OBSTETRIC MANUAL

Final report of the Obstetric Working Group of the National Health Insurance Board of the Netherlands

(abridged version)

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Mission Statement

This Obstetric Manual is a guide to help obstetric caregivers in providing high-quality, efficient and individualised obstetric care.

This Manual is characterised by its pursuit of quality, efficiency and co-operation. Quality and efficiency are achieved by making well-balanced agreements that are based upon as high a level as possible of scientific evidence and consensus-forming by the various professional associations involved in obstetric care. The recommendations in the Manual are strongly inter-related and can mostly be implemented within the principal of collaboration. Therefore, this Manual is also aimed towards stimulating close mutual cooperation between all obstetric professionals.

Joint Statement

The governing boards of the Royal Dutch Organisation of Midwives (KNOV), the National Association of General Practitioners (LHV) (with the approval of the Dutch General Practitioners' Fellowship (NHG)) and the Dutch Association for Obstetrics and Gynaecology (NVOG) declare the ratification of this report during the General Meeting of the members of their professional organisations.

The governing boards of the three professional associations strongly advise their members to use the recommendations in this report in practice and when collaborating with other caregivers providing obstetrical care.

Amstelveen, December 1998 The Royal Dutch Association of Midwives The National Association of General Practitioners The Dutch Association for Obstetrics and Gynaecology

1. Introduction

The Obstetric Manual, made by and for obstetric professionals, was published in the spring of 1999.

The Obstetric Manual was compiled by the Obstetric Working Group. This is a discussion platform of the Royal Dutch Organisation of Midwives (KNOV), the National Association of General Practitioners (LHV) and the Dutch Association for Obstetrics and Gynaecology (NVOG). The College for "Zorgverzekeringen" (then known as the 'Ziekenfondsraad' [Health Insurance Board]) took care of co-ordination and secretarial support.

As may be known, obstetric care in the Netherlands is based on the principal of risk selection. Low-risk pregnant women receive primary level obstetric care provided by (independent) midwives or general practitioners. Women with a high-risk obstetric profile receive secondary level care, provided by obstetricians. Low obstetrical-risk women may choose to give birth at home or in hospital with their primary care provider. Women evaluated as having an increased obstetrical risk deliver in hospital with a secondary level caregiver.

If obstetric problems occur during pregnancy or birth, the primary level caregiver can consult with the secondary level caregiver and refer when appropriate. The secondary level care-provider can also refer the women back to primary care at any time if the condition which prompted referral is no longer a risk factor. This system is based upon the principal of close mutual co-operation between primary and secondary level obstetric caregivers.

The aim of the Obstetric Manual is to promote this co-operation. It also aims towards optimising the quality and efficiency of the care provided. Five sections describe these aims: Obstetric Co-operation; Quality Requirements for Obstetric Professional Groups; the List of Obstetric Indications; Obstetric Ultrasound and Perinatal Audit. The Manual acts as an aid to ensure that the quality of obstetric care and its organisation remains at the high level which characterises Dutch obstetrics.

For those particularly interested in learning about the Dutch obstetric care system, the most interesting section will be the section on risk selection. The 'List of Obstetric Indications' was developed as a guide to this system of risk selection. In preparing this list, more than one hundred obstetric and medical indications were analysed. The most appropriate care-provider is indicated for each case, based on the best possible evidence available.

This abridged version of the Manual contains a translation of the List of Indications. Some background knowledge of the basic principles of the Dutch obstetric system is however essential to be able to understand this section properly. For this reason, we have included a number of other relevant topics – some of which are summarised – in this publication.

The Obstetric Working Group hopes that this summarised translation of the Manual will provide some insight into the organisation of obstetric care in the Netherlands and welcomes any comments from readers.

Amstelveen, May 2000.

2. The Obstetric Manual

2.1. Goal

The main aim of the Manual is to provide the necessary tools to ensure that risk-selection within the field of obstetrics is carried out appropriately. The primary care provider (the independent midwife or general practitioner) is primarily responsible for this process of risk-selection. The Manual is a consensus document reflecting the agreements reached between all the professional groups involved in providing obstetric care.

2.2. Basic assumptions

The following basic assumptions were taken into consideration whilst writing the Manual:

- 1. The continuation of the high-quality obstetric care currently provided in the Netherlands must be guaranteed and improved upon where necessary.
- 2. The medicalisation of obstetric care should be avoided, i.e., actively opposed. Based upon this assumption, the opinion of the working group is that, alongside low-risk and higher-risk hospital deliveries, home birth must continue as a viable option and promoted when possible.
- 3. The working group considers of great importance the optimal use of the expertise found within the various groups of obstetric care-providers. Based upon this assumption, the care during normal pregnancy, birth and puerperium should be considered to belong to the group of primary level obstetric caregivers. Based upon risk election carried out by the primary care-provider, management of at risk evaluated pregnancy, birth and puerperium belongs to the group of secondary level obstetric caregivers.
- 4. The selection and referral of pregnant women for secondary level obstetric care is carried out by the primary level obstetric caregiver, who is qualified for this task. In order to ensure that selection and referral take place appropriately, the use of the expertise of the secondary level care-providers must be accessible by means of consultation and advice giving. Primary level obstetric caregivers must also be offered the possibility of making use of facilities of the secondary level care-provider when necessary and where this is justified.
- 5. The working group considers the achievement of good co-operation between the professional groups involved in obstetric care to be of major importance for optimal obstetric care, especially in a system in which home birth and home postnatal care remains an option in cases of normal pregnancy, birth and puerperium.
- 6. When implementing the list of indications for the organisation of care, as stated in the assumptions mentioned above, the professional competence and responsibility of the obstetric caregiver should be duly respected.
- 7. This list of indications is the result of agreement between the professional groups concerned, based upon the context of professional practice. The Health Care Insurance Board fulfilled an initiating, facilitating and advisory role and confirms that, which has been jointly agreed upon by the professional groups.

2.3. The Obstetric Working Group

The Obstetric Working Group responsible for drawing up the Manual was made up of an equal number of representatives from the three professional associations (KNOV, LHV, NVOG), in addition to a representative from the "Health Care Inspection" (IGZ) of the national government . The chairman and the secretary were provided by the Health Care Insurance Board. Their role was one of guidance and support. The task of the representative of the IGZ was to provide advice and supervision. The representatives of

the professional groups were responsible for shaping the content of the goals, carrying out discussions and feedback to their professional organisations.

