GUIDELINES FOR THE IMPLEMENTATION OF COLLABORATIVE PRESCRIBING SERVICES

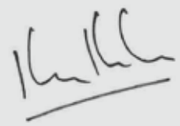
MINISTRY OF HEALTH
SINGAPORE

FOREWORD

I'm pleased to present the updated version of the Collaborative Prescribing Guidelines 2021. Collaborative Prescribing by Advanced Practice Nurses and senior Pharmacists was introduced in our acute hospitals in 2018, as part of the Ministry of Health's efforts to improve healthcare access to our patients. The 2021 Guidelines represent our ongoing efforts to extend the convenience and benefits of collaborative prescribing beyond acute hospitals, to include patients seeking care in the community and at home.

Practitioners face unique situations when they serve our patients outside the familiar and convenient environment of a healthcare institution. We were very fortunate to have gathered a respected, and well-represented expert team of community and home care doctors, nurses and pharmacists, who generously volunteered their time, expertise and experiences to expand the existing Guidelines. The team studied and considered the various unique patient-care situations, and the supporting non patient-care processes across different service models before drawing up the new guidance. On behalf of the Ministry of Health and the Collaborative Prescribing Standing Committee, I'd like to express my appreciation and thanks to all members of the Collaborative Prescribing Community Sub-Committee for their contributions, and to Dr Angel Lee and Ms Sylvia Lee for their leadership.

We hope Practitioners who are serving our patients in the community and at home, will find the 2021 Guidelines useful as you expand your practice to include collaborative prescribing. We also look forward to receive your feedback on how we can improve these Guidelines. For Practitioners, who are still considering whether to embark on this journey, I encourage you to use the 2021 Guidelines in your discussion with your supervisor and management. Thank you.



Prof Kenneth Kwek
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Chairperson of Collaborative Prescribing Standing Committee

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1 Assessing patient

Competencies

A) History taking
B) Data interpretation
C) Diagnostic formulation
D) Physical Examination
J) Documentation

Knowledge, Skills, Ability

1.1 Ability to access, consolidate and interpret all available and relevant patient records.

1.2 Ability to interview patient/caregiver to obtain an appropriate clinical, psychosocial, functional and medication history including over the counter/ traditional medicines, online medicines and drug allergies.

1.3 Ability to perform relevant physical examinations, where appropriate.

1.4 Ability to request and interpret relevant investigations necessary to inform treatment options.

1.5 Ability to make, confirm and document the working or final diagnosis by systematically considering the various possibilities (differential diagnosis).

1.6 Knowledge of the condition(s) being treated, their natural progression and possible symptom burden.

1.7 Ability to assess their severity, deterioration and anticipated response to treatment.

1.8 Ability to review adherence to and safety and efficacy of current treatment plan.

1.9 Ability to collaborate and consult with another member of the team, a specialist or a prescribing information source when necessary

2 Considering treatment option

Competencies

E) Clinical decision making
F) Applied therapeutics
G) Physical and Psychosocial aspects of prescribing

Knowledge, Skills, Ability

2.1 Knowledge of non-pharmacological and pharmacological treatment options.

2.2 Ability to choose the most appropriate treatment options and if medication is needed, choose the most appropriate based on safety, efficacy and cost effectiveness and prescribe doses adjusted according to disease and clinical conditions, including dose optimisation.

2.3 Ability to stop treatment (de-prescribing), if there is no indication.

2.4 Ability to assess the risks and benefits to the patient of taking or not taking a medicine or treatment.

2.5 Knowledge and ability to apply understanding of the pharmacodynamics and pharmacokinetics of medication being prescribed and how these may be altered (e.g. by genetics, age, renal impairment, pregnancy).

2.6 Ability to assess how co-morbidities, existing medication, allergies, contraindications and quality of life impact on management options.

2.7 Ability to take into account relevant physical (e.g. Effect of ability to swallow on the potential impact on route of administration and dosage form of medicines) and psychosocial factors (e.g. emotion, religion, affordability) and how each of these factors could impact the treatment options.

2.8 Ability to identify, access, and use reliable and validated sources of information and critically evaluate other information.

2.9 Knowledge and ability to stay up-to-date in own area of practice and apply the principles of evidence-based practice, including clinical and cost-effectiveness.

2.10 Ability to take into account the wider perspective including the public health issues related to medicines and their use and promoting health.

2.11 Knowledge of the antimicrobial resistance and the roles of infection prevention, control and antimicrobial stewardship measures.

