



European Commission Initiative on Breast Cancer (ECIBC)

GDG Monitoring and evaluation subgroup meeting

Ispra, 18 September 2017, 9:00-18:00h

Minutes

Document history			
Version	Date	Drafted by	Comments
0	19/09/2017	Nadya DIMITROVA	JRC version
1	26/10/2017	Nadya DIMITROVA	Including comments from the participants
2	27/10/2017	Nadya DIMITROVA	Approved version

Page:	1 of 18
File Plan:	Library > Joint space > Meetings > 18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

Presentations are available on CIRCABC dedicated space

List of Participants in Annex I

The Agenda is available at <http://ecibc.jrc.ec.europa.eu/-/gdg-working-meeting>.

The meeting was chaired by Mireille BROEDERS

Update on the work done after the GDG Monitoring and evaluation meeting in June 2017

At the meeting in June 2017 the GDG Monitoring and evaluation group (M&E) has decided to develop criteria for rating the screening indicators identified during the scoping review and to repeat the selection of indicators, which was done during the meeting in May 2017. To this end, a structured approach has been developed by a JRC contractor and the criteria for rating, selected at the June meeting, have been clarified and defined. A rating exercise has been prepared and its execution has been included in the agenda for this meeting.

A detailed breast cancer screening (BCS) pathway has been developed in parallel, allowing for allocation of the existing screening indicators at the corresponding steps and identifying any steps from the pathway for which indicators are missing so new ones have to be proposed. A discussion on the BCS pathway has been included in the agenda for this meeting.

Selection of screening indicators

Indicators to be included in the rating exercise

The scoping review has identified 96 indicators used in screening programmes. The list presented at the meeting in May 2017 was shorter (54 indicators), because some redundant ones were removed beforehand. However, the GDG M&E group decided to look at the whole list of 96 indicators and to identify the redundant ones in a more transparent way as part of the rating exercise. About 30% of all 96 indicators are probably out of the scope of the GDG M&E group, because they are more related to quality of care and therefore to the work of QASDG. These indicators were presented in a separate table (**Annex III**) and the experts started a discussion on each of them in order to decide either to include them in the rating exercise or not.

It was agreed to exclude all indicators presented in Annex III from the rating exercise, because they are related to quality of care. Some comments were made on the following indicators:

- Indicators 83 (T2+ cancers) – it presents an outcome of radiological review, as well as indicator 81 (Interval cancer rate) and maybe related to continuous training of radiologists.
- Indicator 67 (Microcalcification detection rate) – it is relevant to the work of radiologists and pathologists.
- Time requirements – the indicators related to time requirements will be dealt with by the QASDG. However, at least two indicators measuring the time from screening to diagnosis and from diagnosis to

Page:	2 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

treatment have to be considered by GDG M&E group, because time can have an impact on mortality and other relevant outcomes. Since none of the existing indicators on time is appropriate for this purpose, the GDG M&E group proposed two new ones: For screen-detected invasive breast cancers - time from screening to diagnosis and time from diagnosis to treatment.

Another group of 10 indicators has been identified as diagnostic indicators, more relevant to quality of care ([Annex IV](#)).

It was agreed to include all of these indicators in the rating exercise and discuss them again at a later stage, if necessary, when also a radiologist and a pathologist can contribute to the discussion.

The list of indicators was modified according to the decisions taken - the indicators which were not in the scope of the GDG M&E group were excluded and the new ones were added.

Rating exercise

Then the experts continued with the selection of indicators, using a 2-step process: 1) Eliminating any non-relevant or redundant indicators; 2) Rating remaining indicators using several selection criteria.

The selection criteria, chosen in June 2017, were re-discussed in order to agree on their definitions. Definitions of the criteria and the corresponding comments from the experts are presented in [Annex V](#).

It was decided to have a group discussion for eliminating any non-relevant or redundant indicators using the answers Yes, No or Maybe. The indicators which were non-relevant or redundant were excluded from the list, as well as those considered more relevant to the quality of care. Those indicators, which were relevant and non-redundant, or rated as "Maybe", were included in the second step of the rating process. The indicators that were eliminated after the first step were 31 ([Annex VI](#)).

Two new indicators were proposed:

- Invitation coverage – number of women invited in the given period from those eligible.
- False negative assessment after recall (substituting indicators 41 and 42, [Annex VI](#)).