Sub-groups were formed for three subjects (obstetric ultrasound, perinatal audit, revision of the list of obstetric indications). The professional associations were equally represented by two persons in each sub-group. They were supported by representatives of the Health Care Insurance Board, who also had a seat on the Obstetric Working Group.

The realisation of decision-making, both within the Working Group and within the subgroups, was based on consensus forming over all subjects and following confirmation by the three professional associations.

3. Contents of the Obstetric Manual

The five subjects covered in the Manual are important to daily obstetric practice. Each is clearly a specific part of obstetric collaboration and can support this collaboration. These subjects are: Design of Obstetric Co-operation, Quality Requirements for Professionals in Obstetrics, Perinatal Audit, Obstetric Ultrasound and the List of Obstetric Indications.

In order to obtain efficient obstetric care it is important to view these subjects as a whole, the nucleus of which is formed by co-operation. The recommendations in the section reports have the highest possible degree of scientific evidence. Use was made of the cascade system of the Health Care Insurance Board (evidence-based medicine, meta-analysis, consensus, review article, expert opinion)¹.

For those interested in the Dutch obstetric system, the section report on risk-selection (the "List of Obstetric Indications") is of importance. This is included in its entirety in this abridged version of the Manual. The other section reports are summarised below.

3.1. Obstetric co-operation

The aim of obstetric co-operation is to promote structured collaboration between midwives, G.P.'s and gynaecologists in such a way that the individualised patient care is optimised. This can be achieved by making agreements about the provision of individualised care, about the organisation of obstetric care and about the quality of the care provided.

This section report contains recommendations about the design of obstetric collaboration. The advice is general and descriptive in nature. In this way, agreements on a regional/local level can be decided and adapted to the local situation.

In many places in the Netherlands, efficient co-operation already exists between primary and secondary obstetric care-providers, whether or not formally recognised. The advice contained within this Manual is largely based upon experience obtained in these practices. Various sections from this Manual (e.g., the B-indications from the List of Obstetric Indications and the indications for ultrasound) can only be achieved within a structured organisation of collaborative practice.

3.2. Quality requirements for obstetric professionals

High-quality care requires quality on the part of the caregiver. For this reason the Manual pays attention to characteristics of quality that need to be fulfilled by obstetric professionals. The quality requirements of the three different providers of obstetric care (midwives, G.P.'s and gynaecologists) are partly the same, but also differ is some ways. This section report formulates joint quality requirements in such a way that they match the quality requirements of the three professional associations. Attention is also paid to conditions regarding up-dating knowledge and experience (including re-registration and certification), accessibility and availability, practice organisation and necessary equipment, care registration (e.g., exchange of mutual data and participation in the National Obstetric Registration).

3.3. Obstetric ultrasound

This section report provides support for the use of ultrasound in primary and secondary level of care. It provides a review of specific obstetric indications for ultrasound use. For these indications, primary level obstetric caregivers can request and interpret ultrasound examinations without any secondary level intervention. These ultrasound examinations

¹ See advice 'Suitable usage', 'Ziekenfondsraad', no. 588, 1993.

can be carried out by a midwife or G.P. who has been trained in ultrasound technique. The indications are listed in section 6.

Section 3.3 contains requirements regarding expertise and experience of both primary level and secondary level sonographers.

Special consideration is given to whether or not a first trimester ultrasound scan (to determine the duration of the pregnancy) and a standard ultrasound scan in the second trimester (for determining anatomical abnormalities) should be introduced for all pregnant women. Based upon an extensive analysis of scientific literature, the conclusion has been drawn that this diagnostic tool does not clearly contribute towards reducing perinatal morbidity or mortality, the outcome used for evaluating the advice from the sub-groups. The Working Group has not as yet agreed to make an exception for the field of ultrasound by evaluating its need based on another outcome, i.e., the quality of the obstetric care. They have also taken into account the fact that there are still doubts about the feasibility of providing all pregnant women with these routine diagnostic tool will have farreaching effects on obstetric practice. The Working Group has decided to keep a close watch on further developments in knowledge and insight and adapt the Manual accordingly as and when it becomes necessary.

3.4. Perinatal Audit

Perinatal Audit is aimed towards analysing the quality of obstetric care by actual registration and formulating recommendations to improve this quality. This section report contains recommendations for establishing a national registration system and a structural analysis of perinatal deaths. Reports will be registered with an office (that still needs to be set up) by individual care-providers or by regional/local obstetric practices. An aggregated form of this analysis can be fed back to the professional groups, or, if preferred, to the individual professional care-provider, after which quality-promoting measures can be taken, where possible, by the care-provider or their obstetric practice. Recommendations pertaining to Perinatal Audit involve, for the moment, only perinatal death. This section focuses on the future and needs to be worked out in more detail before it can be implemented.

3.5. List of Obstetric Indications

An integral version of this report is included in section 4, after which comes the specific List of Obstetric Indications in section 5.

3.6. The Obstetric Manual in the future

It is important to note that the contents of the Obstetric Manual describe the situation as of the year 1998.

The first List of Obstetric Indications appeared in 1959, the so-called 'Kloosterman list'. A new version of this list was introduced in 1987. At the time of publication, it was agreed that the list would be periodically adapted if necessary. The Obstetric Manual has achieved this as well as adding other subjects pertaining to obstetric care.

The Obstetric Working Group expects that the Manual will need adaptation again in the future according to changes in scientific insight and opinion. At the same time the Obstetric Working Group expects that the subjects Obstetric Co-operation and Perinatal Audit will require further development. It will also be necessary to approach new subjects and include them in future editions of the Manual.

In other words: this Manual is a dynamic document that will require continuous updating. The governing boards of the professional organisations involved have therefore approved of continuing the Obstetric Working Group for the benefit of this up-dating.

3.7. Status of the section reports and advice

As stated above, the advice in this report is based on scientific evidence of medical and/or obstetric policy. Consensus was also reached between the professional associations. As a result, the sections mentioned above form a basis for the optimal provision of care for individuals. Due to the manner in which they were realised, their goal of making obstetric policy as uniform as possible and the fact that efficiency has been taken into account, the sections have achieved the status of authoritative advice to obstetric professionals. Taking their individual responsibility into account, the professionals are allowed to follow policy not advised, if the obstetric or medical care of their patients makes this imperative. This should (of course) only take place based on rational argumentation and under the professional responsibility of the care-provider.

