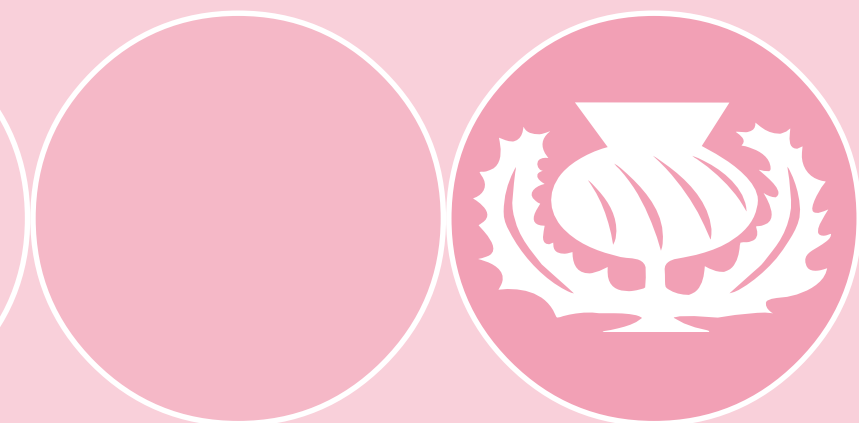


Continuing Professional Development

A manual for SIGN guideline developers



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1 Introduction

SIGN develops evidence based clinical guidelines for NHSScotland by asking multidisciplinary groups of health care professionals to undertake a systematic review and critical appraisal of published literature.

Membership of a SIGN guideline development group is a significant commitment. Over a two year period group members bring knowledge, skills and experience to the development of an evidence based clinical guideline.

Specifically, members bring:

- clinical expertise
- knowledge of the literature and of recent developments in the field
- other specialist expertise (e.g. health economics, social services)
- practical understanding of the problems faced in the delivery of care
- critical appraisal skills.

Membership of a SIGN group creates the opportunity for health professionals to contribute to their own continuing professional development (CPD).

In 2001, the Scottish Council for Postgraduate Medical and Dental Education (SCPMDE) funded SIGN to develop a multiprofessional CPD manual for SIGN guideline development group members.

This document is designed to help SIGN guideline development group members explore the educational experience of being involved in guideline development. The aim of the manual is to help guideline group members choose a method of recording their professional learning during their involvement in guideline development.

Guideline developers are not expected to complete any CPD process in one step; learning develops over time in line with the resources available and personal and professional requirements.

This manual contains practical examples of how SIGN guideline developers can build a record of their learning, but there may be other options available. SIGN recommends that members of guideline development groups seek advice from their own professional organisations because final accreditation of learning must be through these organisations (*see SIGN website for contact details www.sign.ac.uk*).

2 Benefits of CPD

Regardless of discipline, health professionals are expected to continue their learning and development throughout their careers. Health professionals have a duty to keep their knowledge and skills up to date and the public has a right to expect this.¹

Education for health professionals is entering a new era. The formation of NHS Education for Scotland (NES) on the 1st April 2002 brought together the National Board for Nursing, Midwifery and Health Visiting for Scotland (NBS), the Postqualification Education Board for Health Service Pharmacists (PQEB) and the Scottish Council for Postgraduate Medical and Dental Education (SCPMDE). In the future NES will also incorporate the Allied Health Professions. The aim of the NES is to promote best practice in the education and lifelong learning of all NHSScotland staff.²

In creating this new organisation, the Scottish Executive is providing new structures to promote and support effective education and training for NHS staff. This includes CPD, which has benefits for health professionals, patients, and the NHS as a whole (see *Box 1*).

Box 1: Benefits of CPD

Continuing professional development can help health professionals to:

- improve the quality of patient care
- enhance clinical competence
- comply with local and national standards
- contribute towards implementation of clinical governance
- contribute to career development
- maintain intellectual motivation
- meet professional reregulation requirements.

All health professionals have their own regulations and guidelines regarding the minimum requirements for CPD, managed via their statutory bodies and professional organisations. The statutory bodies and professional organisations can be contacted directly for advice on CPD (see www.sign.ac.uk).

A key to successful CPD is the ability to recognise opportunities for learning and development and to make the most of them as they arise. Membership of a SIGN guideline development group is an ideal opportunity to develop knowledge, skills and experience.