The scale for rating of indicators at the second step was from 0 to 10. When rating an indicator, each selection criterion would need to have a passing score to be considered for the overall rating score of the indicator. A mean value of 4 and > was agreed to be used as the passing mark, because it was difficult to propose a cut-off value in advance without knowing the distribution of the data.

The list of 38 indicators that passed the first step was included in the second step of the rating exercise. An on-line survey was prepared and the experts, present at the meeting, received an invitation to participate in this survey.

It was decided that this would be a pilot of the second step of the rating exercise in which the participants would test the on-line survey (clarity of instructions, time for completion, technical issues) and would provide comments and suggestions for modifications, if necessary. Then, after the meeting, the whole GDG M&E group will receive an invitation to participate in the on-line survey for rating the indicators. They will be given also the opportunity to provide comments and to propose new indicators.

The pilot of the survey took about an hour and several feedback comments were received:

- It has to be clarified that Feasibility refers to "ideal" world, not to the situation in a certain country.

Page:	3 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

- A better introduction to the exercise should be prepared.
- The indicators could be rearranged in sub-categories to identify easier the redundant ones.
- The indicators should be rated for relevance also in the second step and the redundant ones should be identified as well, if any of them remained in the list after the first step of rating.
- A scale of 5 points might be easier to use.
- Biopsy indicators – to be clarified if refer to an open biopsy.
- Indicators about advanced cancer – to be discussed how to formulate them – by size, by stage.
- An indicator on overall detection rate is necessary and in addition also detection rate by stage, by subtypes or by other important prognostic factors – to be discussed when formulating definitions of indicators.
- Indicators about treatment – to be clarified that they refer to all treatments, not only to breast conserving surgery.
- Almost all indicators are good, they are already used in the practice and therefore there is no huge variability in the scores.
- Criterion Ethicality is not clear – is it related to what is legal, to data protection, informed consent or else.

The survey will be modified accordingly, considering the relevant comments, and will be repeated with the whole GDG M&E group.

Breast cancer screening pathway

A detailed breast cancer screening (BCS) pathway ([Annex VII](#)) has been developed by a JRC contractor and has been distributed for comments from the GDG M&E group prior to the meeting. A version, modified according to the feedback received, was presented for discussion. The experts suggested the following:

- the red box to be renamed as "lesion confirmed" instead of "cancer";
- the type of biopsy to be specified;
- the role of GP may be included in communication of results, but this depends on how the screening program is organised in each country;
- to add communication at the beginning of the pathway and to put a box about invitation and informed participation before screening. To add arrows for invited or not invited and then participated or not.
- to add an arrow to the green bar after biopsy;

The detailed pathway may help to identify steps for which indicators are missing. QASDG may decide to use the same pathway with allocated quality potentials (QPs). JRC to ensure the use of the same pathway for screening by GDG and QASDG.

Page:	4 of 18
File Plan:	Library > Joint space > Meetings > 18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

Analysis of association of indicators with outcomes

A provisional approach about studying the associations between screening indicators and outcomes was presented. It was clarified that for this study the information about screening indicators and mortality should be obtained for each year from the period of the study. Therefore, as a first approach, the study has to be restricted to the time slot and to the countries (or regions covered by cancer registries) for which the most detailed data are available. JRC informed the experts about the possibility to obtain data about breast cancer incidence, mortality and incidence-based mortality from the EU project "Cancer incidence and mortality in Europe" (<http://encr.eu/>). A draft request for data has been prepared and circulated for comments from the GDG M&E chapter co-editors. If more detailed information about screening indicators should be collected from existing screening programmes in selected countries, this may be facilitated by the corresponding national coordinators.

Next steps and preparation for the meeting in November 2017

The GDG M&E group will finalise the BCS pathway and the selection of screening indicators and will present the results at the meeting in November.

A methodology about studying the associations between screening indicators and outcomes will be presented and discussed.

Part of the meeting will be attended by experts from the QASDG Indicators group in order to coordinate the activities regarding screening indicators.