The advice in this report, formed by scientific evidence and consensus between the professionals forms the guarantee of qualitative optimal care. It is possible that midwives, G.P.'s and gynaecologists within a structure of regional obstetric collaboration may decide to follow a policy which differs from the guidelines. If the parties concerned mutually decide to agreements which are not stated in the Manuel, they must ensure that

the care is of a high quality, that it remains efficient, and that it based on a similar scientific basis to that described in this report. The person responsible for the care should be clearly recognisable to all parties (including patients). This is why joint agreements which differ van de Manuel guidelines can only be made by practitioners within a structure of obstetric collaboration.

4. Revision of the List of Obstetric Indications

The List of Obstetric Indications is intended as a contribution towards promoting optimal obstetric care. As such it forms a decision-making instrument provided by and for the use of obstetric care-providers who practice risk selection.

4.1. Basic assumptions

The main basic assumption is that pregnancy, birth and puerperium are physiological processes that can take place at home. Another basic assumption is that optimal use must be made of the expertise of the various obstetric care-providers. Based upon this assumption, a normal pregnancy, birth and puerperium belong to the primary level care-provider's field of work. Pregnancy, birth and puerperium selected by the primary level care-provider as being 'at risk' belong to the secondary level care-provider's field of work. Guidelines for advise-giving and consultation have been formulated to ensure that selection and referral take place optimally.

4.2. Method of working

The List of Obstetric Indications is based on the list that was published in 1987. The Sub-Group List of Obstetric Indications (SVI), that was created for the revision of the 1987 list, used the following questions as starting point:

- 1. What conditions are relevant for the progress and the outcome of pregnancy, birth and puerperium?
- 2. For which conditions do pregnancy, birth and puerperium have relevant consequences?
- 3. What is the most suitable obstetric/medical policy based upon the medical history and research?
- 4. What risk is involved based on the policy chosen under 3?
- 5. Which care-provider is best indicated for attending the woman during pregnancy and birth in the given situation?

The division into fields A, B, C and D has been retained in the revised list, but the decision-making structure has been altered in comparison with the previous list. The accent now rests on the individual responsibility of the caregiver providing care in the situation concerned; the pre-set boundaries to the field of work by various professional groups providing obstetric care is no longer of first concern. What remains essential that the women receives optimal care both during pregnancy and birth. The notion that 'once referred, automatically leads to continued secondary obstetric care' has now been abandoned. This means that referring-back can take place if the reason for referral no longer exists.

Flow diagram for determining responsibility for care during pregnancy, birth and puerperium, as used in drawing up the revised indication list

relevant condition?	no →	Α	
\rightarrow			
↓			
Yes			
\downarrow			
Specific policy? \rightarrow	no →	Α	
\downarrow			
Yes			
↓			

Increased risk? \rightarrow	no →	Α	transport
\downarrow			transport risk? \rightarrow no
			→A
\rightarrow	possible \rightarrow	1	
l ↓		consultation B	\downarrow
Yes		\checkmark	yes
\downarrow			↓ ↓
\rightarrow	\rightarrow	С	D

A. <u>Primary obstetric care</u>. The responsibility for obstetric care in the situation described is with the primary level obstetric care provider, midwife or GP

B. <u>Consultation situation</u>. This involves evaluation involving both primary and secondary level care. The individual situation of the pregnant woman is evaluated and agreements are made about the responsibility for obstetric care based upon the above mentioned five questions. Consultation will take place unless structural agreements have already been made at a local level. The section on obstetric co-operation provides information about such agreements.

C. <u>Secondary obstetric care</u>. This is a situation requiring obstetric care by an obstetrician at secondary level for as long as the disorder continues to exist.

D. <u>Transferred primary obstetric care</u>. Obstetric responsibility remains with the primary care provider (midwife/GP), but in this situation it is necessary that birth takes place in a hospital in order to avoid possible transport risk during birth.

4.3. Status of the revised list of obstetric indications and use in daily practice

The aim of the list of obstetric indications is two-fold:

1. The list provides advice, obtained on the basis of evidence or consensus, given to obstetric care-providers concerning the level obstetric attendance in specific situations.

2. The list forms a complete set of guidelines based upon which the chosen obstetric policy can be defended in reply to questions from others (e.g., health insurers and clients).

The List of Obstetric Indications and the manner in which advice on obstetric policy has been developed form a guideline for responsible obstetric care. The list contains wellreasoned recommendations, whilst not being authoritative in design. In individual situations an alternative decision may be taken based upon rational arguments. As a result of its use in practice and continuous up-dating based upon evidence and new insights, it is expected that the list will evolve into a professional standard.

It should be emphasised that the List of Obstetric Indications and the guidelines for its use should be seen in the light of the standpoints formulated in this Manual regarding quality requirements and co-operation between the professionals involved in obstetrics. It is intended to optimise this co-operation which in turn increases the quality of care given. The Obstetric Working Group realises that the guidelines will probably not suffice in conflict situations, often having a historical background. The Section reports 'Obstetric Co-operation' and 'Quality Requirements for Obstetric Professionals' go further into detail about the necessity of, and the conditions for, effective collaboration providing methods of assistance aimed towards stimulating and achieving obstetric co-operation. In particular, situations involving intercurrent disorders often involve other professionals providing care for the pregnant woman, such as a G.P. who does not actually attend deliveries himself, medical specialist other than obstetrician or paramedical and nursing care-providers. Agreements about responsibilities, exchange of information and co-ordination of the provided care in such situations has not yet been worked out in the Obstetric Manual. Specific agreements concerning urgent and non-urgent consultation and the referral of indications from the B-category and D-category have also not been further worked out in the current list. These involve the logistics of availability, information exchange, manner of consultation, patient communication and other such matters. The structure of such interdisciplinary agreements and the development of transmural co-operation are very much subject matter for regional and local structures of obstetric collaboration. The Working Group states their standpoint on the development and continuance of co-operation in the section on the Design of Obstetric Co-operation.

pregi	nancy		
\downarrow			
risk-ass	essment		
\checkmark	\checkmark		
normal medical history, pregnancy, birth or puerperium	abnormal medical history, pregnancy, birth or puerperium		
\checkmark	\checkmark		
care provided by Indications	consultation List of Obstetric		
midwife, G.P.	\downarrow		
	risk-analysis by midwife, G.P.		
	Ļ		
	Category:		
midwife/G.P.	$A \rightarrow$ care provided by		
obstetrician	$C \rightarrow$ care provided by		
	$B \rightarrow consultation$		
midwife/G.P.	$D \rightarrow$ care provided by		
When there is any doubt,	consultation is preferable.		

