Shared Medical Appointments in Perinatal Care:

Potential Benefits in a Regional Setting

Key Words: Postnatal care, shared medical appointment, regional, healthcare access

Author: Emily Cox (z5368270)

Supervisor: Dr. Trudi Beck, Nova Health Co.

Co-Supervisor: Dr. Shannon Pike, UNSW Rural Clinical School

Submission Date: 7th September 2025

Word Count: 3999

Table of Contents

Table of Contents 1
Abstract 3
Background 3
Methods 3
Results 3
Conclusion 3
Statement of Contribution 4
Acknowledgements 4
1. Introduction 5
1.1 Postnatal care 5
1.2 Challenges of postnatal care in rural Australia 5
1.3 Shared medical appointments: current evidence 6
1.4 Shared medical appointments: implementation 6
2. Research Questions 7
3. Methodology 7
3.1 Study design 7
3.2 Research Setting 7
3.3 Participants 8
3.3.1 Patient Participants 8
3.3.2 Healthcare Participants 8
3.4 Participant Recruitment 8
3.4.1 Patient Recruitment 8
3.4.2 Healthcare Professional Recruitment 8
3.5. Data Collection 9
3.5.1 Patient Participant Data Collection 9
3.5.2 Healthcare Professional Data Collection 9
3.6 Data analysis 9

3.7 Ethics 9
4. Results 10
4.1 Patient Survey 10
4.1.2 Access to quality services 10
4.1.3 Pace of care, social interaction and managing cares 12
4.1.4 Access to an array of healthcare professionals 14
4.1.5 Peer support 15
4.1.6 Learning from others 16
4.1.7 One on one versus shared medical appointment approach 17
4.1.8 Additional Benefits 17
4.1.9 Limitations of SMA Model of Care 18
4.2 Healthcare Professional Survey 18
4.2.1 Healthcare Professional Survey Responses 18
5. Discussion 19
5.1 Limitations 21
5.2 Future Recommendations 21
6. Conclusion 21
Reference List 22
Appendix 1: Patient Participant Interview 24
Appendix 2: Healthcare Professional Survey 30

Abstract

Background

Delivery and availability of quality postnatal care in Australia is highly variable. Shared medical appointments (SMA's) are an emerging care model that promote learning from shared experiences. With limited evidence in the postnatal setting, the effectiveness of SMA's, especially in rural or regional locations, is undetermined. To contribute to this evidence gap, patient and healthcare professionals' experiences were examined to identify potential benefits and limitations of this care model in a regional postnatal setting.

Methods

A prospective cross-sectional study design was used. Patients were recruited from regional women's health centre and participated in phone interviews. Healthcare professionals' providing SMA's completed an anonymous online survey. Quantitative data was analysed using descriptive statistics, content analysis identified common categories in open free responses.

Results

Most participants (n=34, 79.09%) 'strongly agreed' that the SMA care model increased access to quality services and allowed sharing valuable knowledge participants could action for further support later in the postnatal period. Peer support, learning through lived experiences and a sense of community were key benefits. Group dynamics, described by some, were a potential limitation. The importance of one-to-one appointments for complex or personal concerns was emphasised and echoed by healthcare professionals. All healthcare professionals (n=5) strongly agreed SMA's improved patient-clinical relationships and enhanced time efficiency.

Conclusion

SMA's can improve access to quality care services, create a sense of community and interpersonal connections within the regional postnatal setting. Beyond further research evidently required for SMA's, opportunities to increase equitable access to SMA's in regional postnatal care is required.

Statement of Contribution

Dr. Trudi Beck led the study development and design using her significant clinical expertise, provided project oversight, supported data collection and analysis. Dr. Shannon Pike provided crucial support in refining the design of the study while also guiding data collection and analysis. Dr. Pike also led the ethics application and amendments.

Emily Cox was responsible for screening and recruiting participants, collecting, entering, managing and storing data from participant surveys. She was also involved in ethics application, data analysis, writing for publication and disseminating the findings of the research study as the primary author of the manuscript with her supervisors providing proofreading and editorial support.

Acknowledgements

I would like to acknowledge Dr. Trudi Beck who helped to make this study possible, providing valuable insight and expertise in her respective field, which played an important role in the completion of this study. I would also like to express my gratitude toward the continuous support and guidance from Dr. Shannon Pike. Dr. Pike played a significant role in this project, being available to assist with the study's process as well as providing insightful feedback that aided to the quality of this study

I would also like to thank the participants who took the time to participate in this study, both health professionals and patients. Without their participation, this study would not have been possible.

1. Introduction

1.1 Postnatal care

The postnatal period occurs immediately following the birth of the baby and lasts for approximately six weeks[1]. The postnatal period is challenging, encompassing a rapid change of life events and many physical changes to both mother and baby, which can impact the family unit. Priorities of care throughout the postnatal period differ from person to person. Priorities for some mothers may focus on mental health and for others, on physical health such as recovery from birth, breastfeeding or newborn and maternal sleeping[1,2]. Often there is a combination of both aspects of postnatal care, with additional management including gestational diabetes, hypertension and/or newborn growth and development complications[2,3]. Evidence highlights the importance of flexible postnatal care that is person-centred and tailored to the woman's individual needs to improve health outcomes for both mother and baby[1]. However, as the postnatal period involves rapidly evolving growth and development, challenges may arise when attempting to access appropriate services and educational resources to support these needs[2].

1.2 Challenges of postnatal care in rural Australia

The structured provision of postnatal care in Australia has been limited by a lack of shared policies and guidelines causing potential variability between the standards and quality of care practices and education each woman receives[4,5]. The 2025 release of the living Australian Pregnancy and Postnatal Care Guidelines a positive step to enhance consistent, evidence-based quality care[6]. The World Health Organisation (WHO) recommends the use of practical maternal and neonatal education in the postnatal setting to support the transition from hospital to home[7]. A holistic approach to education regarding maternal recovery and exercise, as well as infant sleep/settling and feeding techniques improves overall outcomes for mother and baby[5]. This holistic approach requires input from several different health professions beyond the immediate care providers such as midwives and obstetricians. The inclusion of health professionals such as physiotherapy and psychology within the realm of a multidisciplinary team (MDT) is important. However, access to MDTs for women who reside in regional environments can be difficult, as established MDTs are limited with many providers practicing in sole clinics[5,7]. The use of a shared medical appointment (SMA) approach may alleviate some of these stressors, particularly if a wider range of health disciplines are available to patients in rural or regional locations[8,9].

