

2015

The Early Pregnancy
Assessment Approach:
Final Evaluation Report



Ms L. Cvitanovic, Dr H. Gifford &
Ms K. Parata

30 June 2015

CONTENTS

EXECUTIVE SUMMARY	5
1. EPAA BACKGROUND & EVALUATION AIMS	12
2. METHODS	15
3. RESULTS.....	23
4. DISCUSSION.....	57
5. CONCLUSION & RECOMMENDATIONS	63
6. LIST OF REFERENCES	67
7. LIST OF DOCUMENTS REVIEWED.....	69
8. APPENDICES	70

ACKNOWLEDGMENTS

We thank all key informants and survey respondents for their contributions to the evaluation. Special thanks to Chloe Mercer, of the Whanganui Regional Health Network, for her timely responses to our many queries throughout the evaluation process and for her invaluable input to the study.

LIST OF INITIALISMS

EPAA	Early Pregnancy Assessment Approach
EPAT	Early Pregnancy Assessment Tool
GP	General Practitioner
HDEC	Health and Disability Ethics Committees
HealthPAC	Ministry of Health claim payment facility
HPA	Health Promotion Agency
LMC	Lead Maternity Carer
MQSP	Maternity Quality and Safety Programme
NHI	National Health Index
NZDep	New Zealand Socio-Economic Deprivation Index
PHQ	Personal Health Questionnaire
PLM	Programme Logic Model
WAM	Whanganui Accident and Medical
WIPE	Whanganui Inter-Professional Education
WRHN	Whanganui Regional Health Network

EXECUTIVE SUMMARY

This report presents the results of a process and short term outcomes evaluation of the Whanganui Regional Health Network's (WRHN) Early Pregnancy Assessment Approach. The evaluation study, commissioned by the Health Promotion Agency (HPA), was carried out by Whakauae Research for Māori Health and Development¹ during the first half of 2015.

The Early Pregnancy Assessment Approach was developed locally by the WRHN in response to an apparent lack of a pragmatic and systematic way of managing early pregnancy health care. Improved health outcomes for 'at risk' expectant mothers and their infants is the primary aim of the intervention. The Network's initial focus on the design and implementation of an electronic Early Pregnancy Assessment Tool (EPAT) (Whanganui Regional Health Network, 2014a) was later broadened with the adoption of a strategic and overarching Early Pregnancy Assessment Approach. Such an approach was considered necessary as it became increasingly evident that an assessment tool alone would, in isolation, be insufficient to address the gaps identified in current early pregnancy care.

EVALUATION OBJECTIVES

The Early Pregnancy Assessment Approach (EPAA) evaluation objectives were to:

- Identify and describe the key EPAA service model components;
- Describe the process of WRHN EPAA implementation and assess process quality including identifying components of the EPAA which have been implemented as planned and components which have been modified (when, how and why);
- Assess the success of specific short-term outcomes identified in the EPAA Programme Logic Model;
- Identify challenges associated with EPAA implementation and, where relevant, how these have been addressed; and,
- Drawing on evaluation results and analysis provide recommendations for wider implementation of an EPAA.

¹ Whakauae Research for Māori Health and Development is a Ngāti Hauiti owned research centre. Established in 2005, Whakauae has a successful record of delivering investigator led health and social services research as well as research and evaluation commissioned by agencies which include a number of North Island district health boards along with Te Puni Kōkiri and the Ministry of Health.

METHODS

The EPAA evaluation study has been undertaken consistent with the design detailed in the Refined Evaluation Plan prepared by Whakauae in March 2015. The low risk, observational research design incorporated a mix of methods including key informant interviews, an online survey, review of quantitative data extracted by the WRHN from their EPAT database and document review.

RESULTS & DISCUSSION

Early implementation evaluation results suggest that the EPAA initiative is achieving positive results in several key areas. These areas include:

- raising awareness of the EPAA among General Practices;
- raising awareness of the EPAA among cross-sector service providers (those providers which offer support to pregnant women including via Lead Maternity Carer (LMC) services, parenting programmes and physical activity programmes);
- gaining the support of sections of General Practice for implementation of the EPAA;
- gaining the support of cross-sector services and programmes for implementation of the EPAA;
- the increase in EPAT skill among an as yet small group of WRHN clinicians;
- the gradual growth in clinician uptake of the EPAT;
- the effective initial targeting of EPAT use with women living in communities in the most socio-economically deprived areas; and,
- EPAA referral pathways and service linkages being utilised; a quarter of all assessments carried out have resulted in support services referral via the Maternal Navigator.

In certain circumstances, the EPAT was considered to be a particularly valuable addition to the suite of patient assessment and management tools available to clinicians. Such circumstances were those in which EPAT installation was complemented by on-site training and support for users. Where, in addition to these circumstances, a Practice had sufficient capacity to routinely dedicate clinical time to EPAT use, the Tool was seen as being a significant asset.

The EPAT was generally considered acceptable by service users as it was broadly consistent with their expectations of primary care. Clinicians who had carried out assessments using the EPAT believed that their patients were at ease with the assessment process. Even where more sensitive screening questions were asked, clinicians cited no obvious indications that service user comfort zones were being compromised.

The small numbers of clinicians who have participated in EPAT training to date, and the lack of opportunity identified by some to make use of the EPAT as an outcome of limited staffing capacity within their respective Practices, appear to be key contributors to the current modest rate of EPAT uptake. Assessments, totalling 74 over the six month period November 2014 to April 2015 inclusive, were carried out by clinicians working in approximately half of the General Practices under the WRHN umbrella. The vast bulk of those assessments were however, carried out in two General Practices; both were larger Practices with one of these servicing a particularly high needs population.

The provision of more EPAT training, along with identifying ways to enhance General Practice capacity to carry out assessments, will increase uptake. Strengthening and consolidating the reach the EPAT has so far achieved, in terms of targeting high needs women in early pregnancy, is also likely to increase uptake of the Tool. Regular peer review of the EPAT assessments that are carried out, and the ongoing WRHN monitoring and feedback of EPAT data to Practices, will aid in strengthening and consolidating reach.

The WRHN has a particular interest in better aligning best practice in early pregnancy assessment and management with claiming for the delivery of first trimester non-LMC health services. The evaluation identified a very low level of awareness and knowledge of first trimester non-LMC claiming processes across General Practice. In turn there was no evidence identified of the WRHN as yet being successful in encouraging General Practices to, in tandem, use the EPAT and claim for first trimester non-LMC health service delivery.

HealthPAC² and EPAT comparative data do however provide an early indicator that the seeds of change may have been sown. In the cases of two early EPAT uptake Practices, the number of assessments carried out using the EPAT equalled, or in one instance approximated, the number of claims made in two of the six months in which the data was collected and compared. It is as yet however, too early to positively identify any emerging trend.

Factors facilitating implementation of the EPAA include the pre-existing raft of service contracts, held by the WRHN and in the wider community. Many of these services and programmes were already working, in some way, to support women in early pregnancy prior to EPAA development. The EPAA has provided a mechanism for strengthening the integration of these services and programmes.

² The Ministry of Health operates HealthPAC which is a claim payment facility. Individual claimants, such as General Practitioners, or organisations, such as General Practice companies, make claims to HealthPAC which checks such claims and releases payments accordingly (Ministry of Health, 2007).

Barriers to EPAA implementation identified highlighted:

- The frustrations for EPAT users caused by encountering malfunctions with the electronic advanced form. Such “glitches” continue to be eliminated with the Tool becoming increasingly reliable. As uptake increases across General Practice, those who are resistant and those who are simply reluctant may be motivated by the positive experience of colleagues to trial the current version of the Tool; and,
- At a broader and more strategic level, the lack of direct funding to support the rollout and overall coordination of the Approach.

CONCLUSION

Overall the early signs are that the EPAA is “working” to varying degrees. It is “working” for those WRHN clinicians who have taken the EPAT on-board. These clinicians are often also those who have taken part in EPAT training and who are members of Practices with the capacity to accommodate use of the Tool. The EPAA is acceptable, in the main, to cross-sector service and programme providers, some of whom are already seeing increases in referral numbers. It is also acceptable to service users and is resulting in referrals being made where needed.

Importantly too, early indications are that the EPAA is successfully targeting at least one high needs population: women living in communities in the areas of highest socio-economic deprivation. There is room to increase the ratio of Māori women being screened which currently stands at around one third of the total.

RECOMMENDATIONS FOR STRENGTHENING THE EPAA LOCALLY

Recommendations to strengthen the EPAA locally are to:

- As a matter of priority, continue to work closely with LMCs to strengthen the link with General Practice. Refining strategies to facilitate optimum communication will be critical here and will support LMCs to provide ongoing feedback in relation to the impact of the EPAT and the EPAA on their work;
- Address the matter of EPAT training as a priority. Consideration of training options and review, refinement and implementation of a training plan will be critical if the gains to date are to be consolidated and extended. It will be especially important to look at alternative training options if the current absence of the EPAT trainer is likely to be ongoing;
- Review options for building staff capacity to utilise the EPAT and actively promote these options. General Practice staffing arrangements which facilitate EPAT use could, for example, be identified and showcased via the in-house newsletter and via professional forums such as Whanganui Inter-Professional Education (WIPE) meetings;
- As part of the review of options for building staff capacity to utilise the EPAT, consider the advantages and disadvantages of carrying out the assessment over more than one consultation;
- Continue to use all opportunities available to raise awareness of the EPAA, across the WRHN and beyond, as the wider context for the EPAT. There are numerous mechanisms which may be available to the WRHN to facilitate EPAA promotion including WIPE and other professional forums, the in-house newsletter, the design and dissemination of a poster and / or brochure and inclusion of a designated web page on the WRHN website. Whilst the WRHN already has various communications mechanisms in place, it is acknowledged that there may be gaps in terms of the human resources currently available to further develop and implement awareness raising strategies;
- Raise the profile of the Maternal Navigator service across General Practice placing emphasis on the pivotal role of the service in the EPAA. Various avenues may be open to the WRHN to promote the Maternal Navigator service including the use of the in-house newsletter, WIPE and other professional forums such as nurses meetings along with development and dissemination of a poster and / or brochure;
- Place emphasis on maintaining and extending mechanisms for providing feedback to General Practices around their EPAT use on at least a quarterly basis. That feedback would ideally include reference to progress in aligning Section 88 claiming with EPAT use;

- Regularly monitor and review the integrity of EPAA referral pathways and services linkages to help ensure that referral processes are operating as intended and that feedback mechanisms are in place between General Practice and cross-sector services and programmes.

RECOMMENDATIONS FOR WIDER IMPLEMENTATION OF THE EPAA

Wider implementation of the EPAA is likely to require:

- An EPAA champion, or champions, initially being identified in a community. The time may then be right to ‘test’ the interest of other primary health and cross-sector stakeholders and secure their input to EPAA preliminary planning. The nature of any preliminary planning process will need to be determined by the community in question, taking into account its own unique situation;
- The early input of cross-sector stakeholders, as intimated above and in particular LMCs. That input would ideally go beyond consultation and involve opportunities to contribute, in some form, to EPAA developmental decision-making. The establishment of a General Practice and cross-sector reference group mechanism to inform ongoing planning and early EPAT implementation may be a consideration;
- Consideration of how best to open up, or broaden, lines of communication with LMCs with a view to enhancing links between LMCs and General Practice. Securing the early input of LMCs, through working with them to consider and assess potential benefits of an EPAA locally, will increase the likelihood that links will be enhanced;
- The assignment of dedicated project management, clinical leadership, EPAT trainer and Maternal Navigator roles. Whilst it may be that one or more of these roles could be taken up by existing positions it should be recognised that significant workloads are likely, particularly in the early phases of development and rollout. In the case of the Maternal Navigator, the workload will likely increase rather than decrease over time;
- Placing a priority on promoting the EPAA, at the earliest opportunity, as a comprehensive initiative inclusive of the EPAT. Ensure that that promotion is then ongoing;
- Consideration of the unique referral pathways and service linkages already available locally and the potential for further growing these; the EPAA in any area will need to evolve in a way that reflects the local context;
- Preparation and regular review of a detailed implementation plan documenting key actions, required resourcing, responsibilities and timeframes and, where necessary, including assessment of risk and strategies for risk mitigation;

- Preparation and regular review of a detailed communications plan documenting key actions, required resourcing, responsibilities and timeframes and, where necessary, including assessment of risk and strategies for risk mitigation;
- Preparation and regular review of a detailed EPAT training plan documenting key actions, required resourcing, responsibilities and timeframes and, where necessary, including assessment of risk and strategies for risk mitigation;
- Placing a priority on providing EPAT training and support initially for Practices which already operate in ways conducive to EPAT uptake. Building a firm foundation for introduction of the EPAA in these Practices is likely to set a precedent and encourage other Practices to come on board;
- Being prepared to allow sufficient time for an EPAA 'culture shift' to gain momentum within General Practice and to nurture this shift wherever possible;
- Considering how the EPAA will 'fit' with other initiatives around improving maternal quality and safety including the work of the National Maternity Monitoring Group and the Maternity Quality and Safety Programme (MQSP)³.

³ The National Maternity Monitoring Group's purpose is to oversee the New Zealand maternity system and to provide strategic advice to the Ministry of Health on priorities for improvement. The MQSP as an initiative provides the building blocks to guide continuous quality improvement of maternity services at national and local levels (MidCentral District Health Board, 2014).

1. EPAA BACKGROUND & EVALUATION AIMS

Early in 2015, the Health Promotion Agency (HPA) commissioned Whakauae to carry out a process and short term outcomes evaluation of the Whanganui Regional Health Network's (WRHN)⁴ emergent Early Pregnancy Assessment Approach (EPAA).

OVERVIEW OF THE EPAA

During 2013 – early 2014, the WRHN with the support of HPA developed an Early Pregnancy Assessment Tool (EPAT)⁵ for use in General Practice locally. The EPAT was introduced in response to an apparent lack of a pragmatic and systematic way of managing early pregnancy health care. An initial focus on the design and implementation of an EPAT soon broadened however, with the adoption of a strategic and overarching Early Pregnancy Assessment Approach (EPPA).

That wider approach was considered necessary as it became increasingly apparent that an EPAT alone would, in isolation, be insufficient to address the gaps which the WRHN had identified in current early pregnancy care. Gaps identified included those in services and programmes readily available to support women in early pregnancy as well as those in the links between the services and programmes which were available. These gaps were considered likely to increase the risk that vulnerable women may not be consistently identified and provided with opportunities to access appropriate support in early pregnancy.

In the Whanganui context gaps in the management of early pregnancy at General Practice level is of particular significance given the region's challenging demographic profile. 'Big picture' social constructs, principally socio-economic status and ethnicity, pattern a host of related health determinants. These determinants include deprivation and poverty, institutional and personal

⁴ There are 15 General Practices under the WRHN. Nine of these are situated in the town of Whanganui and six operate in rural communities (including one which provides both urban and rural services). As at 01 July 2014 the WRHN's enrolled population totalled 62,272 including 16,481 Māori and Tagata Pasifika. Additionally 11,435 are non-Māori/non-Tagata Pasifika living in areas of high deprivation. A total of 45% of the WRHN's enrolled population face inequalities in health risk factors and health outcomes impacted by ethnicity or socio-economic status (WRHN, 2014).

⁵ The EPAT is a Medtech integrated advanced form which clinicians can access from their desktop. An advanced form is a purpose made tool which sits within the Patient Management System (Medtech in this case). The form is dynamic in that it interfaces with data already recorded into the Patient Management System to pre-populate and individualise the screening requirements. Information recorded into the form is automatically written into patient notes, and where required the form is designed to electronically facilitate referral in real-time, reducing referral delays. Medtech itself is a medical software programme widely used in New Zealand to assist healthcare professionals to manage patient care (Medtech, 2015).

racism, low educational attainment, sub-standard housing and poor diet. The link between health determinants and health outcomes is well documented.

EPAA PURPOSES AND OBJECTIVES

The WRHN designed the EPAA for the purposes of:

- Assisting General Practice teams to identify early pregnancy risk factors within the primary care setting; and,
- Through a range of mechanisms, improved management or reduction of early pregnancy risk factors.

Objectives of the EPAA include:

- Improved health outcomes for at risk expectant mothers and their infants;
- All pregnant mothers being enrolled with a Lead Maternity Carer (LMC), being tobacco, alcohol and other drug free and living in a safe, non-violent environment during pregnancy; and,
- Improved quality of early assessment carried out in primary care for women in their first trimester of pregnancy.

EPAA SERVICE MODEL DESCRIPTION

The EPAA integrates a number of existing programmes and projects with new initiatives to create a cross system, collaborative service for women in early pregnancy. Having consistent referral and management pathways in place to deal with patient issues identified through the use of the EPAT is critical to the EPAA. Such issues include those linked with family violence, tobacco, alcohol and other drugs. Through supporting navigation of clear co-ordinated pathways of care and links across services the EPAA is expected to contribute to improved health outcomes for women and their infants.

The critical components of the EPAA are identified and detailed in the Service Model Description⁶ developed by Whakauae in the early stages of the EPAA evaluation (Gifford, Parata & Cvitanovic, 2015). These EPAA components are listed below:

- EPAA Clinical Lead and EPAA Project Lead roles;
- An EPAT maternity screening tool for General Practice;
- EPAT training and support;

⁶ The EPAA Service Model Description is a stand-alone document prepared for the HPA and the WRHN.

- Enhanced linkages within primary care and between primary care and other key stakeholders (such as LMCs, Sport Wanganui and the Youth Services Trust);
- More effective referral pathways and potential data sharing; and,
- Alignment of maternity support roles within the WRHN including
 - the Maternal Navigator;
 - the Pregnancy and Parenting Courses Coordinator;
 - the Population Health Team; and,
 - Practice Nurses.

Additional components, whilst related, are less directly connected to, and pre-date the development of, the EPAA. These components include the WRHN's Pēpi-Pod and Warm-Up New Zealand: Healthy Homes Programmes and the Quit Clinic which each have their own specific service objectives some of which have commonalities with those of the EPAA.

EVALUATION OBJECTIVES

The objectives of the EPAA evaluation were to:

- Identify and describe the key EPAA service model components;
- Describe the process of WRHN EPAA implementation and assess process quality including identifying components of the EPAA which have been implemented as planned and components which have been modified (when, how and why);
- Assess the success of specific short-term outcomes identified in the EPAA Programme Logic Model;
- Identify challenges associated with EPAA implementation and, where relevant, how these have been addressed; and,
- Drawing on evaluation results and analysis provide recommendations for wider implementation of an EPAA.

2. METHODS

Whakauae's proposal to HPA for the evaluation of the EPAA, submitted in November 2014, included preliminary consideration of research methods to be utilised. Subsequent to submission of that proposal, a Refined Evaluation Plan was prepared by Whakauae and accepted by HPA in early March 2015.

The EPAA evaluation study has been undertaken consistent with the design detailed in the Refined Evaluation Plan which described the conduct of low risk, observational research. The design incorporated a mix of methods including logic modelling, key informant interviews, an online survey, the review of quantitative data extracted by the WRHN from the EPAT database and document review. Each of these components of the evaluation study is separately discussed below.

LOGIC MODELLING

The EPAA Refined Evaluation Plan included a Programme Logic Model (PLM) developed by Whakauae in consultation with the WRHN. The aim, context, assumptions, activities and intended outcomes of the EPAA are documented in the PLM in narrative (aim, context, assumptions) and diagrammatic (activities and intended outcomes) form. Capturing the defining characteristics of the EPAA in the PLM clarifies shared thinking around the intent of the approach. Furthermore, any assumptions regarding the changes the EPAA is expected to facilitate are made explicit in the process of developing the PLM. The PLM has primarily been used to provide a transparent framework for informing evaluation of the EPAA. The PLM developed is included here as Appendix One.

KEY INFORMANT INTERVIEWS

A pivotal component of the evaluation design included a set of key informant interviews carried out in two phases; Phase One comprised two, strategic level, scoping interviews whilst Phase Two comprised interviews with three distinct groups of key informants, namely service users, General Practice staff and service providers in receipt of referrals from primary care.

The results of Phase One key informant interviews primarily informed the development of the descriptive EPAA service delivery model which is discussed in the results section of the report. Additionally, Phase One results informed the development of Phase Two key informant interview schedules.

Phase One key informants were identified due to their roles in relation to the development and strategic level implementation of the EPAA. Phase Two key informants were identified due to their

roles in primary health care, in providing health and related services to women in early pregnancy in other settings, or because of their experience as service users. Key informants in these categories were convenience sampled (Patton, 2002). Table 1 below summarises the number of informants in each group.

Table 1: Key informants by group and number (n=19)

Key informant group	Number of key informants
EPAA strategic development and implementation	2
Service users	4
Services in receipt of referrals (including LMCs)	7
GPs	1
Practice nurses	5

Phase One interviews were carried out in late February 2015 with Phase Two interviews being completed over a period of several weeks during April 2015. Whilst Phase One included one tandem⁷ and one individual interview, all interviews conducted in Phase Two were conducted one-on-one. Whilst most interviews were carried out face-to-face, two interviews were conducted by telephone. One of these interviews was conducted by telephone due to issues of geographical isolation and limitations on time available to complete data collection. The other interview was conducted by telephone due to key informant preference.