The following decision-tree has been designed for use in daily practice:

4.4. Guidelines for designing the consultation situation

Co-operation between the primary and the secondary level care-provider is most apparent in the B-indications, which involve evaluation in the fields of overlap in primary and secondary level responsibilities. These indications therefore form a reason for consultation. Consideration must be given to the possibilities of prevention, diagnostics and treatment in the given situation. The contributions, based upon the expertise of the various care-providers, need to be considered. Of prime importance is that the obstetric policy agreed upon will lead to optimal care in individual cases. Agreements about whom is responsible for what should be clear.

The following guidelines are intended to assist optimising obstetric co-operation in this situation.

- 1. During obstetric referral and consultation policy, the care-providers involved will respect each other's professional responsibilities and competence. Providing quality responsible obstetric care is generally seen as a mutual responsibility, apart from the individual responsibility towards individual clients. There should be recognition for the fact that primary and secondary level obstetric care are both characterised by their own specific expertise, each different in nature but equal in value.
- 2. Consultation between primary and secondary level care-providers about an individual case (hereafter referred to as 'consultation') will be regarded by the care-providers concerned as an integral part of the professionalism with which they carry out their practice. Consultation involves on the one hand the midwife and the G.P., active in obstetrics, and on the other hand the obstetrician and medical specialists, such as the paediatrician and the neurologist.
- 3. The initiative for consultation can come from both sides. In the B-situation, within the framework of obstetric risk-selection, the primary level care-provider may take the initiative. The general and specific advice contained within the List of Obstetric Indications play an important role here. Non-compliance with the list is possible (as stated above and in the list), based upon rational reasons.
- 4. Consultation about a specific situation begins with written information provided by the primary level care-provider for the specialist. This contains all relevant obstetric information (preferably including a copy of the pregnancy dossier) and a specific definition of the problem.
- 5. An appointment during antenatal clinic between the patient and the specialist will usually follow. The specialist will draw up a file (preferably even in cases in which his involvement is limited to a single consultation) and will put his findings and his well-reasoned advice in writing to the primary care-provider.
- 6. Other forms of consultation (e.g. by telephone or in writing) are possible if both careproviders feel that this is justified. Even in these situations, the results of the consultation should be recorded in writing.
- 7. The situation at hand can lead to a referral to a secondary level care-provider, to further care at primary care level or to joint care in one form or another. This decision is taken after consultation between the primary care-provider and the specialist. The most appropriate obstetric policy and the most suitable care-provider will be determined. When joint obstetric care is decided, clear agreements will be made about the division of responsibilities.
- 8. The information to the patient will be an account of the policy determined during consultation between the primary and the secondary level care-provider.
- 9. The care-providers will carry out the mutually agreed policy . If an other than agreed upon policy is carried out, the consultative partner should be informed of this including motivation and all relevant information.
- 10. The care-providers involved in the consultation will keep each other informed about progress of the case. In particular, specific information will be provided about outcomes (birth and puerperium, health of mother and child). The case in question can be mutually evaluated when considered necessary. Possible causes of morbidity/mortality should always be mutually discussed.

11. Existing regional structures of collaborative obstetric practice between primary and secondary level care-providers will discuss cases which do not comply with points 3 and 9, or where there is a structural difference in insight between care-providers. A structure of obstetrical collaboration essentially important for the existence of a balanced professional relationship based on equality between all parties concerned.

The specific List of Obstetric Indications is reproduced in the following section.

5. The List of Obstetric Indications

What follows is the list of specific obstetric indications, including an explanation of the description of the obstetrical care provider and guidelines on how to deal with the consultative situation.

The obstetric indication list is divided into six main groups, within which reference is made to the various obstetric and medical disorders and diseases. Where necessary, an explanation is provided about the obstetric policy related to specific indications and upon what the referral policy is based. The right-hand column shows for each indication who is the most suitable care provider.

The main purpose of the indication list is to provide a guide for risk-selection. The primary obstetric care provider, midwife or GP is primarily responsible for this risk-selection. The Manuel is a consensus document showing the agreement reached by the professional groups on their decision-making structure.

Code	Description	Care provider
A Primary obstetric care	The responsibility for obstetric care in the situation described is with the primary obstetric care provider.	midwife/G.P.
B Consultation situation	This is a case of evaluation involving both primary and secondary care. Under the item concerned, the individual situation of the pregnant woman will be evaluated and agreements will be made about the responsibility for obstetric care (see Section 4.5).	depending on agreements
C Secondary obstetric care	This is a situation requiring obstetric care by an obstetrician at secondary level for as long as the disorder continues to exist.	obstetrician
D Transferred primary obstetric care	Obstetric responsibility remains with the primary care provider, but in this situation it is necessary that birth takes place in a hospital in order to avoid possible transport risk during birth.	midwife/G.P.

Explanation of the codes used for the care providers

List of specific obstetric indications

1. Pre-existing disorders – non-gynaecological

In cases of pre-existing disorders that are relevant to obstetrics, other care providers other than the midwife are regularly involved with care of the pregnant woman. In cases requiring consultation, it is necessary to involve the other care providers in the consultation.

For this reason, in disorders given code B in this section, attention should be given to collaboration with others outside the field of obstetrics. Attention should be paid to the counselling of women who are considering the possibility of becoming pregnant.