1.3 Shared medical appointments: current evidence

SMA's combine sequential healthcare appointments within a semi-structured group environment, fostering interactions between peers and promoting education through shared experiences[8,9]. SMA's have been primarily adopted within chronic health disease management in Australia[9]. Evidence from this population suggests SMA's improve patient outcomes, where questions that participants may not have thought of could be answered[9]. Further, SMA's provide an alternate way to provide education with access to a wider range of healthcare professionals and emotional support, allowing personal connections between participants to develop[10,11,8]. Patient satisfaction with chronic disease SMA's have been ultimately positive with literature suggesting participants needs can be met through quality communication that supports informed decision making[12].

There is currently a paucity of evidence for the use of SMA's in the postnatal care setting. Findings from a single study suggests care provided within a SMA model was of higher quality when provided in a judgement free environment, an important consideration during a period of time where women may be at their most vulnerable[10]. The SMA model created an integrated community improving women's experiences, evident in mother's superior ratings of care in comparison to their previous pregnancies when SMA's were not accessible in their rural setting[10]. Whilst not specific to postnatal care, limited evidence supports the use of SMA's for rural women with low income during the antenatal period. The ability to establish a supportive environment via SMA's was beneficial with proposed benefits of equitable access to care[10].

1.4 Shared medical appointments: implementation

The provision of SMA's require cohesive planning and delivery. Health professionals require appropriate knowledge to provide the service and skill to facilitate the group dynamic[12]. Provision of SMA's can be labour intensive due to required preparation of material and session set-up. This additional time requirement for health professionals could arguably be used more effectively by seeing patients face to face[12]. Despite this, studies have suggested that the patient-led aspects of the SMA improve content delivery, as patients lead conversations allowing the health professional to deliver content in a flexible way based upon participants immediate needs to improve the relevance of the education provided[12,13].

There is a significant gap in the evidence base for the use of SMA's in postnatal care. Emerging evidence and evidence drawn from other population groups suggests alternate healthcare models such as SMA's may provide benefits in education, access to

comprehensive care and enhance healthcare professional time efficiency[12,13]. However, with limited evidence in the postnatal setting, the current effectiveness of this model cannot be determined. Patient and healthcare professionals' experiences with SMA's is also inconclusive due to a lack of studies in this space. As SMA's are becoming more prevalent, it is important to address these evidence gaps to guide future SMA models of care that are effective, accepted by patients and support optimal newborn and maternal outcomes within the postnatal period.

2. Research Questions

This research explores patient and healthcare professionals' experiences of SMA's in postnatal care in a regional New South Wales (NSW) women's health centre.

1. What are the experiences of patients attending postnatal SMA's in a regional healthcare setting?
2. What are healthcare professionals' perceptions of the benefits and limitations of SMA's in regional postnatal care?

3. Methodology

3.1 Study design

This study was conducted using a prospective cross-sectional research design. Phone interviews were conducted with patients (**Appendix 1**) and healthcare professionals completed online anonymous surveys (**Appendix 2**).

3.2 Research Setting

This study was conducted at Nova Health Co., a regionally based women's health centre providing holistic care for women, children and families. Nova Health Co. provides antenatal and postnatal care, lactation consultations, women's gynaecological care and family planning services, and allied health services such as physiotherapy, psychology and dietetics. At Nova Health Co., SMA's are used to deliver the 'Mums and Bubs' program that encompasses postnatal aspects of care in a multidisciplinary approach across a five-week program. 'Mums and Bubs' is based on the Possums approach that focuses on education regarding infant sleep, breastfeeding and skills surrounding maternal mental health and wellbeing[14].

3.3 Participants

3.3.1 Patient Participants

Patient participants who attended the SMA were invited to participate if they met the following inclusion criteria: were aged 18 years or over and participated in a full SMA postnatal program in the last 12-18 months at the private clinic. Patients who attended less than 4 sessions were excluded.

3.3.2 Healthcare Participants

Healthcare professionals across medical, nursing and allied health specialties were involved in the delivery of the SMA. Healthcare professionals were invited to participate in this study if they met the following inclusion criteria: practicing in any healthcare discipline and assisted with the delivery of the SMA postnatal program in the last 12-18 months at the private clinic. Healthcare professionals who did not provide direct care throughout the SMA's were excluded.

3.4 Participant Recruitment

3.4.1 Patient Recruitment

Patient participants were identified by the private clinic staff and their best practice software. Private clinic staff sent the recruitment letter and Participant Information Statement (PIS) via email to potential participants. The recruitment letter advised potential participants to contact the research team directly if they wished to participate in the research. One month post dissemination of the initial recruitment letter/email the private clinic sent a reminder letter and another copy of the PIS via email.

3.4.2 Healthcare Professional Recruitment

Healthcare Professional participants were identified via the private clinic administrative staff and their workplace email address provided to the research team to distribute the electronic anonymous survey. This approach to consent was selected in consideration of the National Statement, thus avoiding potential for coercion to participate and allowing participant responses to remain anonymous. The research team sent one email with the invitation to participate and the PIS, advising potential participants what to do should they wish to participate. One month following the initial email a reminder email was sent with the PIS.

3.5. Data Collection

3.5.1 Patient Participant Data Collection

Patient participant data was collected via a survey interview conducted by the research team. Survey questions were developed by the research team based on a review of the existing literature and evidence for SMA's in chronic health management[8]. Participants responded to survey questions using open responses, and a Likert Scale. For the latter, participants were offered the opportunity to provide additional details for their Likert response with open responses.

3.5.2 Healthcare Professional Data Collection

Healthcare professional participant data was collected via an online anonymous survey administered through the UNSW hosted Qualtrics platform. Survey questions were developed by the research team and based on evidence of healthcare provider's satisfaction of SMA delivery in chronic health management[8].

3.6 Data analysis

Descriptive statistics described participant characteristics and survey results. Participant free responses, beyond assigning a level of agreement to the survey statements, were analysed independently by the author and one supervisor using content analysis to examine the responses for similar words and phrases. Words and phrases identified were then grouped into categories to aggregate responses that described the patients and healthcare professional perspectives. Participant quotes will be presented to further describe categories. Quantitative data was analysed using Qualtrics survey software, IBM SPSS Statistics version 30 and Microsoft Excel program.