2.1 REFLECTIVE LEARNING

Reflection helps individual health professionals to assess their learning and development during the guideline development process as well as helping them to consider their future learning needs. Reflection is central to CPD. Reflection on practice is an integral component of experiential (work based) learning.³ It helps to identify learning that has taken place in past and current experience. Engaging in the process means questioning actions and underlying assumptions. Effective reflection requires commitment and time.

After a period of reflection on practice, health professionals should begin to plan their own professional development. The following stages might be helpful:⁴

1. Review your competence

What are your strengths, weaknesses and areas in need of further development?

2. Set your learning objectives

What do you want to achieve?

3. Develop an action plan

What learning activities will help you meet your needs? (For example, a literature search, a course, a clinical visit)

4. Evaluate the outcomes

Once the plan has been implemented, think about what happened and what you learned. Did you achieve your objectives? What was the value to patients? How will you share your new knowledge?

5. Record your study time and learning outcomes

Accurately record all your learning activities in your professional profile.

These stages can be used for the preparation of any form of professional development, and can be used to focus on either a clinical or non-clinical experience to help apply theory to practice. Applying it to guideline development can maximise the gain from an individual's involvement in the guideline development process and contribute to their CPD.

3 CPD and a record of learning

Building a record of learning is one way of providing evidence of CPD. The record can be built from a variety of activities (see *Box 2*) which, when combined with self assessment against a set of competencies, produce a detailed record. Building a record of learning also has recognised benefits for health professionals (see *Box 3*).

Box 2: Sources of evidence for learning and development

- self testimony, for example, reports and review of practice
- practice based documents such as records of work based projects
- observation of practice, for example, report of supervisors, colleagues, peers & patients
- annual appraisal
- critical incident analysis
- results of clinical audit
- analysis of video and/or audiotapes relating to learning outcomes and competencies
- reflection on an education or training experience in relation to practice
- assessments, for example, observation of practice; examinations (oral or written)
- assignments, for example, literature reviews, case studies and academic dissertations.

Box 3: Benefits of keeping a record of learning

- helps assess current standards of practice
- assists development of analytical skills through reflection
- enables review and evaluation of past experience to improve current practice
- provides current information to support an application for a job or course
- demonstrates experiential learning that may count as credit towards further qualifications
- may satisfy professional reregistration requirements.

To record learning over the course of SIGN guideline development, group members need to:

- identify work based learning that takes place as a result of the SIGN guideline development process
- identify learning development needs
- collate evidence from experiential learning.

4 Records of learning

There are a number of different formats that a record of learning can take. The approach chosen may depend on the recommendations or guidelines made by statutory or professional bodies. Health professionals might also be influenced by the format that they prefer. SIGN is not able to accredit personal learning. This manual contains four different examples of records of learning that you might choose to use.

All records of completed learning activity should be logged in line with the current procedures recommended by professional accrediting organisations' CPD schemes. A copy of the learning activity log can be sent, if this is a requirement of their CPD scheme.

4.1 THE CPD CHECKLIST

The CPD checklist (*see section 5*) sets out the key learning points which group members are likely to gain from their involvement in SIGN guideline development. It allows them to identify existing knowledge and areas where further development may be needed.

4.2 THE COMPETENCY MATRIX

The competency matrix (*see section 6*) contains a set of competencies that map the learning that group members might gain from taking part in the guideline development process. Each competency is accompanied by examples of the knowledge and skills required to achieve the associated competency. The aim is to provide a framework for CPD that allows group members to identify their learning needs and the subsequent learning and development that results from being involved in the SIGN process. The matrix encourages a personal assessment of ability to meet relevant competencies, identification of existing knowledge, areas for further development, the development of an action plan and a record of progress.

4.3 THE COMPUTERISED EVALUATIVE LEARNING TOOL

The Computerised Evaluative Learning Tool (CELT, *see section 7*) is a software package that allows the development of a personalised portfolio of learning using information technology. CELT was designed by the West of Scotland Postgraduate Department of General Practice to provide general practitioners (GPs) with a structured approach for recording, and therefore gaining CPD credit from, their day to day learning experiences. CELT was piloted with GPs and copies of the CD-ROM have now been distributed to over 100 GPs in Scotland. Other computerised educational tools have been developed for use by hospital physicians, surgeons and undergraduate students but they may not be directly applicable to the SIGN guideline development process.^{5,6,7}

CELT consists of four main menus that help health professionals to reflect on and summarise their learning; develop a personalised portfolio; apply learning in practice; and make changes to practice as a result of what they have learned. SIGN has collaborated with the CELT team to produce an amended version that reflects the SIGN guideline development process. Interested guideline group members should contact: Marion Howat on 0141 330 5616; email diane.kelly@scpmde.scot.nhs.uk; or visit the website: www.show.scot.nhs.uk/scpmde/ (*click on west*).