1.1	Epilepsy, without medication	Α
1.2	Epilepsy, with medication	В
	Prenatal diagnostics are recommended in connection with the disorder and its	
	medication. Optimal care requires consultation between all care providers	
	concerned (midwife, G.P, obstetrician, neurologist).	
1.3	Subarachnoid haemorrhage, aneurysms	С
	Care during puerperium can be at primary level.	
1.4	Multiple sclerosis	В
	Depending upon the neurological condition, a complicated delivery and the	
	possibility of urine retention should be taken into account. For optimal care,	
	consultation between all care providers concerned is indicated.	
1.5	Hernia nuclei pulposi	Α/
	This represents a C-situation in cases of a recently suffered HNP or where	С
	there are still neurogenic symptoms. It is an A-situation after treated hernia,	
	especially if a previous pregnancy was normal. Both the medical history and	
	the current clinical condition are relevant.	
1.6	Lung function disorder	В
	The opinion of the lung specialist should be taken into account during	
	evaluation.	
1.7	Asthma	A/
	Care during pregnancy, birth and puerperium can only take place at a primary	С
	level when the asthma involves lengthy symptom-free intervals, whether or	
	not use is made of inhalation therapy. Consultation with the GP/specialist	
1.0	involved is recommended.	0
1.8	Tuberculosis, active	С
	Tuberculogic non estive	
	Tuberculosis, non-active	A
	In cases of an active tuberculoses process and subsequent treatment,	
	consultation should take place with the physician involved and the obstetrician regarding the clinical condition and care during pregnancy and	
	birth. In cases of non-active tuberculosis, care during pregnancy and birth can	
	take place at a primary level.	
1.9	HIV-infection	С
1.7	As a result of the current possibilities of medical therapy for preventing	
	vertical transmission, these patients should be cared for during pregnancy and	
	birth in a hospital equipped for the treatment of HIV and AIDS.	
1.10	Hepatitis B with positive serology (Hbs-AG+)	A
1.10	Since 1988 it is important that a screening programme for this serology is	11
	since 1766 it is important that a screening programme for this scrology is	

		1
1 1 1	carried out on pregnant women.	
1.11	Hepatitis C	В
	Consultation with the obstetrician and follow-up by the pediatrician is	
1.10	recommended.	C
1.12	A heart condition with haemodynamic consequences	С
	Pregnancy and birth will have an effect on the pre-existing haemodynamic	
1.10	relationships. A cardiac evaluation is important.	D
1.13	Thrombo-embolic process	В
	Of importance are the underlying pathology and the presence of a positive	
	family medical history. Pre-conceptual counselling is important.	9
1.14	Coagulation disorders	C
1.15	Renal function disorders	С
	When there is a disorder in renal function, with or without dialysis, referral to	
	secondary care is recommended.	
1.16	Hypertension	Α/
	Pre-existing hypertension, with or without medication therapy, will require	С
	referral to secondary care.	
	Hypertension has been defined by the ISSHP as: A single event of diastolic	
	blood pressure of 110 mm Hg or more (Korotkoff IV). Diastolic blood	
	pressure of 90 mm Hg or more at two subsequent blood pressure	
	measurements with an interval of at least 4 hours between the two	
	measurements. A distinction should be drawn between a diastolic blood	
	pressure under 95 mm and a pressure of 95 mm and higher. Extra attention	
	should be paid to a pregnant woman with a diastolic pressure between 90 and	
	95 mm; from 95 mm, referral to secondary care should take place.	
1.17	Diabetes mellitus	С
1.18	Hyperthyroidism	С
1.19	Hypothyroidism	В
	In cases of biochemical euthyroid, without antibodies and without	
	medication, or stable on levothyroxine medication, care can take place at a	
	primary level. Where levothyroxine medication is given, specific tests are	
	recommended due to the frequent increase in medication required during	
	pregnancy.	
1.20	Anemia, due to a lack of iron	В
	Anemia is defined as Hb<6.0 mmol that has existed for some time.	
1.21	Anemia, other	В
	This includes the haemoglobinopathies.	
1.22	Inflammatory Bowel Disease	С
	This includes ulcerative colitis and Crohn's disease.	
1.23	System diseases and rare diseases	С
	These include rare maternal disorders such as Addison's disease and	
	Cushing's disease. Also included are systemic lupus erythematosus (SLE),	
	anti-phospholipid syndrome (APS), scleroderma, rheumatoid arthritis,	
	periarteritis nodosa, Marfan's syndrome, Raynaud's disease and other	
	systemic and rare disorders.	
1.24	Use of hard drugs (heroin, methadone, cocaine, XTC, etc.)	С
·· ·	Attention should be paid to actual use. A urine test can be useful even in	
	cases of past use in the medical history. The involvement of the pediatrician	
	is indicated during the follow-up postpartum.	
1.25	Alcohol abuse	С
1.23	The fetal alcohol syndrome is important. The involvement of the pediatrician	

	is indicated during the follow-up postpartum.	
1.26	Psychiatric disorders	В
	Care during pregnancy and birth will depend on the severity and extent of the	
	psychiatric disorder. Consultation with the physician in charge is indicated.	

2. Pre-existing gynaecological disorders

2.1	Pelvic floor reconstruction	С
2.1		C
	This refers to colpo-suspension following prolaps, fistula and previous rupture.	
	Depending on the cause, the operation technique used and the results achieved,	
	the obstetrician will determine policy regarding the birth. A primary caesarean	
	section or an early primary episiotomy can be considered, to be repaired by the	
	obstetrician. If the chosen policy requires no special measures and no specific	
	operating skill, then care during birth can be at primary level.	
2.2	Cervical amputation	С
	Cervical cone biopsy	В
	Cryo- and lis-treatment	А
	The practical application of obstetric policy in this field can be worked out in	
	local mutual agreements. If an uncomplicated pregnancy and birth have taken	
	place following cone biopsy then a subsequent pregnancy and birth can take	
	place at primary level.	
2.3	Myomectomy (serous,mucous)	В
	Depending on the anatomical relationship, the possibility of a disturbance in the	
	progress of the pregnancy or birth should be taken into account.	
2.4	Abnormalities in cervix cytology (diagnostics, follow-up)	Β/
	There should be differentiation according to obstetric versus gynaecological	Α
	policy. Gynaecological consultation can be indicated even without obstetric	
	consequences. Participation in national cervical cancer screenings program is not	
	provided pregnant women. The gynaecological follow-up is not an impediment	
	to obstetric care at primary level.	
2.5	DES-daughter (untreated and under supervision)	В
	There should be a differentiation according to obstetric versus gynecological	_
	policy. Gynaecological care related to the problems surrounding DES may be	
	necessary, while obstetric care can take place at primary level.	
2.6	IUD in situ	В
2.0	Status following removal of the IUD	A
2.7	Status following infertility treatment	A
2.1	In practice, the wish of the patient to be cared for at secondary level plays a	Π
	role here, even though the pregnancy and birth are otherwise normal. There is no	
	question of an increased obstetric risk.	
20	*	D
2.8	Pelvic deformities (trauma, symphysis rupture, rachitis)	В
	Consultation should take place at the start of the last trimester. It should be	
	pointed out that care at secondary level has not been shown to have any added	
0.0	value in cases of pelvic instability and symphysis pubis dysfunction.	
2.9	Female circumcision/Female genital mutilation	A/
	Circumcision as such can require extra psychosocial care. Where there are	В
	serious anatomical deformities, consultation should take place in the third	
	trimester.	1