3.7 Ethics

Ethics approval was provided by the UNSW HREAP Executive on the 3rd of February 2025 (iRECS7847).

4. Results

4.1 Patient Survey

A total of 43 patient interviews were conducted with a response rate of 23.24%. The majority of participants resided in a large rural town (Modified Monash Model MM3[15]). The median age of participants was 30 years, with 65.12% being primiparous. Participant demographics are presented in **Table 1**.

Table 1. Participant Demographics

Participant Demographics	Result
Age *(yrs)*, median (IQR)	30.00 (28 -33)
Sex Female, number (%)	43 (100)
Modified Monash Model Classification, number (%)	
MM2 Regional centre	0 (0)
MM3 Large rural town	39 (90.70)
MM4 Medium rural town	0 (0)
MM5 Small rural town	2 (4.65)
MM6 Remote community	0 (0)
Declined to answer	2 (4.65)
Relationship Status, number (%)	
Married	25 (58.14)
In a relationship	18 (41.86)
Single	0 (0)
Separated	0 (0)
Parity, number (%)	
Primiparous	28 (65.12)
Multiparous	15 (34.88)
Employment Status, number (%)	
Paid maternity leave	38 (88.37)
Unpaid leave	3 (69.70)
Unemployed	2 (4.65)

MMM = Modified Monash Model

4.1.2 Access to quality services

Of the 43 respondents, the vast majority (n=34, 79.07%) reported that they 'strongly agree' attending the SMA improved their access to quality care **(Figure 1)**. Participants who

expanded further verbalised common categories including a better awareness of available services;

> *'I wouldn't have thought to access these services on my own' (*Participant 27)
> *'...this information was valuable and* [it was] *helpful to know what supports are available'* (Participant 20)

Results also suggested that this care model provided a better understanding of what each service provides as voiced by Participant 30;

> *'The opportunity to hear from other health professionals like mental health, medical support and general referrals'*

which was perceived to improve the quality of their care. Though, timing of the program proved to be a challenge for some participants;

> *'I had just had a baby so that was my priority, it wasn't the right time'* (Participant 26)

Categories of improved knowledge and education of available supports, depicting the potential for future referrals was revealed. Of those participants who 'disagreed' (n=1, 2.33%), or 'strongly disagreed' (n=1, 2.33%) reported they were already aware of services available as;

> *'Those who attend* [this service] *have done their research and already know about the extra support'* (Participant 44)

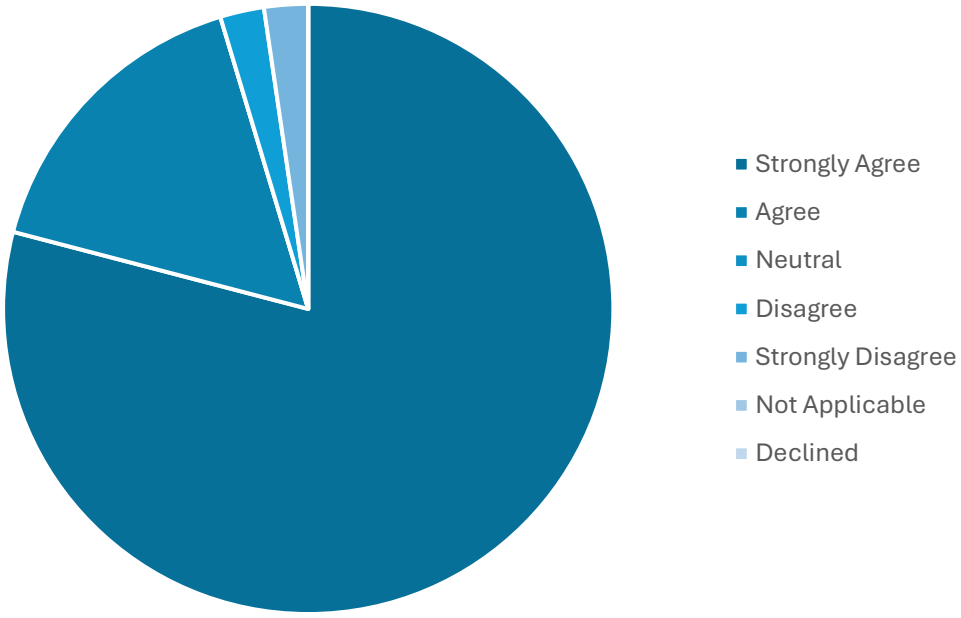


Figure 1. Patient perception that attending shared medical appointments improved their access to quality services

4.1.3 Pace of care, social interaction and managing cares

Multiple aspects of SMA provisions were evaluated, presented in **Figure 2**. The perceived time with patients own doctor was mixed as although 25 respondents reported 'strongly agree' (n=20, 46.51%), or 'agree' (n=5, 11.63%), those who 'disagreed' (n=4, 9.30%), 'strongly disagreed' (n=1, 2.33%), or found this statement 'not applicable' (n=11, 25.60%), further expressed that the physician at the practice was *'not* [their] *usual doctor'*. Similar results were also reflected when evaluating the pace of care with their own doctor. For participants who 'strongly agree' (n=20, 46.51%), it was common that this mode of care was valuable, this allowed them to have the;

> *'Opportunity to discuss concerns weekly with a midwife or general practitioner'*
> *(Participant 20)*

SMA's also gave participants a *'sense of security'* (Participant 30) if concerns did arise throughout the week that they could seek further support. Similarly, many patients favoured the relaxed pace with allied health professionals, with 27 (62.80%) 'strongly agreeing', and 7 (16.28%) 'agreeing'. Only 2 participants responded 'neutral' (n=2, 4.65%), with one expanding on this response stating they;

> *'Accessed allied health professionals outside* [the practice] *due to availability'*
> (Participant 44)

Others, such as Participant 27 suggested access to allied health professionals within the SMA was an '*opportunity to hear from other healthcare professionals*' and gave them useful information so future self-referrals could be made.

The SMA care model created an opportunity for participants to meet new people, with all respondents (n=40) either strongly agreeing (n=36, 90%) with this statement and 4 (10%) agreeing. Self-care management was also evaluated. Of the 40 respondents, 23 (53.50%) strongly agreed that this program assisted in self-care management skills. The most prominent self-management skills suggested upon expansion of this response included physical and mental health. Participants found that physical health measures included information about healthy eating and recovering after birth, such as safety while undertaking everyday tasks.