3 Reaching a shared decision
(with patient/caregiver)

Competencies

G) Physical and Psychosocial aspects of prescribing
I) Therapeutic communication
J) Documentation

Knowledge, Skills, Ability

3.1 Ability to build rapport with patient and/or caregivers.

3.2 Ability to identify and respect the patient and/or caregivers in relation to diversity in values, beliefs and expectations about their health and treatment with medicines. (e.g. Discussions to start opioid and address any misbelief/misconception regarding opioids, and recognise/acknowledge individual's resistance towards morphine and explore alternative opioids).

3.3 Ability to explain the rationale behind and the potential risks and benefits of management options in a way the patient and/or caregiver understands, including discontinuing treatment.

3.4 Ability to work with the patient and/or caregiver in partnership to make informed choices, agreeing on a treatment plan that respects patient preferences including financial constraint, their right to refuse or limit treatment.

3.5 Ability to routinely assess adherence in a non-judgemental way and understand the different reasons for non-adherence (intentional or non-intentional) and how best to support patients/ caregivers.

3.6 Ability to explore the patient/caregivers understanding and expectations of a consultation and aim for a satisfactory outcome for the patient/caregiver and prescriber.

3.7 Ability to develop, finalise, implement and document the treatment plan.

4 Prescribing

Competencies

E) Clinical decision making
F) Applied therapeutics
G) Physical and Psychosocial aspects of prescribing
H) Collaboration with the multi-disciplinary team

Knowledge, Skills, Ability

4.1 Ability to prescribe a medicine safely with knowledge of its mechanism of action, indications, dose, contraindications, interactions, toxicity (e.g. opioid toxicity) and adverse effects.

4.2 Knowledge of the potential for adverse effects and ability to take steps to avoid/minimise, monitor and manage them.

4.3 Ability to ensure no omission of medicine resulting in any untreated indication.

4.4 Ability to ensure medicines without indications are discontinued.

4.5 Ability to prescribe within relevant frameworks for appropriate medicine use (e.g. local formularies, care pathways, protocols and guidelines).

4.6 Ability to prescribe generic medicines for cost effectiveness and when medicines with narrow therapeutic index should be prescribed by specific brands.

4.7 Knowledge of relevant national frameworks for medicines use and ability to apply them to own prescribing practice.

4.8 Ability to accurately complete and routinely check calculations relevant to prescribing and practical dosing.

4.9 Ability to consider the potential for misuse of medicines.

4.10 Ability to use up-to-date information about prescribed medicines (e.g. availability, pack sizes, storage conditions, excipients, costs).

4.11 Ability to electronically generate or write legible unambiguous and complete prescriptions which meet legal requirements.

4.12 Ability to effectively use the systems necessary to prescribe medicines (e.g. medicine charts, electronic prescribing, decision support).

4.13 Ability to make accurate, legible and timely records and clinical notes of prescribing decisions.

4.14 Ability to communicate information about medicines and what they are being used for when sharing or transferring prescribing responsibilities/information.

Competency Framework for Collaborative Prescriber

5 Providing patient education

Competencies

I) Therapeutic communication

Knowledge, Skills, Ability

5.1 Ability to establish the patient/caregiver's understanding of and commitment to the patient's clinical management, monitoring and follow-up.

5.2 Ability to give the patient/caregiver clear, understandable and accessible medication information (e.g. what it is for, how to use it, possible unwanted effects and how to manage and/or report them, expected duration of treatment).

5.3 Ability to guide patients/caregivers on how to identify reliable sources of information about their medicines and treatments.

5.4 Ability to ensure that the patient/caregiver knows what to do if there are any concerns about the management of their condition, if the condition deteriorates or if there is no improvement in a specific time frame.

5.5 Ability to, when possible, encourage and support patients/caregivers to take responsibility for their medicines and self-manage their conditions.

6 Monitoring and reviewing

Competencies

A) History taking
B) Data interpretation
E) Clinical decision making
J) Documentation

Knowledge, Skills, Ability

6.1 Ability to establish, document and maintain a plan for reviewing the patient's treatment.

6.2 Ability to ensure that the effectiveness of treatment and potential unwanted effects are monitored.

6.3 Ability to detect and report suspected adverse drug reactions using appropriate reporting systems.

6.4 Ability to review and adjust the management plan in response to patient's clinical progress and patient's preferences.

6.5 Ability to recommend an appropriate duration for next monitoring and review.

Consultations
Technical competencies

A) History taking

Key tasks	Knowledge, Skills, Ability
1. Accessing patient	**1.2** Ability to interview patient/caregiver to obtain an appropriate clinical, psychosocial, functional and medication history including over the counter/ traditional medicines, online medicines and drug allergies. **1.8** Ability to review adherence to and safety and efficacy of current treatment plan.
6. Monitoring and reviewing	**6.2** Ability to ensure that the effectiveness of treatment and potential unwanted effects are monitored.