4.4 PAPER BASED CELT

SIGN has developed a paper based version of the CELT tool (*see section 8*) for those who do not have access to a computer or who do not feel confident about using the electronic version.

5 CPD Checklist

This checklist is one of a number of approaches that have been designed by a multi-professional working group to support you in obtaining CPD approval for your learning associated with SIGN guideline development work.

Name:

Job title:

Guideline development group:

Programme Manager:

Date of first guideline development group meeting:

1. Defining the remit of the guideline proposal

This is usually carried out by the group at the initial meeting and should be included in learning experience.

- Liaison with professional colleagues and SIGN Executive and SIGN Specialty subgroup lead to discuss drafting the SIGN proposal (optional)
- Gathering evidence of variation in practice, other projects of relevance to the proposal and previous related guidelines.

2. SIGN methodology

Understanding of SIGN Methodology (first meeting)*

3. Finalising remit of the guideline - learning outcomes

- Definition of the patient journey of care
- Consideration of patient issues to be addressed by the guideline
- Heightened awareness of the skills and viewpoints of other specialties.

4. Subgroup working and literature review - learning outcomes

- Attend SIGN critical appraisal course - basic*
- Attend SIGN critical appraisal course - advanced*
- Selecting papers from literature search results
- Appraising guidelines
- Appraising systematic reviews and meta-analyses
- Appraising randomised controlled trials
- Appraising observational studies
- Compiling evidence tables in consultation with colleagues in subgroup.

* These meetings are already CPD / PGEA approved therefore doctors should use the tick box as a personal record of learning.

5. Drafting the guideline - learning outcomes

- Addressing omissions / overlaps in the evidence base with guideline development group
- Completing considered judgement forms and drafting recommendations
- Drafting sections for the guideline
- Contributing to the areas for audit and research.

6. National Meeting - learning outcomes

- Delivering presentations
- Facilitating parallel sessions
- Chairing sessions

7. General

- IT skills
- Guideline editing
- Library skills, e.g. knowledge of information resources
- Organisational skills
- Communication and presentation skills
- Multidisciplinary working

8. Other (please specify)**9. Time**

Estimated number of hours of learning reflected in this checklist? _____ Hrs

N.B. The time spent on the learning should not include time spent in SIGN critical appraisal training nor the National Meeting associated with the guideline. Accreditation already exists for SIGN methodology training, critical appraisal and National Meetings.

All records of completed learning activity should be logged in line with the current procedures recommended by your professional accrediting organisation's CPD scheme (see *SIGN website for contact details* www.sign.ac.uk). Send your accrediting organisation a copy of your learning activity log if required to do so under their CPD scheme; otherwise retain a copy for your own records.

6 Competency Matrix

The following sets of competencies outline what SIGN guideline development group members might gain from the guideline development process.

6.1 CLINICAL KNOWLEDGE

Group members contribute to the clinical debate of the group in relation to their professional role through their:

- clinical expertise and knowledge
- awareness of current practice and trends
- awareness of the current evidence base.

6.2 SIGN GUIDELINE DEVELOPMENT

Group members must learn and follow the SIGN guideline development process to give them:

- knowledge of the aims of SIGN and how these link with NHSScotland policy directives
- awareness of the methodology used to produce a clinical guideline
- awareness of the process for the implementation and evaluation of a clinical guideline
- commitment to involving patients and/or their representatives in the SIGN guideline development process.

6.3 RESEARCH AND EVIDENCE

Group members should demonstrate an awareness of current research; a willingness to follow SIGN critical appraisal methodology and to contribute to the formulation of the draft guideline:

- possess and/or learn critical appraisal skills
- knowledge of research methods and of ethical and/or legal issues.

6.4 PERSONAL SKILLS

Group members can identify personal attributes that contribute to effective group processes:

- representing a professional discipline at a local or national level
- ability to work in a multidisciplinary environment
- time management skills
- ability to work as part of a team
- presentation, networking, committee, negotiation and basic IT skills (e.g. email)
- ability to work alongside patients and/or their representatives.