Information Sheets (refer Appendix Two) were prepared and a copy given to all key informants in both key informant data collection phases. Information Sheet content was discussed with each informant prior to the completion of a participant Consent Form (refer Appendix Three) and the interview. Four separate interview schedules (refer Appendix Four) were designed to collect evaluation data; these were respectively targeted at high level EPAA service design key informants,

⁷ A tandem interview refers to an interview conducted by one researcher with two informants simultaneously.
 Evaluation of the Early Pregnancy Assessment Approach: Final Report Page | 16

service users, General Practice teams and those providing additional health related services to women in early pregnancy such as tobacco quit programmes.

Recruitment

General Practice teams were advised by the WRHN that evaluation of the EPAA was to take place and invited to put their names forward for interview. Whakauae followed up all those who indicated an interest in taking part in interviews with a total of six clinicians then being successfully recruited. At least two of those who showed initial interest were not later available for interview. Additionally, a small group of practice nurses from one practice who indicated their willingness to take part in interviews only did so on the final day of interviewing precluding their inclusion due to time constraints.

Whakauae was provided with a list of EPAA health related service provider contacts by the WRHN. Each of these service provider contacts was contacted and directly recruited for interview by Whakauae. LMC recruitment was directly managed by Whakauae with one key LMC contact then initiating a snowball sampling process (Patton, 2002). A total of five LMCs were subsequently invited to take part in interviews with all five invitations being accepted. Due to later unexpected lack of availability however, only three LMCs were then interviewed.

Service user recruitment was jointly facilitated by Whakauae and the WRHN. Recruitment information was prepared by Whakauae (refer Appendix Five) and used by the WRHN to assist practice nurses to invite interest from service users in taking part in interviews. The success of that approach was limited resulting in the Maternal Navigator then assisting with further recruitment. Whakauae was provided with the contact details for a total of five service users who had indicated interest in the evaluation and had given their consent for Whakauae to approach them directly about the study. Four of the five service users were able to be successfully contacted and later consented to participate in interviews. One service user was unable to be contacted.

Service users who took part in interviews received a \$30 Warehouse voucher as koha⁸ in recognition of their contributions to the research of time and information.

⁸ A gift or token offering.

ONLINE SURVEY

An online survey tool was designed, reviewed and refined by the evaluation team with input from the WRHN prior to testing. The online survey was constructed, administered and statistically analysed using Survey Monkey. A recipient email data base and dissemination process was agreed with the WRHN.

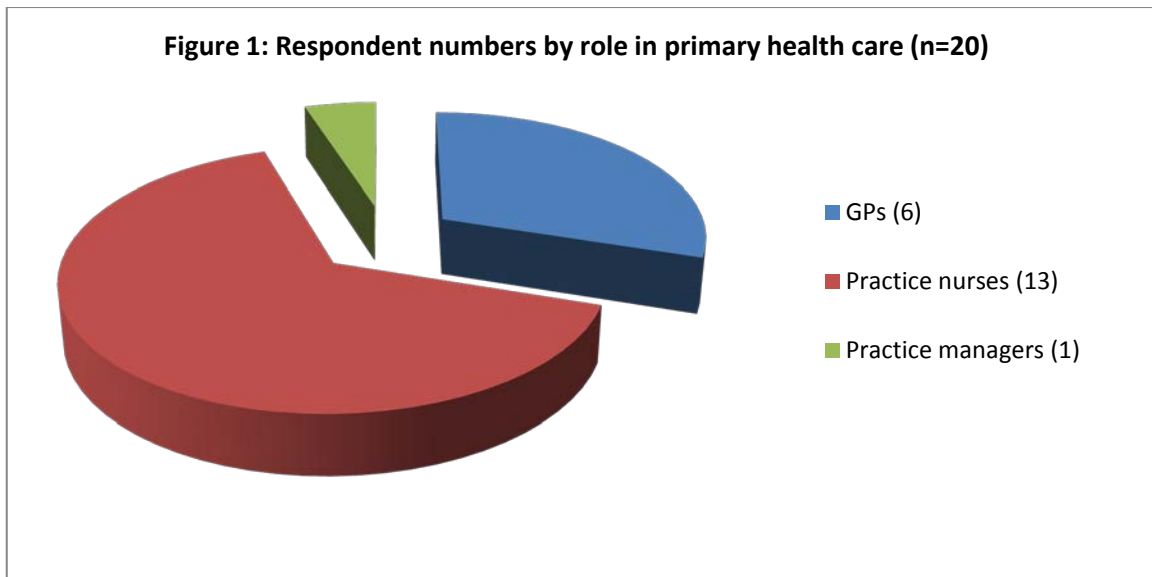
During April 2015, all General Practice clinical staff were invited to participate in a brief online survey (refer Appendix Six). An initial e-mail invitation (refer Appendix Seven) was prepared by Whakauae and sent out by the WRHN's Communications Coordinator to practice managers at all 16 General Practices under the umbrella of the WRHN for dissemination to clinical staff.

Only one response was received in the week which followed mail out of the initial invitation. When the low response rate was raised with the WRHN it was identified that staff had been sent four other surveys in the same week that the EPAA survey went out. Survey overload was considered likely to have contributed to the low EPAA survey response rate.

An alternative dissemination strategy was then explored. As a result, survey completion reminders were subsequently sent directly to GPs and practice nurses as well as to practice managers by the Communications Coordinator. Additionally the survey was promoted by the Communications Coordinator in the WRHN's weekly in-house newsletter drawing attention to the random prize draw incentive, a \$200 New World grocery voucher.

The survey was open for a period of two weeks, closing on 29 April 2015. The first reminder was emailed at the end of week one with a second, and final, reminder being sent on the day the survey closed. Both the initial email invitation and the reminder emails included web link access to the survey tool which was administered through the Survey Monkey⁹ website. A total of 20 valid survey responses were received resulting in a response rate of approximately 26%. Figure 1 below shows number of survey respondents by primary health care role.

⁹ Survey Monkey is a provider of independent, third party, web-based survey tools combining survey methodology with web technology (Survey Monkey, 2015).



Contingencies for accommodating potentially low survey participation rates were considered by Whakauae prior to survey design. Use of an online survey tool was selected as being likely to be the optimum survey administration mechanism because of ease of access, minimal completion requirements in terms of time and ease of survey return. In order to further incentivise participation those who took part in the survey were also eligible to be entered in a random draw to win a \$200 New World Supermarket voucher. All respondents were offered the opportunity to opt in to the random draw.

QUANTITATIVE DATA

An initial meeting was held with the WRHN, in early March 2015, to discuss the opportunities for extraction of quantitative data from the EPAT data base. The organisation has set up the database to capture EPAT information including what components of the EPAT are being used, who by and how often. The database also captures information in relation to smoking status and referral. A range of data queries were developed and provided to the WRHN, so that data could be extracted by the EPAA Project Lead. The raw data responses, along with an analysis of results, were then supplied to Whakauae for review.

Data queries included:

- Who is being screened? (By age, NZDep quintile / decile, ethnicity, geographical spread eg rural / urban and neighbourhood);

- Who is using the tool? (By GP practice and by individual GP / nurse; is it being nurse or GP administered; how frequently is it being used and by whom eg someone that started using it then dropped off?);
- How is the tool being used? (What skip patterns have been identified? How frequently are links and additional forms being used?); and,
- What is resulting from use of the tool? (Number of referrals? Where are patients being referred and at what rates? What referral rate is there to in-house WRHN services? What referral rate is there to external services?).

At a follow up meeting six weeks after the initial meeting, progress with respect to data extraction was discussed and a formal quantitative data reporting date of early May 2015 was agreed.

DOCUMENT REVIEW

The WRHN provided Whakauae with EPAA related documents including the hard copy version of the Medtech advanced form, the initial implementation plan and an updated implementation plan. A list of documents made available for review is included here as Appendix Seven.

ANALYSIS

Almost all interviews were audio-recorded, with the consent of participants, and transcribed. In the case of one telephone interview however, notes only were taken. These notes, along with interview transcripts, were reviewed by two researchers working on the study. A coding system was developed identifying key elements of relevance to the evaluation study. The researchers independently reviewed all interview transcripts applying these codes and expanding the coding system where necessary. As a result of this work, both researchers initially identified key themes from the data. Using the mahi a rōpū method (Boulton & Kingi, 2011) findings were then shared with the analysis being refined and key messages determined.

As has been noted above, online survey results were largely statistically analysed using Survey Monkey. The limited amount of qualitative data collected via the online survey was thematically analysed alongside key informant interview data.

Quantitative data provided by the WRHN, in response to Whakauae's data queries, was reviewed in consultation with the WRHN which was helpful in further exploring the meaning of the results at a primary care level. Quantitative analysis of EPAT data is an ongoing project for the WRHN.

Documents provided by the WRHN were reviewed with results being used to inform evaluation findings, particularly in relation to assessment of implementation progress.

ETHICS

The HPA directed that the EPAA evaluation methodologies proposed by Whakauae be consistent with Health and Disabilities Ethics Committees (HDEC) ethical research practice expectations. As a first step in addressing that requirement, Whakauae assessed the definition of the scope of HDEC review. The definition is included in section 3 of the Standard Operating Procedures for HDECs, along with a flowchart developed to assist applicants to determine whether or not a study is likely to require HDEC review (HDEC, 2014). On the basis of that assessment, Whakauae concluded that HDEC review was unlikely to be required for the proposed EPAA Evaluation study.

To confirm the above conclusion, Whakauae corresponded with the Ethics Committees Advisor outlining the nature and proposed design of the Evaluation study. Email confirmation was received from the HDECs Advisor confirming that the proposed Evaluation study falls “under service evaluation which does not require HDEC review. It appears that you are formally assessing the pilot. You are seeking informed consent. I can confirm HDEC review is not required” (Personal communication, HDEC, 22 January 2015).

Though formal ethics review was therefore not sought, all expected research ethics processes have been adhered to in the conduct of the EPAA evaluation research.

LIMITATIONS

This was a small scale study carried out over a brief, five month timeframe. The study design was impacted by the time restriction and the study results, to some extent, reflect that limitation. Aside from the compressed timeframe for the conduct of the study, the only other limitation which may have impacted the findings concerned securing the input of two key players; the clinician responsible for delivery of the EPAT training component of the EPAA and service users. In the case of the former, unavoidable circumstances precluded participation. In the case of the latter, some service users have contributed to the study but the EPAA picture we have drawn is primarily coloured by what has been learned from health care workers and managers. That picture would be richer if an even broader range of service user stories were included.

Several limitations should also be noted in relation to the WRHN quantitative data reviewed in the report. Firstly, a number of “test” cases were set up by the WRHN in the EPAT, at different stages of advanced form rollout, to assess the robustness of various form inclusions. Whilst the WRHN

removed all known test cases from the data provided to Whakauae for review there is a possibility that one or more test cases have not been successfully identified and excluded. Secondly, whilst roll-out of the EPAT to General Practices began in July 2014, the collection database was not implemented until three months later in October 2014. EPAT data collected from October 2014 to 05 May 2015 is included in the review. Finally, there was also a two week period after 28 October 2014 where data was not being successfully transferred into the collection database from some Practices and that data is therefore not included in the review.

3. RESULTS

In this section of the report evaluation results are presented. Reporting is structured under each of the first four objectives of the EPAA evaluation identified in the EPAA Background & Evaluation Aims section above. These objectives were to:

- I. Describe key components of the EPAA service model;
- II. Describe the process of WRHN EPAA implementation to date and assess process quality including identifying components of the EPAA which have been implemented as planned and components which have been modified (when, how and why);
- III. Assess the success of specific short-term outcomes identified in the EPAA Programme Logic Model; and,
- IV. Identify challenges associated with EPAA implementation and, where relevant, how these have been addressed.

The final evaluation objective was to draw on the evaluation results and analysis in order to provide recommendations for wider implementation of an EPAA. That objective is addressed in the Conclusion and Recommendations section of the report.

I. KEY COMPONENTS OF THE EPAA SERVICE MODEL

As has previously been noted under the EPAA Background and Evaluation Aims heading of the report, the critical components of the EPAA are detailed in the stand-alone Service Model Description document developed by Whakauae (Gifford et al, 2015). The Description provides a detailed picture of the EPAA and the relationships between its various components.

II. EPAA IMPLEMENTATION PROCESS

During 2014, *An Early Pregnancy Assessment Recording Tool Implementation Plan* (WRHN, 2014b) was prepared by the WRHN. That *Implementation Plan* has progressed through a series of iterations reflecting the shift from the original concept of developing an EPAT to the design of a wider EPAA with the EPAT at its core. A key informant made reference to that process of transition explaining that:

The idea was to write a form which would simply collect the basic clinical information about a woman's pregnancy, absorb that information from the use of those forms and then do a printout and say "this is essentially an early ante-natal assessment".... a whole bunch of

other stuff... [then] came in to play...But the original form was really a coordinating process (KI19).

Late in 2014, Whakauae met with the WRHN and was provided with the most recent version of the *Implementation Plan*. Implementation progress against the *Plan* was reviewed with the WRHN on that occasion. At a follow up meeting, on 23 April 2015, progress in the implementation of the rollout of the EPAA was again reviewed with the final version of the *Implementation Plan* (WRHN, 2014b) being the key point of reference. Information gathered at that review meeting, complemented by relevant key informant data, informs this section of the report which summarises implementation progress to date.

Almost all actions listed in the *Implementation Plan* have been either completed or have been initiated but are, because of their nature, ongoing at least in the short to medium term future. Examples of completed actions include:

- Loading of the EPAT at the General Practices where the Tool was piloted;
- EPAA promotion and training delivered through the Whanganui Inter-Professional Education (WIPE) forum¹⁰;
- Pre-installation of the EPAT at General Practices;
- Training for the Practice Nurse assigned to carry out EPAT training with her colleagues;
- The establishment of the GRx Active Pregnancies Programme in partnership with Sport Whanganui; and,
- The inclusion of Healthy Homes and the Pēpi Pods Programmes in the EPAA as EPAT referral options.

Implementation Plan documented actions which had been initiated, but which are ongoing include making necessary changes to the EPAT in response to user feedback. An informant commented that the WRHN had “*made quite a few changes to the form...that’s just normal when we’re testing a tool*” (KI08). Another informant reported too that the ‘tweaking’ of any tool is an ongoing process and one which is being routinely pursued by the WRHN with respect to the EPAT:

We’ve regularly been asked for feedback on the Tool... which we’ve given, particularly when it doesn’t work. Sometimes I’ll get emails for it. Other times it’ll just be a phone call, or

¹⁰ WIPE meetings are hosted by the WRHN and attended by General Practice staff as well as being open to associated health professionals including LMCs. The monthly meetings are held in the evenings to better accommodate the needs of health professionals.

somebody will be popping down and they'll just say "oh, how's that Early Pregnancy Tool going?" (KI14).

Monitoring and follow up of Maternal Navigator referral along with monitoring and reporting of Section 88 claiming¹¹, in tandem with use of the EPAT and the wider EPAA, are also tasks the WRHN is continuing to pursue.

One critical ongoing action included in the *Implementation Plan*, the booking and delivery of EPAT training at all General Practices, has been initiated but is progressing at a slower rate than initially anticipated by the WRHN. There are several reasons for delays in delivery of the on-site EPAT training, two of which include the lack of specific training funding support and the unexpected absence of the nurse who had been trained by the WRHN to in turn train nurse colleagues. That absence has occurred over an extended period as an outcome of personal circumstances. A key informant explained that the EPAA implementation is:

...on track except that the education is taking longer than anticipated...I think we were hoping to cover off a couple of Practices per month but it just doesn't happen like that because you might have to go back repetitively...and [the nurse] who's doing that education, her time is limited and our funding is limited (KI08).

Another informant concurred adding that the extent of the training required to support implementation of the EPAT has possibly been more significant than had initially been anticipated requiring some new ways of thinking around accommodating the training need. As that informant asserted:

...the issue we've got at the moment is how are we providing the training? Because it really needs one-to-one coaching from usually nurse to nurse. And every nurse is potentially going to be in this situation (KI19).

A *Communications Plan* (WRHN, 2014c) was developed to sit alongside the *Early Pregnancy Assessment Recording Tool Implementation Plan*. Many of the actions included in that *Communications Plan* have been implemented, with several requiring ongoing implementation. At least one action has however, been delayed.

Communications Plan actions implemented include:

¹¹ Section 88 sets out the terms and conditions regulating how and when the Crown will make a payment to a maternity provider for the provision of primary maternity services.

- Initial EPAA awareness raising carried out across General Practice teams and amongst the WRHN staff;
- EPAA awareness raising with LMCs;
- WIPE session coordination;
- Design and delivery of hardcopy EPAT information for General Practices; and,
- Information sharing with other interested primary health organisations nationally.

Actions initiated, but requiring ongoing implementation, include WRHN provision of feedback to General Practices on their EPAT use through a quarterly analysis of EPAT data collected. Currently feedback is being provided to General Practice teams in relation to their own EPAT activity but not yet in relation to EPAT activity across all WRHN Practice teams. It is intended that quarterly analysis of EPAT data across all Practices will be provided in the near future when WRHN capability can accommodate that provision.

EPAA *Communications Plan* actions yet to be carried out include preparation and dissemination of an EPAA press release and provision of regular EPAA updates to General Practices. In the case of the anticipated press release, the delay is a reflection of the wider delay in EPAA rollout. In the view of the WRHN, the EPAA is yet to be well embedded in all General Practices in part due to the extent of on-site EPAT training still needing to be carried out. The time is not yet considered 'right' to raise public awareness and expectations of the EPAA as a result.

In the case of provision of regular EPAA updates to General Practices, the slower than anticipated uptake of EPAT use has in turn delayed the need for EPAA formal updates. Some informal updating is however occurring, facilitated by the EPAA Clinical Lead. An informant noted that whilst:

There's been some high level training... around GP peer reviews - just really getting high level 'buy in' to what it's about and there's been some one-to-one coaching from the practice nurse. But that process has to continue and at the moment we're having to absorb that within our existing process and that's difficult (KI19).

Planned implementation of the EPAA is additionally detailed in the stand-alone Service Model Description document developed by Whakauae and referenced above.

III. EPAA PLM SHORT - MEDIUM TERM OUTCOMES

The EPAA PLM identifies anticipated short, medium and long-term outcomes. The primary foci of the EPAA evaluation are the short term outcomes listed in the Short Term Outcomes column of the PLM (refer Appendix One). Medium term outcomes are additionally reported where possible along with

Evaluation of the Early Pregnancy Assessment Approach: Final Report Page | 26

the related but non-outcome focussed issue of the acceptability of the EPAA to service users. PLM short term outcomes reported below are, except where specified:

- General Practice awareness and understanding of the EPAA and the EPAT;
- EPAT / EPAA uptake across General Practices;
- Awareness of the role of the Maternal Navigator;
- Awareness and use of the EPAA / EPAT in tandem with claiming under Section 88 (medium term outcome additionally considered);
- Cross-sector awareness and understanding of the EPAA; and,
- Cross-sector 'buy in' to EPAA implementation (medium term outcome).

General Practice awareness & understanding of the EPAA & EPAT

Awareness and understanding of the EPAA and EPAT are considered here under separate key informant interview, WRHN WIPE evaluation and online survey headings.

Key informant interviews

Level of awareness of the EPAT was high amongst the General Practice key informant group. These informants focussed primarily on the EPAT component when explaining what they knew about the overall EPAA. One informant, for example, described the EPAT as being a pivotal component of the EPAA framework as it facilitated:

...being able to identify high risk, potentially high risk, pregnancies early and having a standardised approach...to questions that need to be asked in early pregnancy, to medications that need to be administered, to tests that need to be taken or offered to patients...creating guidelines or pathways that really are largely aimed at best practice and making sure that patients or clients receive the same information, same standard of care wherever they go (KI13).

Others concurred, with one noting that the EPAT *"identifies any high risk women ...so we can get them in to the right services and get them the right help"* (KI14) and another adding that the EPAT is:

...a really concise tool to use which brings all the components [of the EPAA] together. It's a memory prompt reallya reminder, makes it very tidy. You can put it all together. And it's great the way the scripts pop up. I like that bit (KI15).

The installation of the EPAT in all General Practices under the umbrella of the WRHN had heightened awareness of Tool availability. Installation had, in some instances, been more than a passive process. One informant reported, for example, that:

...one of the [WRHN] staff came out and showed us exactly how the Tool worked through a peer review session.... All the nurses were educated on it because generally the Tool is used by all the nurses (KI14).

Another informant who had not accessed training was nevertheless aware of the Maternal Navigator referral pathway mapped by the EPAT and had made use of it. She asserted that:

Basically it's a good tool for people... who [have] just found out they're pregnant. Who need help - and the fact that it's on the computer. You can just flick it, say okay, and it's gone. You don't have to fax it and this, that and the other so it's pretty cool. When it works (KI16).

WRHN WIPE Evaluation

Awareness of the EPAA, or at least of the EPAT, appears to have been heightened among General Practice staff by WRHN promotion via mechanisms including the in-house newsletter and a WIPE meeting dedicated to the EPAA roll out. Several key informants had taken part in that meeting and made reference to it as having been the source of their EPAA knowledge.