> *'I was taught about rules about driving because I had a caesarean section'* (Participant 23)
>
> *'They gave us ideas for a healthier breakfast'* (Participant 44)

Mental health measures commonly suggested were to *'figure out priorities'* (Participant 27); *'being easier on myself*' (Participant 32); *'being confident to breast feed in public and get out of the house'* (Participant 12). Validation was also a common category within the expanded responses as some participants found that;

> *'You get lost in postpartum because everything is about the baby'* (Participant 15)

Some participants also suggested that one-on-one appointments in this setting would be more effective as *'you are able to get more personal advice'* (Participant 25). Managing baby cares proved to be a positive aspect of the SMA care model for this cohort. Of 41 respondents, 31 (75.61%) 'strongly agreed' and 7 (17.10%) 'agreed' that SMA's did assist in caring for their babies. Many of the expanded responses suggested that the SMA provided a strong community network,

> '[It is a] *community...a supportive and encouraging environment... any questions did not feel silly' (Participant 15)*

Further responses similarly depicted convenience and financial benefits;

'We didn't have to book another appointment to get [him] *seen to'* (Participant 18)

'*Other random queries saved a visit or appointment to a chemist, doctor, or midwife'* (Participant 20)

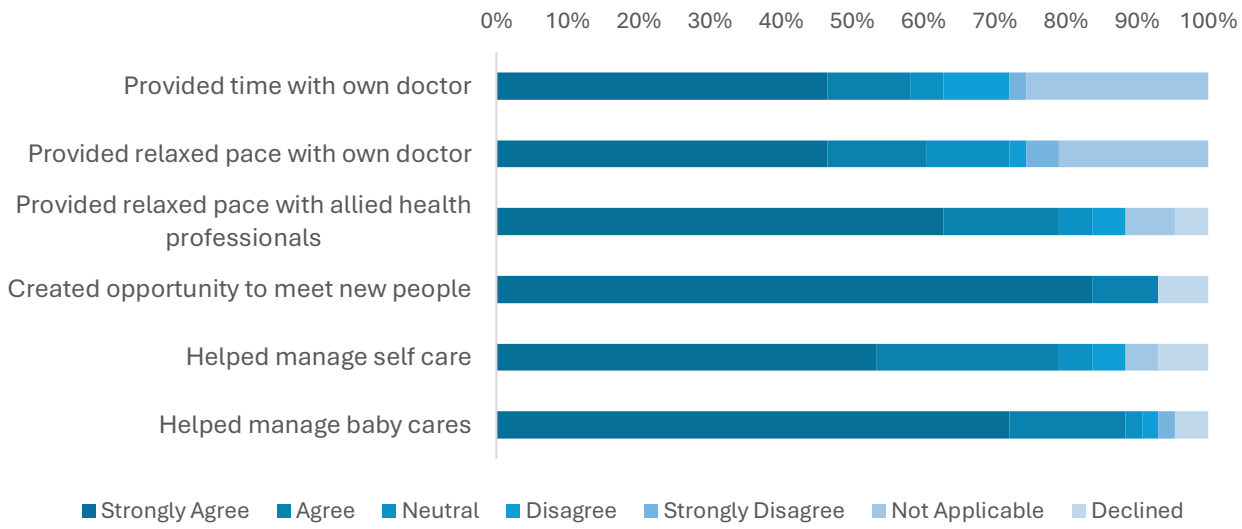


Figure 2. Participant perceptions of pace of care, management of personal and infant cares, and social interactions

4.1.4 Access to an array of healthcare professionals

Most participants found this SMA model of care provided access to a range of health care professionals such as psychologists, dieticians and physiotherapists, with 34 (79.07%) 'strongly agreeing' and 4 (9.30%) 'agreeing' to this statement as outlined in **Figure 3**. Participants expanding further suggested the SMA assisted in the provision of further referrals such as a pelvic floor physiotherapist and mental health occupational therapist. One participant gained *'extra support for some challenging times faced'* (Participant 30) which improved their overall experience. Other participants described this as being *'very beneficial to address many topics from different perspectives'* (Participant 40). Although with some 'disagreeing' (n=1, 2.33%), 'strongly disagreeing' (n=1, 2.33%), or having a 'neutral' (n=2, 4.65%) response, participants clarified that they already had access to these professionals outside of the group environment, and despite *'*[being] *occasionally irrelevant to* [my] *personal experience...it is valuable to have this knowledge for future pregnancies'* (Participant 20). Further expanded responses mentioned that participants *'didn't receive much medical care...even though it was a fantastic experience to get the ball rolling'* (Participant 27).

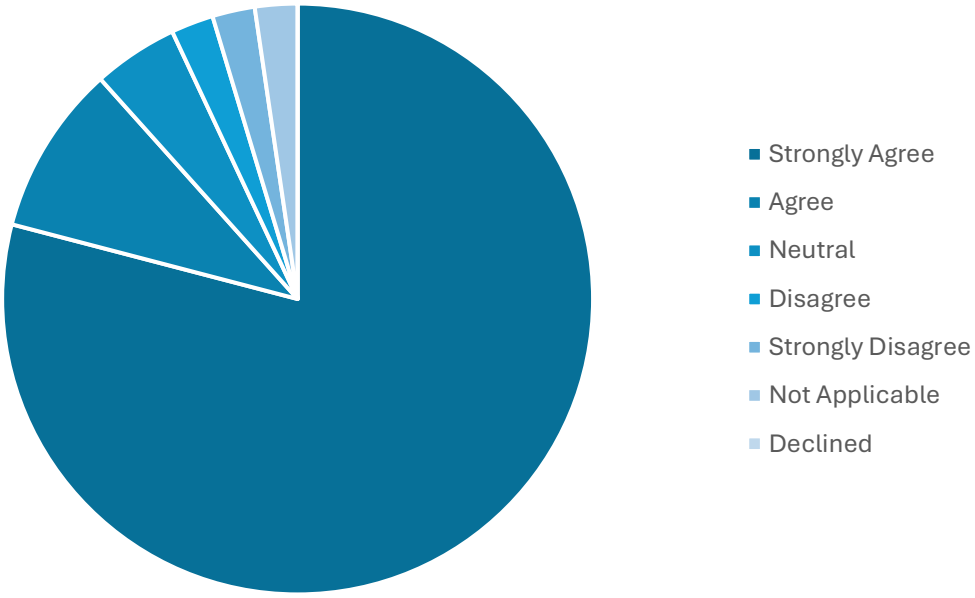


Figure 3. Participant perception that attending shared medical appointments improved access to a range of healthcare professionals