B) Data interpretation

Key tasks	Knowledge, Skills, Ability
1. Accessing patient	**1.1** Ability to access, consolidate and interpret all available and relevant patient records. **1.4** Ability to request and interpret relevant investigations necessary to inform treatment options.
6. Monitoring and reviewing	**6.3** Ability to detect and report suspected adverse drug reactions using appropriate reporting systems.

C) Diagnostic formulation

Key tasks	Knowledge, Skills, Ability
1. Accessing patient	**1.5** Ability to make, confirm and document, the working or final diagnosis by systematically considering the various possibilities (differential diagnosis).

Consultations
Technical competencies

D) Physical Examination

Key tasks	Knowledge, Skills, Ability
1. Accessing patient	**1.3** Ability to perform relevant physical examinations, where appropriate. **1.6** Knowledge of the condition(s) being treated, their natural progression and possible symptom burden. **1.7** Ability to assess their severity, deterioration and anticipated response to treatment.

E) Clinical decision making

Key tasks	Knowledge, Skills, Ability
1. Accessing patient	**1.7** Ability to assess their severity, deterioration and anticipated response to treatment.
2. Considering treatment option	**2.4** Ability to assess the risks and benefits to the patient of taking or not taking a medicine or treatment. **2.6** Ability to assess how co-morbidities, existing medication, allergies, contraindications and quality of life impact on management options. **2.8** Ability to identify, access, and use reliable and validated sources of information and critically evaluate other information. **2.9** Knowledge and ability to stay up-to-date in own area of practice and apply the principles of evidence-based practice, including clinical and cost-effectiveness.
4. Prescribing	**4.5** Ability to prescribe within relevant frameworks for appropriate medicine use (e.g. local formularies, care pathways, protocols and guidelines). **4.7** Knowledge of relevant national frameworks for medicines use and ability to apply them to own prescribing practice. **4.9** Ability to consider the potential for misuse of medicines.

Competency Framework for Collaborative Prescriber

Consultations
Technical competencies

E) Clinical decision making (continued)

Key tasks	Knowledge, Skills, Ability
6. Monitoring and reviewing	**6.1** Ability to establish, document, and maintain a plan for reviewing the patient's treatment. **6.4** Ability to review and adjust the management plan in response to patient's clinical progress and patient's preferences. **6.5** Ability to recommend an appropriate duration for next monitoring and review.

F) Applied therapeutics

Key tasks	Knowledge, Skills, Ability
1. Accessing patient	**1.6** Knowledge of the condition(s) being treated and their natural progression and possible symptom burden.
2. Considering treatment option	**2.1** Knowledge of non-pharmacological and pharmacological treatment. **2.2** Ability to choose the most appropriate medication and prescribe doses adjusted according to their disease and clinical conditions, and consider all pharmacological treatment options including optimising doses as well as stopping treatment (appropriate polypharmacy, de-prescribing). **2.4** Knowledge and ability to apply understanding of the pharmacodynamics mode of action and pharmacokinetics of medicines and how these may be altered (e.g. by genetics, age, renal impairment, pregnancy). **2.11** Knowledge of the antimicrobial resistance and the roles of infection prevention, control and antimicrobial stewardship measures.

Consultations
Technical competencies

F) Applied therapeutics (continued)

Key tasks	Knowledge, Skills, Ability
4. Prescribing	**4.1** Ability to prescribe a medicine safely with knowledge of its mechanism of action, indications, dose, contraindications, interactions, toxicity (e.g. opioid toxicity) and adverse effects. **4.2** Knowledge of the potential for adverse effects and ability to take steps to avoid/minimise, recognise and manage them. **4.6** Ability to prescribe generic medicines for cost effectiveness and when medicines with narrow therapeutic index should be prescribed by specific brands. **4.8** Ability to accurately complete and routinely check calculations relevant to prescribing and practical dosing. **4.10** Ability to use up-to-date information about prescribed medicines (e.g. availability, pack sizes, storage conditions, excipients, costs).