The WIPE meeting, held on 02 September 2014, attracted 52 participants including 18 GPs and 21 Practice Nurses along with two LMCs. There are approximately 75 GPs and Practice Nurses who come under the umbrella of the WRHN. More than half of these clinicians therefore took part in the WIPE meeting which introduced the EPAA.

A WIPE meeting evaluation form was developed by the WRHN which was then disseminated and collected during the meeting. The evaluation form was completed by approximately half (n=25) of the WIPE participants. As responses were anonymous, it cannot be determined how many of these 25 forms were completed by GPs and Practice Nurses as opposed to other health services personnel present such as pharmacists and LMCs. All evaluation forms were collated by the WRHN (WRHN, 2014d) and results of relevance to the EPAA evaluation are summarised below.

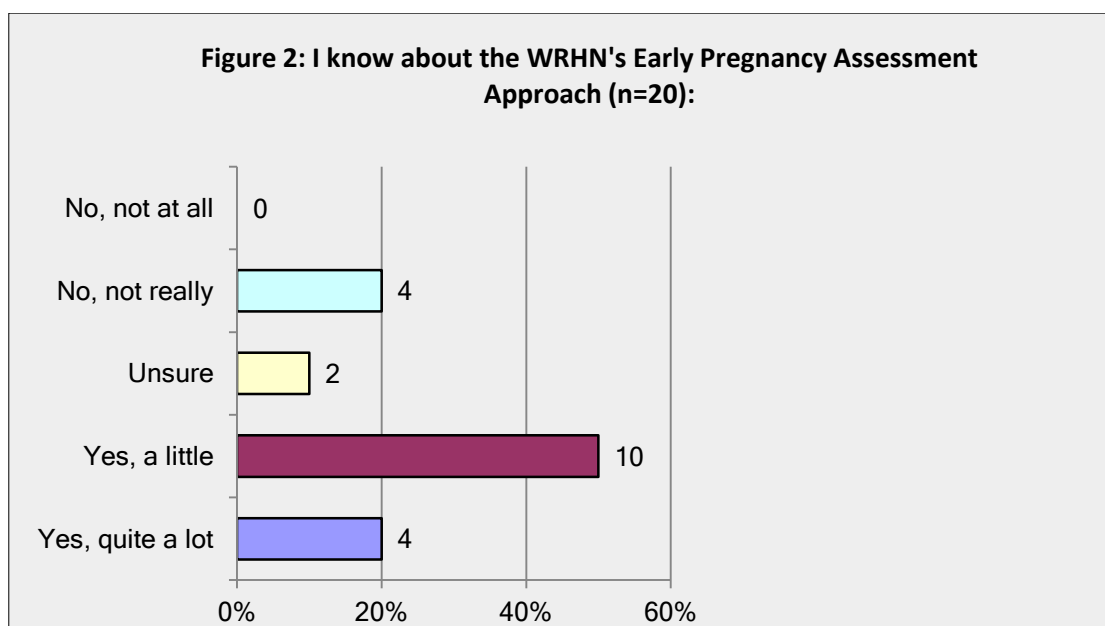
In response to a question asking participants to rate how informative they had found the EPAA WIPE session, most (n=21) allocated scores of 7-10 with 10 being the highest score and 1 the lowest. When asked to rate how relevant session content was to their practice, only four respondents allocated a score lower than 7. Additionally, one respondent commented that the EPAA WIPE session had motivated them to "locate the primary toolkit pregnancy assessment form tomorrow".

Of the 25 WIPE evaluation respondents, 19 reported that their learning needs had been adequately met assigning the WIPE session a score of 7 or higher. When asked to comment on what they had found most valuable about the session, responses included *"raising awareness among GPs and*

Practice Nurses”, “good update and new information”, “discussion re current management / GP care of pregnant women” and “all of it”.

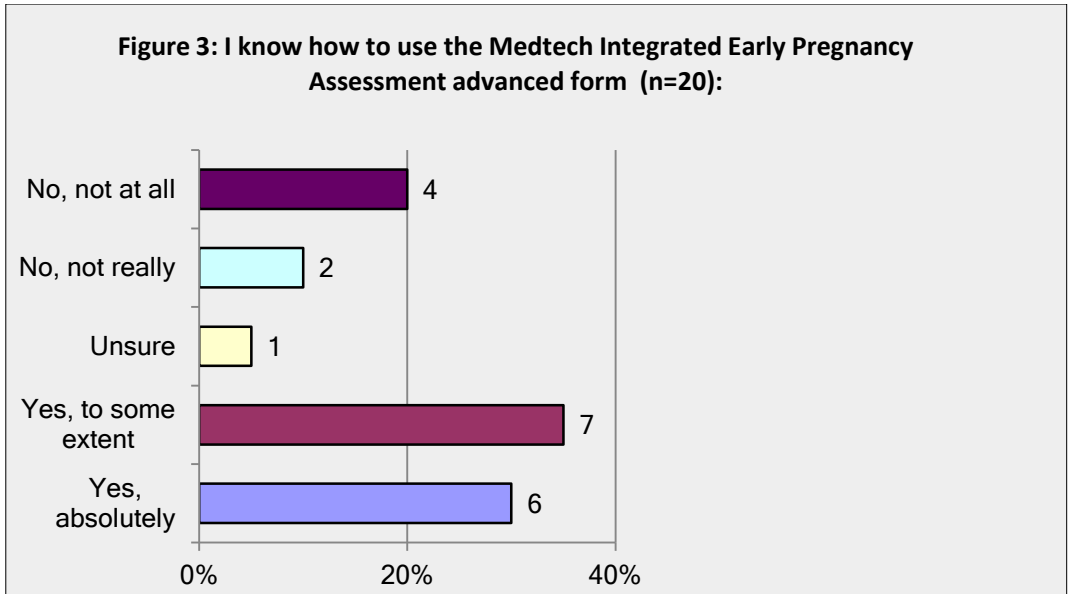
Online survey

Respondents to the online survey conducted by Whakauae were asked to rate how familiar they were with the EPAA. Most (16 of the 20) indicated that they knew about the EPAA, although for many that knowledge was limited. One quarter (n=4) of those reporting having knowledge of the Approach indicated that they knew ‘quite a lot’ about it. Figure 2 below summarises survey respondent self-rated knowledge of the EPAA.

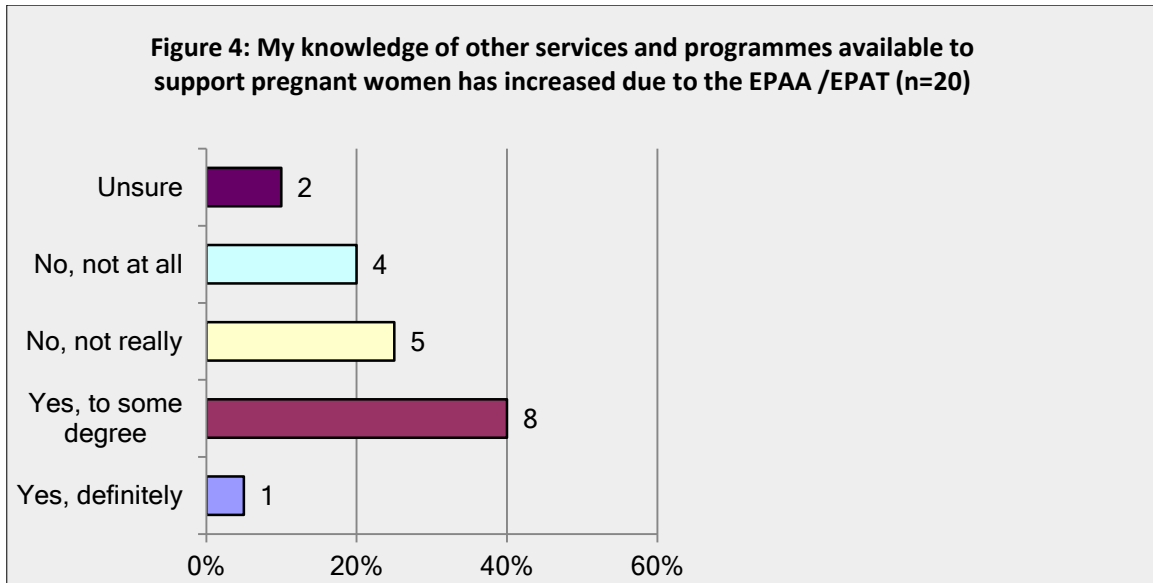


Factors cited as contributing to respondents having limited knowledge of the EPAA included, in one instance, having only recently become a member of a General Practice team. That respondent observed that, as a result of her limited General Practice experience, she was “...learning lots of new things, [the EPAA] being one”.

Online survey respondents were also asked whether they knew how to use the EPAT with 13 indicating that they did. Over a quarter (n=6) of all respondents reported having a sound level of skill in using the EPAT with a further quarter (n=7) noting that they had at least some level of skill in EPAT use. However, another quarter of respondents indicated that they either knew very little or nothing at all about using the Tool. Figure 3 below summarises respondents’ assessments of their level of EPAT use skill.



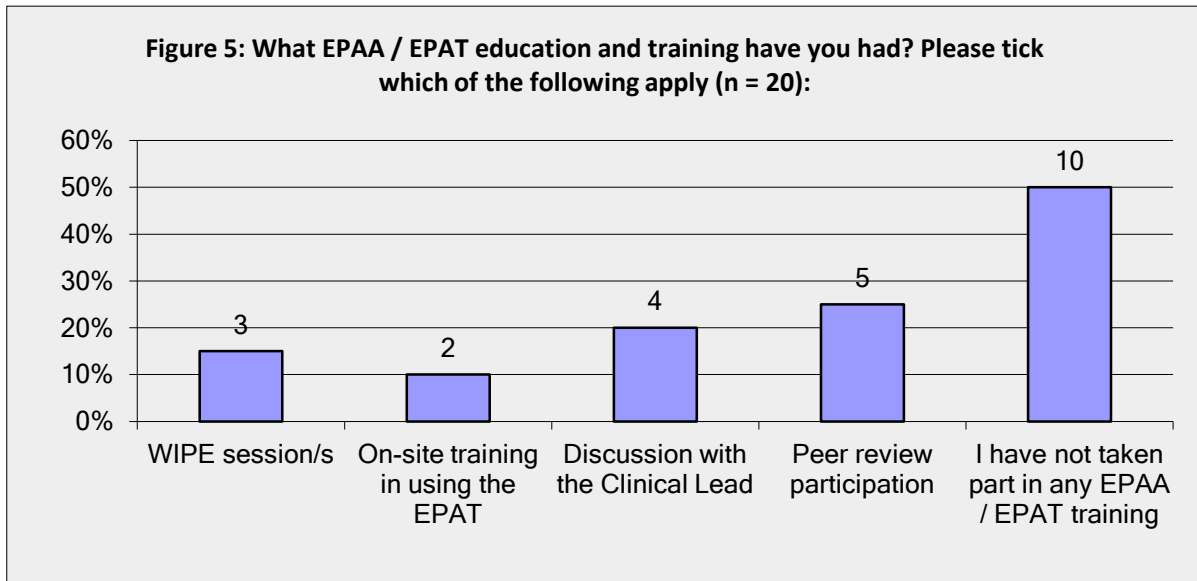
As a result of the EPAA / EPAT, knowledge of other services and programmes available to support pregnant women had increased for almost half (n=9) of the survey respondents as Figure 4 below illustrates.



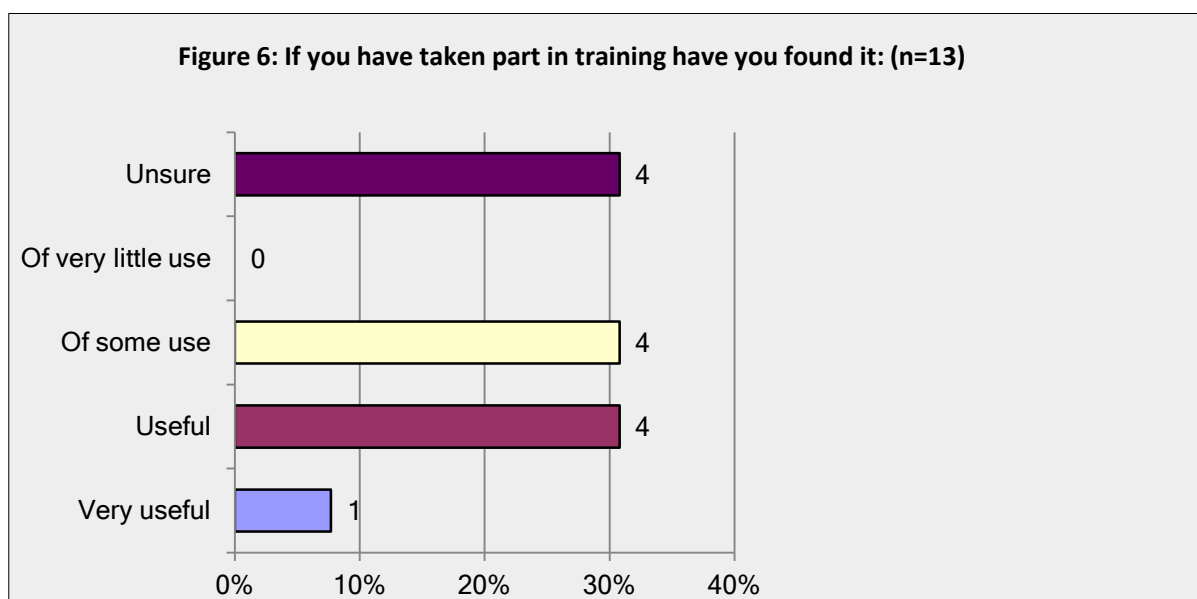
A further question concerning the EPAA / EPAT training respondents had undertaken allowed for the selection of one or more responses from a list of options provided. Although half (n=10) of the respondents indicated that they had not taken part in any of the training options listed, three of these respondents acknowledged that they had utilised other alternative training opportunities not included in the list of options provided. One of these respondents had taught herself to use the EPAT commenting that self-learning had eventuated because she had been “...asked to do an early

pregnancy assessment and then figured it out from there”. Another reported that a “...colleague taught me how to use this form” and a third explained that she had learned about the EPAA through a “nurse meeting attendance”.

A quarter of all respondents had participated in EPAA / EPAT peer review sessions. Small numbers had either attended the EPAA WIPE meeting (n=3) or had taken part in on-site training (n=2). Reported training participation is overviewed in Figure 5 below.



Respondents’ assessment of the usefulness of the training which they had taken part in was also explored. Results are summarised in Figure 6 below.



Of the 13 respondents who had taken part in training, in some form, nine had found this training beneficial as Figure 6 highlights. One respondent however, added a qualifier to this noting that the *“actual use of the Tool often takes more time than you are led to believe in the training”*. The remaining four respondents indicated that they were unsure of the usefulness or otherwise of the training that they had taken part in.

A total of ten respondents commented on ways that the EPAA / EPAT training could be improved though not all the comments offered related specifically to training issues. One respondent stated that she *“...didn't realise there was training available. Keen!”* whilst another noted that she *“...would like some training”*. *“More advertising”* of the training that was available was suggested by another respondent, along with the need for WIPE training sessions to be made available.

For one respondent the need for further training was considered to be minimal. She asserted that the EPAT could be satisfactorily mastered *“if one is motivated and takes the time to apply/think and work it through”*. Another considered that *“the training is adequate”*. However, if the training accessed was not then applied, skilled EPAT use would not result. This respondent asserted that following training it *“is then how often you are able to use the Tool that allows you to be more familiar and more I think, skilful, with its use.”*

EPAA/EPAT uptake across General Practices

Key informant data, online survey data and WRHN EPAT data are referenced in this section of the report which considers the level of General Practice uptake of the EPAA including the EPAT.

Key informant interviews

Key informants included a cross section of regular users of the EPAT, intermittent users of the Tool and non-users. Regular users reported finding the Tool of value as the following example highlights:

It's just a really good checklist, you know? You make sure they've got their scripts. They've had their blood tests done. If they need swabs they're done and then if they've got questions. And there are a lot of extra little underlined areas in there so you can go and you can print off information forms for them and give them to them. And then if you've got concerns about depression or anything like that there are all your PHQ94s¹² and everything in there as well and you can go through and do those (KI18).

¹² Personal Health Questionnaires used in primary health care as a measure of patient mental health status.
Evaluation of the Early Pregnancy Assessment Approach: Final Report Page | 32

Another regular user had found that the EPAT supported a much more thorough early pregnancy assessment than that which she would have been carried out in the past, when she would “*probably not [have] screened for any of the kinds of things*” (KI14) which the EPAT included. In this regular user’s General Practice “*everybody has access to [the Tool and]...probably six would be utilising it*” (KI14).

A third regular EPAT user reported that training had decreased the time she now needed to carry out an assessment and that EPAT use was making early pregnancy care easier. She commented that the:

...only problem is when you’re new with the form you tend to be reading it rather than talking to them....The first time it took me about half an hour...with a bit of training it’s probably about 15 or 20 minutes now....[It] does make it a lot easier because you’re not thinking “gosh, what have I forgotten”? (KI15).

An intermittent user of the EPAT also conceded that the Tool was of use in so far as it “*kind of reminds you to ask that question. “Are you smoking? Are you drinking”?*” (KI16). However, her more regular use was precluded by the problems she had experienced with the form. Those problems were principally losing data which she had entered and being concerned that electronic referrals made to the Maternal Navigator service were not always being successfully transmitted to that Navigator.

Another intermittent user however, commented that:

The times I’ve used it I’ve found it very valuable because ...often you scratch your head and “oh, what’s all this”? Tests we need to do for...first trimester screening - well they’re all available and they’re all there and they’ve got links to various sites and information.... a lot of the thinking is done for you. But it is ... quite a long form. I think it needs to be long but it’s not a ten minute consultation form....it’s a fantastic tool to use (KI13).

In the view of the above informant, the EPAT itself is relatively straightforward but becoming skilled in its use requires “*using it more often*” (KI13). In a busy General Practice setting finding time to make use of the Tool could be a challenge.

A non-user reported supporting the EPAA in principle but not finding it of particular relevance in her rural General Practice setting. With LMCs and General Practice clinicians in regular, close contact and proximity, combined with good local knowledge among clinicians of the circumstances of pregnant patients, the need for the EPAA was considered to be minimal. This non-user informant emphasised

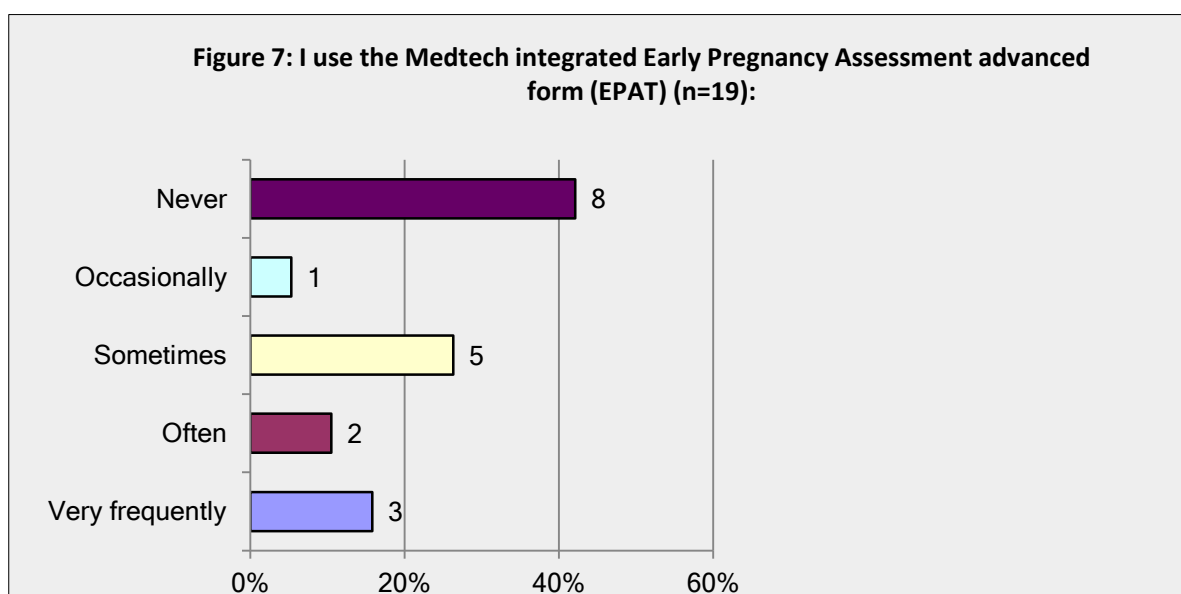
that women in early pregnancy “...only want to tell their stories once” (KI17) so it therefore made more sense to direct them to a nearby LMC in the first instance who would carry out any necessary assessment work. In effect, in the view of this non-user informant, an EPAA of sorts was already in place in her rural community prior to its formal introduction by the WRHN.