4.1.5 Peer support

Most respondents 'strongly agreed' (n=33, 78.57%) that the SMA model of care provided helpful peer support, presented in **Figure 4.** Peer support was found to be particularly important for participants who had moved to the region as *'the sense of community'* (Participant 30) improved the feeling of social isolation. The SMA environment was also commonly described as *'non-judgemental'...'safe'…*and providing *'solidarity'* for women who are *'at the same stage with newborn babies'* (Participant 25*).* Importantly, 2 of the 7 expanded respondents emphasised that *'it really depends on the dynamic of the group'* (Participant 26) with challenges arising when participants were unable to *'connect with the group'* (Participant 44).

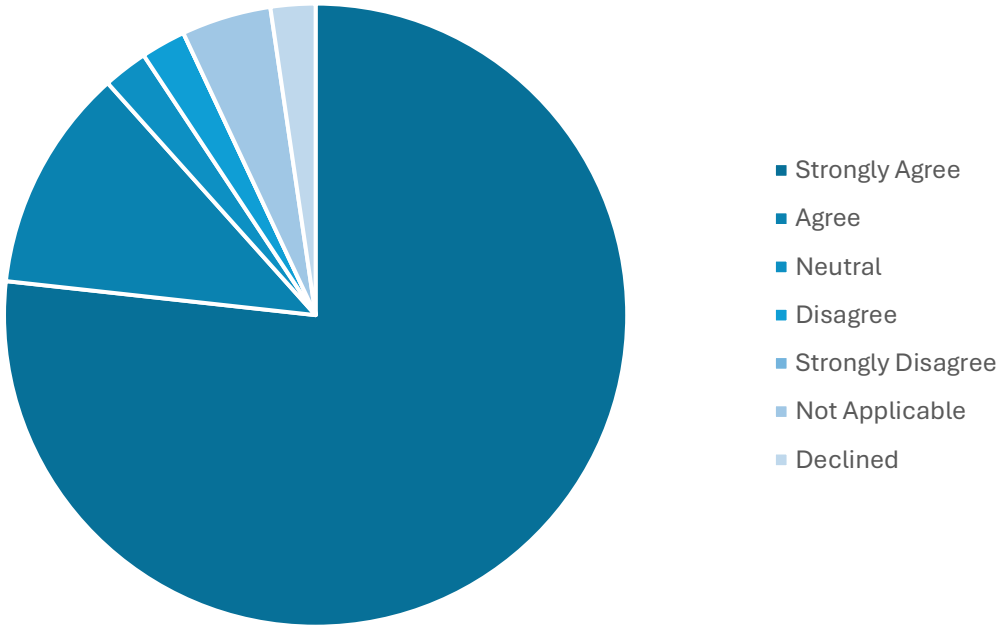


Figure 4. Participant perception that shared medical appointment provided peer support

4.1.6 Learning from others

Of the 40 respondents, 36 (90%) 'strongly agreed' that the SMA allowed them to learn from questions that others had asked, outlined in **Figure 5.** For participants expanding, most found this to be *'hugely beneficial, especially in the early weeks'...'I was able to learn from those around me and not just the health professionals'* (Participant 46). For those who strongly disagreed (n=1, 2.5%), timing proved to be a challenge, as *'I wasn't able to absorb the information with the amount of sleep I was getting* (Participant 26)*'.*

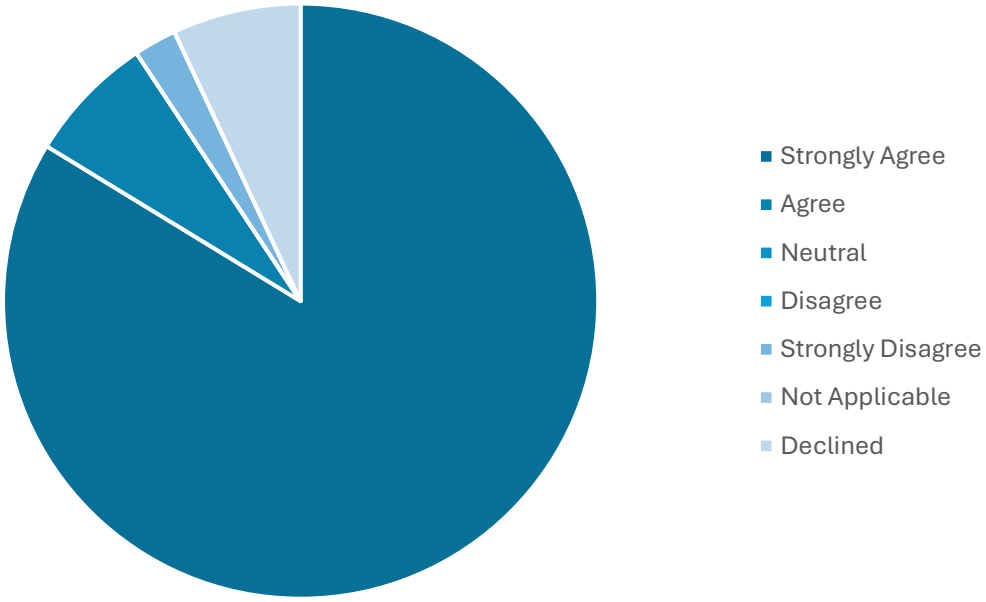


Figure 5. Participant perceptions that attending shared medical appointments allowed them to learn from questions that other participants had asked

4.1.7 One on one versus shared medical appointment approach

Participants were asked whether access to quality care would differ if attended in a one-on-one setting. Of the 34 responses, 23 (67.65%) thought it would. Personalisation of care was a common category identified where *'you could also ask more questions without feeling like you're interrupting'* (Participant 27). Others stated, *'it would be different but not necessarily better or worse'* (Participant 28). Interestingly, many participants suggested financial gain from the SMA approach as *'knowing what other services have to offer'* (Participant 46) allowed for less time limits when in comparison to one-on-one appointments. The opinion that there were *'questions answered that [I] may not thought to have asked'* was shared by 7 participants.

