personal significance I ascribe to the transformative journey of motherhood I am embarking upon once again. All I yearn for is a special midwife, a constant presence by my side, with whom I can share this sacred experience and who validates the immense importance and impact on my wellbeing. Rebecca has promised to accompany me in the upcoming visits with the other midwives, offering a glimmer of hope and a lifeline that perhaps, just perhaps, we may forge a fleeting bond amidst the chaos."

#### 3.6.4. Scenario D. One-stop-shop

The last scenario is shaped by a fixed system and an orientation of reasoning: "I am Anna, a newly qualified midwife, working in a maternity system with an overarching goal of this system to ensure cost-effective maternity care, safety, care improvement and innovation – all while for women to maintain continuous access to maternity care services. My journey to becoming an advanced midwife specialist and practitioner requires me to upskill in various areas, including technology and obstetric interventions and treatment, regulation, governance, and policy. I will also be tasked with collecting data on metrics such as waiting time, waiting lists, readmission rates, intervention rates, breastfeeding rates, handwashing, hygiene and so on. The scope of interventions I will be involved in is extensive and eclectic, ranging from continuous cardiotocography (CTG), induction, instrumental birth, external cephalic version, fertility treatment, medical abortion, ultrasound, prescribing – to name a few. As I contemplate the implications of this role, I notice that many midwives seem to be competing for this position, perhaps due to the potential for a slight increase in pay. However, I question whether fulfilling this role means ascending to a position of superiority or merely contributing to a new layer of hierarchy and tension within the maternity care system. The clinic where I work is highly system-driven, with 24/7 centralised CTG monitoring and surveillance, strict adherence to measurable indicators, and a strong focus on "doing" rather than "being present." The emotional well-being of expectant mothers and the overall staff morale appear to be undervalued, as they are not considered quantifiable factors that impact the quality of care. In this environment, the epidemiology and statistics of our unit are important data points over time. I grapple with the question of whether I am just a cog in a monstrous machine that thrives on continuous monitoring and the constant performance of obstetric care by midwives. I also question whether my service is primarily directed toward women or driven by governmental budgetary constraints. My concerns lead me to ponder the priorities and values within the healthcare system I operate in."

## 4. Discussion

This paper offers a detailed and analytical account of the factors that affect MLCC and its multiple possible paths to the future. In general, it is difficult to foresee the future but by thinking ahead through a process of exploring and considering significant trends and developments, different probable, possible and plausible MLCC future alternative situations and outcomes and possibilities emerged [17–19]. The scenarios are storylines of a future end state of MLCC presented as an interplay of certainties and uncertainties at a point in time or horizon, with the potential to serve as an input for dialogue.

The four scenarios formed by the dimensions are meaningfully diverse, yet plausible and causally unfolded scenarios [43]. All scenarios have MLCC as their central focus but show variation in the utilisation of the care model. Scenario A is supposedly driven by a system that engages with the content and context of MLCC with adaptive responses based on knowledge and understanding of the model. Responses such as midwives working part-time in the MLCC model to support their work-life balance and family commitments suggest adaptation on system level and the model to thrive through pragmatic and strategic, seemingly feasible solutions [44,45]. The purpose of this scenario suggests building a sustainable MLCC environment. Scenario B seems to mirror the responsiveness of scenario A, in this case a personalised and tailored response to women in the model, including the concepts of partnership, intimacy, and reciprocity. The fluidity of MLCC seems to be initiated and led by motivated midwives, seemingly to make MLCC work for women and for midwives. This scenario supposedly reflects midwives who are

classified by women as having the capacity to go ‘above and beyond’, being kind and endorphic [46]. Midwives in the scenario engage with online support mechanisms that have been recognised to establish strong reciprocal woman-midwife relationships being perceived as actual relationships [47]. Scenario C suggests the woman to be an intersecting entity consisting of multiple vulnerable factors that are attempted to be holistically integrated by various midwives as one continuum. The named midwife seems to coordinate the woman through a fragmented system, illustrating the compassionate way of working to meet multifaceted needs of social complex populations [48]. Diversity is addressed in scenario B and C, although in scenario B diversity is addressed as differences in human beings and in scenario C diversity focuses on health risks and social complexity [2]. Scenario D seemingly emphasises and furthers the approach of midwifery coordination of care portrayed in scenario C although MLCC seems to have a different meaning in scenario D through assigning the midwife with a tapestry of obstetric and technocratic tasks. Pursuing this as the future of MLCC might face challenges as there is no agreement about the structure of MLCC integration or about task, skills, and responsibilities [11,49]. The last two scenarios seem to embody the management continuity of care aspect and not relational continuity [8], which is at the heart of MLCC [3,4].

Reflecting on the elements of MLCC: “the midwife is the lead professional in planning, organising, and providing care to a woman from booking to the postnatal period” [1], “care is provided by the same midwife, or by a small team of midwives aiming to develop a partnership between the woman and midwife overtime” [1,2] and “the woman is being cared for by a known, trusted midwife or midwives [3,4], seem to be predominantly portrayed in scenario B and to a lesser degree in scenario C. The woman-midwife relationship aspects are being referred to and recognised as important and communicated as such in scenario A but not actively integrated in the utility of MLCC. “Optimising biopsychosocial processes, strengthening the opportunities for women to achieve a positive birth and positive perinatal care experiences” [3,4] is fully utilised in scenario B, while in scenario A the positive experiences are implicitly mentioned. The midwife as lead professional in “a multidisciplinary network of consultation and referral with other care providers” [1] is described in scenario A, C and D. In scenario C and D, the autonomy of the midwife is more compromised than in scenario A. Based on the scenarios it might that a non-polarised future of MLCC best thrives by a self-organising power of an adaptive system of midwives and midwife managers, focusing on the experiences of service user, that is the childbearing woman, governed by a thorough understanding of the purpose and value of MLCC [50].