Overall, though there were reportedly high rates of EPAT use in several General Practices, those high rates did not appear to be the norm with one informant observing that the EPAT is not “as embedded as it could be yet” (KI13) across Practices.

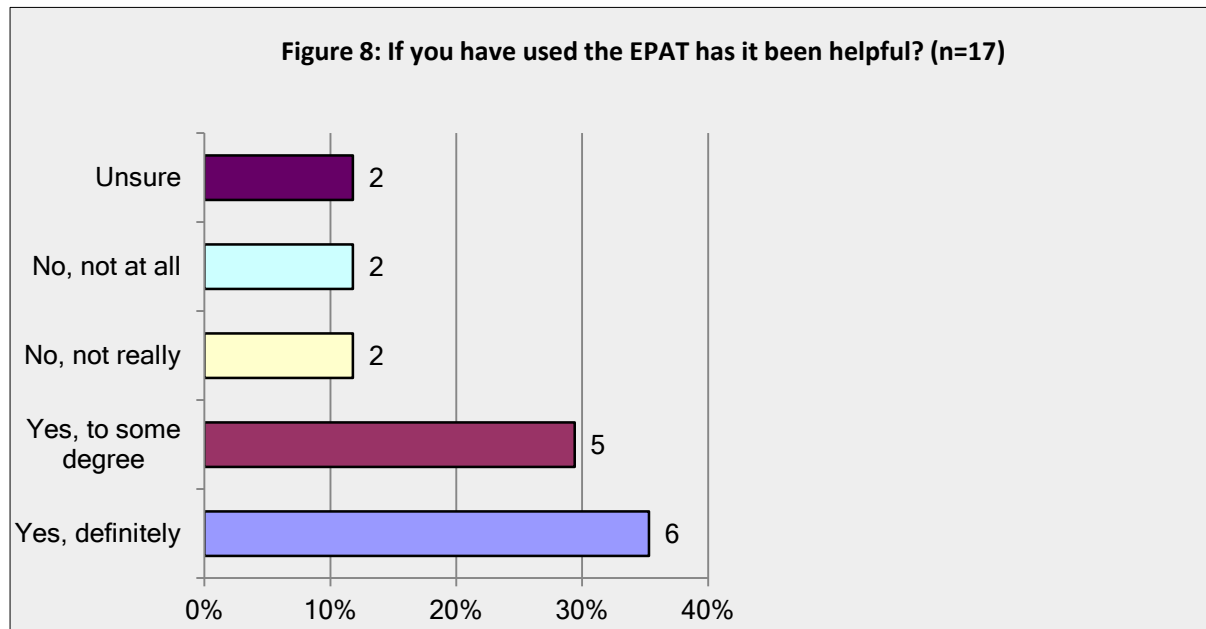
Online Survey

General Practice online survey respondents were asked to assess how often they had made use of the EPAT. A little over a quarter of respondents reported using the Tool either often or very frequently. One such respondent noted that she was “... now using [the EPAT] on all pregnant women” whilst a GP commented that “my nurses use it - pregnant women are always referred to my nurses for initial assessment and management”.

Another quarter of respondents indicated that they only sometimes used the Tool. The reason cited by two respondents for their limited use of the Tool was that they tended to see very few pregnant patients and that there were therefore few opportunities to use it. Despite the lack of opportunity identified, both respondents reported using the Tool whenever the opportunity did present to do so. Almost half of all respondents however, indicated that they had not used the EPAT at all since its introduction in WRHN General Practices during 2014. Figure 7 below summarises reported EPAT uptake.



Despite only 11 respondents indicating that they had in fact used the EPAT, a total of 17 respondents then went on to answer a follow up question concerning how helpful they had found the Tool necessitating a manual review of all responses¹³. Of the six respondents who answered this question yet had not used the Tool, one was a GP who had answered on the basis of his knowledge of the experience of his Practice Nurses. Figure 8 below charts all 17 responses.

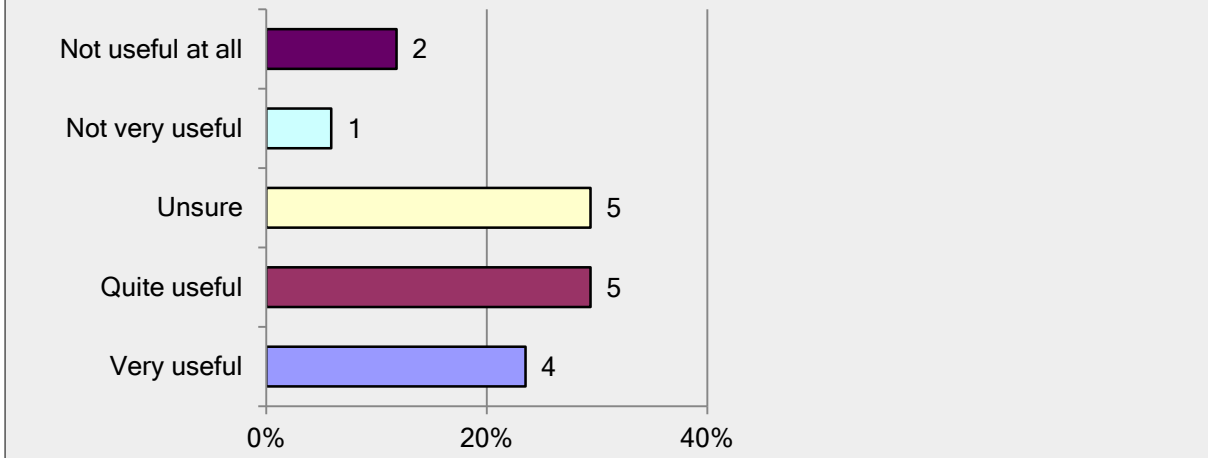


A total of 11 respondents considered the EPAT to be either to some degree helpful or definitely helpful. The main reason respondents cited for considering the EPAT helpful was because it provided, in the words of one respondent “...prompts to *get things right*” therefore ensuring that assessors “*cover the bases*” in the words of another.

When asked to rate the usefulness of the Tool, specifically in relation to identifying and managing risk in early pregnancy, 17 responses were again collected. Of these respondents more than half indicated that the EPAT had either been quite useful or very useful. Only a single respondent amongst the 11 who had actually used the Tool indicated that she had not found it at all useful in identifying and managing risk. All responses are charted below in Figure 9.

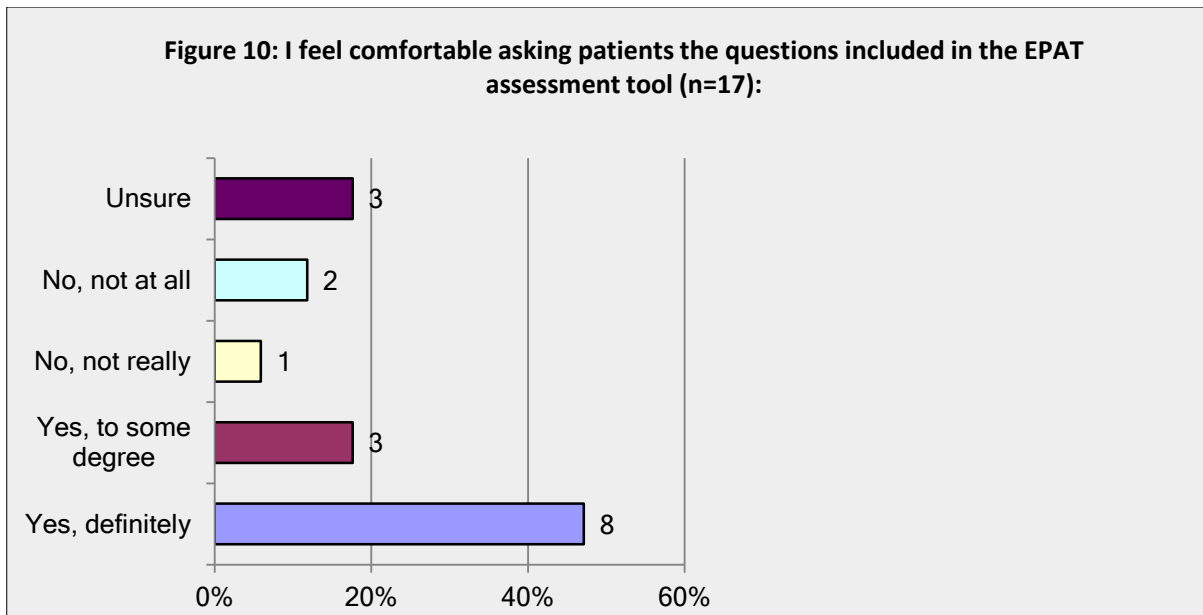
¹³ During the online survey testing phase the need to ensure automatic referral to the next relevant question, for those reporting not having used the EPAT, was not identified.

Figure 9: How useful have the EPAA / EPAT been in helping you to identify and manage early pregnancy risks (including smoking and drinking)? (n=17)

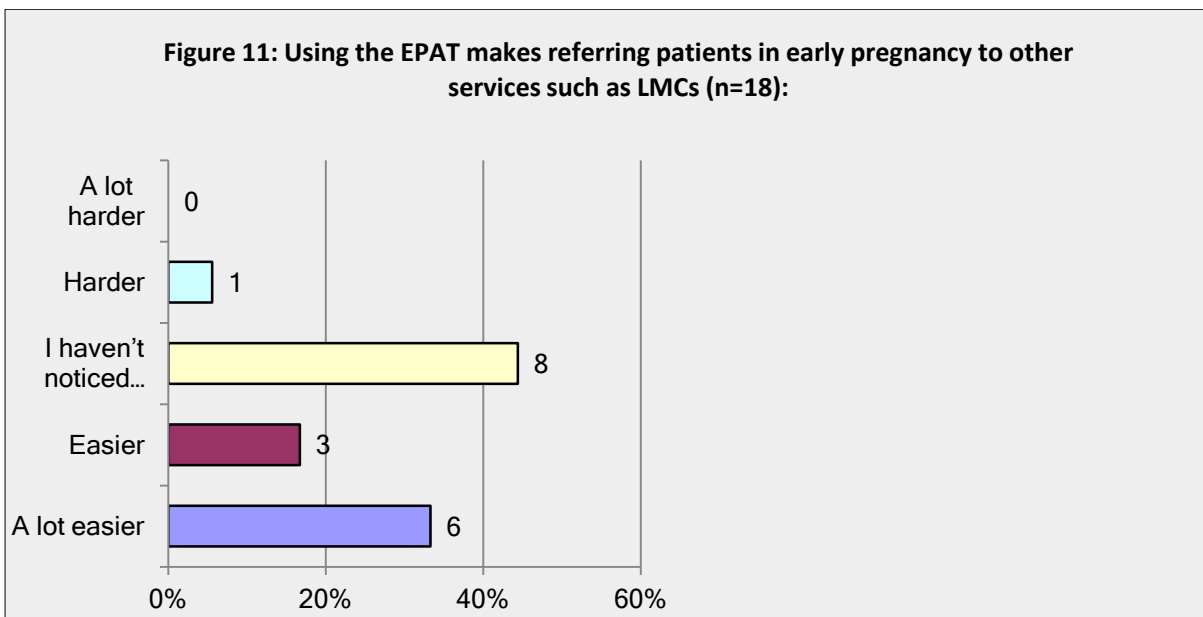


One respondent additionally noted that the EPAT was a “great tool to remind all nurses/GPs to ask [these] often missed questions and [it also] provides tools to assist”.

A total of 17 respondents rated their level of comfort around asking patients the questions included in the early pregnancy assessment process. Several of these questions related to talking with patients about potentially sensitive issues including family violence, tobacco, alcohol and other drug use. Again, 11 of the 17 recorded positive responses noting that they were either definitely comfortable asking patients the EPAT questions or relatively comfortable asking these questions. One respondent additionally commented that rather than asking patients some of the questions verbatim she generally modified or “re-word[ed]” questions where appropriate. Responses are summarised below in Figure 10.



For half (n=9) of those responding to a question concerning EPAT facilitation of patient referral to LMCs and other external services, the EPAT was considered to have enhanced ease of referral. The high number (n=8) of those who identified no difference in the ease of the referral process may be explained by the fact that almost all members of this group of eight respondents had no experience in the use of the Tool. Figure 11 below charts responses to the question around ease of referral. One EPAT user asserted that referral using the EPAT “takes more time” therefore making referral harder, though she did not go on to describe the nature of the difficulties she had experienced. Another two users had not noticed any improvement in ease of referrals as a result of EPAT use.



WRHN EPAT Data

EPAT data collected and collated by the WRHN is summarised in this section of the Evaluation Report providing an additional measure of uptake. In total, the EPAT Medtech advanced form was used on 74 occasions by clinicians during the period 28 October 2014 – 05 May 2015. That use was confined to clinicians based in approximately half of the 15 Practices under the umbrella of the WRHN along with one other primary care service. No EPAT uses were recorded by clinicians working in rural areas.

The vast majority of EPAT uses took place in two of the larger Practices (one used the EPAT 23 times and the other used it 21 times). Aside from one other Practice that recorded 12 uses, the Tool had been used only one to six times in each of the remaining five practices.

Of the 74 early pregnancy assessments completed using the EPAT, 65% were carried out with non-Māori women and the remainder (35%) with Māori women. Given the ethnic composition and age structure of the Whanganui population, and that 89% of the Māori population in the region are registered with the WRHN (Gray, 2014), it is likely that the rate of EPAT use with Māori women could be increased. The overall Māori population of the Whanganui District Health Board region is 25.9%¹⁴ (Health Quality and Safety Commission New Zealand, 2015). According to the Whanganui District Health Board (2013) however:

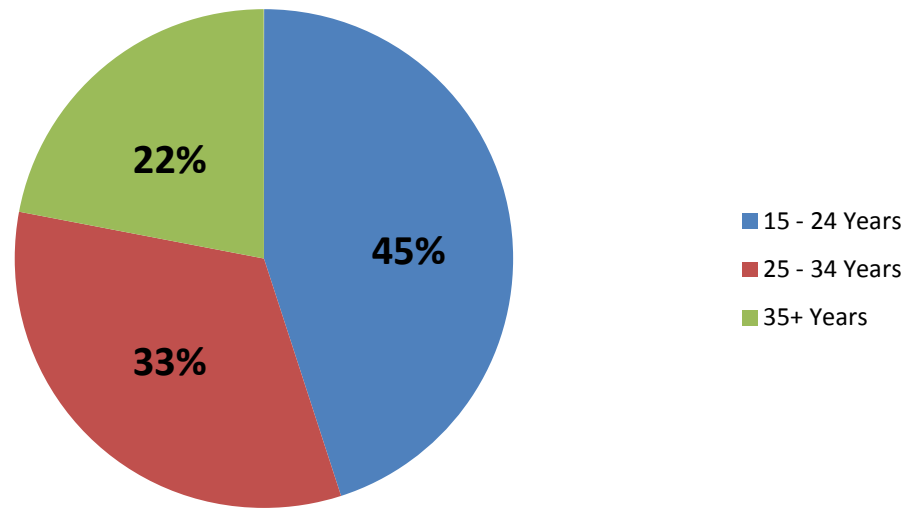
Compared to the New Zealand average, the population of Whanganui is characterised by a younger Māori population structure (Whanganui District Health Board, 2013: 5).

Of the birthing population in the region across the age span, 47% of that population is Māori (Whanganui and MidCentral District Health Boards, 2012). The number of Māori births taking place in Whanganui District Health facilities is therefore high, with Māori women also tending to give birth at a younger age than other ethnicities. Approximately 35% of all Māori women give birth aged 22 years or younger (Whanganui District Health Board, 2013). During 2010, 46.9% of all new born babies registered in Whanganui were Māori (Whanganui and MidCentral District Health Boards, 2012).

Figure 12 below highlights the number of early pregnancy assessments carried out by patient age group. The largest proportion of these assessments were carried out with the age group having the highest rate of fertility; 15 – 24 year olds.

¹⁴ The proportion of people identifying themselves as Māori in the Whanganui District Health Board region is therefore much higher than that of New Zealand as a whole (14.6%) (Centre for Public Health Research, 2010).

Figure 12: EPAT screening by patient age (n=74)



In 2010, 36.4% of babies delivered in the Whanganui region were born to mothers living in communities in the most deprived areas (Quintile 5) with only 5.2% being born to mothers living in communities in the least deprived areas (Quintile 1) (Whanganui & MidCentral District Health Boards, 2012). WRHN EPAT data identifies that the highest percentage (62%) of women screened were also those living in communities in the highest deprivation quintiles; Quintiles 4 and 5. The quintile distribution of Whanganui new borns is consistent with the quintile distribution of expectant mothers screened using the EPAT and highlighted in Table 3 below.

Table 2: EPAT Screening by Patient Quintile

Quintile	Number	%
Unknown	9	12%
1	3	4%
2	5	7%
3	11	15%
4	19	26%
5	27	36%

It is noted that Quintiles 4 and 5 are also overall the most highly populated in the Whanganui region (Centre for Public Health Research, 2010) which has more of its people living in areas of higher deprivation compared to many other District Health Board regions. Among the six District Health Boards making up the Central Region, for example, Whanganui has the greatest number (35% or more than one third) of its population living in the most deprived quintile. Additionally, it has the smallest proportion of the population living in the least deprived quintile at just 11% (Central Regions Technical Advisory Services Limited, 2014). As well as having the greatest number of people living in the most deprived communities in the region, the birth rate is highest for women living in these communities.

Clinicians carrying out EPAT screening had, in many instances (n=53), completed the section of the form asking whether the patient currently had an LMC. A quarter of women however, were not screened in relation to LMC booking. Whilst 13 of the 53 women who were screened had booked an LMC, 39 had yet to book and two were directly assisted to book on the day screening occurred.

A total of 55 women were screened for family violence with two being recorded as having family violence related issues. However, a quarter of women screened using the EPAT were not asked about family violence issues.

In contrast to the family violence and LMC screening gaps (approximately one quarter of women were not screened) a total of 68 women were screened in relation to the use of alcohol. Of these 56 were recorded as either being non-drinkers or having stopped drinking during pregnancy. A further ten women were recorded as drinking “within the limit” with one being recorded as being a binge drinker. The latter patient was subsequently referred for support.

The smoking status of 96% of patients was recorded (n=71). Of these 71 women, one third (n=24) were recorded as being current smokers. The data does not currently show if a referral to a cessation service was made on the day of the assessment using the ABC form. It is possible that smoking status was not updated on the day of the EPAT screening. To correct this data it would be necessary to pull in the date that the connected advanced form was updated.

It was unclear why alcohol and tobacco screening rates were notably higher than the rates of screening for family violence and LMC booking.

Awareness of the role of the Maternal Navigator

Key informants who were members of General Practice teams under the WRHN umbrella were, in most cases, aware of the existence of the organisation's Maternal Navigator service. Several were able to describe the general nature of the service. One informant, for example, explained that:

... My understanding [is] that certainly high risk pregnancies and that might include, psychiatric issues as well, can be actioned through that service...and the people can be navigated through to midwives and so on. And really just to ensure that antenatal care is as good as it could be (KI13).

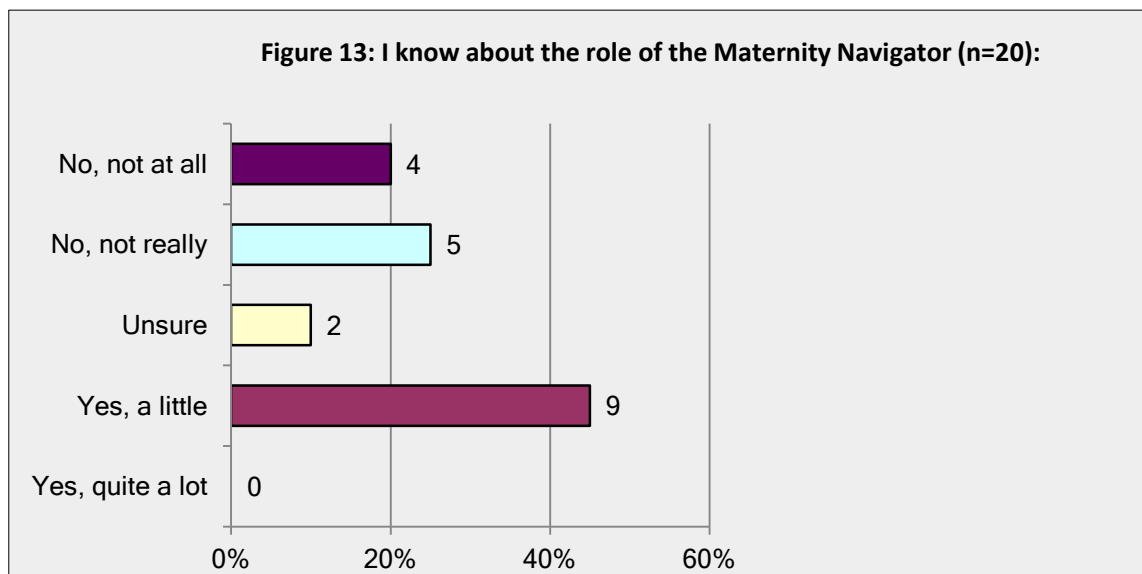
Clarity around what the Maternal Navigator role might involve in practice however appeared to be limited amongst other key informants. One informant, for example, outlined the nature of the service before then going on to surmise that the role of the Navigator would likely involve contacting at risk pregnant women:

...pick[ing] them up and tak[ing] them to appointments and that. But that might not be true. ...she'll get the referral. She'll see the girls and she'll organise with them, like she'll go with them to choose a midwife or if they have to go for a scan she'll go. That's my understanding (KI18).