4.1.8 Additional Benefits

Extended responses also evaluated whether participants experienced any other additional benefits via the SMA's. Of the 27 responses, many reported benefits of connecting with one another, with 14 (51.85%) respondents reporting the SMAs improved their social support network;

'[I was able to] *form new friendships which is difficult when you are on maternity leave'* (Participant 18)

'It was very supportive and informative, but also gave me an opportunity to get out of the house and get used to my new normal… It was a safe space to discuss ongoing emotions" (Participant 20)

4.1.9 Limitations of SMA Model of Care

Participants suggested challenges with the *'group dynamic…feeling like I was under pressure from other mums'* (Participant 26). Others found if they had more personalised questions stating, *'it would be a bit more of a barrier'...* though utilised the *'chat afterwards approach'* (Participant 20) which was discussed within the first SMA.

4.2 Healthcare Professional Survey

A total of 5 healthcare professional survey responses were completed, with a response rate of 62.5%. Majority of the participants (n=3, 60%) were from a nursing background, with the remaining 2 allied health professionals.

4.2.1 Healthcare Professional Survey Responses

Several aspects of health professionals' productivity and efficiency within a SMA were explored, presented in **Figure 6.** All 5 participants (100%) 'strongly agreed' that patient-clinician relationships, patient knowledge and overall patient care were improved via the SMA model of care. All respondents found this approach decreased repetition of information delivered within the group setting.

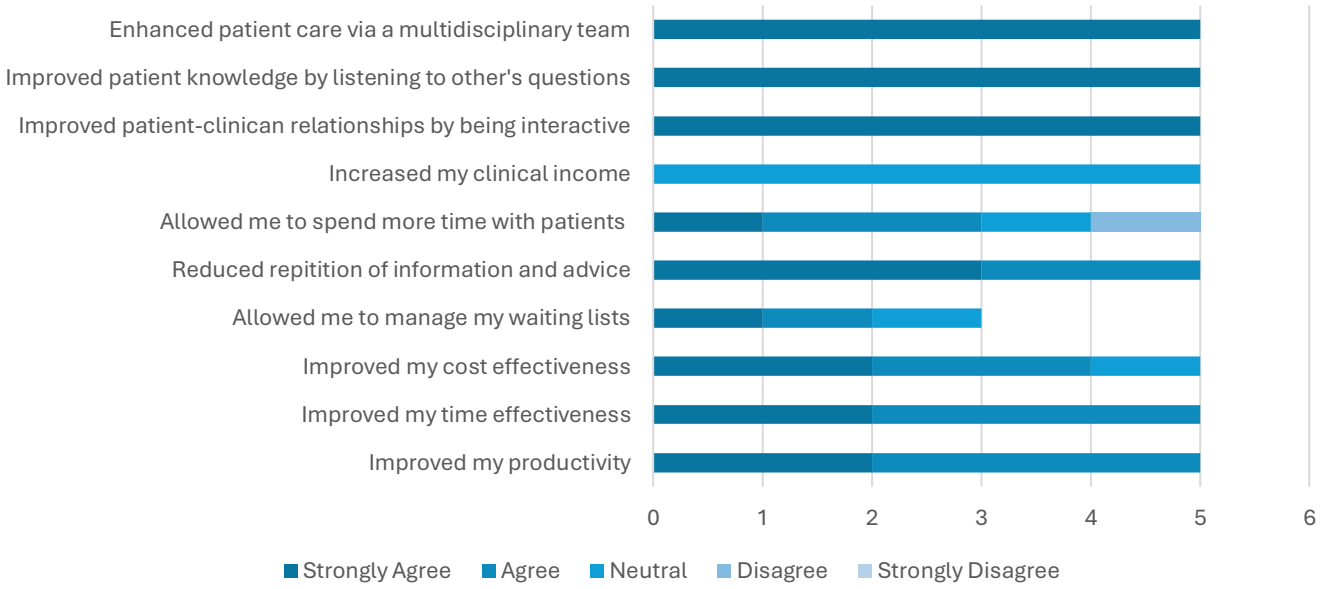


Figure 6. Healthcare professionals survey responses

Extended responses consistently highlighted increased provision of evidence-based knowledge for patients including feeding, sleep, cry/fuss challenges which allowed for a

better rapport where advice can be *'tailored to individual circumstances more readily'* (Participant 3). This also improved time effectiveness where a broader range of education was better delivered, making for better equipped *'consults as they already have knowledge'* (Participant 2).

All participants reported a greater connection with their patients through a support network, enabling experiences to be better delivered as key SMA benefits in postnatal care;

> '[Allows experiences to be] *normalised with the aim of de-stigmatising and de-medicalising common developmental phases for infants' (Participant 1)*
>
> *'Building social connections through shared life experience, weekly monitoring…* [allowed us to] *debunk myths through evidence-based care'* (Participant 4)

Suggested limitations included costs, '*it is not necessarily accessible to all in the community'* (Participant 5), SMA availability due to high demand, and the *'need for one-on-one appointments in situations that are complex or nuanced'* (Participant 2).

5. Discussion

Although there are studies exploring the benefits of SMA's in chronic health management, a significant gap remains in the evidence for patient and healthcare professionals' experience within the postnatal setting. This gap is particularly evident in the rural and regional setting. This study highlighted the importance of access to quality care and the benefits that a SMA model can provide for regional women during the postnatal period. Key findings from this study suggest that the SMA care model strengthened participant's health literacy, their knowledge of additional healthcare services roles and availability, and opportunity for peer support. Both patient participants and healthcare professionals experienced benefits but also highlighted the importance of one-on-one appointments for more complex or personal issues.

Awareness of and access to medical, nursing and allied health services are known barriers for rural and regional Australians[16]. This study's findings suggest that SMA's can improve awareness of and access to a range of services available to women in the postnatal period. These findings are also reflected in the evidence from studies in chronic disease management, who similarly suggest that improved access to services may also improve overall participant health and wellbeing outcomes[9,11]. Importantly for the patients in this study, their increased knowledge and awareness of the array of disciplines available to support

them in a regional setting afforded the opportunity to be referred or seek referrals for ongoing or alternative care. This novel finding can guide SMA content and models of care in the regional postnatal setting. Importantly, as regional mothers face higher geographical isolation and increased rates of poor mental health as 25% of mothers are more likely to experience poorer mental health, including depression or anxiety, than their metropolitan counterparts[17,18]

The postnatal period can be isolating for mothers and often care provided is too generalised ignoring vital person-centred approaches and fostering positive relationships in a vulnerable stage of life[19,20]. In contrast, the establishment of peer support networks, sense of community and the ability to learn from others in a similar situation within the SMA's were common findings highlighted in this study. For participants who had changed locations upon the birth of their baby, it was particularly evident that the SMA care model provided the social connections required to feel safe and supported in a new environment.