G) Physical and Psychosocial aspects of prescribing

Key tasks	Knowledge, Skills, Ability
2. Considering treatment option	**2.7** Ability to take into account relevant physical (e.g. Effect of ability to swallow on the potential impact on route of administration and dosage form of medicines) and psychosocial factors (e.g. emotion, religion, affordability) and how each of these factors could impact the treatment options. **2.10** Ability to take into account the wider perspective including the public health issues related to medicines and their use and promoting health.
3. Reaching a shared decision	**3.2** Ability to identify and respect the patient/caregivers in relation to diversity, values, beliefs and expectations about their health and treatment with medicines. (e.g. Discussions to start opioid and address any misbelief/misconception regarding opioids, and recognise/acknowledge individual's resistance towards morphine and explore alternative opioids). **3.5** Ability to routinely assess adherence in a non-judgemental way and understand the different reasons non-adherence can occur (intentional or non-intentional) and how best to support patients/caregivers.

Consultations
Technical competencies

H) Collaboration with the multi-disciplinary team

Key tasks	Knowledge, Skills, Ability
1. Accessing patient	**1.9** Ability to collaborate and consult with another member of the team, a specialist or a prescribing information source when necessary.
4. Prescribing	**4.14** Ability to communicate information about medicines and what they are being used for when sharing or transferring prescribing responsibilities/information.

I) Therapeutic communication

Key tasks	Knowledge, Skills, Ability
3. Reaching a shared decision	**3.1** Ability to build rapport with patient and caregivers. **3.3** Ability to explain the rationale behind and the potential risks and benefits of management options in a way the patient/caregiver understands, including discontinuing treatment. **3.4** Ability to work with the patient/caregiver in partnership to make informed choices, agreeing on a treatment plan that respects patient preferences including their right to refuse or limit treatment. **3.6** Ability to explore the patient/caregivers understanding and expectations of a consultation and aim for a satisfactory outcome for the patient/caregiver and prescriber.
5. Providing patient education	**5.1** Ability to establish the patient/caregiver's understanding of and commitment to the patient's management, monitoring and follow-up **5.2** Ability to give the patient/caregiver clear, understandable and accessible information about their medicines (e.g. what it is for, how to use it, possible unwanted effects and how to report them, expected duration of treatment). **5.3** Ability to guide patients/caregivers on how to identify reliable sources of information about their medicines and treatments. their conditions.

Consultations
Technical competencies

I) Therapeutic communication (continued)

Key tasks	Knowledge, Skills, Ability
5. Providing patient education (continued)	**5.4** Ability to ensure that the patient/caregiver knows what to do if there are any concerns about the management of their condition, if the condition deteriorates or if there is no improvement in a specific time frame. **5.5** Ability to, when possible, encourage and support patients/caregivers to take responsibility for their medicines and self-manage

J) Documentation

Key tasks	Knowledge, Skills, Ability
3. Reaching a shared decision	**3.7** Ability to develop, finalise, document and implement the treatment plan.
4. Prescribing	**4.11** Ability to electronically generate or write legible unambiguous and complete prescriptions which meet legal requirements. **4.12** Ability to effectively use the systems necessary to prescribe medicines (e.g. medicine charts, electronic prescribing, decision support). **4.13** Ability to make accurate legible and contemporaneous records and clinical notes of prescribing decisions.

Competency Framework for Collaborative Prescriber

Collaborative Prescriber
Prescribing Governance

Job Description
Collaborative Prescriber

Critical Work Function
Prescribing Governance

Key tasks
1) Prescribing safely
2) Prescribing professionally
3) Improving good prescribing practice
4) Prescribing as part of a team

Technical Skills & Competencies
A) Inter-professional collaboration
B) Prescribing systems
C) Professional and ethical considerations of prescribing

1 Prescribing safely

Competencies

B) Prescribing systems
C) Professional and ethical considerations of prescribing

Knowledge, Skills, Ability and Attitude

1.1 Ability to prescribe within own scope of practice and recognise the limits of own knowledge and skill.

1.2 Knowledge of the common types and causes of medication errors and ability to prevent, avoid and detect them.

1.3 Ability to identify the potential risks associated with prescribing via remote media (telephone, email or through a third party) and takes steps to minimise them.

1.4 Ability to minimise risks to patients by using or developing processes that support safe prescribing particularly in areas of high risk (e.g. transfer of information about medicines, prescribing of repeat medicines).

1.5 Knowledge and ability to keep up to date with emerging safety concerns related to prescribing.

1.6 Ability to report prescribing errors, near misses and critical incidents, and review practice to prevent recurrence.

2 Prescribe professionally

Competencies

B) Prescribing systems
C) Professional and ethical considerations of prescribing

Knowledge, Skills, Ability and Attitude

2.1 Ability to ensure confidence and competence to prescribe are maintained.

2.2 Accepts personal responsibility for prescribing and understands the legal and ethical implications.

2.3 Knowledge and ability to work within legal and regulatory frameworks affecting prescribing practice (e.g. regulators guidance, supplementary prescribing).