The key informants' lack of experience in use of the Maternal Navigator service was evident in their uncertainty around what the service might actually offer. Despite this lack of experience in using the Maternal Navigator service however, most key informants were aware of how it could be accessed. As one explained, access was facilitated through the EPAT via:

...a highlight button through to our WRHN maternal health midwife [navigator] which can flag as a highlight concerns for high risk (KI14).

Amongst General Practice online survey respondents, approximately half reported knowing at least a little about the Maternal Navigator role, although not one single respondent claimed to be knowledgeable about it. The remaining half of respondents indicated being unsure about the role or having no knowledge, or virtually no knowledge, of it. Levels of knowledge of the Maternal Navigator role are highlighted below in Figure 13.



Two respondents additionally suggested that it would be useful if “more education” around the Maternal Navigator role was made available by the WRHN in the interests of increasing uptake.

As noted above, WRHN key informants were generally aware of the Maternal Navigator role. Referrals to the Maternal Navigator service had however, not yet been made by these informants.

Approximately half of online survey respondents in turn knew a little about the role. The WRHN EPAT data collector registered a total of 18 referrals to the Maternal Navigator during the six month period ending in early May 2015 suggesting that the level of awareness of the role across the organisation had been sufficient to prompt use of the service. Approximately a quarter of all assessments completed had resulted in referral to the Navigator service highlighting the added value that its availability has had to contribute to ‘at risk’ patient care.

Table 4 below records reasons why clinicians referred women in early pregnancy to the Maternal Navigator service.

Table 3: Reasons for referral to Maternal Navigator service by number (n=18)

Referral reason	Number of referrals
Alcohol counselling (mild – moderate)	1
Green Rx Active Pregnancies Programme	3
Hospital / Termination Clinic	1
Pregnancy and Parenting Classes	8
Smoking cessation	4
Support to connect with an LMC	1

Amongst other key informant groups, including both LMCs and service users, level of awareness of the Maternal Navigator role appeared to be non-existent. Of the four service users interviewed, none had heard of the service being available nor were any users aware of having been referred to that service. In one instance where the Maternal Navigator had been involved, that involvement was not explicitly identified by the service user as being a part of a Maternal Navigation service. The service user reported receiving a telephone call to facilitate connecting her with an early pregnancy programme noting that “[I] can’t even remember who it was. It was like the regional health board” (KI 12). Such lack of awareness of the Maternal Navigator role amongst service users was not necessarily considered to be problematic however, with one service provider key informant suggesting that so long as referral occurs as necessary, service awareness level among users is relatively unimportant.

Awareness & use of the EPAA / EPAT in tandem with claiming under Section 88

It is, as yet, early days for establishing a strong link between use of the EPAT and claiming for first trimester non-LMC services delivered under Section 88 of the New Zealand Public Health and Disability Act 2000. Section 88 sets out the terms and conditions regulating how and when the Crown will make a payment to a maternity provider for the provision of primary maternity services. General Practice claims can be made for services which include first trimester non-LMC services; the period of pregnancy which is the focus of the EPAA. Section 88 claims are made outside Medtech and are not therefore directly linked into the EPAT Medtech advanced form.

Prior to roll out of the EPAA, the WRHN had identified that there were instances of clinicians making Section 88 claims but not necessarily carrying out early pregnancy assessment and management consistent with current best practice. The EPAA seeks to address the issue of uneven service provision by supporting best practice using the EPAT as a mechanism to drive that shift.

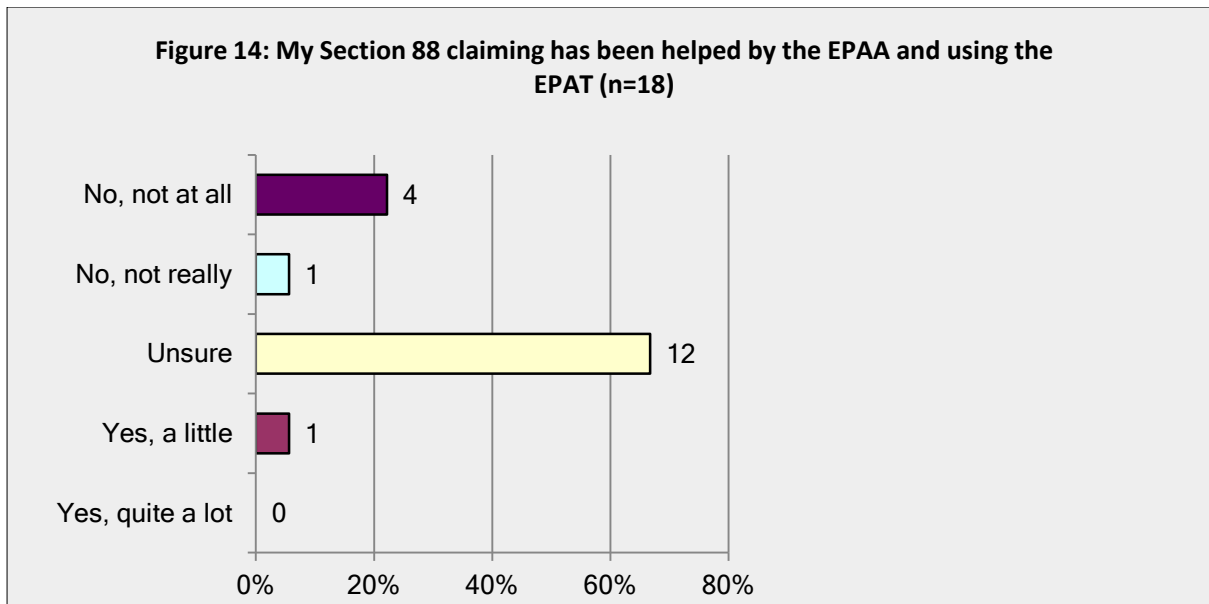
On the other side of the coin, it was also identified that General Practices were at times providing first trimester services but failing to then make Section 88 claims for these services. An informant described the claiming gap that had existed prior to the rollout of EPAT and how the EPAT was expected to contribute to closing that gap:

...I went in to the accounting programme and they hadn't even put a claim in for that person. So they do all this work and they weren't being funded for it. So that actually hit home to people. Not only ... will [the EPAT] give us better information but it'll structure the process by which there's proper invoicing as well (KI19).

When issues relating to best practice and Section 88 claiming were raised with General Practice key informants there appeared to be very little understanding of Section 88 claiming processes with one informant stating, for example, that she did not really "*...have anything to do with the claiming part of it*" (KI 18). One informant was however, able to describe how the EPAT can prompt Section 88 claiming. She went on to identify however, that more work needed to be done within her Practice to ensure efficient claiming was occurring. She noted that whilst the EPAT:

...does help... it's about doing the whole audit processes which we, probably at this clinic, haven't got really tidy at the moment So I guess that's why we're going down the track of putting in screening tools - to actually screen ourselves to make all those links happen (KI14).

General Practice online survey respondents too were asked to assess whether or not claiming for health services delivered to pregnant patients under Section 88 was being facilitated by the EPAA and use of the EPAT. As Figure 14 below highlights a minimal positive impact on claiming processes was identified. Two thirds (n=12) of the 18 respondents who answered this question stated that they were unsure about the impact of the EPAA and the EPAT on Section 88 claiming. Almost all (n=5) of the remaining third of respondents indicated that the EPAA and the EPAT had made no difference, or virtually no difference, to their claiming.



The large proportion of those reporting being unsure of the impact of the EPAA and the EPAT on claiming may be a reflection of the apparently limited knowledge many clinicians have of claiming processes generally. As one respondent explained, *“we are not responsible for the claiming”*.

Currently the WRHN is tracking Section 88 claiming, on a monthly basis, across General Practices and attempting to match results with EPAT data collection activity to better identify where claiming is occurring in tandem with use of the EPAA. Section 88 claiming data supplied to the WRHN by HealthPAC¹⁵ cannot however be directly matched with EPAT data. As the HealthPAC data does not include service user NHI numbers¹⁶ direct matching is not possible. The WRHN is therefore using the data that it does have available to try and establish a ‘bigger picture’ of the relationship between Section 88 claiming and EPAA activity. The WRHN expects to find that ‘bigger picture’ useful for tracking EPAA progress as well as for targeting activity including training and education.

Unsurprisingly, comparative Section 88 claiming data and EPAT data collected over the six month period, November 2014 to April 2015 inclusive, indicates that there is as yet little consistency in use of the EPAT in tandem with Section 88 claiming. Claims (n=147) continue to exceed EPAT use overall though it is noted that during February 2015, assessments carried out well exceeded claims made. A

¹⁵ The Ministry of Health operates HealthPAC which is a claim payment facility. Individual claimants or organisations make claims to HealthPAC which checks such claims and releases payments (Ministry of Health, 2007).

¹⁶ Everyone who uses health and disability support services in New Zealand is allocated their own National Health Index (NHI) number (Ministry of Health, 2012).

number of instances were therefore recorded of General Practices carrying out assessments using the EPAT but then failing to follow up by claiming.

Cross-sector awareness & understanding of the EPAA

Key informant interviews were used to form an impression of the level of cross-sector awareness and understanding of the EPAA within the Whanganui community. Providers of services or programmes to support women in early pregnancy, including LMCs, were asked to identify what they knew and understood about the WRHN's EPAA.

It was apparent that cross-sector awareness of the EPAA was widespread although levels of understanding varied. LMCs had heard about the EPAA, including the EPAT, from a number of sources. One of these LMCs described first hearing about EPAA developments through a regular monthly LMC meeting held in October 2014:

... We'd been discussing the Early Pregnancy Assessment Tool at that stage and we'd also talked, discussed [it] in our local New Zealand College of Midwives meetings as well.... and [we've] had emails from managers in Palmerston North and Whanganui about it too....I knew it had rolled out to GP practices and to WAM and also to the Youth Services Trust. Yep. And, the midwives had said that they're starting to get referrals... (KI04).

Other key informants also outlined what they understood about the EPAA. For one informant, understanding was confined to identifying a link between the Approach and improved health and wellbeing as the following example illustrates. The informant had had the Approach:

...explained to me so many times [by a WRHN worker]. It's... basically just informing and supporting the mums to learn about how to take care of themselves in a whole "wellness bubble"....wanting to basically create a wellness for women right from pregnancy stage, right through the pregnancy and after pregnancy and continue on in to their life (KI03).

Another informant provided a more comprehensive account of the EPAA noting that it was:

...developed to incorporate all wrap around services. So helping pregnant women to engage with all the services we've got...like Pēpi Pods, the pregnancy and parenting antenatal classes, Green Rx aqua classes.....Healthy Homes, so insulation, looking after child wellbeing etcetera...and obviously smoking, alcohol any addiction services. So it's basically utilising all the services in the community that could help pregnant women like a one-stop shop (KI01).

Cross-sector 'buy in' to EPAA implementation

Data to inform assessment of the level of cross-sector 'buy in' to EPAA implementation was gathered through key informant interviews with LMCs and others involved in delivery of services to women in early pregnancy beyond the General Practice setting.

The WRHN initiative was favourably viewed by key informants all of whom supported the EPAA. One LMC, for example, applauded efforts to ensure that consistent, comprehensive referral information would be provided by all General Practice clinicians rather than by only a minority. Already progress was being made in this regard, in the view of the informant, who noted that so far "the dealings I've had with [the Approach] have been very good" (KI06). Another informant concurred, commenting that "I think it's great. I think it's fantastic... It really - it sort of works alongside my [programme]" (KI03). This informant added that the EPAA was now successfully resulting in referrals to her programme. She noted being:

...pleasantly surprised that the referrals [are coming in].... it takes time. But the word is out there and....I'm sure there's a lot more out there that would, you know, come but I'm confident that that will happen (KI03).

The 'buy in' of the informant was being further cemented with the growing numbers of referrals to her programme. She described being committed to working with General Practice to support ongoing programme uptake:

...we are doing as much as we can to promote it. I think we just need to keep at it and like anything just ... you know, expose it to the GPs and the medical sector really.... Just 'keep on' [KI03].

Another informant appeared to be fully engaged in the promotion of the EPAA and working collaboratively to get the best outcomes for pregnant women. However, she did note that despite the EPAT being available for some months in General Practices, she had received few referrals which was a source of some frustration for her. The informant commented that she did not think clinicians were necessarily:

...using the Tool diligently enough....I think they have such a short window frame [sic] to be able to complete this whole assessment. They're dealing with - quite often they can be quite hard to reach women and so for the nurses in the consult, they're trying to get everything done within this ten to 15 minute timeframe. Including this assessment tool (KI02).

She went on to highlight the importance of using the Tool properly:

... It's really important...that these practice nurses understand the values of those two things, the benefits of those two things. Identifying that if they [expectant mothers] don't have an LMC that automatically there should be a referral ...Whether they give the list or not. And then they ask them about the Pregnancy and Parenting class (KI02).

A LMC informant, though supportive of the EPAA in principle, also reported having yet to notice any change in the quality of referrals she was receiving from General Practice.

Other examples of cross-sector 'buy in' to EPAA implementation were provided by a further informant. She explained that:

I like that ...[the EPAA] constantly ties in so that all the wrap around services are all working and tying in together.... And [pregnant women will] feel completely supported all the way through....So I can refer to each and every [programme]. I have the referral forms for each of them which we fax off (KI01).

The informant added that the way services cooperate in Whanganui means that approaches such as the EPAA have fertile ground to flourish:

I think Whanganui actually works really, really well in that way. It's exciting, especially with our pregnancy programme to see how everybody works well together (KI01).

IV. ACCEPTABILITY TO SERVICE USERS, FACILITATORS, CHALLENGES & UNANTICIPATED CONSEQUENCES

In addition to the short-medium term PLM outcomes discussed above, the evaluation also considered a number of other EPAA implementation factors. These included the acceptability of the EPAA to service users, factors which contributed to the ease of EPAA implementation, challenges to implementation and unanticipated consequences of implementation.

Acceptability of the EPAA to service users

An impression of the level of acceptability of the EPAA to service users was gained through analysis of service user key informant interviews along with analysis of the relevant service provider data available. It was readily apparent that the Approach was within the comfort zone of expectant mothers. The Approach appeared to be broadly consistent with what pregnant women expected from primary care in terms of assessing health status.

One service user informant, for example, in response to a question concerning how comfortable she felt with the early pregnancy assessment process carried out, commented simply that “it was good. Finding out all the information you needed” (KI12). For this informant, the process had been a ‘two way’ interaction involving her finding out what she needed to know about her pregnancy as well as ensuring the health care provider had sufficient information to be able to make a well informed assessment. Similarly another informant commented that:

I actually felt quite comfortable....I wasn't surprised by anything. I remember feeling like they were normal questions to be asking. I felt safe. I didn't feel like [the Practice Nurse] was being invasive (KI10).

Service users were specifically asked to comment on how they had felt being asked some of the potentially more challenging EPAT questions such as those concerning family violence and alcohol use. It was clear that informants were open to being asked about these kinds of issues too although one commented that she “*didn't really expect to be asked about your mental health and that, but I think it's really good, it's necessary*” (KI12). She went on to say she felt comfortable and thought all of the questions asked were critical questions that needed to be posed. Another informant observed that the ‘difficult’ EPAT questions were broached in a supportive and caring way:

It wasn't exactly “alright you're pregnant. Do you smoke? Okay, bye, off you go”. It was like someone was really looking in to ...the mental health side of things...and nobody had asked me before if I might need further support, I might need, you know, it could be that you could refer on to mental health services for example so I thought that was quite good actually (KI01).

In one instance, an informant observed that it was probably easier to respond openly to sensitive questions being asked by a health professional than by a friend or whānau member. She commented that she knew:

...quite a few women who are quite private and I think during pregnancy, even if they were still struggling with issues with drinking and all of that, they're not going to open up to family and friends. So I think it's important the nurse is asking those questions because they're probably more likely to be missed....someone you know is confidential and they have to keep it confidential rather than someone who might go blabbing and gossiping (KI10).

Those General Practice clinicians who had used the EPAT did not report having any particular issues with asking the questions included in the assessment although one did identify that some questions were more challenging to ask than others. She stated that:

I think it's a reasonably comfortable [tool to use]. I guess, you know, the questions around the mental health, previous mental health or family violence are... it doesn't matter who you're talking to, they're never comfortable to ask (KI14).

Most General Practice informants said they had had training around asking difficult questions and did not therefore have a problem broaching the subjects of domestic violence or mental health, for example. No informant had encountered a negative response from an expectant mother in the process of carrying out assessment suggesting that questions were likely to be being asked in a way acceptable to the service user group.

Despite informants generally considering that the assessment carried out under the EPAA is acceptable to service users, the timing of that assessment was independently questioned by both a service user informant and by a service provider informant. Each raised the issue of whether it was always appropriate to carry out a full assessment at the first consultation following confirmation of pregnancy. If the service user had only just discovered that she was pregnant, it was suggested a full assessment may not be a priority for her especially if she had yet to make a decision about whether or not to continue with the pregnancy. The service user informant described being:

...six weeks pregnant when I found out and I'd booked an appointment straight away with my GPI was quite upset. I was a little bit distressed about it ... so the nurse was with me and I think she did well considering I was upset the whole time (KI10).

For the informant cited above, the assessment process was not as useful as it could have been because she was more focussed on coming to terms emotionally with learning of her pregnancy than she was on how the pregnancy would be managed. The timing of the assessment did not appear to be an ideal fit with her wider wellbeing needs.

The service provider informant commented that, in her experience, it was often better to get a woman who had just had a pregnancy confirmed to simply have her bloods taken at that first consultation. She would then be asked to return to the Practice after a few days for her blood test results when an assessment would be carried out. The reason for the woman's initial visit may not have been anything to do with confirming a pregnancy; meaning that the woman might therefore need time to process the discovery and come to a decision about continuing with the pregnancy or otherwise. The woman would be motivated to return for the assessment, should she be thinking of continuing the pregnancy, in order to get the results of her blood tests. The informant explained that in her General Practice they avoided doing:

...the “you’re pregnant and actually we want to sit down and talk to you for forty five minutes”. It just doesn’t work. So we send them away, get the bloods done to confirm it and then get them to come back (KI14).

EPAA Facilitators

Aspects of EPAA implementation identified by key informants as having worked particularly well primarily concerned the EPAT, the pivotal component of the Approach. It was apparent however, that implementation of other EPAA components had also worked well including enhancing service and programme linkages both within primary health and across-sectors. Informants commonly cited increases in both General Practice and cross-sector awareness of services available to support women in early pregnancy as examples of EPAA components that worked well.

The development of the EPAT, and its subsequent installation in all General Practices was, in certain circumstances, viewed as being a particularly valuable addition to the suite of tools already available to clinicians. Such circumstances were those which had seen installation of the EPAT complemented by on-site training and support for users. Where Practices additionally had sufficient clinical capacity to routinely dedicate time to EPAT use with patients, the Tool was seen as being a significant asset. As one key informant, who was a member of a General Practice team which had had access to onsite EPAT training as well as having dedicated EPAT capacity, explained:

I’ve got that half hour so I’m not racing them out the door. I’ve got time to just sit here and talk to [patients in early pregnancy]. Organise their first lot of antenatal bloods, find a midwife....and then [assess] are they at risk? Yes? No?You don’t have to remember it all in your head anymore, it’s there and it’s easy.... it gives us consistency (KI18).

Another agreed that the EPAT supports best practice, providing ready access to early pregnancy information and prompting clinicians to ask the critical questions. She commented that:

Most of it is user friendly and has really good links... I think [our Practice Nurses] like the fact that it has the links there. So you click on the button and it links you in to the tool that you need to be at. That is really good.... [because] going out of one screen and in to another screen to open something up is just a nightmare. And you’ll lose interest pretty quickly. So having all that attached to the form is really good - having the medications attached, like the scripts attached to the forms are, is really good (KI14).

The success of the wider EPAA in increasing awareness of services available to support women in early pregnancy was highlighted by several informants. One of these informants for example, in

addition to appreciating the increased ease of referral facilitated by the EPAT, explained that prior to the introduction of the EPAA she:

...didn't know that they actually had Pēpi Pods, I didn't know anything about those.... and the Smokefree Pregnancy and the Active Pregnancy as well. So I've learnt about those (KI 16).

The enhanced awareness among clinicians of support services and programmes with the capacity to work with women at risk was a first step in paving the way for referral to occur.

Another aspect of EPAA implementation which worked particularly well was the 'connectedness' of the raft of programmes and services contributing to the Approach. Fortuitously, a number of the programmes being delivered prior to the introduction of the EPAA and central to the evolving Approach were being delivered under contracts already held by the WRHN. Identifying the programme overlaps and determining ways of creating enhanced synergies across these programmes has been integral to the WRHN's rollout of the EPAA.