3. Obstetric medical history

3.1	Active blood group incompatibility (Rh, Kell, Duffy, Kidd)	С
	ABO-incompatibility	B
	Pregnancy and birth can take place at primary care level in cases of ABO-	
	antagonism, but one should be on the alert for neonatal problems.	
	Consultation is indicated.	
3.2	Pregnancy induced hypertension in the previous pregnancy	Α
	Pre-eclampsia in the previous pregnancy	В
	HELLP-syndrome in the previous pregnancy	С
3.3	Habitual abortion (≥3 times)	А
	If an abortion should occur again, the need to carry out pathological study of	
	fetal material should be discussed. Genetic counselling prior to pregnancy is	
	also advised.	
3.4	Pre-term birth (<37 weeks) in a previous pregnancy	В
	If a normal pregnancy has taken place subsequent to the premature birth, then	
	a further pregnancy can be conducted at primary care level.	
3.5	Cervix insufficiency (and/or Shirodkar-procedure)	C/
I	Secondary level care during pregnancy is indicated up to 37 weeks; with a	Α
	full term pregnancy, home birth is allowed. If a subsequent pregnancy was	
	normal, then future pregnancies and deliveries can be conducted at primary	
	care level.	
3.6	Placental abruption	С
3.7	Forceps or vacuum extraction	Α/
	Evaluation of information from the obstetrical history is important.	В
	Documentation showing a case of an uncomplicated assisted birth will lead to	
	the management of the present pregnancy and birth at primary care level.	
	Consultation should take place when no documentation is available or when	
	there are signs of a complicated assisted birth.	
3.8	Caesarean section	С
3.9	Fetal growth retardation (Light for date)	С
	A birth weight of P<2.3 or obvious neonatal hypoglycemia related to fetal	
	growth retardation.	
3.10	Asphyxia	В
	Defined as an APGAR score of <7 at 5 minutes. It is important to know	
	whether a pediatrician was consulted because of asphyxia at a previous birth.	
3.11	Perinatal death	В
	Such an obstetrical history requires consultation. It is also important to know	
	whether there was a normal pregnancy following the perinatal death.	
0.10	Pregnancy and birth can then be conducted at primary care level.	
3.12	Prior child with congenital and/or hereditary disorder	В
	It is important to know the nature of the disorder and what diagnostics were	
	carried out at the time. If no disorders can currently be discerned, then further	
0.10	care can be at primary care level.	
3.13	Postpartum haemorrhage as a result of episiotomy	A
3.14	Postpartum haemorrhage as a result of cervix rupture (clinically	D
	demonstrated)	
	The assumption is that there is a chance of a recurrence; the pregnancy and	
	birth can be conducted at primary care level. The decision can be taken to	
2 1 7	allow birth to take place in the hospital.	D
3.15	Postpartum haemorrhage, other causes (>1000 cc)	D

	In view of the chance of a recurrence, although the pregnancy and birth can	
	be conducted at primary care level, the decision can be taken to allow birth to	
	take place in the hospital.	
3.16	Manual placenta removal in a previous pregnancy	D
	In view of the increased recurrence risk, the next following pregnancy and	
	birth can be cared for at primary care level, with the birth taking place in	
	hospital. When the birth following one in which the manual placenta removal	
	has taken place has had a normal course, a subsequent pregnancy and birth	
	can be cared for at primary level. When in the previous birth a placenta	
	accreta is diagnosed, obstetrical care at secondary level is indicated.	
3.17	4th degree perineal laceration (functional recovery/no functional recovery)	Α/
	If satisfactory functional recovery has been achieved following the 4th degree	С
	tear, then pregnancy and birth can be managed at primary care level. The	
	possibility of performing a primary episiotomy during birth should be	
	considered. If secondary repair surgery was necessary, then referral to	
	secondary care is indicated (similarly to that which is stated for pelvic floor	
	reconstruction). If no functional repair has been achieved following a 4th	
	degree tear, then birth should be managed at secondary care level.	
3.18	Symphysis pubis dysfunction	А
	There is no added value to managing pregnancy or birth at secondary care	
	level in cases with a symphysis pubis dysfunction in the history or with pelvic	
	instability.	
3.19	Postpartum depression	А
	There is no added value to managing pregnancy or birth at secondary care	
	level in cases with a p.p.d. in the history. Postpartum depression occurs at	
	such a time postpartum that even the puerperium can be cared for at primary	
	care level.	
3.20	Postpartum psychosis	А
	It is necessary to distinguish whether there is a case of long-term medicine	
	use. It is important to have a psychiatric evaluation of the severity of the	
	psychosis and the risk of recurrence.	
3.21	Grand multiparty	А
	Defined as parity >5. There is no added value to managing a pregnancy and	
	birth at secondary care level.	
3.22	Post-term pregnancy	Α
	Post-term pregnancy in the obstetrical history has no predictive value for the	
	course of the current pregnancy and birth.	

4. Developed/discovered during pregnancy

In this section it is the case that supervision at secondary level care is necessary in situations given the code C, as long as the problem described still exists. If it no longer exists, then the patient can be referred back to primary level care.

4.1	Uncertain duration of pregnancy by amenorrhoea >20 weeks Consultation is required when the duration of pregnancy is uncertain after 20	В
	weeks amenorrhoea. The primary care provider has access to sufficient additional diagnostic tools in the first 20 weeks.	
4.2	Anemia (Hb<6.0 mmol/l)	В
	It is important that the nature and the severity of the anemia are analysed during consultation.	
4.3	Recurrent urinary tract infections	В
	One can speak of recurrent urinary tract infection when an infection has	
	occurred more than twice. Further analysis of the infection is required. The	
	risk of renal function disorders and the risk of pre-term birth are important.	
	The course of further diagnostics can take place within the local mutual agreements made between the three professional groups.	
4.4	Pyelitis	С
	Hospital admission is required for the treatment of pyelitis, so that care will	C
	have to be at secondary level. After successful treatment of the pyelitis,	
	further care during pregnancy and birth can be at primary level.	
4.5	Toxoplasmosis, diagnostics and therapy	С
	Referral to secondary level is required both for diagnostics and for therapeutic	
4.6	policy.	~
4.6	Rubella	С
	An increased risk of fetal growth retardation, pre-term birth and visual and hearing disorders should be taken into account in a case of primary infection	
	with rubella during pregnancy.	
4.7	Cytomegalovirus	С
	An increased risk of perinatal death and subsequent morbidity should be	0
	taken into account.	
4.8	Herpes genitalis (primary infection)	С
	Herpes genitalis (recurrent)	А
	During a primary infection there is a (slight) risk of transplacental fetal	
	infection. In the first year after the primary infection, there is a higher	
	frequency of recurrences and asymptotic virus excretion. If a primary	
	infection occurs shortly before or during birth, there is an increased risk of	
	neonatal herpes. Due to the possibility of treatment with antiviral drugs,	
	referral to secondary care is indicated for primary infections. For recurrences	
	and where herpes genitalis is in the medical history, it is advisable to carry	
	out a virus culture from the oropharynx of the neonate. If there are frequent recurrences (>1/month) or where there is a recurrence during birth, referral is	
	indicated due to the increased risk of infection of the neonate. It is as yet not	
	clear whether the presence of antibodies are sufficient protection for the child.	
4.9	Parvo virus infection	С
	This infection can lead to fetal anemia and hydrops. Possibilities exist for	
	treating these problems.	
4.10	Varicella/Zoster virus infection	В