2.4 Ability to make prescribing decisions based on the needs of patients and not the prescriber's personal considerations.

2.5 Ability to recognise and deal with factors that might unduly influence prescribing (e.g. pharmaceutical industry, media, patient, colleagues).

3 Improve prescribing practice

Competencies

B) Prescribing systems
C) Professional and ethical considerations of prescribing

Knowledge, Skills, Ability and Attitude

3.1 Ability to reflect on own and others prescribing practice, and acts upon feedback and discussion.

3.2 Ability to act upon (whistle blow) colleagues' inappropriate or unsafe prescribing practice using appropriate mechanisms.

3.3 Knowledge of the available tools and using them to improve prescribing (e.g. patient and peer review feedback, prescribing data analysis and audit).

4 Prescribe as part of a team

Competencies

A) Inter-Professional Collaboration

Knowledge, Skills, Ability and Attitude

4.1 Ability to act as part of a multidisciplinary team to ensure that continuity of care across care settings is developed and not compromised.

4.2 Ability to establish rapport with other professionals based on understanding, trust and respect for each other's roles in relation to prescribing.

4.3 Ability to negotiate the appropriate level of support and supervision for role as a prescriber.

4.4 Ability to provide support and advice to other prescribers or those involved in administration of medicines where appropriate.

Prescribing Governance
Technical competencies

A) Inter-Professional collaboration

Key tasks	Knowledge, Skills, Ability
4. Prescribing as part of a team	**4.1** Ability to act as part of a multidisciplinary team to ensure that continuity of care across care settings is developed and not compromised. **4.2** Ability to establish rapport with other professionals based on understanding, trust and respect for each other's roles in relation to prescribing. **4.3** Ability to negotiate the appropriate level of support and supervision for role as a prescriber. **4.4** Ability to provide support and advice to other prescribers or those involved in administration of medicines where appropriate.

B) Prescribing systems

Key tasks	Knowledge, Skills, Ability
1. Prescribing safely	**1.2** Knowledge of the common types and causes of medication errors and ability to prevent, avoid and detect them. **1.4** Ability to minimise risks to patients by using or developing processes that support safe prescribing particularly in areas of high risk (e.g. transfer of information about medicines, prescribing of repeat medicines). **1.6** Ability to report prescribing errors, near misses and critical incidents, and review practice to prevent recurrence.
2. Prescribing professionally	**2.3** Knowledge and ability to work within legal and regulatory frameworks affecting prescribing practice (e.g. regulators guidance, supplementary prescribing).
3. Improving good prescribing practice	**3.3** Knowledge of the available tools and using them to improve prescribing (e.g. patient and peer review feedback, prescribing data analysis and audit).

Prescribing Governance
Technical competencies

C) Professional and ethical considerations of prescribing

Key tasks	Knowledge, Skills, Ability
1. Prescribing safely	**1.1** Ability to prescribe within own scope of practice and recognise the limits of own knowledge and skill. **1.5** Knowledge and ability to keep up to date with emerging safety concerns related to prescribing.
2. Prescribing professionally	**2.1** Ability to ensure confidence and competence to prescribe are maintained. **2.2** Accepts personal responsibility for prescribing and understands the legal and ethical implications. **2.4** Ability to make prescribing decisions based on the needs of patients and not the prescriber's personal considerations. **2.5** Ability to recognise and deal with factors that might unduly influence prescribing (e.g. pharmaceutical industry, media, patient, colleagues).
3. Improving good prescribing practice	**3.1** Ability to reflect on own and others prescribing practice, and acts upon feedback and discussion. **3.2** Ability to act upon (whistle blow) colleagues' inappropriate or unsafe prescribing practice using appropriate mechanisms.

Good Prescribing Practice Guidelines

Introduction

Overarching Practice Statements

The Collaborative Prescribing ("CP") Practitioner is responsible for the care of the patient and should have knowledge and access to patient's most updated clinical records.

The CP practitioner should:

a. Establish the patient's clinical history, latest investigations and concurrent use of medications.

b. Assess the patient's clinical condition(s).

c. Apply appropriate clinical reasoning to identify the most appropriate treatment options (i.e. pharmacological and non-pharmacological) in partnership with the patient and/or caregiver.

d. Explain and ensure that patient/caregiver understands the treatment plan.

e. Document the treatment plan clearly, accurately, and legibly in a timely manner.

f. Communicate with the patient's physician and/or the multidisciplinary team involved in patient's care whenever necessary.