The scenarios in this paper are a portrayal of descriptive and normative future heuristics that will only unfold through human action or inaction [43]. It is not uncommon for scenarios that emerge from the intuitive logics scenario planning methodology, to highlight negative aspects or sensitive topics of a phenomenon. Although the scenarios are not predictions, good or bad, or science fiction [43], the scenarios in this paper may cause different responses and heterogenous viewpoints [19]. Although this paper has a theoretical perspective, it does have practical meaning as it is after this point to focus on stakeholder analysis, that is, the identification of groups to identify participants for future MLCC development [51], including strategy development, anticipation, adaptive organisational learning, and proactive behaviour of midwives [43,52]. The scenarios are suitable for a dialogue among student midwives and/or practising midwives and midwifery management as a tool for transformative learning and professional development to unpick and explore the causality of the key variables underpinning the scenarios and gain in-depth understanding of micro-, meso- and micro-level forces in midwifery care [32,43]. Understanding the different causes and their effects as portrayed in the scenarios’ storylines, stakeholders might be nudged to take action to pursue or avoid a certain scenario, including managers and policymakers [19,43]. As MLCC is not a default model of practice [5,7], the scenarios might be an antidote to tunnel vision of practitioners and managers who do not embrace the extensive MLCC evidence, break down paradigms, biases and change the MLCC mindset [53]. Because the intuitive logics scenario planning methodology aims to increase critical thinking, enhance understanding of causal process and consequences, and develop long-term thinking and planning [16–19], individuals with decision making responsibility, policy makers or reformers might be the most likely individuals to make use of the scenarios. Considering the underlying dimensions, in-depth knowledge of MLCC, recognising its meaning and pragmatic responses to context and experiences and seeking MLCC leaders or appointing benchmarking midwives [54], seem paramount. Current and future childbearing women might benefit most from becoming aware of future care pathways to reflect on what would suit them best [55]. The scenarios can be communicated to a wider audience, including maternity service users. The scenarios are suitable for narrative techniques such as animation, which could be used for influencing and informative (social) media messaging purposes [56].

### 4.1. Limitations

Probably the biggest flaw of this study was selection bias as the key variables emerged from the author’s own work. Identifying the key variables and clustering them according to their impact and certainty was self-validated, affecting source credibility. However, the results in this paper were drawn on a collectively collected, analysed, interpretated and written body of evidence. The key variables emerged from studies predominantly performed in European countries, therefore affecting transferability of the scenarios to non-western maternity services or non-high-income countries. Within the methodology of the intuitive logics scenario planning methodology, there was no hypothesis of how the future of MLCC was going to unfold and therefore the author did not express opinions but utilised a thinker role, using personal work as propositional information. This thinking process transferred the key variables to scenarios, presenting possibilities without an estimation of the likelihood these discourses will be true or certain [21]. Information on other MLCC trends and developments might have been missed. This paper is therefore mere an example of how the intuitive logics scenario planning methodology can be used to reflect on what one would do to preserve or enhance its own interests as a particular scenario unfolds - certain or uncertain, true or not true. Uncovering viewpoints on unfolding events, can lead to re-thinking and re-design of care, theory building, and reasoning and might prevent ‘failure to rescue’ [19,57]. Regardless the potential methodological limitations, the methodology used can serve as an example to broach other topics and their future, ideally performed by multiple actors. Despite the debate around the use of artificial intelligence in academic writing, this assisted the author in organising the key variables within the four quadrants and facilitated to enhance the meaning and authenticity of the scenarios’ content [20].

## 5. Conclusion

This paper has a descriptive, argumentative, and explanatory character and used intuitive logics scenario development methodology as a theoretical and methodological model to present a compilation and experience analysis of primary research and original scholarship. This paper and its scenarios do not predict the future or evolutionary path of MLCC but provides possible, probable, and plausible futures for MLCC that reflect the presence of a contextual and systematised vision. The paper is an example of how to approach the future of MLCC, the methodology serving as a tool to establish a theoretical truth of how a future state of MLCC may unfold, with the emphasis on the use of the scenarios for dialogue. One must bear in mind that the scenarios are fictional storylines, alternatives of care-as-usual, but based on current trends and developments that derived from the scientific literature - aiming to strengthen and challenge critical thinking, the reflectiveness, analytical capacity, and decision-making among practitioners,

managers, and policy makers.

## Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work the author used ChatGPT to draft the scenarios. After using this tool/service, the author reviewed and edited the content as needed and takes full responsibility for the content of the publication.

## Funding

N/A

## Use of AI

During the preparation of this work the author used CHAT GPT to draft the scenarios. After using this tool/service, the author reviewed and edited the content as needed and takes full responsibility for the content of the publication.

## CRediT authorship contribution statement

**Yvonne J. Kuipers:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – original draft.

## Declaration of competing interest

There are no conflicts of interest to be reported.

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