6.5 ORGANISATION OF HEALTHCARE SERVICES

Group members should demonstrate an ability to take account of the organisational and national context in relation to the guideline being considered, for example, though awareness of:

- directives from statutory or regulatory bodies
- national bodies supporting clinical effectiveness, patient involvement, resource implications of SIGN guidelines and social inclusion considerations.

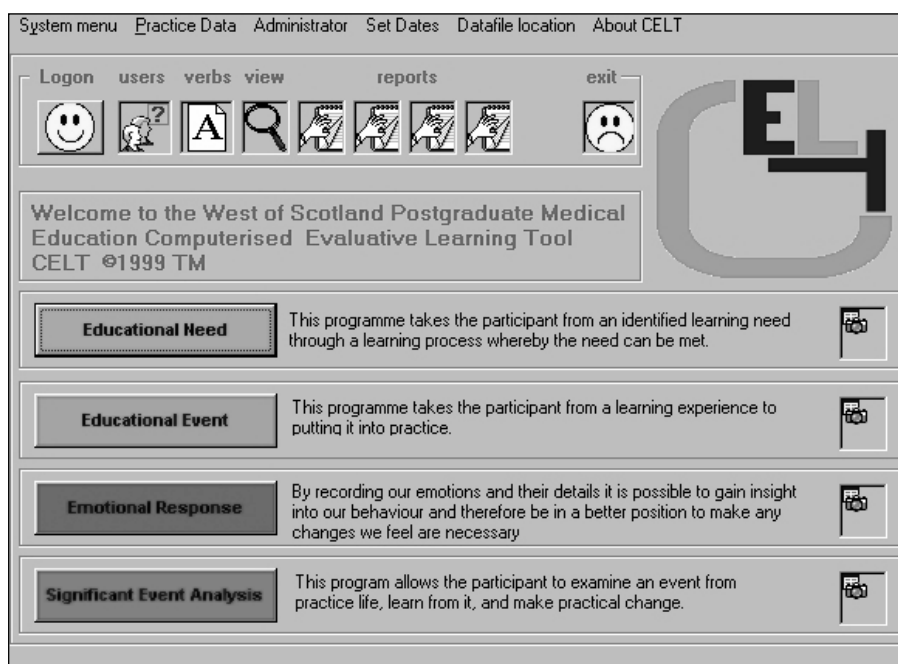
Example of a completed competency matrix for a member of a diabetes guideline development group

COMPETENCY	PERSONAL PROFILE SPECIFIC TO AREA OF CLINICAL PRACTICE	AREAS FOR FURTHER PERSONAL DEVELOPMENT	EVIDENCE OF SUPPORT SOUGHT AND THE FORM IT TOOK	IDENTIFICATION/ RECORDING OF DEVELOPMENT
Clinical knowledge relevant to the guideline being developed	I have undertaken a specialist diabetes course and run a diabetes clinic in my general practice.	Need to understand the role of specialist practitioners in acute diabetes care.	Visited the local inpatient diabetes unit and the specialist diabetes nurse to find out more about the service provided.	Dates when I visited the unit and met with the nurse are recorded. Date when completed a written summary of my learning points.*
SIGN guideline development	I have no experience of SIGN guideline development, but I have peer reviewed the SIGN leg ulcer guideline.	Need to study the SIGN guideline developer's handbook (SIGN 50) and meet with a SIGN Programme Manager.	Obtained a copy of the SIGN guideline developer's handbook (SIGN 50). Met with the diabetes guideline Programme Manager.	Recorded the dates when I read SIGN 50 & met the Programme Manager. Date when a written summary from the reading and visit was added to my record of learning.*
Research & evidence	Have successfully completed two research modules as part of my community nursing degree and I am reviewing current nursing research in diabetes as part of my degree course.	Need to acquire an understanding of critical appraisal when evaluating research for the SIGN guideline.	Attended a SIGN critical appraisal training course.	Record of training dates. Date when completed a written summary of my learning points.
Personal skills	I have some experience of group work as I am a member of my LHCC clinical effectiveness group. Have some experience of developing local guidelines.	Need help to develop my presentation skills.	Attended an in-house study day on presentation skills.	Record of attendance at presentation skills training. Copy of presentation prepared in my learning record. Date when completed written summary of learning points.
Organisation of healthcare services	Have experience of implementing SIGN guidelines at local level. Have some awareness of national diabetes policy documents.	Need to obtain more information about the framework for diabetes care and treatment in Scotland.	Searched relevant national websites. Found some new information that is relevant to this guideline.	Dates of which websites searched and when. Summary of key learning points now included in personal learning record.