EPAA Implementation challenges

EPAA implementation challenges are discussed under key informant interview and online survey headings below.

Key informant interviews

EPAA implementation challenges identified by key informants fell largely into two categories. These categories were use of the EPAT and successful engagement of the most 'at risk' expectant mothers. In the case of EPAT use the barriers noted were the lack of time necessary to carry out assessments, at least initially, 'glitches' with the advanced form and gaps in training. These barriers are outlined below.

Key informants commonly described working in busy General Practice settings where time is a precious commodity. For the novice EPAT user, the comprehensiveness of the required assessment contributed to completion being a laborious process. It was necessary to have staff available who could dedicate the time to carry out assessments. As one informant observed:

The Tool itself is quite time intensive and probably lends itself to, you know, allocat[ion of] a period of time - say half an hour - with a practice nurse so it can be done thoroughly...it's something that needs ongoing reinforcement in order to maintain its use (KI13).

Some clinicians found, as the above informant suggests, that if they had the opportunity to use the EPAT on a regular basis the completion process became more straight-forward and therefore quicker to carry out. An informant who supported that position contended that:

You need to use it frequently to get used to it. To know what's coming and you can almost prompt your own questions as you're going through. But if you're only using it twice a month that could be difficult (KI14).

'Glitches' with use of the EPAT were described as being a source of frustration for a number of informants who offered numerous examples of their impact. One informant, an expectant mother, commented on her experience with EPAT malfunctions:

The nurse was doing the assessment. She actually struggled with the form a bit and we ended up doing it about three times. Filling in the form.... it was the first time she had used it. She was finding trouble going back and some [information] disappeared so she said "let's start again".... She was very apologetic and doing her best. Like she tried to have a look at it before but it was the first time she'd used it (KI12).

Another informant described losing data at the end of an assessment with a patient:

For some reason you get to the end of it [the assessment] and you go to print it and you lose the whole - you lose everything!....It's been happening a few times.... one of my nurses has done it three times and lost it three times (KI14).

As this informant went on to say, the risk with putting in tools which still contain a number of faults can mean that clinicians:

...lose interest, particularly in a big, busy medical clinic. If things don't work once you lose interest. You lose their 'buy in' to use the tools and it's hard to get it back (KI14).

A further barrier to EPAT use commonly identified was lack of training with informants noting issues around being unfamiliar with the Tool. One informant contended that what was really required was intensive training input such as "*...one to one coaching ... nurse to nurse*" (KI19). The need to have access to sustained training opportunities during the process of EPAT embedment within General Practice was highlighted also.

Beyond the barriers to use of the EPAT, the most commonly cited challenge to implementation of the broader EPAA was successfully engaging the most 'hard to reach', and the likely most 'at risk', groups of expectant mothers. In the words of one informant:

...it's just trying to get it out there and to catch those people that really need it. I think we're very good at reaching a certain group of people. They're motivated people anyway so it's trying to get [the others] (KI06).

Essentially, the EPAA aims to identify and provide early pregnancy support for 'at risk' expectant mothers. However, doing so assumes firstly successfully connecting with those women early in their pregnancies. As one service provider explained even if an assessment does get completed and referral to a service is made, ensuring follow through can be time consuming and not necessarily always successful:

It's a difficult one really....See some of them - you just don't get them anyway. You just ring and ring and ring and you never get through. I can tell you probably four out of ten we can't get hold of. Probably five out of ten actually (KI07).

At a broader and more strategic level, a principal barrier to EPAA implementation identified by informants was the lack of direct funding to support the rollout and overall coordination of the Approach. In order to implement the EPAA, the WRHN needed to identify indirect funding streams which could support EPAA activity. Additionally, project management and clinical lead staff needed to fit their EPAA implementation roles around their myriad of other responsibilities within the organisation, meaning that the time required to support the rollout was not always available or, at the very least, required shifting of other priorities.

Online survey

EPAA and EPAT Implementation aspects that were challenging were also explored through the online survey with more than half of the respondents taking the opportunity to comment on challenges. Respondents focussed on barriers specific to the use of the EPAT. The most commonly cited of these barriers was the length of the assessment process given the time available to carry it out. As one respondent noted using the EPAT *"... takes a long time. There's a lot of ground to cover in a short time"*. Similarly another observed that *"if wanting the best outcome for the mother, time is the barrier [to EPAT use]"*. A third respondent reported that, as far as she was aware, in the General Practice where she was employed *"most staff members have been concerned about the length of time it [the EPAT] appears to involve"*.

A further barrier to use cited by several respondents was the technological "glitches" experienced with EPAT use including failure of the Tool to save information entered requiring time consuming repeat or even multiple re-entry of data. It was also identified that work needed:

... to be done on direct referrals to the Maternal Navigator and also on the choices that the pregnant woman can tick of services required from same, as it only allow [s] one tick when, for example, a woman may want antenatal classes and breastfeeding support.

One respondent observed that the EPAT is:

...just another tool with all the info I would naturally collect. The form can be slow and time consuming, not to forget long. Sometimes the functions don't work properly either.

For another respondent the main challenge around using the Tool was coming to terms with her experience of finding it *"...a bit tiresome at times"*. For a third respondent becoming more skilled in the use of the Tool was being hampered by the lack of opportunity to *"find...[my] way around it, as I haven't had to use it much at [the] moment...probably only twice now"*.

Other respondents cited *"referral/guideline overload"* and too much *"form filling"* as being barriers to the use of the EPAT along with lack of training and the sheer size of the Medtech advanced form which was reportedly *"slightly daunting at first inspection."*

In summary, both key informants and online survey respondents highlighted the same barriers to implementation of the EPAA. These barriers were primarily associated with the use of the EPAT and included the time consuming nature of the assessment process, at least prior to becoming well-practised in carrying these out; 'glitches' in the advanced form; and lack of EPAT training. An additional barrier identified to the successful implementation of the broader EPAA was successfully engaging with the most hard to reach, and possibly most at risk', groups of expectant mothers.

Unintended EPAA consequences

The evaluation study identified few specific unintended consequences of EPAA development and delivery. Unintended consequences which were identified included EPAT training delivery latterly being added to the role of the WRHN's Population Health Nurse. The need to allocate a dedicated EPAT training resource had become obvious during the piloting phase of the EPAT in two WRHN General Practices.

During the refining of EPAA referral pathways, it also became clear that there was a gap in provision of alcohol and other drug services locally. Services available were largely focussed on the treatment of moderate to severe substance issues at one end of the care continuum. At the other end of the continuum was the population health level service delivered by the local Public Health Unit. Services offering one-on-one interventions, such as education or support for individuals or whānau with lower order alcohol issues, were not readily available. In order to address the gap identified in

Evaluation of the Early Pregnancy Assessment Approach: Final Report Page | 55

service provision, the WRHN extended the roles of its Quit Clinic smoking cessation quit coaches. The quit coaches were provided with the training necessary to equip them to offer education and support to those with lower order alcohol issues.

A final unidentified consequence of EPAA development and delivery concerned the 'fit' of the Approach with other work streams. A key informant observed that that 'fit' was reflected in the advent of improved local primary care access to imaging processes including ultrasounds for women in early pregnancy. The new imaging provider contracted by the District Health Board was, for the first time, sending copies of ultrasound images ordered by LMCs to a patient's General Practice. Though the information sent did not necessarily have "...a direct impact" (KI19) for the General Practice, as pregnant patients were under LMC care, nevertheless:

You're getting constant reminders around pregnancy issues coming in to your clinical inbox [as a result of receiving scan information] ...all of which is increasing the general alertness and awareness around general pregnancy in primary care. So we've ... got a kind of whole cultural shift that's happening in lots of different ways. It's subtle but, but it's very real and ... all of that enhances the readiness of primary care to therefore have much better role – ownership - in terms of the early pregnancy stuff (KI19).

In the next section of the Report, the results presented here are discussed before conclusions are drawn and recommendations made with regard to strengthening the EPAA locally and rolling it out in primary care beyond Whanganui.

4. DISCUSSION

The EPAA conceptual framework¹⁷ appears sound and is generally supported, at least in principle, by a range of stakeholders. Tasks integral to EPAA implementation have largely either been completed within the pre-determined timeframes or have been initiated with implementation being ongoing. The review of the WRHN's *Implementation Plan* and *Communications Plan* reported in the Results section above identifies that, in the main, EPAA plans have been actioned as intended. There are valid reasons explaining those delays that have occurred in the case of a minority of planned actions; these reasons too, have been documented above.

Challenges to the successful implementation of the EPAA do however remain. These challenges are essentially those associated with the bedding in, or consolidation of, any comparable, comprehensive new initiative which is essentially reliant on the commitment of a small group to drive it with restricted funding to support their endeavours. Progress made in the implementation of EPAA, and the challenges remaining, are discussed below. Reference is also made to the anticipated short – medium term outcomes included in the EPAA PLM developed in the early phases of the evaluation.

GENERAL PRACTICE AWARENESS & UNDERSTANDING OF THE EPAA & EPAT

Whilst awareness of the EPAA and EPAT was marked amongst General Practice clinicians, as an outcome of active promotion by the WRHN, that awareness had not necessarily led to correspondingly well informed understandings nor to high levels of EPAA / EPAT uptake. In the main, while there was evidence that the EPAT was the focus of clinician awareness, there was less recognition of the overall EPAA of which the EPAT is a part; albeit a critical part.

The routine use of the EPAT in General Practice is central to the effective implementation of the wider EPAA. Tool use facilitates screening and appropriate referral of women 'at risk'. It maps referral pathways linking together the various components of the Approach. It is therefore critical that clinicians feel confident and motivated to use the Tool and that its use becomes normalised.

As the WRHN is already aware, addressing the current gaps in EPAT training provision is necessary to ensure that clinicians have the support needed to build the confidence, skill and motivation to make use of the Tool. Participating in training, experimenting with the EPAT and becoming more experienced in its use, are all likely to build EPAT skill. Increased skill will, in turn, contribute to a

¹⁷ Refer to the *EPAA Service Model Description* (Whakauae, 2015) for details regarding EPAA development.

reduction in the time needed to carry out assessments. Alongside EPAT training provision, raising awareness of the relationship of the EPAT to the more comprehensive EPAA is necessary if the intended benefits of the Approach for 'at risk' women in early pregnancy are to be fully realised.

Coupled with addressing gaps in training there is a need to consider how staff capacity to use the EPAT may be increased. There appear to be staffing arrangements used in some General Practices that better accommodate the time required to carry out in-depth EPAT assessments. Other Practices may be able to emulate these arrangements, thus improving uptake of the EPAT.

Carrying out assessments over two consultations may also potentially contribute to increasing the capacity of General Practices to use the EPAT. Whilst the same amount of work would need to be done overall, it may be more manageable, particularly in smaller Practices, if the extended period of time needed to do the entire assessment was broken up in to two shorter periods allowing for other tasks to be completed in between times. It would be important however, to have a strategy in place to help ensure that pregnant women return to the Practice to complete the assessment. Having blood test results available at the second visit may be one way to encourage women to return.

EPAA/EPAT UPTAKE ACROSS GENERAL PRACTICES

The relatively low level of EPAA / EPAT uptake across General Practices appears to have been influenced by:

- Small numbers of clinicians having to date participated in training;
- The lack of opportunity identified by some to make use of the EPAT as an outcome of limited staffing capacity; and,
- The lack of opportunity to make use of the EPAT due to the low numbers of pregnant patients presenting.

As noted above, clinicians in approximately half of the General Practices under the WRHN umbrella carried out assessments, totalling 74, over the six month period November 2014 to April 2015 inclusive. The bulk of those assessments were however, carried out in two General Practices; both larger Practices with one of these servicing a particularly high needs population.

It is likely that the efforts of the latter Practice have contributed significantly to the WRHN apparently successfully targeting the EPAA at one high needs population; specifically women living in communities in the most socio-economically deprived population quintiles (Quintiles 4 and 5). In New Zealand evidence points to a marked link between deprivation scores and health outcomes (Health Quality and Safety Commission New Zealand, 2015). Over-representation of Māori in areas

Evaluation of the Early Pregnancy Assessment Approach: Final Report Page | 58

of highest deprivation has a critical role to play contributing both to disproportionately higher birth rates and increased level of risk in early pregnancy.

Approximately two thirds of assessments were carried out with women from the most deprived quintiles within which Māori are over-represented. As the Māori birth rate in Whanganui is broadly equivalent to the non-Māori birth rate it is likely that many of the pregnant non-Māori women assessed in Quintiles 4 and 5 will be the mothers of Māori children. However, as Māori women make up almost half of women giving birth in the Whanganui region it will be important to continue improving the rate at which the EPAT is being used with these women. As well as Māori women of childbearing age being over-represented in areas of highest deprivation they have a significantly higher smoking rate than non-Māori, a known risk in pregnancy. Currently a little over one third of assessments are being carried out with Māori women.

Although the early signs are that the EPAT will be appropriately targeted as noted above, it needs to also be acknowledged that not all assessments are being comprehensively completed. Of particular concern in this regard is the 'skipping' of family violence screening and LMC booking status in the case of approximately one quarter of the 74 assessments carried out. Conversely, alcohol and tobacco screening was consistently carried out in most instances. The 'skipping' of some screening questions may have been due to factors such as lack of time given that both key informants and online survey respondents had commonly indicated being comfortable with asking these potentially sensitive questions.

Increased EPAT training provision and EPAT uptake, along with finding ways to enhance General Practice capacity to carry out assessments, are likely to further strengthen and consolidate the reach of the EPAT so far achieved in terms of targeting high needs women in early pregnancy. Regular peer review of the EPAT assessments that are carried out, and the ongoing WRHN monitoring and feedback of EPAT data to Practices, will similarly contribute to strengthening and consolidating reach.

Next steps in the implementation of the EPAA may include further testing and extension of referral pathways to help ensure that those women who are identified as being in need of support get that support in a timely fashion. Screening in itself is obviously of little value if referral follow-through does not occur as intended.

AWARENESS OF THE ROLE OF THE MATERNAL NAVIGATOR

Although there is room to strengthen awareness of the Maternal Navigator service it is apparent that referrals are being made at a reasonable rate with a quarter of all EPAT assessments carried out prompting referral to the service.

The raw numbers (n=18) of referrals to the Maternal Navigator service are as yet still relatively small. However, considerable potential exists to substantially boost these numbers as more clinicians come on board with the use of the EPAT and 'buy in' to the overarching EPAA. Given the emergent nature of the service it is possibly fortuitous that the referral rate is not as yet unmanageably high placing stress on referral pathways that are still, in some instances, in the formative phase.

THE EPAA & CLAIMING UNDER SECTION 88

It was apparent that the level of awareness and knowledge of first trimester non-LMC claiming across General Practice was low. In turn there was no evidence identified through either key informant interviews or the online survey of enhanced alignment as yet occurring between claiming and EPAT use.

HealthPAC and EPAT comparative data however, offers an early indicator that the seeds of change may have been sown. In the cases of two early EPAA uptake General Practices, the number of assessments carried out using the EPAT equalled, or in one instance approximated, the number of Section 88 claims made in two of the six months in which the data was collected and compared. It is, as yet, too early to positively identify any emerging trend and it should be noted that the raw numbers are very small.

CROSS-SECTOR AWARENESS, UNDERSTANDING & 'BUY IN'

As identified in the Results section of the Report, there was a high level of cross-sector awareness of the WRHN's development of the EPAA. There was however, less knowledge of the specifics involved in EPAA implementation. Despite not always knowing exactly how the Approach might be implemented in practice, there was an overall positive response to the development. That response suggests that the future for the Approach is bright with the potential to further benefit from the synergies of cross-sector efforts to support 'at risk' expectant mothers.

Amongst those already in receipt of referrals through the EPAT there was particularly strong support for the EPAA initiative. Amongst those who had yet to notice changes in rate or quality of referral, there was however also support for the initiative. Retaining that support will be important for the future of the Approach with increased use of the referral pathways available being critical. Keeping

open the avenues of communication which strengthen linkages between General Practice and cross-sector services will be equally important to the future of the EPAA. It is particularly critical that those linkages are strengthened with LMCs if support for the most 'at risk' expectant mothers is to be ensured. As more clinicians become skilled and routine users of the EPAT, it is likely that referral pathways will be better utilised helping to cement cross-sector EPAA 'buy in'.

ACCEPTABILITY OF THE EPAA TO SERVICE USERS

In addition to the short-medium term PLM outcomes discussed above, the evaluation also considered a number of other EPAA implementation factors. These included the acceptability of the EPAA to service users, factors which contributed to the ease of EPAA implementation and barriers to implementation. Each of the factors is briefly discussed below.

For service users interviewed, the EPAT was the 'face' of the EPAA in most instances, as only one service user had experience with the wider EPAA. The EPAT was generally acceptable to service users being broadly consistent with their expectations of primary care. Clinicians who had carried out assessments using the EPAT were also of the view that patients were at ease with the assessment process. Even in the case of the more sensitive screening questions there was no obvious indication that service user comfort zones were being compromised.

Given the apparent acceptability of the EPAT to service users, and the critical importance of screening questions measuring risk, it is of at least some concern that several of these questions are amongst those most likely to be 'skipped' during the assessment process. Ongoing WRHN monitoring of these skip patterns will be important, along with feeding back results to General Practices, so that contributing issues can be identified and addressed at the earliest opportunity.

In terms of acceptability of the EPAA, and the EPAT, to service users a further issue identified and requiring consideration relates to the timing of assessment. It may not always be appropriate to carry out a full assessment at an initial consultation during which a pregnancy has first been diagnosed. Ensuring optimum engagement of the pregnant woman in the assessment process may be compromised if she is at best distracted, and at worst, distressed by the diagnosis. If a primary purpose of the assessment is to assess risk then it is important that an accurate measure of that risk is achieved which is likely to require the active engagement of the woman involved.

EPAA FACILITATORS

Factors facilitating implementation of the WRHN's EPAA included the EPAT, increased awareness among clinicians of services and programmes available to support women in early pregnancy and

the already existing raft of contracts with the potential to be better integrated to create exponential gains in terms of what can be delivered and for who. Alongside these factors, the District Health Board led MQSP is one of a number of broader health initiatives aimed at improving maternal outcomes for mothers and their infants contributing to development of conditions supportive of EPAA implementation.

In certain circumstances, the EPAT was a particularly valuable addition to the suite of patient assessment and management tools available to clinicians. Such circumstances were those in which EPAT installation was complemented by on-site training and support for users. Where, in addition to these circumstances, a General Practice had sufficient capacity to routinely dedicate clinical time to EPAT use, the Tool is a significant asset.

CHALLENGES TO IMPLEMENTATION

Challenges to EPAA implementation identified highlighted the frustrations for some EPAT users caused by encountering advanced form “glitches”. Encountering these malfunctions in the form had contributed, in at least one reported instance, to clinicians discontinuing use of the EPAT. These faults, now that they have been identified, continue to be eliminated with the Tool becoming increasingly more reliable as a consequence.

Those clinicians who encountered problems using the Tool in the early phases of rollout, and who discontinued its use as a result, may now however be reluctant to try out the ‘new and improved’ version of the EPAT. As uptake increases across General Practice, both those who are resistant to EPAT use and those who are simply reluctant due to past experience with the EPAT may be motivated by the positive feedback of others to trial the current version.

At a broader and more strategic level, a principal barrier to EPAA implementation identified was the lack of direct funding to support the rollout and overall coordination of the Approach. The WRHN has been creative in finding ways to support the rollout within its existing resources but embedding the initiative and ensuring a continual growth in uptake will likely require further investment in the short to medium term.

The following section of the Report draws together the evaluation conclusions and provides two sets of recommendations. The first of these sets of recommendations addresses the future positioning of the EPAA in Whanganui. The second considers what would likely be necessary to support the implementation of an EPAA beyond Whanganui.

5. CONCLUSION & RECOMMENDATIONS

This study sought to provide the HPA and the WRHN with information on the extent to which the EPAA is, in this early phase of implementation, addressing the gaps identified locally in early pregnancy assessment and management. Determining and documenting critical EPAA components, as well as the relationships between these components, has also been important, as has exploring how the planned intervention has been implemented.

Overarching evaluation considerations have largely been addressed through assessing progress in achieving the short term outcomes identified in the EPAA PLM. Progress towards achieving medium term outcomes too has been assessed where possible.

Overall it is considered that, at least in relation to the short-medium term outcomes noted above, the early signs are that the EPAA is “working” to varying degrees. It is “working” for those WRHN clinicians who have taken the EPAT on-board. These clinicians tend to be those who have taken part in EPAT training and who are members of Practices with the capacity to accommodate use of the Tool. The EPAA is acceptable, in the main, to cross-sector providers, some of whom are already seeing increases in referral numbers. It is also acceptable to service users and is resulting in referrals being made where needed in a number of instances.

Importantly too, early indications are that the EPAA is successfully targeting at least one high needs population; women living in communities in the areas of highest socio-economic deprivation (Quintiles 4 and 5). There is room to increase the ratio of Māori women being screened, which currently stands at around one third of the total. The reasons why the initiative is progressing with respect to achieving its intended short to medium outcomes have previously been documented in the Results section of the report.