Action points

Task	Who is responsible	Deadline
Modify the rating exercise according to the feedback received and send it to the whole M&E group with the proper instructions for execution.	Jean-Eric Tarride and Sergei Muratov	Mid-October 2017
Summarise the results from the rating exercise and prepare the list with selected indicators	Jean-Eric Tarride and Sergei Muratov	Beginning of November 2017
Collect the information about the selected indicators, which is necessary to explore the association with outcomes	Carlos Canelo and GDG M&E group	November 2017
Finalise the data request for incidence-based mortality	GDG M&E group and JRC	November 2017
Obtain estimates for incidence-based mortality from the European Cancer Information System (ECIS), according to details described in the data request	JRC	November 2017
Develop a methodology for analysis of association of screening indicators with outcomes (e.g.	Jean-Eric Tarride and Sergei Muratov	Beginning of November 2017

Page:	5 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

incidence-based mortality)		
Analyse the association of screening indicators with outcomes (e.g. incidence-based mortality)	Carlos Canelo	November 2017
Inform the QASDG Indicators group about the outcomes of the work on screening indicators and coordinate the corresponding activities	GDG M&E group	November 2017 GDG M&E meeting

ANNEX I: Participating members of the Monitoring and evaluation subgroup: M. AUTELITANO, M. BROEDERS, X. CASTELLS, S. DUFFY, P. FITZPATRICK, P. GIORGI ROSSI, S. HOFVIND, L. NYSTROM, H: SCHUNEMANN, A. TORRESIN

Absent members of the Monitoring and evaluation subgroup:

B. BORISCH, M. FOLLMANN, L. GIORDANO, C. QUINN, A. LEBEAU, P. RABE, K. YOUNG, R. VAN ENGEN

Participating members of the QASDG Indicators subgroup: A. PONTI

Participating ECIBC contractors and JRC staff

Contractors: P. ALONSO (CCib), C. CANELO (CCib), J.E. TARRIDE (McMaster University), Sergei Muratov (McMaster University)

JRC staff: N. DIMITROVA, S. DEANDREA, D. LERDA, L. NEAMTIU, S. PAKALIN, E. PARMELLI, S. VERZILLO

ANNEX II: Presentations:

[Slides ISPRA meeting sept 18 v2.pptx](#)

[Indicator process Carlos.pptx](#)

Page:	6 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

ANNEX III: List of indicators related to quality of care

List of indicators related to quality of care				
Sub-category	Number of indicator	Name of indicator	Numerator	Denominator
Biopsy group				
Benign Biopsy Group	14	Proportion of benign diagnostic biopsies on impalpable lesions weighing less than 30 grams	n° of benign diagnostic biopsies on lesions weighting less than 30 gm	n° of diagnostic biopsies on lesions weighting less than 30 gm
Insufficient results	8	Proportion of imaging guided FNAC procedures with insufficient result	n° of insufficient results	n° of FNAC procedures
Insufficient results	9	Proportions of FNAC/core biopsy at the diagnosis of cancer subsequently proven to be malignant with an insufficient result	n° of FNAC procedures with insufficient result with a subsequent malignant diagnosis	n° of FNAC procedures with insufficient result
Insufficient results	80	Proportion of image guided core/vacuum procedure with an insufficient result	n° of insufficient results	n° of image guided core/vacuum procedure
	47	Impalpable lesions correctly identified at first open biopsy	n° of impalpable lesions correctly identified	n° of impalpable lesions
	48	Inadequate specimen rate	n° inadequate specimens	n° of procedures assessed (FNA/ NCB/ VACB)
	85	Rate of stereotactic core biopsy / breast referred for microcalcifications	n° of stereotactic core biopsy procedures performed on a breast referred by the reading radiologist for microcalcifications in which the tissue was radiographed	n° of stereotactic core biopsy procedures performed on a breast referred by the reading radiologist for microcalcifications
Breast cancer detection rate group				
Advanced cancer	83	T2+ cancers, review errors	n° of T2+ cancers with previous mammogram reviewed and defined as lecture error	N° of T2 cancers detected
Detection rate	67	Microcalcification detection rate	n° of cancers detected in the presence of microcalcification	n° of screened women
Interval cancer rate	81	Interval cancer, review errors	n° of IC with previous mammogram reviewed and defined as lecture error	n° of interval cancer

Page:	7 of 18
File Plan:	Library > Joint space > Meetings > 18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