* The competency matrix states when a written summary or note of learning had been produced. The actual summary would be contained within the guideline developer's personal learning record e.g. PREP folders for nurses and midwives.

All records of completed learning activity should be logged in line with the current procedures recommended by your professional accrediting organisation's CPD scheme. The accrediting organisation should be sent a copy of your learning activity log if required to do so under their CPD scheme; otherwise retain a copy for your own records.

7 Computerised Evaluative Learning Tool



7.1 AIMS AND OBJECTIVES OF CELT

The aim of CELT is to help individuals take control of their learning and link it to their work. The objectives are to enable individuals to:

- undertake learning at a time and place suitable to them
- identify learning needs from their own experience
- focus their learning
- develop reflective skills
- apply learning in practice.

7.2 THE PACKAGE

CELT is a software programme that allows individuals to develop a personalised portfolio of learning using information technology. Any combination of the four menus can be used.

7.2.1 EDUCATIONAL NEED

The user identifies a learning need. The programme guides the user through a process whereby the need can be met and where the user is encouraged to apply the learning.

7.2.2 EDUCATIONAL EVENT

The user recalls something they have learned and the programme guides the user to apply this in practice.

7.2.3 EMOTIONAL RESPONSE

The user identifies a work related emotional experience and the programme guides him/her through a process where learning can take place, and be applied to another situation.

7.2.4 SIGNIFICANT EVENT ANALYSIS

The user reviews a significant event from their working life and is guided to learn from it. The programme encourages the user to apply the learning to another situation.

7.3 ADDITIONAL FEATURES

The programme allows the user to:

- keep a record of his/her own educational activities and allows them to track and monitor them as desired
- print reports of his/her learning portfolio
- email evidence of his/her learning direct to the Department of Postgraduate Medical Education in Glasgow for PGEA accreditation and/or for a certificate to show to their accrediting body
- access a direct connection to the Internet for searching and access to information required to fulfil a learning need
- learn from day to day experience and develop a learning portfolio which is personally relevant
- set his/her own dates for task completion and allows them to monitor their progress
- search their own personalised database of learning activities.

8 Paper based CPD tool

This paper based tool is one of a number of approaches that have been designed by a multi-professional working group to support you in obtaining CPD approval for your learning associated with SIGN guideline development work.

Name:

Job title:

Guideline development group:

Programme Manager:

Date of first guideline development group meeting:

1. EDUCATIONAL NEED

--

2. HOW YOU DISCOVERED THE NEED

--

3. SPECIFIC LEARNING OBJECTIVE

--

4. ADDITIONAL LEARNING OBJECTIVE

--

5. MEETING THE OBJECTIVE

--

6. TIME SCALE FOR COMPLETION OF LEARNING OBJECTIVE

--

7. KEY LEARNING POINTS

--

8. PROPOSED NEXT STEPS

--

9. OTHER IDENTIFIED NEEDS

--

10. OTHER COMMENTS YOU WISH TO MAKE

--

11. TIME

Estimated number of hours of learning reflected in this proforma? _____ Hrs

N.B. The time spent on the learning should not include time spent in SIGN critical appraisal training nor the National Meeting associated with the guideline. Accreditation already exists for SIGN methodology training, critical appraisal and National Meetings.

All records of completed learning activity should be logged in line with the current procedures recommended by your professional accrediting organisation's CPD scheme (see SIGN website for contact details www.sign.ac.uk). Send your accrediting organisation a copy of your learning activity log if required to do so under their CPD scheme; otherwise retain a copy for your own records.

8.1 ACCOMPANYING NOTES

8.1.1 EDUCATIONAL NEED

This section asks you to describe your educational need in the form of a specific question. An educational need is a gap between your current and desired levels of knowledge or skill. Some needs you will be aware of and some you will not. The following are often used to help identify learning needs:

- a significant event
- audit results
- new information or proposals for care (e.g. a guideline, circular, consultant letter)
- feedback from colleagues.