Interestingly, participants in this study suggested cost effectiveness as an additional benefit, a factor not previously thoroughly assessed. Existing evidence does suggest a potential financial gain from a health system perspective, saving health professionals several hours of consultations per year[9], the financial benefits or constraints from a patient perspective has not yet been determined. Convenience and cost effectiveness in this SMA model for regional patients is a unique finding. The ability to have concerns assessed by or discussed with an appropriate health professional at the time of the SMA alleviated the need for additional appointments to be made, with a consequent financial and convenience benefit. Importantly, this was not evident for all concerns, especially if they were more complex or personal which was determined by the appropriate clinician. Comparatively, healthcare professionals did suggest financial constraints could be a barrier to access the SMA's, particularly for participants of a lower socioeconomic status. This potential constraint requires further exploration in future research.

Healthcare professional perspectives of SMA's elicited in this study aligned with existing evidence. Specifically, improved patient care and knowledge, time effectiveness and clinician-participant rapport[12,13]. Studies within the chronic disease management realm have suggested that the lack of facilitator clarity for content delivery proves to be a limitation for the SMA model of care[12]. This finding was not depicted in the current study. This may be due to the structured content approach based on the Possums program[14], or the facilitation skills of the SMA facilitators, however the influence of the pregnancy care setting is unknown and could be further explored[12]. A recent publication guiding a structured approach in general practice may address concerns across SMA's conducted in broader populations[21]. This guide

could be considered and adapted in the postnatal setting as the targeted postnatal evidence grows.

5.1 Limitations

An evident limitation of this study is the small sample sizes across both participant groups. Despite the sample size, the response rate aligns with published rates across studies within the postnatal setting[22]. The sample median age (30 years) reflects that reported for NSW primiparous mothers in 2023, 30.1 years[17]. Thus, suggesting our sample similarly represents the broader population in terms of age. Our participant groups were recruited from a single regional centre with limited staff numbers initially. These factors limit the generalisability of findings to different allied health and medical professions, public and private service settings.

5.2 Future Recommendations

Implementing national, multi-site participant recruitment to gain a broader perspective of SMA's from a larger, diverse, rural and metropolitan sample in future research is recommended. Based on emerging evidence, the ability to better identify opportunities for more streamlined approaches to care via communication with primary healthcare networks may improve access and economic viability of SMA's in the future. Equity and increased reach of care may also be improved with further funding opportunities to improve care delivery across a wider range of locations and practices. The standardisation of postnatal care in NSW may reduce the variability of clinical practice and improve streamlined education and health practices where patient-clinician expectations can be discussed to create a common goal.

6. Conclusion

This study explored both patient and health care professionals' experiences of SMA's in a regional setting. The findings revealed many benefits, including learning through lived experiences and the delivery of evidence-based care in a supportive environment. Benefits were also identified beyond previous research, extending particularly to the improvement of social networking and peer support which is vital for women in the postnatal period. Some limitations were also identified, including a lack of standardisation of care, group dynamic challenges and timing of care. Addressing these barriers, principally care standardisation across NSW may improve the outcomes and access to SMA's in future, particularly in regional settings.

Reference List

1. Milroy, T.F., J. . Postnatal care: The general practitioner visit. *Australian Journal of General Practice* **51**(2022).
2. Adams, Y.J., Miller, M.L., Agbenyo, J.S., Ehla, E.E. & Clinton, G.A. Postpartum care needs assessment: women's understanding of postpartum care, practices, barriers, and educational needs. *BMC pregnancy and childbirth* **23**, 502 (2023).
3. McCauley, H., Lowe, K., Furtado, N., Mangiaterra, V. & van den Broek, N. Essential components of postnatal care–a systematic literature review and development of signal functions to guide monitoring and evaluation. *BMC Pregnancy and Childbirth* **22**, 448 (2022).
4. Blair, A., Tan, A., Homer, C.S. & Vogel, J.P. How do postnatal care guidelines in Australia compare to international standards? A scoping review and comparative analysis. *BMC pregnancy and childbirth* **24**, 121 (2024).
5. World Health Organization. *WHO recommendations on maternal and newborn care for a positive postnatal experience* (2022).
6. Australian Living Evidence Consortium. Australian postnatal care guidelines. Vol. Version 6.1 (2025).
7. Subramanian, L.*, et al.* Just-in-time postnatal education programees to improve newborn care practices: needs and opportunities in low-resource settings. *BMJ Global Health* **5**(2020).
8. Egger, G.*, et al.* Patients' and providers' satisfaction with shared medical appointments. *Australian Family Physician* **44**, 674-679 (2015).
9. Egger, G., Stevens, J., Ganora, C. & Morgan, B. Programmed shared medical appointments: A novel procedure for chronic disease management. *Australian Journal of General Practice* **47**, 71-75 (2018).
10. Herrman, J.W., Rogers, S. & Ehrenthal, D.B. Women's perceptions of CenteringPregnancy: A focus group study. *MCN: The American Journal of Maternal/Child Nursing* **37**, 19-26 (2012).
11. Clancy, D.E., Yeager, D.E., Huang, P. & Magruder, K.M. Further evaluating the acceptability of group visits in an uninsured or inadequately insured patient population with uncontrolled type 2 diabetes. *The Diabetes Educator* **33**, 309-314 (2007).
12. Marshall, V.*, et al.* Healthcare providers experiences with shared medical appointments for heart failure. *Plos one* **17**, e0263498 (2022).
13. Graham, F.*, et al.* Barriers and facilitators to implementation of shared medical appointments in primary care for the management of long-term conditions: a systematic review and synthesis of qualitative studies. *BMJ open* **11**, e046842 (2021).