Accountability and Responsibility of Prescribers

The CP practitioner is professionally accountable for his/her prescribing decisions, including initiation, titration and discontinuation of medications.

The CP practitioner should avoid playing the role of the prescriber, dispenser and administrator concurrently.

The CP practitioner should remain up-to-date with the knowledge and skills required for safe prescribing practice.

Guidelines for Communication and Clinical Documentation

Communicating with patients and family members and caregivers

Appropriate education and provision of information to patients about their medications is essential to ensure safe and effective medication use. CP practitioners should inform patients about their treatment options, indications, risks that include potential adverse effects, and complications; and responsibilities towards an agreed medication management plan.

CP practitioners should:

a. Provide information on prescribed medicines to patients and caregivers as part of the clinical consultation with documentation of this counseling in the patients' record. Where necessary, printed medication information can be given to patients to enhance understanding.

b. Provide communication channel for patients and/or caregivers to clarify any doubts or concerns; and to report any side effects, so that early medical attention can be sought.

Good recording practice

All consults with CP practitioners must be documented either on electronic or handwritten case logs.

a. Electronic case log entries should not be altered, and changes in clinical decisions and prescriptions should be clearly documented as addendums.

b. Handwritten case log entries should be legible and made in ink. Any amendments made should be crossed out with a single line, initialled, dated and time-stamped.

Recording specifications

The documentation should include pertinent discussions with the patient and CP practitioner, and should include the following when necessary:

a. Date and time of consult.

b. Identifying information, including that of the member documenting the patient contact.

c. Patient presenting symptoms or concerns (e.g. medication assessment, pharmaceutical opinion, follow-up, etc.).

d. Patient history summary and care plan if developed. (The record should acknowledge whether a care plan was available. If a care plan is part of the patient record it should be acknowledged in the documentation).

e. Documentation of patient's voluntary and informed or implied consent, or that of their substitute decision maker, if any.

f. Information provided to or received from other caregivers.

g. Collaboration undertaken with other caregivers, including outcomes, and/or proposed courses of action.

h. Assessments, interventions, and recommendations where professional judgment was exercised along with the evidence on which the recommendations are based; and

i. A follow-up plan that is sufficiently detailed to monitor the patient's progress and ensure continuity of care by the CP practitioner, and other regulated health professionals or caregivers, if applicable.

Guidelines for CP Prescriptions

Good prescribing practice

All CP Practitioners must have sufficient knowledge of the medications they prescribe; if in doubt, they should check with a senior medical practitioner, senior pharmacist or check with drug references.

CP practitioners must not provide care to themselves or those close to them where this involves controlled drugs and drugs with significant potential for dependence or psychiatric care.

The CP Practitioner should indicate the following on an CP prescription:

a. Patient identification
The patient's name, address and identification number should be included on the prescription.

b. CP practitioner identification
The CP Practitioner's name, employment address and nurse/pharmacist registration number.

c. Date and time of the prescription
The CP prescription should not be back-dated, or signed off in advance.

d. Medication name
Medications prescribed by the CP Practitioner must be written in their non-proprietary name, except for medications in combination, and when patients are allergic to certain excipients (i.e. can only take particular brand(s)).

e. Dosage form
The dosage form and/or route of administration must be clearly stated on the prescription.

f. Dosage regimen
For medications intended to be taken when required (i.e. PRN), the prescriber should state the indications and the number of doses required and/or the total quantity to be dispensed.

g. Duration and/or quantity of medication
For medications where the duration cannot be indicated, the quantity to be prescribed should be clearly stated.

h. Signature and professional registration number of the CP Practitioner
In order to ensure timely review of the patients, the prescriptions should not be written or printed-off and signed in advance. CP practitioners should issue electronic prescriptions as much as possible, and any amendments should be made to the prescription within 24 hours.

Mode of prescribing

Electronic prescriptions should be issued by the CP Practitioner, and handwritten prescription(s) could be issued when necessary if:

a. The CP practitioner is on a home care visit, and/or
b. There is a system downtime

Handwritten prescriptions by the CP practitioner must be written in non-erasable ink and should be written by the same CP practitioner throughout.

Prescription storage

All original hard copy and electronic prescriptions issued by CP practitioners should be preserved for a minimum of 2 years from date of issue for audit and legal purposes.

Prescriptions for Controlled Drugs ("CDs") should be preserved for the duration stipulated in the Misuse of Drugs Regulations.

Non-routine prescribing scenarios

Medication refill

Medication Refill refers to the re-ordering of medications not previously ordered by the CP practitioner, but in accordance to a previously prescribed medication list for patients under their care without consultation with a medical doctor or an CP practitioner.