	This refers to a maternal infection. Primary infection with varicella/zoster virus (chicken pox) during the pregnancy might require treatment of the pregnant woman with VZV-immunoglobulin due to the risk of fetal varicella syndrome. If varicella occurs shortly before birth or early during the puerperium, there is a risk of neonatal infection. Treatment of the mother and child with an antiviral drug is sometimes indicated. If there is a case of manifest herpes zoster (shingles), then there is no risk of fetal varicella syndrome.	
4.11	Hepatitis B (Hbs-Ag+)	А
4.12	Hepatitis C This is an indication for referral to secondary care for consultation. Attention must be given to follow-up by the pediatrician.	В
4.13	Tuberculosis This refers to an active tuberculous process.	С
4.14	HIV-infection In connection with the present possibilities of medical therapy for preventing vertical transmission, care for these patients during pregnancy and birth should take place in a hospital/center equipped to deal with HIV and AIDS. Syphilis	C
4.13	Positive serology and treated	Α
	Positive serology and not yet treated	B
	Primary infection	C
	Attention should be paid to collaboration between the primary and secondary care providers involved during referral. It is important to ensure perfect information exchange between the midwife, the GP, the obstetrician and the venereologist. Structural agreements can be worked out in local collaboration.	C
4.16	Hernia nuclei pulposi, (slipped disk) occurring during pregnancy Policy should be determined according to complaints and clinical symptoms.	В
4.17	Where there are no complaints, (further) care can take place at primary level. Laparotomy during pregnancy As soon as wound healing has occurred and if the nature of the operation involves no further obstetric risks, care for the pregnant woman can return to primary level. During hospitalisation the obstetrician will be involved in the care. If there are no further obstetric consequences then care for the pregnant woman can return to primary level.	С
4.18	Cervix cytology PAP III or higher What is important here is that further gynaecological policy (for the purpose of subsequent diagnostics) may be necessary, while the pregnancy and birth can be conducted at primary level.	В
4.19	Medicine use	Α/
	What is obviously important here is the effect of drugs on the pregnant woman and the unborn child. Attention should also be paid to the effect on lactation and the effects in the neonatal period. In cases of doubt, consultation should take place. Note: information is available from the NIAD (030- 2971100) and from the teratology center of the RIVM (030-2742017).	В
4.20	Use of hard drugs (heroin, methadone, cocaine, XTC etc.) The severity of the addiction to hard drugs is important here and their effects during pregnancy and birth and in the puerperium, particularly for the neonate.	С
4.21	Alcohol abuse	С

	This involves the fetal alcohol syndrome. Obviously the long-term		
	involvement of the pediatrician can be necessary during follow up.		
4.22	Psychiatric disorders (neuroses/psychoses)	Α/	
	The severity of the psychiatric problems and the opinion of the physician in	С	
	charge of treatment are important.		
4.24	Hyperemesis gravidarum	С	
-	Referral to secondary care is necessary for treatment of this condition. After		
	recovery the pregnancy and birth can take place at primary care level.		
4.24	Ectopic pregnancy		
4.25	Antenatal diagnostics	С	
	Attention should be given to the presence of a risk for congenital deformities. If no deformities can be found, then further care can take place at primary		
	level. In cases of an age-related indication, direct referral from primary care		
1.20	level to a genetic center can take place.	D	
4.26	(Suspected) fetal deformities	B	
4.27	Pre-term rupture of membranes (<37 weeks amenorrhoea)	C	
4.28	Diabetes Mellitus (incl. pregnancy diabetes)	C	
4.29	Pregnancy induced hypertension	A/ C	
	This refers to hypertension (according to the ISSHP definition, see 1.16) in the second half of programmy in a province hyperbolic system.	C	
	the second half of pregnancy in a previously normotensive woman. Distinction is drawn between diastolic blood pressure up to 95 mm and blood		
	pressure starting at 95 mm. At a diastolic pressure between 90 and 95 mm, a		
	pregnant woman should receive extra care, from 95 mm upwards, she should		
	be referred to secondary level care.		
4.30	Pre-eclampsia, super-imposed pre-eclampsia, HELLP-syndrome	С	
1.50	Pre-eclampsia is a combination of pregnancy induced hypertension and proteinuria. The latter is defined by an albustix ++ in a urine sample or by a total protein excretion of 30 mg or more during a period of 24 hours. A super-	C	
	imposed pre-eclampsia exists when there is 'de novo' proteinuria during a pregnancy in a patient with pre-existing hypertension. The HELLP-syndrome is characterised by the combination of haemolysis, liver function disorder and a decrease in the number of platelets.		
4.31	Blood group incompatibility	С	
4.32	Thrombosis	С	
4.33	Coagulation disorders	С	
4.34	Recurring blood loss prior to 16 weeks	В	
4.35	Blood loss after 16 weeks	С	
	After the blood loss has stopped, care can take place at primary care level if		
	no incriminating causes were found.		
4.36	Placental abruption	С	
4.37	(Evaluation of) negative size-date discrepancy	В	
	A negative size-date discrepancy exists if the growth of the uterus remains 2		
	to 4 weeks behind the normal size for the duration of the pregnancy.		
4.38	(Evaluation of) positive size-date discrepancy	В	
4.39	Post-term pregnancy	С	
	This refers to amenorrhoea lasting longer than 294 days.		
4.40	Threat of or actual pre-term birth	В	
	As soon as there is no longer a threat of pre-term birth, care during the		
	pregnancy and birth can be continued at primary care level.		
4.41	Insufficient cervix	С	