14. Crawford, E., Whittingham, K., Pallett, E., Douglas, P. & Creedy, D.K. An evaluation of Neuroprotective Developmental Care (NDC/Possums Programs) in the First 12 Months of Life. *Matern Child Health J* **26**, 110-123 (2022).
15. Australian Government Department of Health. Health Workforce Locator. Vol. 2025 (2025).
16. Baazeem, M., Kruger, E. & Tennant, M. Current status of tertiary healthcare services and its accessibility in rural and remote Australia: A systematic review. *Health Sciences Review* **11**, 100158 (2024).
17. New Shouth Wales Health. Mothers and Babies Report 2023: Maternal Age. (2025).
18. Australian Institute of Health and Welfare. Perinatal mental health screening in Australia. (15 November 2024).
19. Sudhinaraset, M., Landrian, A., Golub, G.M., Cotter, S.Y. & Afulani, P.A. Person-centered maternity care and postnatal health: associations with maternal and newborn health outcomes. *AJOG Glob Rep* **1**, 100005 (2021).
20. Bryanton, J., Beck, C. T., & Montelpare, W. Postnatal parental education for optimizing infant general health and parent-infant relationships. *Cochrane Database of Systematic reviews* (2013).
21. Brisbane South Public Health Network. Shared medical appointments toolkit for general practice. (Brisbane South PHN, Brisbane, QLD, 2024).
22. Hoang, H., Lê, Q. & Terry, D. Are maternity experiences of rural women getting better with time? Results from a survey in Tasmania. *Nursing and Health* **1**, 71-77 (2013).

Appendix 1: Patient Participant Interview

Shared Medical Appointments in Perinatal Care in a Regional Setting Patient Participant Survey

Thank you for your time to participate in this survey. I am going to ask you a few questions about your experience attending the Mums and Bubs group which uses a shared medical appointment approach.

You can ask to skip any questions that you are not comfortable with and we can stop the survey at any time you wish.

Are you happy to start?

Demographics	
1. How do you describe your gender?	Man/male Woman / female Non-binary I use a different term [please state] Prefer not to answer
2. What is your age?	(in years)
3. What is the postcode where you live?	
4. When attending Nova Health Co Mums & Bubs SMA's, was this for your first child	☐ Yes ☐ No How many children do you have?
5. Did you attend the SMA alone or with	☐ Alone ☐ With others, please specify… How many sessions did they attend?

someone else?	
6. When attending Nova Health Co Mums & Bubs SMA's, did you live alone?	☐ yes ☐ no, who did you live with:
7. When attending Nova Health Co Mums & Bubs SMA's, what was your relationship status?	☐ married ☐ in a relationship ☐ single ☐ separated
8. When attending Nova Health Co Mums & Bubs SMA's, what supports were available to you (people and services)	List:
9. When attending Nova Health Co Mums &	☐ yes, on paid maternity leave ☐ yes, on unpaid leave ☐ not employed ☐ not employed, working in a caring role

Bubs SMA's, were you employed?	☐ other, please specify					
SMA Experience						
	Not applicable	**Strongly agree**	**Agree**	**Neutral/ Uncertain**	**Disagree**	**Strongly Disagree**
When answering the following questions please consider the shared medical appointment / group-based sessions rather than thinking about the topics that the healthcare professionals provided. Does that make sense?						
1. Improved my access to quality care						
Note any additional comments made:						
2. Provided me with time with my own doctor						
Note any additional comments made:						
3. Provided me with a more relaxed pace of care with my doctor						
4. Provided me with access to a range of care from						

different healthcare professionals						
Note any additional comments made:						
5. Provided me with a more relaxed pace of care with allied health professionals						
Note any additional comments made:						
6. Do you think this access to quality care would differ if you were to access 1:1 appointments only?	Free text					
7. Provided me with helpful peer support						
Note any additional comments made:						
8. Created opportunity to meet new people						

9. Provided me with the opportunity to learn from the questions that other group members asked that I may not have thought to ask?						
Note any additional comments made:						
10. Helped me to manage caring for myself						
Any particular things?						
11. Helped me to manage caring for my baby						
Any particular things?						
12. Any other benefits or comments you would like to make?						
13. Attending shared medical appointments at Nova						

Health Co limited me in the following ways	

Thank you for your time and participation

Appendix 2: Healthcare Professional Survey

Q1 What is your profession?

- ○ Medical (1)
- ○ Nursing (2)
- ○ Allied Health (3)
- ○ Other (4)

End of Block: Default Question Block

Start of Block: Block 1

Q2 The Shared Medical Appointments (SMA's) at Nova Health Co Mums & Bubs improved my productivity

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Page Break

Q3 The SMA's at Nova Health Co Mums & Bubs improved my time effectiveness

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Q4 The SMA's at Nova Health Co Mums & Bubs improved my cost-effectiveness

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Q5 The SMA's at Nova Health Co Mums & Bubs allowed me to better manage my waiting lists

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Q6 The SMA's at Nova Health Co Mums & Bubs reduced repetition of information and advice

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Q7 The SMA's at Nova Health Co Mums & Bubs allowed me to spend more time with my patients and adopt a slower pace compared to individual visits

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Q8 The SMA's at Nova Health Co Mums & Bubs increased my clinical income

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Q9 The SMA's at Nova Health Co Mums & Bubs provide opportunity to get to know my patients better due to the interactive setting

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Q10 Were there any particular benefits to this increased knowledge of your patients?

_____

_____

_____

_____

_____

Q11 The SMA's at Nova Health Co Mums & Bubs provide patients with additional knowledge from listening to other patient questions or comments compared to 1:1 sessions

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Q12 The SMA's at Nova Health Co Mums & Bubs enhance patient care due the multidisciplinary approach

- ○ Not applicable (1)
- ○ Strongly agree (2)
- ○ Agree (3)
- ○ Neutral/Uncertain (4)
- ○ Disagree (5)
- ○ Strongly disagree (6)

Q13 Do you think that there are any other benefits of SMA’s in perinatal care

- ○ No (1)
- ○ Yes (2)

Skip To: Q16 If Do you think that there are any other benefits of SMA’s in perinatal care = No

Q14 Please discuss any other benefits you believe SMA's in perinatal care provide

_____

_____

_____

_____

_____

Q16 What are the limitations of SMA’s in perinatal care?

_____

_____

_____

_____

_____

Q17 Please discuss any other comments you have regarding SMA's in perinatal care

_____

_____

_____

_____

_____

End of Block: Block 1