Radiographical performance				
Acceptability of Mx	94	Proportion of women undergoing a technical repeat screening examination	n° of women with a repeat examination due to technical reasons	n° of screened women
Acceptability of Mx	95	Proportion of women with a radiographically acceptable screening examination	N° women with a radiographically acceptable screening examination	n° of screened women
Technical aspects	55	Radiation dose	mean glandular dose, which is the radiation dose measured on a 45 mm polymethylmethacrylate test phantom corresponding to a 53 mm standard breast.	
Technical aspects	86	Spatial resolution	the smallest detectable detail at a defined contrast level to a given background.	
Technical aspects	88	Target optical density	Logarithm (base 10) of the ratio between light intensity produced by a visible light source and perpendicularly incident on a film (I ₀), and light intensity transmitted by the film (I): OD = log ₁₀ (I ₀ /I)	
Technical aspects	89	Threshold contrast visibility	minimum detectable contrast for a 5-6 mm detail < 1.5%.	
Recall/referral/re-invite rate				
	66	Referral rate for invasive procedures for microcalcifications	n° of women referred for invasive procedures for microcalcifications	n° of screened women
Time requirements				
	59	Time between: assessment and issuing of results	Measured as number of days or as proportion of patients that took ≤5 days	
	60	Time between: screening mammography and result	Measured as number of days or as proportion of patients that took ≤15 days or ≤10 days	
	62	Time between result of diagnostic mammography and offered assessment	Measured as number of days or as proportion of patients that took ≤5 days	
	63	Time between result of screening mammography and offered assessment	Measured as number of days or as proportion of patients that took ≤5 days or ≤3 days	

Page:	8 of 18
File Plan:	Library > Joint space > Meetings > 18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

	64	Time between symptomatic mammography and result	Measured as number of days or as proportion of patients that took ≤ 5 days	
	58	Time from recall to assessment	n ^o of women assessed within 28 calendar days	n ^o of women recall for assessment
	77	n ^o of assessments visits to obtain a definitive diagnosis	n ^o of women with ≤ 3 visits for diagnostic assessment and results appointments	n ^o of eligible women attending assessment
	78	Receipt of screening results %(less than 2 weeks)	n ^o of adequately screened women sent results within 2 weeks	n ^o of screened women sent results
Treatment related				
	61	Time between:decision to operate and date offered for surgery	Measured as number of days or as proportion of patients that took ≤ 15 days or ≤ 10 days	
	75	Abscense of reoperation due to postoperative complications	n ^o patients not requiring surgery	n ^o of patients with complication within 30 days after breast cancer surgery
	91	Proportion of localised impalpable lesions successfully excised at the first operation	n ^o localized impalpable lesions successfully excised at the first operation	n ^o of localized impalpable lesions
	92	Proportion of patients where a repeat operation is needed after incomplete excision	n ^o of reoperations due to incomplete excision	n ^o of operations for therapeutic purposes
	93	Proportion of wires placed within 1 cm of an impalpable lesion prior to excision	n ^o of wires placed within 1 cm of an impalpable lesion	n ^o of wire placed in impalpable lesions

Page:	9 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

ANNEX IV: List of diagnostic indicators related to quality of care

List of diagnostic indicators related to quality of care				
Sub-category	Number of indicator	Name of indicator	Numerator	Denominator
Biopsy Group	10	Absolute sensitivity of core biopsy	n° of carcinomas diagnosed as such	n° of carcinomas
Biopsy Group	11	Complete sensitivity of core biopsy	n° of carcinomas that were not definitely negative or inadequate	n° of carcinomas
Biopsy Group	12	Absolute sensitivity of FNAC	n° of carcinomas diagnosed as such	n° of carcinomas
Biopsy Group	13	Complete sensitivity of FNAC	n° of carcinomas that were not definitely negative or inadequate	n° of carcinomas
Biopsy Group	46	Image guided core biopsy malignant rate	n° of primary malignant breast cancers resulted from ultrasound- or stereotactic-guided core biopsies	n° of ultrasound- or stereotactic-guided core biopsies (all core biopsies included)
Treatment related	76	Staging of the axila (patients who had axillary staging)	n° of women with invasive breast cancer with an axillary staging procedure	n° of women with invasive breast cancer
Biopsy Group	15	Proportion of patients subsequently proven to have breast cancer with a pre-operative FNAC or core biopsy at the diagnosis of cancer	n° of patients having a pre-operative FNA or core biopsy at the diagnosis of cancer.	n° of patients subsequently proven to have breast cancer
Biopsy Group	16	Proportion of patients subsequently proven to have clinically occult breast cancer with a pre-operative FNAC or core biopsy that is diagnostic for cancer	n° of patients having a pre-operative FNA or core biopsy at the diagnosis of cancer.	n° of patients subsequently proven to have clinically occult breast cancer
Breast Cancer Detection Rate Group	74	Sentinel node status	n° of patients where axillary status is determined with the sentinel node (SN) method	n° of patients where axillary status is assessed
Breast Cancer Detection Rate Group	90	Proportion of invasive screen-detected cancers < 10 mm in size for which there was no frozen section	n° of invasive screen detected cancers < 10 mm for which there was no frozen section	n° of invasive screen detected cancers < 10 mm