		-
	Once the pregnancy has lasted 37 weeks, further care can take place at	
	primary care level.	
4.42	Symphysis pubis dysfunction (pelvic instability)	А
	This refers to complaints that started during the present pregnancy	
4.43	Multiple pregnancy	С
4.44	Abnormal presentation at full term (including breech presentation)	С
4.45	Failure of head to engage at full term	В
	If at full term there is a suspected cephalo-pelvic disproportion, placenta	
	praevia or comparable pathology, consultation is indicated.	
4.46	No prior prenatal care (± full term)	А
	Attention should be paid to the home situation. The lack of prenatal care can	
	suggest psychosocial problems. This can lead to further consultation and a	
	hospital delivery.	
4.47	Baby up for adoption	А
	The prospective adoption often goes hand-in-hand with psychosocial	
	problems. This can lead to further consultation and a hospital delivery.	
4.48	Dead fetus	С
	If the mother prefers to give birth at home, the care she receives should be the	
	same as if the birth were to take place in a hospital. Attention should be paid	
	to postmortem examination study and evaluation according to protocol.	
4.49	Obstetrically relevant fibroids (myoma)	В
	Depending on the anatomical proportions, the possibility of a disturbance in	
	the progress of pregnancy or birth should be taken into account.	

5. Occurring during birth

For the C-category in this section, when one of the items mentioned below occurs, an attempt should still be made to achieve an optimal condition for further intrapartum care, whilst referral to secondary care level may be urgent ,depending on the situation. When referring from the home situation, the risk of transporting the woman also needs to be included in the considerations.

5.1	Abnormal presentation of the child	В
5.0	What counts here is abnormal presentation and not abnormal position.	
5.2	Signs of fetal distress	С
	It is important that fetal distress can be expressed in various ways (fetal heart	
	rate, meconium staining in the amniotic fluid).	0
5.3	Intrapartum fetal death	С
	Attention should be paid to post-mortem examinations	~
5.4	Pre-labour rupture of membranes	С
	Referral should take place the morning after the membranes have been broken	
	for 24 hours.	
5.5	Failure to progress in the first stage of labour	В
	If the contractions are good, both regarding strength and frequency, but there	
	is no change in the cervix or progress in dilation after the latent phase for a	
	duration of 4 hours, one can speak of a failure to progress in labour.	
	Consultation is necessary to be able to determine further treatment based on	
	an analysis of the possible cause.	
5.6	Failure to progress in second stage of labour	С
	This exists where there is a lack of progress, after a maximum of one hour, in	
	cases with full dilation, ruptured membranes, strong contractions and	
	sufficient maternal effort.	
5.7	Excessive bleeding during birth	С
	The degree of bleeding during birth cannot be objectively measured, but	
	needs to be estimated. Excessive loss of blood can be a sign of a serious	
	pathology.	
5.8	Placental abruption	С
5.9	Umbilical cord prolaps	С
5.10	(Partial) retained placenta	С
	It is not always possible to be sure of the retention of part of the placenta. If	
	there is reasonable cause to doubt, then referral to secondary care should take	
	place	
5.11	Fourth degree perineal laceration	С
5.12	Meconium stained amniotic fluid	C
5.13	Fever	C
0.15	It is obviously important to find out the cause of the fever. In particular, the	C
	possibility of an intrauterine infection should be taken into account and the	
	administration of antibiotics intrapartum should be considered.	
5.14	Analgesia	В
5.14	It is important to be aware of the effects on dilatation and respiratory	
	depression. The use of painkillers during birth is a subject that can be covered	
	during local discussions with the aid of guidelines. One should attempt to	
	achieve well-founded consensus.	
5 1 5	Vulva haematoma	С
5.15		
	Treatment policy is determined according to the complaints intrapartum and	
	in the early puerperium.	

5.16	Symphyiolysis	В
	This refers to rupturing of the symphyseal rupture. It should be distinguished	
	from pelvic instability. The added value of consultation in cases of pelvic	
	instability has not been proven.	
5.17	Birth with no prior prenatal care	С
	A lack of prenatal care can be a sign of psychosocial problems and in	
	particular addiction. Intrapartum monitoring, serological screening and	
	immunisation are of utmost importance.	

6. Occurring during the puerperium

6.1	Puerperal fever	A/
	It is important to know the underlying cause. In cases of reasonable doubt,	С
	referral should be considered.	
6.2	(Threat of) eclampsia, (suspected) HELLP-syndrome	С
6.3	Thrombosis	С
6.4	Psychosis	В
	It is important to involve (non-obstetrically) the GP and the psychiatrist in	
	treating the psychiatric disorder.	
6.5	Postpartum haemorrhage	С
6.6	Hospitalisation of child	С
	It is obviously important here to involve (non-obstetrically) the GP and the	
	pediatrician. The bonding between mother and child are important in the	
	period following birth.	

6. List of indications for ultrasound scanning

Based upon the results of the Ultrasound scan Sub-group (see section 3.3.), the following indications have been determined for ultrasound examinations which can be carried out and evaluated by qualified primary level sonographers or requested by primary level care-providers without any involvement of secondary level care.

First trimester indications	Second trimester indications	Third trimester indications
Blood loss	Suspected multiple	Suspected multiple
	pregnancy	pregnancy
Uncertain gestational age	Negative fetal heartbeat	Suspected abnormal
		presentation
Suspected multiple		Negative fetal heartbeat
pregnancy		
Negative fetal heartbeat after		
12 weeks gestation		

The Obstetric Work-Group would like to make the following comment: The description of these indications for carrying out and evaluating ultrasound scans at primary care level means that all other obstetric indications will lead to ultrasound scans being carried out and evaluated at secondary care level, whilst further obstetric policy will be based upon the list of obstetric indications.

The routine use of ultrasound scanning for measuring crown-rump length (CRL) during the first trimester or a standard ultrasound or the detection of congenital abnormalities during the second trimester is not advised as yet, based upon a lack of sufficient evidence of improvement in perinatal morbidity and mortality by implementation. We recommend re-consideration, on a national level, of the final outcomes for determining the value of this form of diagnostics as well as investigation into the consequences of routine ultrasound examinations for primary level obstetric practice.

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