In relation to SIGN guideline development group membership, there are many examples of events that might help you identify a learning need.

Example: You are happy with the concept of critically appraising papers until they arrive on your desk. You have a go but are not confident identifying study type, let alone its methodological quality.

Having found an area you need to learn about, you should try to be very specific about what it is you need to learn. You should turn your area of need into a question (or questions) to be answered to make it easier to work out what you need to do.

Example: How do I critically appraise a randomised controlled trial (RCT)?

8.1.2 HOW YOU DISCOVERED THE NEED

This section asks you to briefly explain how you know that you have the need stated in the previous screen. What event took place that allowed you to discover this? For example:

Example: Papers from SIGN arrived in the post. I tried to appraise some papers and realised that I did not feel confident. I wasn't even sure which type of papers I was reviewing.

8.1.3 SPECIFIC LEARNING OBJECTIVE

This section asks you to be specific about what it is that you wish to learn.

Example: To be able to critically appraise an RCT.

8.1.4 ADDITIONAL LEARNING OBJECTIVE

Example: I would like to learn about confidence intervals.

8.1.5 MEETING THE OBJECTIVE

This section asks you to describe how you will tackle the learning objective you have set yourself.

Example: I will attend a SIGN Critical Appraisal skills course and then practice reviewing RCTs within one week of completing the course. I shall discuss my appraisals with another member of my subgroup and contact the SIGN information team if I have difficulty.

8.1.6 TIME SCALE FOR COMPLETION OF LEARNING OBJECTIVE

Here you are asked to indicate how long it will take to complete what you have planned.

Example: A SIGN Critical Appraisal skills course is being held next month so I should have completed my first learning objective within two months.

8.1.7 KEY LEARNING POINTS

Here you are asked to list at least three key points that you have learnt.

Example: I have learnt that when reviewing an RCT it is important to consider:

- The numbers involved in the study (sample sizes)
- The randomisation and blinding processes used (if any)
- How well the researchers attempted to reduce levels of bias in the study
- In addition, I now understand confidence intervals.

8.1.8 PROPOSED NEXT STEPS

This section asks you to describe what you will do next to be able to demonstrate your learning to date.

Example: I have critically appraised six RCTs in relation to a key question. I found that three of the six studies had poor descriptions of the randomisation process and two of them randomised the patients by alternating between one group and another. These studies were given low quality ratings. I decided that only one of the studies was high quality methodologically and I rated it as 1+. I will complete an evidence table on behalf of my subgroup and will meet with them to discuss the quality ratings of the studies. If we do not agree on the quality ratings then I may decide that I need further practice in reviewing papers.

8.1.9 OTHER IDENTIFIED NEEDS

This section asks you to list any other learning needs that you have identified (most probably they are related to the previous one).

Example: I would like to learn to appraise observational and qualitative studies.

9 Development of the manual

9.1 INTRODUCTION

SIGN is a collaborative network of health professionals, funded by the Scottish Executive Health Department. This document was produced by a multidisciplinary group of health professionals using a grant from the SCPMDE.

9.2 THE DEVELOPMENT GROUP

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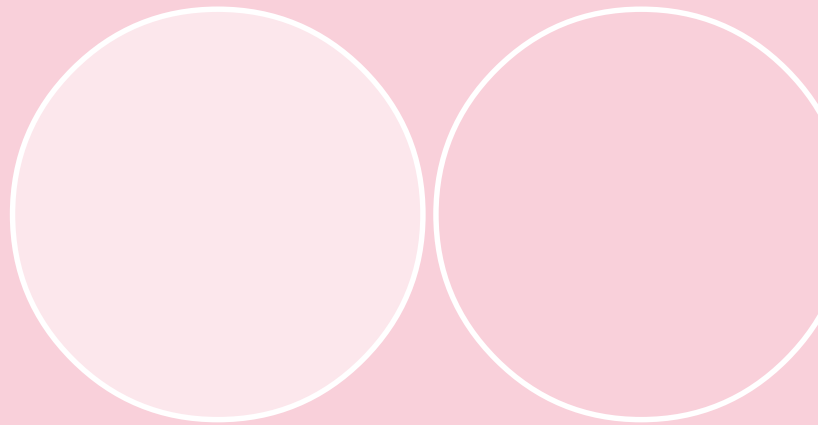
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SIGN is very grateful to the following experts for their comments on the draft manual:

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