Page:	10 of 18
File Plan:	Library > Joint space > Meetings > 18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

ANNEX V: Definitions of criteria to be used in the rating of indicators

Definitions of criteria to be used in the rating of indicators		
Criteria	Definition	Comments
Step 1 of the rating exercise		
Redundant	Exact duplication or semantically very close to another indicator	
Relevant	An adequate indicator must have sound clinical and/or empirical rationale for its use. It represents an important aspect of breast cancer screening, gives useful information to different practice and policy stakeholders and stimulates efficient actions that may lead to quality improvement	The last part of the definition "may lead to quality improvement" is may be related to the work of QASDG, so it is important to define what it means for this exercise. It is possible to remove this part of the sentence, if not applicable in this exercise. It is not possible to think in a preliminary way what action to take.
	Combination of: Face validity: An adequate indicator must have sound clinical and/or empirical rationale for its use. It should measure an important aspect of quality that is subject to provider or health care system control. And Pertinence: An indicator represents an important aspect of breast cancer screening, gives useful information to different practice and policy stakeholders and stimulates efficient actions that may lead to quality improvement.	Face validity and Pertinence are covered in Relevance, so Relevance can be used as a criterion.
Step 2 of the rating exercise		
Measurable / Feasible (scale from 0-10)	The data required to assess the indicators must be available and easily accessible. If not, methods should exist to obtain the data in the near future.	
	COMBINED with	
	Practical feasibility: no definition was provided; was mentioned as Measurable/Feasible in the presentation	Distinguish between measurability and practical feasibility. Measurability refers to theoretical possibility to compute the indicator; practical feasibility refers to the possibility to compute the indicator in practice (needs survey to check the availability of data in each country). Keep the concept of theoretical measurability, because information for practical feasibility is not available at the moment. Explain this in the rating exercise.

Page:	11 of 18
File Plan:	Library > Joint space > Meetings > 18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

Precision (scale from 0-10)	An adequate indicator should have relatively large variation in the delivery of (sub)-processes of care to patients between services and/or between Member State that is not due to random variation or patient characteristics	
	COMBINED with	
	Minimum bias: The indicator should not be affected by systematic differences in patient case-mix, including disease severity and comorbidity. In cases where such systematic differences exist, an adequate risk adjustment system should be possible using available data.	Substitute precision with accuracy.
Ethicity (scale from 0-10)	Collection, treatment and analysis of indicator data respect individual rights of confidentiality, freedom of choice in providing data and informed consent about the nature and implications of data provided	
Understandability (scale from 0-10)	An indicator has to be simple. Its interpretation should be easy and understandable by the majority of the population, not only by experts and stakeholders.	

Page:	12 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

ANNEX VI: List of indicators eliminated after the first step of the rating exercise

List of indicators eliminated after the first step of the rating exercise					
Attendance rate					
Sub-category	Number of indicator	Name of indicator	Numerator	Denominator	Comments
	65	Cumulative examination rate	n° of participants in a given invitation round, who also participated in all previous rounds	n° of eligible women in a given invitation round, who were also eligible in all previous invitation rounds	related to coverage, depend on the invitation system, which is different in each country
	73	Retention rate	n° of screen-eligible women who had a subsequent screening mammogram within 30 months of a previous program mammogram	n° of screen-eligible women with a program mammogram in a given calendar year	
Biopsy group					
Benign Biopsy Group	4	Benign open biopsy rates (in further assessed)	n° of women found not to have invasive cancer or DICS after a open biopsy	n° of women referred to assessment	the definition is old, open biopsy is very rare, open surgery and diagnostic surgery cannot be distinguished, it is a matter of intention
Benign Biopsy Group	6	Benign to malignant open biopsy ratio	n° of women undergoing open biopsy with benign result	n° of women undergoing open biopsy with malignant result	
Benign Biopsy Group	82	Specificity of FNAC	N° of correctly identified benign lesions	N° of benign lesions	
Benign Biopsy Group	87	Specificity of core biopsy	N° of correctly identified benign	N° of benign lesions	