In the light of the results, discussion and summary points included in the above sections of the Report, a number of recommendations are made with respect to the further development of the EPAA both in the Whanganui context and further afield. These recommendations are made in order to address the final objective of the evaluation.

RECOMMENDATIONS FOR STRENGTHENING THE EPAA LOCALLY

Recommendations to strengthen the EPAA locally are to:

- As a matter of priority, continue to work closely with LMCs to strengthen the link with General Practice. Exploring and refining strategies to facilitate optimum communication will be critical here and will support LMCs to provide ongoing feedback in relation to the impact of the EPAT and the EPAA on their work;
- Address the matter of EPAT training as a priority. Consideration of training options and review, refinement and implementation of a training plan will be critical if the gains to date are to be consolidated and built upon. It will be especially important to look at alternative training options if the current absence of the EPAT trainer is likely to be ongoing;
- Review options for building staff capacity to utilise the EPAT and actively promote these options. General Practice staffing arrangements which facilitate EPAT use could, for example, be identified and then showcased at little cost via the in-house newsletter and via professional forums such as WIPE;
- As part of the review of options for building staff capacity to utilise the EPAT, consider the advantages and disadvantages of carrying out the assessment over more than one consultation;
- Continue to use all opportunities available to raise awareness of the EPAA, across the WRHN and beyond, as the wider context for the EPAT. There are numerous mechanisms which may be available to the WRHN to facilitate EPAA promotion including WIPE and other professional forums, the in-house newsletter, design and dissemination of a poster and / or brochure and inclusion of a designated web page on the WRHN website. Whilst the WRHN already has various communications mechanisms in place, it is acknowledged that there may be gaps in terms of the human resources currently available to further develop and implement awareness raising strategies;
- Raise the profile of the Maternal Navigator across General Practices placing emphasis on the pivotal role of the position in the EPAA. Various avenues may be open to the WRHN in relation to promotion of the Maternal Navigator role including use of the in-house newsletter, WIPE and

other professional forums such as nurses meetings and development and dissemination of a poster and / or brochure;

- Place emphasis on maintaining and extending mechanisms for providing feedback to General Practices around their EPAT use on at least a quarterly basis. That feedback would ideally include reference to the alignment of Section 88 claiming with EPAT use;
- Regularly monitor and review the integrity of EPAA referral pathways and services linkages to help ensure that referral processes are operating as intended and that feedback mechanisms are in place between General Practice and cross-sector services and programmes.

RECOMMENDATIONS FOR WIDER IMPLEMENTATION OF THE EPAA

Wider implementation of the EPAA is likely to require:

- An EPAA champion, or champions, initially being identified in a community. The time may then be right to 'test' the interest of other primary health and cross-sector stakeholders and secure their input to EPAA preliminary planning. The nature of any preliminary planning initiative or process will need to be determined by the community in question taking into account its own unique situation;
- The early input of cross-sector stakeholders, as intimated above and in particular LMCs. That input would ideally go beyond consultation and involve contributing, in some form, to EPAA developmental decision-making. The establishment of a General Practice and cross-sector reference group mechanism to inform ongoing planning and early EPAT implementation may be a consideration;
- Consideration of how best to open up, or broaden, lines of communication with LMCs with a view to enhancing links between LMCs and General Practice. Securing the early input of LMCs, through working with them to consider and assess potential benefits of an EPAA locally in the first instance, will increase the likelihood that links will be enhanced;
- The assignment of dedicated project management, clinical leadership, EPAT trainer and Maternal Navigator roles. Whilst it may be that one or more of these roles could be taken up by existing positions it should be recognised that significant workloads are likely particularly in the

early phases of development and rollout. In the case of the Maternal Navigator the workload will likely increase rather than decrease over time;

- Consideration of the unique referral pathways and service linkages already operating locally and the potential for further growing these; the EPAA in any area will need to evolve in a way that reflects the local context;
- Preparation and regular review of a detailed implementation plan documenting key actions, required resourcing, responsibilities and timeframes and, where necessary, including assessment of risk and strategies for risk mitigation;
- Preparation and regular review of a detailed communications plan documenting key actions, required resourcing, responsibilities and timeframes and, where necessary, including assessment of risk and strategies for risk mitigation;
- Preparation and regular review of a detailed EPAT training plan documenting key actions, required resourcing, responsibilities and timeframes and, where necessary, including assessment of risk and strategies for risk mitigation;
- Placing a priority on promoting the EPAA, at the earliest opportunity, as a comprehensive initiative inclusive of the EPAT. Ensure that promotion is then ongoing;
- Placing a priority on providing EPAT training and support initially for Practices which operate in ways conducive to EPAT uptake. Building a firm foundation for introduction of the EPAA in these Practices is likely to both set a precedent and encourage others to come on board;
- Being prepared to allow sufficient time for an EPAA 'culture shift' to gain momentum within General Practice and to nurture this shift wherever possible;
- Considering how the EPAA will 'fit' with other initiatives around improving maternal quality and safety including the work of the National Maternity Monitoring Group and the MQSP.

6. LIST OF REFERENCES

Boulton, A. & Kingi, T. K. (2011). Reflections on the Use of a Māori Conceptual Framework to Evaluate Complex Health Policy: The Case of New Zealand's Healthy Eating Healthy Action Strategy Evaluation. *Evaluation Journal of Australasia*, Vol 11, No. 1, pp5-10.

Centre for Public Health Research. (2010). *Health Needs Assessment: Whanganui District Health Board for the Ministry of Health*, Wellington: Massey University.

Gifford, H., Parata, K. & Cvitanovic, L. (2015). *The Whanganui Regional Health Network's Early Pregnancy Assessment Approach (EPAA): Service Model Description*, Whanganui: Whakauae Research for Māori Health and Development (unpublished report for the Health Promotion Agency).

Gray, G. (2014). *Performance Summary Māori Health Indicators*, New Zealand: Te Tumu Whakarae.

Health and Disabilities Ethics Committees. Applying for review. Does your research require HDEC review? Retrieved from <http://ethics.health.govt.nz/applying-review>, 29 January 2014.

Health Quality and Safety Commission New Zealand. Atlas of Healthcare Variation. Retrieved from <http://www.hqsc.govt.nz/our-programmes/health-quality- evaluation/projects/atlas-of-healthcare-variation>, 08 May 2015.

MidCentral District Health Board. (2014). *Annual Report MidCentral District health Board*, Retrieved from <http://www.midcentraldhb.govt.nz/Publications/AllPublications/Documents/MQSP%20 Annual%20Report%20MidCentral%20%20Whanganui%20DHBs%202014%20final%2030%20June%202014.pdf>, 26 May 2015.

Ministry of Health. (2007). *HealthPAC Electronic Claiming*, retrieved from <https://www.health.govt.nz/.../healthpac-electronic-claiming-hl7-spec-jun>, 12 May 2015.

Ministry of Health. (2012). *National Health Index*, retrieved from www.health.govt.nz/our-work/health-identity/national-health-index, 12 May 2015.

Patton, M. (2002). *Qualitative Research & Evaluation Methods*, USA: Sage.

Survey Monkey. (2015). *Everything you wanted to know but were afraid to ask*. Retrieved from <https://www.surveymonkey.com/mp/aboutus/> 09 April 2015.

Technical Advisory Service. (2014). *Central Region DHBs Consolidated Reporting April 2014 – Draft*, Wellington: Technical Advisory Service.

Whanganui District Health Board. (2013). *Whanganui District Health Board Māori Health Plan 2013-2014*, Whanganui: Whanganui District Health Board.

Whanganui and MidCentral DHBs. (2012). *Whanganui and MidCentral DHBs Maternity Quality and Safety Programme Strategic Plan 2012-2015*, Whanganui & Palmerston North. Retrieved from

<http://www.midcentraldhb.govt.nz/Publications/AllPublications/Documents/Maternity%20Quality%20and%20Safety%20Programme%20Strategic%20Plan%202012-2015.pdf>, 20 May 2015.

Whanganui Regional Health Network. Retrieved 08 May 2015 from <http://www.wrpho.org.nz/>

Whakauae Research for Māori Health and Development. (2015). Whanganui Regional Health Network Early Pregnancy Assessment Approach: Refined Evaluation Plan, Whanganui: Whakauae Research for Māori Health and Development (unpublished report for the Health Promotion Agency).

7. LIST OF DOCUMENTS REVIEWED

Whanganui Regional Health Network. (2014a). *Early Pregnancy Assessment Tool: How to Use and Clinical Guidelines for General Practice Teams*, version 2.

Whanganui Regional Health Network. (2014b). *Early Pregnancy Assessment Recording Tool: Implementation Plan*.

Whanganui Regional Health Network. (2014c). *Communications Plan*.

Whanganui Regional Health Network (2014d). *Whanganui Inter-Professional Education: Pregnancy and Parenting Meeting Evaluation*, September 2014.

Whanganui Regional Health Network & Sport Whanganui. (2014). *Active Pregnancies: Antenatal Aquarobics: Project Proposal*.

Whanganui Regional Health Network & Sport Whanganui. (2014). *Draft Service Level Agreement: Active Pregnancies Subsidised Aquarobics*.

Whanganui Regional Health Network. (April 2015). *EPAT Data Summary*.

Whanganui Regional Health Network. (May 2015). *EPAT Versus Section 88 Claiming*.

8. APPENDICES

APPENDIX ONE: LOGIC MODEL

The **aim, context, assumptions, activities and intended outcomes** of the EPAA are documented in the programme logic model below in either narrative (aim, context, assumptions) or diagrammatic (activities and intended outcomes) form. Capturing the defining characteristics of the EPAA in this succinct format clarifies shared thinking about how the Programme operates and its intent. The model can be used to explain EPAA parameters simply to a range of key audiences including funders, referral sources and other service providers. It will also help to ensure that there is a transparent framework in place for informing evaluation of the EPAA; that is **what** is to be evaluated and **why**.

EPAA aim

The EPAA aims to improve health outcomes for vulnerable expectant mothers and their infants.

EPAA context

The EPAA was developed locally by the WRHN and was initially rolled out during 2014.

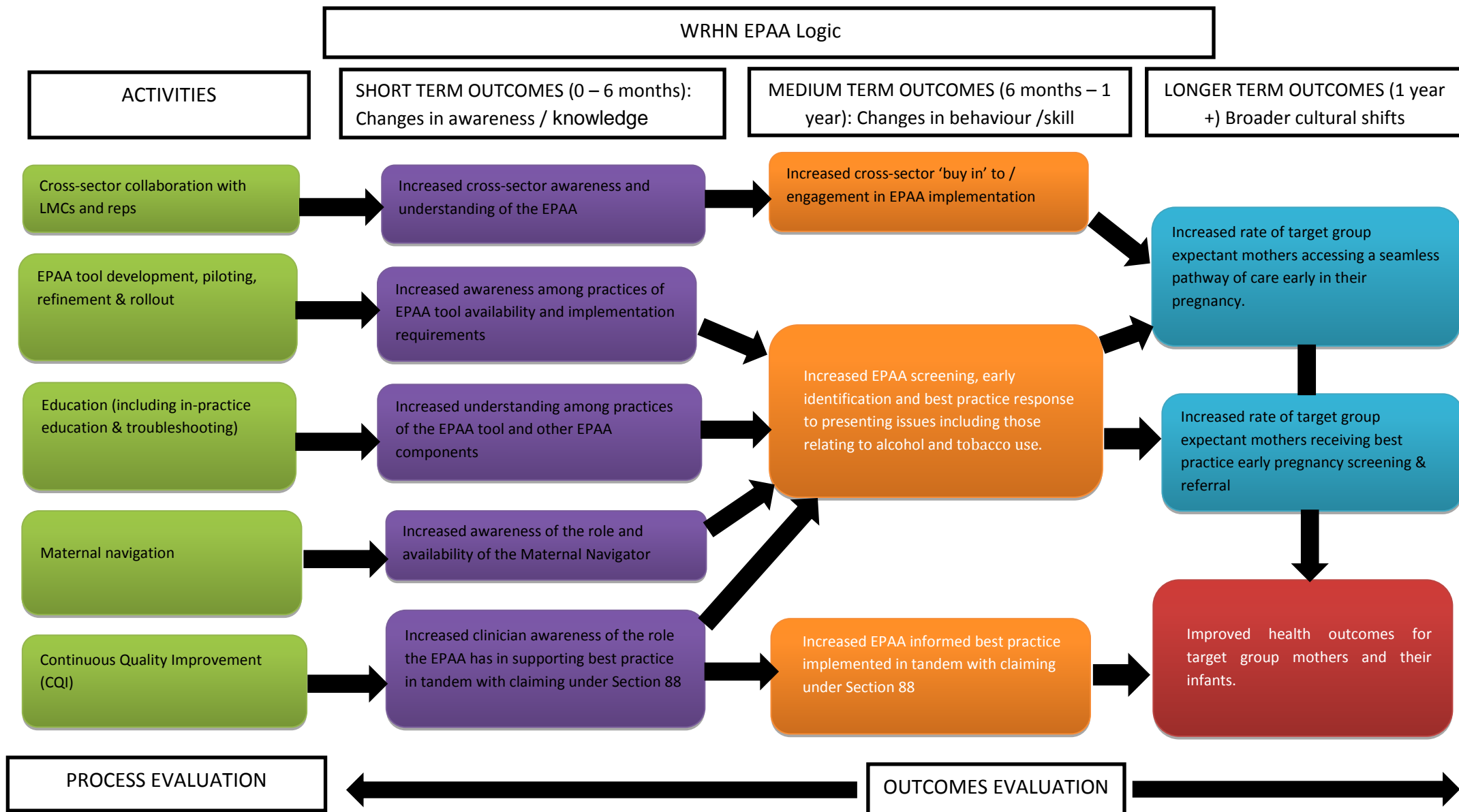
EPAA assumptions include that:

- Maternal and child health can be improved through successfully engaging vulnerable expectant mothers in ante-natal interventions delivered in primary care settings; and that,
- The EPAA model is appropriate to meet the needs of the target population (vulnerable mothers).

Inputs / resources (things which the EPAA relies on) include:

- Successful development of an EPAA tool; and,
- The willingness of General Practices under the WRHN to actively participate in the implementation of the EPAA.

The Diagram overleaf identifies EPAA **activities** and **outcomes** (short-term, medium term and long-term). The primary foci of the EPAA evaluation are delivery processes (Activities column) and the short term outcomes following on from these (reading across the table in the direction of the arrows).



APPENDIX TWO: INFORMATION SHEETS

INFORMATION SHEET FOR ROUND ONE EPAA KEY INFORMANTS

Thank you for your interest in this Early Pregnancy Assessment Approach (EPAA) evaluation. Whakauae Research is carrying out the evaluation on behalf of the Health Promotion Agency (HPA). The Early Pregnancy Assessment Approach has been developed and is being implemented by the Whanganui Regional Health Network (WRHN). Before you decide whether or not to take part, please read this sheet. If you decide not to take part there will be no disadvantage to you of any kind.

The evaluation study will describe the development and implementation of the EPAA as well as assessing the short term impact.

We are interested in talking with you about things like:

- Your understanding of the purposes and objectives of the EPAA;
- The EPAA screening tool itself and how / why it was developed;
- EPAA referral pathways and service linkages;
- Your understanding of the expected short term impacts and longer term outcomes of the EPAA

If you are willing to take part in an interview:

- We will meet with you, at a time and place that suits you, for 30 – 60 minutes;
- You only need to answer the questions you want to answer;
- You can end the interview at any time if you want to; and,
- We will ask you for your written consent to take part in the interview and to audio record the interview.

What will happen to information you give us?

- Information you give us will be analysed and reported in such a way that you will not be able to be identified. Your name and any information which could identify you will not be linked in our report to the things you talk about;
- Information collected will be securely stored and accessible only to the research team;
- Results of the study may be published. Information included in any published material will in no way be linked to you without your prior express permission.

Questions

If you have any questions about this research, either now or in the future, please contact one of the following:

Dr Heather Gifford (Academic Lead)

Whakauae Research for Māori Health and Development, Whanganui

Ph (06) 347 6772 Email: heather@whakauae.co.nz

Ms Lynley Cvitanovic (Researcher)

Whakauae Research for Māori Health and Development, Whanganui

Ph (06) 347 6772 Email: lynley@whakauae.co.nz

Ms Kiri Parata (Researcher)

Whakauae Research for Māori Health and Development, Whanganui

Email: kiri.parata@xtra.co.nz

INFORMATION SHEET FOR ROUND TWO KEY INFORMANTS

(Service users)

Kia ora / Greetings

The Whanganui Regional Health Network (WRHN) is looking after women in early pregnancy in a new way. The Network wants to know if this new way of doing things is working for its patients. We (Whakauae Research) are helping to find that out.

Whakauae wants to talk with expectant mothers who have seen a GP or Practice Nurse in the early months of their pregnancy. We especially want to talk with expectant mothers who may have been referred by the GP or Practice Nurse to another service. Referral may have been to services like a LMC (Midwife), to a parenting programme, to the Maternal Navigator or to the Quit Clinic.

We would like to talk with you in private, about:

- Your experience of going to the GP / Practice Nurse early in your pregnancy;
- How well GP / Practice Nurse services worked for you;
- What, if any, changes you believe may need to be made to GP / Practice Nurse services to better support women in early pregnancy; and,
- If the GP / Practice Nurse referred you to another service how well referral worked for you.

What you talk with us about will only be reported in a way that means that you can't be identified.

IF YOU ARE WILLING TO TALK WITH US:

- We will contact you to arrange an interview at a time and place that suits you;
- Interviews will be as informal as possible and will take 30 - 45 minutes;
- You are welcome to have a support person or persons with you at the interview;
- You will only need to answer the questions you want to answer;
- You can choose to end the interview at any time if you want to; and,
- We will ask you for permission to audio record the interview (only the Whakauae Research team will hear this recording).

We will provide koha (a \$30 Warehouse voucher) to each service user who takes part in the evaluation as a small token of appreciation of your time and sharing of your views.

Evaluation of the Early Pregnancy Assessment Approach: Final Report Page | 74

Kiri Parata will be carrying out all the interviews.

Questions

If you have any questions about this research, either now or in the future, please contact:

Ms Lynley Cvitanovic or Dr Heather Gifford

Whakauae Research for Māori Health and Development, Whanganui

Ph (06) 347 6772 Email: lynley@whakauae.co.nz heather@whakauae.co.nz

INFORMATION SHEET FOR ROUND TWO KEY INFORMANTS

(For those in receipt of EPAA referrals)

Thank you for your interest in the evaluation of the Whanganui Regional Health Network's Early Pregnancy Assessment Approach (EPAA). Whakauae Research is carrying out the evaluation on behalf of the Health Promotion Agency (HPA). Before you decide whether or not to take part, please read this sheet. If you decide not to take part there will be no disadvantage to you of any kind.

The evaluation will describe the development and implementation of the EPAA along with assessing its short term impact.

We are interested in talking with you about things like:

- your awareness and understanding of the EPAA;
- What impact the use of the Medtech Integrated Early Pregnancy Assessment Tool (EPAT) may have had on the quality and / or type of referrals you get from GPs and Practice nurses;
- In what ways your awareness and knowledge of services and programmes the WRHN provides to support pregnant women may have changed as an outcome of the EPAA.

If you are willing to take part in an interview:

- we will meet with you, at a time and place that suits you;
- the interview will take 30 – 40 minutes of your time;
- you will only need to answer the questions you want to answer;
- you can end the interview at any time if you want to; and,
- we will ask you for your written consent to take part in the interview and to audio record the interview.

What will happen to information you give us?

- Information you give us will be analysed and reported in such a way that you will not be able to be identified. Your name and any information which could identify you will not be linked in our report to the things you talk about;
- Information collected will be securely stored and accessible only to the research team;

- Results of the study may be published. Information included in any published material will in no way be linked to you without your prior express permission.

Questions

If you have any questions about this research, either now or in the future, please contact one of the following:

Dr Heather Gifford (Academic Lead)

Whakauae Research for Māori Health and Development, Whanganui

Ph (06) 347 6772 Email: heather@whakauae.co.nz

Ms Lynley Cvitanovic (Researcher)

Whakauae Research for Māori Health and Development, Whanganui

Ph (06) 347 6772 Email: lynley@whakauae.co.nz

Ms Kiri Parata (Researcher)

Whakauae Research for Māori Health and Development, Whanganui

Email: kiri.parata@xtra.co.nz

INFORMATION SHEET FOR ROUND TWO KEY INFORMANTS

(For GPs & Practice nurses)

Thank you for your interest in the evaluation of the Whanganui Regional Health Network's Early Pregnancy Assessment Approach (EPAA). Whakauae Research is carrying out the evaluation on behalf of the Health Promotion Agency (HPA). Before you decide whether or not to take part, please read this sheet. If you decide not to take part there will be no disadvantage to you of any kind.

The evaluation will describe the development and implementation of the EPAA along with assessing its short term impact.