The CP practitioner **should only issue a medication refill if:**

a. The quantity of medication prescribed does not match the next appointment date given.
b. Prescriptions or medications have been misplaced.
c. Medication has disintegrated and/or has its integrity compromised.
d. Appointment date has been rescheduled to a later date

When issuing a medication refill, **the CP practitioner should:**

a. Ensure that the patient:
  i. Is clinically stable.
  ii. Has been taking all the medications at the same dose since the last consult.
  iii. Is on regular follow-up with their doctor (i.e. not more than 1 year).
  iv. Has fixed his/her next appointment date.
b. Check the patient's latest available and relevant medical record to ensure that the medication and/or its dose has not been adjusted since his/her last visit.
c. Re-order medications that are on the approved drug formulary in the CPA.

The **duration of medication refilled** should not:

a. Exceed the patient's next appointment date.
b. Exceed a 2-week supply if the patient has not made his/her next appointment date.

Prescribing in a home care setting

The CP practitioner that carries out home care visits should maintain the list of patients made readily accessible to members of the same care team. The CP practitioner should maintain these patient records on the electronic databases of their employed institution, which is subject to a review by a medical doctor(s) of the same care team on a regular basis as stipulated within their individual CPAs.

The CP practitioner's employed institution must ensure that there is proper inventory management of the medications checked-in and checked-out of their employed institution's medication supply or pharmacy, which must be regularly audited by the person-in-charge of the medication supply or a registered pharmacist at least once every 3 months.

The inventory documentation must include the following information:

a. Name of CP practitioner.
b. Professional Registration number of CP practitioner.
c. Date and time of check-in and check-out of medications.
d. Medications (i.e. name, dosage form, quantity, strength and batch number).
e. Expiration date of the medications.

The following non-exhaustive list of potential work processes are provided as examples to guide the development of the institution's policies and processes:

a. The CP practitioner should avoid playing the role of the prescriber, dispenser and administrator concurrently in a home environment. Suitable processes should be in place to allow a second suitably competent person e.g. Registered Nurse, Registered Pharmacist or Physician to check the medications dispensed before administration to the patient by the CP practitioner.
b. The CP practitioner should return all medications brought out for home care visits back to their institutions at the end of the work day. All drugs shall be stored within the institution's pharmacy or medication storage area. In case of exigencies where medications could not be returned at the end of the day, the institution shall have policies and procedures to define the exigencies and ensure that the drugs are kept appropriately and securely, and the drugs are returned to the institution within 3 working days for reconciliation.

Examples of work processes for additional safeguards for CDs in home care setting:

a. Institutions that intend to implement CP services which involve the use of CDs must have institutional guidelines and SOPs in place that govern the use of CDs. The guidelines and SOPs must minimally address the following:
  i. The CP practitioner should avoid playing the role of the prescriber, dispenser and administrator concurrently in a home environment. Suitable processes should be in place to allow a second suitably competent person e.g. Registered Nurse, Registered Pharmacist or Physician to check the medications dispensed before administration to the patient by the CP practitioner.
  ii. Institutions should set guidelines on the quantity and type of controlled drugs brought by collaborative prescribers during home care visits, taking into account the average number of patient visits each CPP makes in one day, the CD requirement profile of the case mix, safety and other operational considerations. CPPs should only carry emergency or interim stocks for immediate supply to the patient and for long term needs, a prescription should be provided to the patient for the CD to be filled by at a pharmacy.
  iii. A situation is an emergency if the patient is experiencing uncontrolled pain and other symptoms such as dyspnea that are relieved by opioids. CPP to supply only if the patient does not have the required opioids in his/her existing stock of medications.
  iv. Institutions should set guidelines on the quantity and duration of controlled drugs supplied by collaborative prescribers for emergency doses or for interim supplies, which should not exceed a maximum of three-day supply, so that patient has a supply of CDs until the patient or their caregiver can fill their CD prescriptions.
  v. Institutions should set guidelines on the type of personnel that are authorised to transport CDs, and the safeguards to prevent loss, theft, and diversion of CDs during transport.
  vi. CDs should always be transported by authorized personnel e.g. Registered nurses, physicians and kept by the staff and under lock and key.
  vii. CP practitioners shall maintain a register to record the actual CD dispensing in accordance with the Misuse of Drugs Regulations.
b. If a patient/client has a history of drug abuse or is suspected of drug abuse or exhibits drug seeking behaviour the collaborative prescriber should refer the case to his/her collaborating doctor.

c. Parenteral CDs must be prepared and supplied by a suitably competent healthcare professional e.g. registered nurse, physician according to the prescribed doses for the purpose of administration. Lay caregivers must not be empowered to prepare parenteral CDs for the patients.
d. Collaborative prescribers must educate the patient/client on the indications, method of administration, the side effects and their managements, proper storage and disposal of the CDs.