Page:	13 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

			lesions		
Open biopsy	7	Open biopsy rate	n° of open surgical biopsies	n° screening mammographic examinations (also as n° referred to further assessment)	
Open biopsy	68	Positive open surgical biopsy rate	n° of open surgical biopsies resulted in the diagnosis of cancer	n° screening mammographic examinations	
Preoperative Bx	84	Rate of fine-needle aspirations/core biopsy for diagnosis	Screens with a fine needle aspiration or core biopsy before any surgery in which the final result was primary malignant breast cancer	Screen with surgery in which the final result was primary malignant breast cancer	
Preoperative Bx	15	Proportion of patients subsequently proven to have breast cancer with a pre-operative FNAC or core biopsy at the diagnosis of cancer	n° of patients having a pre-operative FNA or core biopsy at the diagnosis of cancer.	n° of patients subsequently proven to have breast cancer	More related to quality of care/diagnosis. They are very much embedded in the screening process, but will be considered later, by the QASDG.
Preoperative Bx	16	Proportion of patients subsequently proven to have clinically occult breast cancer with a pre-operative FNAC or core biopsy that is diagnostic for cancer	n° of patients having a pre-operative FNA or core biopsy at the diagnosis of cancer.	n° of patients subsequently proven to have clinically occult breast cancer	
	10	Absolute sensitivity of core biopsy	n° of carcinomas diagnosed as such	n° of carcinomas	

Page:	14 of 18
File Plan:	Library > Joint space > Meetings > 18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

	11	Complete sensitivity of core biopsy	n° of carcinomas that were not definitely negative or inadequate	n° of carcinomas	
	12	Absolute sensitivity of FNAC	n° of carcinomas diagnosed as such	n° of carcinomas	
	13	Complete sensitivity of FNAC	n° of carcinomas that were not definitely negative or inadequate	n° of carcinomas	
	41	False negative rate	n° of false negative diagnoses established by each needle biopsy modality	n° of cases with final malignant outcome	Define numerator and denominator better. More related to pathology indicators. An indicator is necessary about interval cancer for those with a positive mammogram. Clarification is needed, how to compute it. The definition has to be improved: False negative assessment after recall. Indicators 41 and 42 can be substituted with this new definition.
	42	False positive (surgery)	n° false positive tests (from surgical or open biopsy)	n° of screened women(expressed as per 1000 participants)	
	1	Accuracy	n° of cases with true benign and true malignant results	n° of all cases assessed by each diagnostic modality: FNA/ NCB/ VACB	
	45	Histological confirmation	n° of cancers histologically confirmed	n° of screened women	
	46	Image guided core biopsy malignant rate	n° of primary malignant breast cancers resulted from ultrasound- or stereotactic-guided core biopsies	n° of ultrasound- or stereotactic-guided core biopsies (all core biopsies included)	