We are interested in talking with you about things like:

- Your awareness and understanding of the EPAA;
- Any changes in your awareness and knowledge of services and programmes the WRHN provides to support women in early pregnancy;
- Your perspective on the usefulness, or otherwise, of the Medtech Integrated Early Pregnancy Assessment Tool (EPAT);
- If you have used the EPAT how that use has impacted on your assessments of women in early pregnancy and on referral of women to other services or programmes.

If you are willing to take part in an interview:

- we will meet with you, at a time and place that suits you, for approximately 30 - 40 minutes;
- you only need to answer the questions you want to answer;
- you can end the interview at any time if you want to; and,
- we will ask you for your written consent to take part in the interview and to audio record the interview.

What will happen to information you give us?

- Information you give us will be analysed and reported in such a way that you will not be able to be identified. Your name and any information which could identify you will not be linked in our report to the things you talk about;
- Information collected will be securely stored and accessible only to the research team;
- Results of the study may be published. Information included in any published material will in no way be linked to you without your prior express permission.

Questions

If you have any questions about this research, either now or in the future, please contact one of the following:

Dr Heather Gifford (Academic Lead)
Whakauae Research for Māori Health and Development, Whanganui
Ph (06) 347 6772 Email: heather@whakauae.co.nz

Ms Lynley Cvitanovic (Researcher)
Whakauae Research for Māori Health and Development, Whanganui
Ph (06) 347 6772 Email: lynley@whakauae.co.nz

Ms Kiri Parata (Researcher)
Whakauae Research for Māori Health and Development, Whanganui
Email: kiri.parata@xtra.co.nz

APPENDIX THREE: CONSENT FORM

February 2015

I have read the Information Sheet and understand what the evaluation is about. My questions have been answered to my satisfaction. I know that I can ask for more information about the study at any time and that:

- My participation in this evaluation is entirely voluntary;
- I can withdraw the information I provide, up to and including 07 May 2015, without disadvantage of any kind;
- My interview will be recorded with my consent. If audio-recording is used, I can choose to have the recorder stopped at any time during my interview;
- Any record of my name and address will be destroyed at the conclusion of the study. An anonymous transcript of my interview will however, be retained in secure storage for three years by Whakauae Research after which it will be destroyed;
- I may decline to answer any particular question(s) and/or may decide to end the interview without disadvantage to me of any kind;
- The results of the evaluation may be published, but my anonymity will be preserved. No information which could reasonably lead to the identification of interview participants will be included in any report or published material resulting from this research without the prior consent of the participant concerned;
- The definition of the scope of Health and Disability Ethics Committee (HDEC) review has been referenced by Whakauae. Ethics review requirements have been further confirmed with the HDECs Advisor. As this Early Pregnancy Assessment Approach (EPAA) evaluation involves low risk observational research, complies with standard requirements for the ethical conduct of such research and is consistent with standard programme assessment, formal ethics review and approval are not considered necessary.

I (name).....agree to take part in this interview as part of the Early Pregnancy Assessment Approach (EPAA) evaluation being carried out by Whakauae Research for Māori Health and Development.

Date:

Signature of interviewee:

APPENDIX FOUR: INTERVIEW SCHEDULES

EPAA Round One Kaimahi Interview Schedule – Feb 2015

The focus of this interview is to gather information to inform development of an EPAA Service Model Description (including purpose and objectives of the approach, screening tools and evidence behind their development, service linkages, referral pathways, resource inputs and expected impacts and outcomes, how the approach is being implemented, uptake within and beyond General Practice, participation in EPAA education sessions, whether the EPAA is being implemented as planned and, if not, what changes are being made and why.

1. What do you think the EPAA's primary purposes / objectives are?

Prompts: Why was the EPAA proposed in the first place? What gaps is the EPAA expected to fill? Who is the target group and why?

2. What evidence do you think that there is to support development of the EPAA?

Prompts: Please tell me about the literature and / or the practice wisdom etc which supports WRHN's decision to investigate and go ahead with EPAA development.

3. What have been the key drivers in EPAA development and early implementation?

Prompts: What were the origins of the initiative? Who was / were the "drivers" for the initiative? What were the factors prompting development? How was the initiative "sold" to the WRHN? Who by?

4. Please tell me what the EPAA "looked like" in the planning / early implementation phases – how was the approach intended to operate? What were the key components for inclusion and why?

Prompts: What screening tools were developed? Why? How? How were they being used? What referral pathways were anticipated? What service linkages were anticipated? What resource inputs were anticipated? What about the training component – what was this expected to "look like"? How was it expected the target group would be recruited?

5. Please describe how the various stakeholders were brought on board with the EPAA.

Prompts: Who were the key players identified? How were they identified and by who? At what point in the EPAA development were key players identified and brought on board? What has the level of EPAA support been across the various stakeholder groups and why? How has support been canvassed and how successful has this been? Which, if any, stakeholders have been less open to EPAA implementation and why?

6. Please tell me about EPAA rollout / implementation challenges. How was it intended that these challenges would be approached?

Prompts: What risk assessment/ risk mitigation was carried out? What were the key risks identified (eg low level of General Practice uptake?) and how were these identified? How successful has EPAA risk assessment / risk mitigation planning been (eg what challenges have arisen as anticipated and been resolved without derailing the initiative?) What unanticipated challenges have there been (falling outside risk mitigation planning) and how have these been dealt with? What has the impact of challenges (anticipated and unanticipated been on EPAA rollout?

7. To what extent has the EPAA so far been implemented as planned? Prompts: What changes to the implementation plan have been necessary and why? How have changes to the EPAA been made?

8. In your view, what is the EPAA intending to achieve? Prompts: What are the intended short term impacts and longer term outcomes of the intervention

9. What successes do you believe the EPAA has so far achieved?

Prompts: Please explain how the EPAA has been able to achieve these successes. What is the significance of these successes?

10. What changes do you believe are needed to the EPAA to ensure that it is best placed to meet its intended goals?

Service Users (Pregnant Mothers) – April 2015

The focus of this interview is to gather information about the experience of the expectant mother using the pregnancy assessment service. Referrals may have been made to services through this assessment process and we wish to find out the acceptability of the process, how useful it has been and what changes, if any may need to occur.

1. I'll start by asking about your recent experience seeing the doctor or nurse about your pregnancy.

Prompts: What can you recall about the early pregnancy assessment the Dr or Practice Nurse did with you? What kinds of questions did the Dr or Practice Nurse ask you about your pregnancy and your health? What do you think the purpose of the assessment may have been? (*Explain the purpose of EPAT briefly if necessary*).

2. Who did the early pregnancy assessment with you?

Prompts: Your own GP / Dr? Your own Practice Nurse? If not, try to establish who did the assessment; was it someone they have a relationship with already?

3. How comfortable did you feel with having the assessment done?

Prompts: What questions do you remember being asked? Did your Dr/Nurse explain why they were asking you certain questions? Did you feel comfortable answering all of the questions? What questions, if any, did you feel less comfortable answering? Can you tell me why you think this was?

4. What effort was made by the Dr / Practice Nurse to make sure you understood why the questions were being asked?

Prompts: Did the Dr /Practice Nurse clearly explain why the questions were important? Were you surprised by any of the questions?

5. What, if any, support services did the Dr / Practice Nurse refer you to after doing the assessment?

Prompts: Quit Clinic? Parenting Programme? LMC? Maternal Navigator? Pēpi-Pod Programme? Can you please tell me about the referral? Were you contacted by someone about the Programme? How did that go? Did you meet with them? How long after your visit to the Dr/Nurse did that contact occur? Did you realise contact was a result of the earlier assessment? Did you previously know that there were/are referral services available to offer you support in some areas?

6. In what ways has the referral to *[insert name of service]* been helpful to you?

Prompts: What has happened as a result of your referral? What support have you been able to get? What if any changes have you made in your home life since the referral? (*use language appropriate to what service/s they've indicated above*).

7. What did you find most useful about the recent pregnancy assessment you had with the Dr / Practice Nurse?

Prompts: What did the Dr / Practice Nurse tell you about that you may not have known about otherwise? What questions did they ask that you thought were helpful for you around managing your pregnancy? Would you recommend the approach to other friends or whānau who are pregnant?

8. What changes, if any, should be made to the way assessment and referral is done?

Prompts: What questions do you think were missed out? What questions could be asked differently? How would it be better to ask these questions? Are there other services you think should also be offered to women in early pregnancy / other programmes for referral?

Referred Services (LMCs etc) – April 2015

The focus of this interview is to gather information about how referred agencies have found the use of EPAA/EPAT. We are interested in cross-sector awareness and understanding of the EPAA, increased cross-sector 'buy in' to / engagement in EPAA implementation, whether referral information and processes are more effective and whether there is better information share about patients.

1. Can I please start by asking what your role is here?

Prompts: What does your role involve? How long have you been in this role?

2. Can you please tell me what you know about Whanganui's Early Pregnancy Assessment Approach?

Prompts: Have you been involved in the development or promotion of the approach, any education or training? Do you know about its origins? At what stage was your organisation involved as a partner/referred service?

3. What potential do you feel that the Approach has in terms of strengthening service support for women in early pregnancy?

Prompts: What changes do you feel we may see as an outcome of the Approach? Is assessment likely to improve? In what ways? Is assessment likely to become more standardised? Are women at risk more likely to be identified and referred to additional support services?

4. How useful do you feel that the Approach has so far been?

Prompts: What changes, if any, have you noticed in the way that women in early pregnancy are being assessed and referred to support services? How widespread do you feel that these changes are?

5. How supportive are you of the Approach?

Prompts: Do you feel that the Approach is likely to deliver benefits for women in early pregnancy? Why / why not?

6. Please tell me about referrals for services for pregnant women which your agency has had in the past from GPs or Practice nurses.

Prompts: Prior to the EPPA and development of the Early Pregnancy Assessment Tool (EPAT – the advanced Medtech form), how did referrals come to you? How relevant were the referrals that were made? Did you receive the kinds of patient referral information which you found useful? What referral information did you find lacking? Were referrals received at the rate you would have expected? Why / why not?

7. Since the EPAT was introduced in General Practice in what ways, if any, have referrals of pregnant women to your service or programme changed?

Prompts: Now that some GPs and Practice nurses are using the EPAT to carry out assessments and referral in early pregnancy what changes have you noticed? Is the patient referral information you are now getting any more useful than in the past? Is it any easier to get patient information? In what way? Are there any noticeable differences in your work as a result of the EPAT referrals?

8. What, if any difference, is there now (with the EPAA) in patient follow up after referral? What contact, if any, do you have following the referral with the person who made that referral?

Prompts: Do you have any interaction afterwards with the referrer? What follow up is there, if any, with or from General Practice?

9. What changes would you suggest to the way the referrals are being done as a result of the EPAA and use of the EPAT?

Prompts: What challenges do you think still exist in regard to referrals from General Practice? What would make EPAT referrals work better?

The EPPA & the EPAT (GPs and Practice nurses) – April 2015

The focus of this interview is to gather information about General Practice perspectives on the EPAA as well as the use of the EPAT. We want to know about awareness and understanding of EPAA components (including the EPAT, the role and availability of the Maternal Navigator and the role the EPAA has in supporting best practice in tandem with claiming under Section 88). We also want to know about the effectiveness of the EPAA in identifying and managing early pregnancy risk factors (including alcohol), implementation barriers and facilitators, implementation aspects that happened as planned, aspects which were implemented differently and why, EPAA successes and challenges, and, whether the education and training has been supportive.

1. Can I please start by asking what your role is here at the Practice? Prompts: What does your role involve? How long have you been in this role?

2. Can you please tell me what you know about Whanganui's Early Pregnancy Assessment Approach? Prompts: The Approach includes a number of components. Which of these are you aware of (eg new referral options for 'at risk' women in early pregnancy such as to the Maternal Navigator). What do you think the aim of the EPAA is? What reasons do you think the WRHN has for introducing a different approach to early pregnancy assessment and management?

3. The Early Pregnancy Assessment Tool (EPAT) is an important component of the WRHN's Early Pregnancy Assessment Approach (EPAA). Can you please tell me about your understanding of the Tool? Prompts: What is the purpose of the EPAT? How is the EPAT intended to be used?

4. Please tell me about the introduction of the EPAA and the EPAT in your Practice. How long has the EPAT been available in your Practice? Prompts: How were the EPAA and the EPAT introduced? How effective do you feel the process of introducing and integrating the EPAA and the EPAT has been?

5. Please tell me about how the EPAA and the EPAT are used in your Practice. Prompts: Do you utilise services associated with the wider Approach and the EPAT? Please tell me more about why or why not. If so, when did you start referring to that service? Are you aware of others in your Practice using the EPAT?

6. What, if any EPAA/EPAT education and training have you had? Prompts: Have you attended WIPE sessions where the EPAA and the EPAT were discussed? Have you had on-site training in using the EPAT? Have you had any discussions with the Clinical Lead about the EPAA and the EPAT? Have you participated in peer review of the Tool? Anything else? How helpful did you find the training / training support? How could the training be improved?

7. If you use the EPAT, how helpful has it been? Prompts: In what ways? Does it make it easier to broach what might be considered difficult questions to ask, like whether there are risks of domestic

violence? Does it provide useful reminders (for example about prescribing)? Does it make accessing early pregnancy management related information easier?

8. How helpful has the EPAT been in helping you to identify and manage early pregnancy risk (including smoking and drinking)? Prompts: Has it prompted you to screen for things you might not have otherwise? Please give me an example of a time when you have been prompted to screen when you may not have otherwise done so. How has it helped to guide best practice?

9. How comfortable do you feel carrying out assessments with pregnant women using the EPAT? Prompts: Are some questions easier to ask than others? Please explain. Are there questions you are more likely to avoid asking?

10. How comfortable do you think women in early pregnancy feel with the assessment being carried out? Prompts: Have you noticed any particular questions causing discomfort or awkwardness?

11. What impact does use of the EPAT have on referring patients in early pregnancy to other support services, including LMCs? Prompts: Does it make it any easier to determine appropriate referral agencies. Are referral processes any clearer? If so please give an example.

12. How, if at all, has your knowledge of other services and programmes available to support pregnant women increased due to the EPAA/EPAT? Prompts: What do you know about the role of the Maternity Navigator? Did you know this role has resulted from the EPAA? Do you know she is based at WRHN? (Explain role if necessary). What about the Quit Clinic? What about the Pēpi-Pod Programme? What about Healthy Homes? What about Pregnancy and Parenting Courses? What about GRx Active Pregnancies?

13. In what ways, if at all, has your Section 88 claiming been helped by the use of EPAT? Prompts: Please explain.

14. What, if any, changes need to be made to the way early pregnancy assessment and management is being carried out using the EPAT and the EPAA? Prompts: What would make the overall Early Pregnancy Assessment Approach more effective? What would make EPAT work better?

APPENDIX FIVE: INFORMATION FOR RECRUITING SERVICE USERS

Kia ora / Greetings

PLEASE EXPLAIN THE FOLLOWING POINTS ABOUT THE EPAA EVALUATION TO POTENTIAL PARTICIPANTS:

The Health Promotion Agency (HPA) and the Whanganui Regional Health Network (WRHN) want to know more about the new approach being taken (the EPAA) in primary health care to assess and support women in early pregnancy.

Whakauae Research is helping to find out how well the approach is working. Whakauae wants to talk with expectant mothers who have participated in early pregnancy assessment processes sometime within the last six months. **We particularly want to talk with expectant mothers who may have been referred to other services through the assessment process.** Referrals may have been made to LMCs, to parenting programmes or perhaps to the Maternal Navigator.

We want to talk with service users, in private, about:

- Their experiences of using early pregnancy assessment services;
- How acceptable they found service delivery to be; and,
- What, if any, changes they believe may need to be made to service delivery.

The things service users say to us will be reported in a way that does not allow any particular service user to be identified.

PLEASE EXPLAIN TO SERVICE USERS THAT IF, AT THIS STAGE, THEY ARE WILLING TO TALK WITH US:

- We will contact them individually. If they are still willing to take part in the evaluation, we will arrange an interview at a time and place that suits them;
- Interviews will be kept as informal as possible and will take 30 - 45 minutes;
- Service users will be welcome to have a support person or persons with them at the interview;
- Service users will only need to answer the questions they want to answer;
- Service users can choose to end the interview at any time if they want to; and,
- We will ask service users for permission to audio record the interview (only the Whakauae Research team will hear this recording).

We will provide a koha (a \$30 Warehouse voucher) to each service user who takes part in the evaluation as a small token of appreciation of their contributions of time and information.

PLEASE COLLECT THE FOLLOWING INFORMATION FROM SERVICE USERS & RETURN TO CHLOE MERCER AS SOON AS POSSIBLE:

Whakauae may contact me and invite me to take part in an interview.

YES NO

If yes, my contact number is:

The best times to contact me are:

Name:

Ethnicity:

NB. As we will be interviewing only 5 – 8 service users you may not necessarily be contacted even if you have agreed to take part in the evaluation.

Kia ora / Thank you for your time.

COMMENT:

10. My knowledge of the other services and programmes available to support pregnant women has increased due to the EPAA /EPAT

Yes, definitely Yes, to some degree No, not really No, not at all Unsure

COMMENT:

11. My Section 88 claiming has been helped by the EPAA / EPAT:

Yes, quite a lot Yes, a little Unsure No, not really No, not at all

COMMENT:

12. What EPAA / EPAT education and training have you had? Please tick which of the following apply:

- WIPE session/s
- On-site training in using the EPAT
- Discussion with the Clinical Lead
- Peer review participation
- Other (please describe)
- I have not taken part in any EPAA / EPAT training

COMMENT:

13. If you have taken part in the above training have you found it:

Very useful Useful Of some use Of very little use Unsure

COMMENT:

14. How could the training be improved? Please comment:

15. What barriers do you think there are to using the EPAA and the EPAT? Please comment:

16. What would make the EPAA / EPAT work better? Please comment:

APPENDIX SEVEN: INVITATIONS TO PARTICIPATE IN ONLINE SURVEY

Initial Invitation Email

To go in the draw to win a \$200 New World Supermarket voucher please take part in our survey on the WRHN's Early Pregnancy Assessment Approach (EPAA)

Please copy the following web link in to your browser to access the on-line survey: #\$\$%@%&@#\$

Survey background information

In 2014, the Whanganui Regional Health Network (WRHN) introduced its Early Pregnancy Assessment Approach. The approach includes a Medtech advanced form (the Early Pregnancy Assessment Tool or EPAT).

Whakauae Research for Māori Health & Development is carrying out an evaluation of the EPAA. The evaluation has been commissioned by the national Health Promotion Agency (HPA).

As part of the evaluation, we are surveying GPs and Practice nurses to find out more about how the EPAA is working. The survey will take about 10 - 15 minutes.

All those who complete the online survey **by Wednesday 29 April 2015** will (with their consent) go in a random draw to win a \$200 New World Supermarket grocery voucher. There are approximately 78 General Practice clinicians who may be eligible to enter the \$200 voucher draw.

The survey is anonymous and no individual will be identified in the survey reporting.

To be entered in the random draw however, you will need to provide us with your email address when you complete the survey. This is so that we can contact you if your entry is drawn as the winning entry. **Your email address and identity will not be used for any purpose other than for Whakauae Research to contact you if you are the random draw winner.**

Completion and submission of the survey will be taken as your consent to participate in the evaluations study. Your contribution will be greatly appreciated.

Please contact us if you have any questions about the survey. Our contact details are listed below.

Ngā mihi

Lynley Cvitanovic

Whakauae Research Ph: (06) 3476 772 Email: lynley@whakauae.co.nz heather@whakauae.co.nz

Reminder Invitation Email

All Whanganui Regional Health Network GPs and Practice nurses are asked to take part in a brief online survey about the Network's Early Pregnancy Assessment Approach (EPAA). Everyone who does the survey can choose to go in a draw to win a \$200 New World Supermarket voucher.

Please click on this web link to access the online survey: #\$\$%@%&@#\$\$

Survey background information

In 2014, the Whanganui Regional Health Network (WRHN) introduced its Early Pregnancy Assessment Approach (EPAA). The approach includes a Medtech advanced form (the Early Pregnancy Assessment Tool or EPAT).

Whakauae Research for Māori Health & Development is carrying out an evaluation of the EPAA. The evaluation has been commissioned by the national Health Promotion Agency. As part of the evaluation, we are surveying GPs and Practice nurses to find out more about how the EPAA is working. The survey will take 10 - 15 minutes of your time to complete.

All those who submit the online survey **by Wednesday 29 April 2015** will (with their consent) go in a random draw to win a \$200 New World Supermarket grocery voucher. There are approximately 75 General Practice clinicians who may be eligible to enter the \$200 voucher draw.

The survey is anonymous and no individual will be identified in the survey results and reporting.

To be entered in the random draw however, you do need to provide us with your email address when you complete the survey. Having your contact address will allow us to email you if your entry is the winning entry. **Your email address and identity will not be used for any purpose other than for us to contact you if you are the random draw winner.**

Completion and submission of the survey will be taken as your consent to participate in the evaluations study. Your contribution will be greatly appreciated.

Please contact us if you have any questions about the survey. Our contact details are listed below.

Ngā mihi

Lynley Cvitanovic

Whakauae Research Ph: (06) 3476 772

Email: lynley@whakauae.co.nz or heather@whakauae.co.nz