Page:	15 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

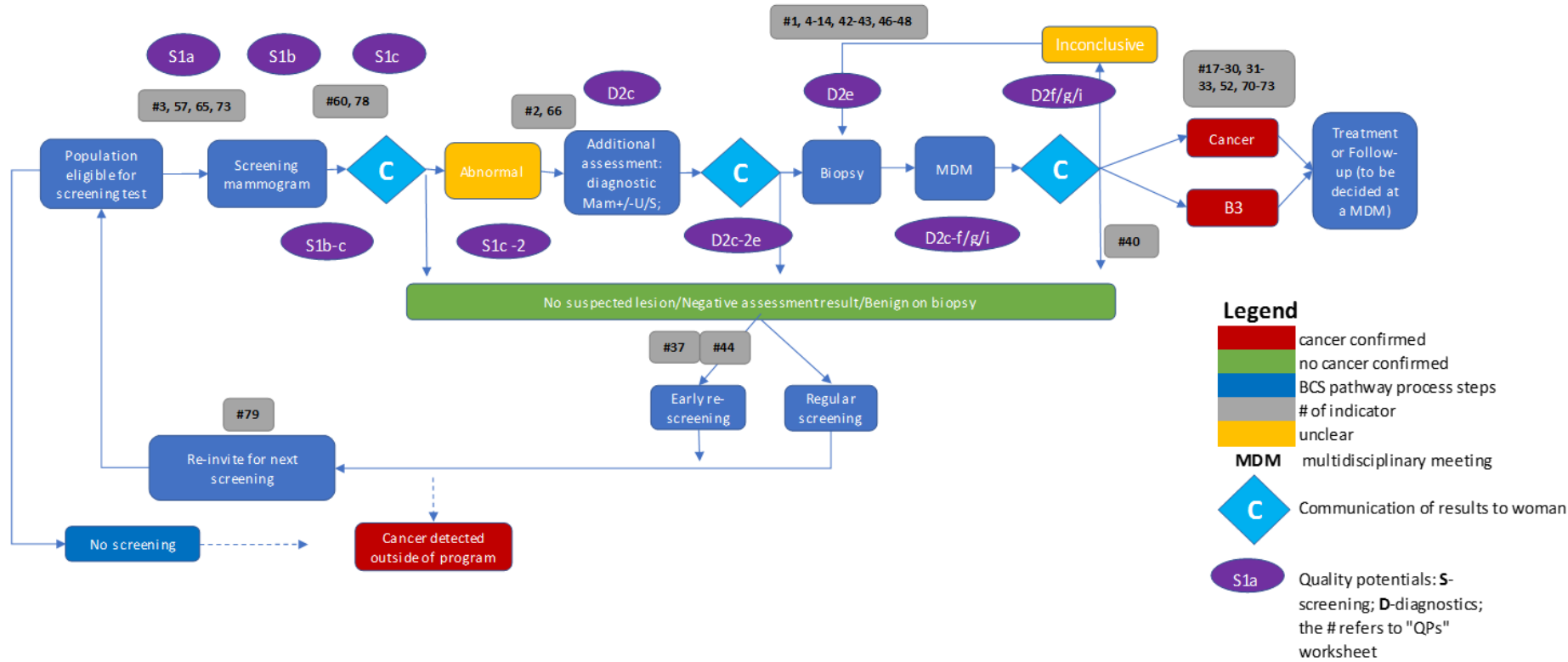
	51	Modality for final diagnosis	the modality that ultimately established the diagnosis for each lesion they assessed	FNA/ NCB/ VACB /Calculated for all cores	
Breast Cancer Detection Rate Group					
Interval cancer rate	50	Missed cancer rate	n° of missed cancers (not detected until a subsequent screening round)	n° of mammograms exams	
Invasive cancer	90	Proportion of invasive screen-detected cancers < 10 mm in size for which there was no frozen section	n° of invasive screen detected cancers < 10 mm for which there was no frozen section	n° of invasive screen detected cancers < 10 mm	
Lymph Node Status Group	74	Sentinel node status	n° of patients where axillary status is determined with the sentinel node (SN) method	n° of patients where axillary status is assessed	More related to quality of care
Non-invasive	96	Non-invasive/micro invasive cancers detected	N° of non invasive cancers	n° of micro invasive cancers	
Specificity	40	Specificity	n° of screened negative (true negative)	n° of true negative, plus the n° of false positive recalls as a result of abnormal mammograms, symptoms, and technical reasons (false positive)	
Radiographical performance group					
	54	Rate of diagnostic imaging	n° of abnormal screens referred by the screening radiologist that had either an ultrasound or special views	n° of abnormal screens referred by the screening radiologist	

Page:	16 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

			performed in assessment		
Recall/referral/re-invite rate group					
	44	Follow-up rate for microcalcifications	n° women who are recommended a one-year follow-up instead of the standard two-year screening interval);	n° of screened women	
	79	Eligible women re-invited within the specified screening interval	n° of women invited to screening within the optimal interval	n° of women invited to next screening round	
Treatment related					
	35	Breast conserving therapy	n° of women diagnosed with invasive cancer and treated with breast conserving therapy	n° of women operated on for invasive breast cancer	
	76	Staging of the axila (patients who had axillary staging)	n° of women with invasive breast cancer with an axillary staging procedure	n° of women with invasive breast cancer	

Page:	17 of 18
File Plan:	Library > Joint space > Meetings >18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0

ANNEX VII: Revised BCS pathway



Page:	18 of 18
File Plan:	Library > Joint space > Meetings > 18September2017
File Name:	ECIBC_GDG_Monitoring-evaluation_minutes_Sept18_v2.doc
Version:	0