Risk Management

The aim of risk management is to:
a) Ensure patient safety through the minimization of risk associated with the inappropriate use of any prescription medication, and
b) Improve the quality of the collaborative prescribing system.

Risk mitigation

The section details the possible scenarios where risk mitigation would be useful.

a. Prescribing rights
  i. CP practitioners should only prescribe when they have been privileged. When e-prescribing systems are in place, the CP practitioners would only be granted the rights to prescribe after privileging has been approved.

b. Prescribing beyond the scope of the CPA
  i. CP practitioner should verify that the medication prescribed is within the approved medication list.
  ii. The approved medication list should be made easily available to all healthcare professionals employed within the institution.

c. Prescribing during system downtime
  i. CP practitioners should manually obtain clinical history, including medications and possible allergies, from the patient and/or caregiver.
  ii. Written prescriptions issued should be retrospectively documented on the electronic system.
  iii. CP practitioners should review his/her prescriptions against the patients' clinical history once the system has been restored.
  iv. When in doubt or when the risk of error is high, and if the situation is non-urgent, the prescription should be delayed until the necessary verification can be conducted.

Medication safety

The following are recommendations to ensure medication safety when prescribing.

a. Electronic medication ordering and clinical decision support system should be utilized, where possible.
b. Routine checking of latest available patient records prior to and/or during each consult.
c. Clear communication with the patient and/or their caregivers to obtain a full clinical history.
d. Patient and/or caregiver are provided with a channel for feedback or advice in the event of an adverse reaction or medication incident.
e. Proper documentation of patient's consultation.
f. Where errors and adverse events have been detected, the patient should be reviewed at the earliest possible opportunity.
g. Training on medication safety and on-going education of CP practitioner should be provided regularly.

Incidents and Complaints Reporting Management System

Whistleblowing

Whistleblowing is important to patient safety, but is often avoided for fear of being in the vanguard of change. This section details the various aspects of whistleblowing and the appropriate reporting channels.

Protection for whistle-blowers
An employer shall not penalise or threaten to penalise an employee or cause or permit any other person to penalise an employee, for having made a disclosure.

Types of incidents reported include:

a. Unfair judgement of CP practitioner's clinical practice resulting in unjust treatment of CP practitioner (e.g. dismissal of CP practitioner).
b. Failure to provide adequate information of medication to patient where significant risks are present.
c. Failure to report suspected drug addicts to Director of Medical Services and Director of Central Narcotics Bureau.
d. Irresponsible or injudicious prescribing, in particular a substance of potential abuse.
e. Malpractice such as prescribing for relatives without proper medical consultation.
f. Exceptional failure such as fatal medication error.
g. Anticipation of potential catastrophic error/event.

Disclosure on fellow colleagues should be made

a. In good faith without any malice.
b. Where there is reasonable belief that the information is substantially true.
c. Where there is no intended personal gain.
d. Where it is reasonable considering the circumstances.

Collaborative Prescribing Clinical Governance Guidelines

Introduction

This guidance sets out the administrative and procedural step to empower selected Advanced Practice Nurses and Pharmacists with prescribing responsibilities.

Aims of Collaborative Prescribing

Improve patient's accessibility to care

Provide quality care without compromising patient safety

Increase patient choice in accessing medicines

Enable better use of their expertise

The aims of extending prescribing responsibilities to our selected Advanced Practice Nurses and Pharmacists are to:

a. Improve patient's accessibility to care;
b. Provide quality care without compromising patient safety;
c. Increase patient choice in accessing medicines; and
d. Enable better use of their expertise.

Definitions

Collaborative Prescribing ("CP") Practitioners refer to Advanced Practice Nurses and Pharmacists registered with the Singapore Nursing Board and Singapore Pharmacy Council respectively, who are permitted to prescribe within a scope of practice as defined in their Collaborative Practice Agreement.

Collaborative Practice Agreement ("CPA") is an agreement between the CP Practitioner and their collaborating medical practitioner, endorsed by the clinical and professional heads of department, and approved by the healthcare institution's Credentialing Committee.

The CPA should specify the site(s) in which the CP practitioner(s) is practicing. This agreement would delineate the CP Practitioner's scope of practice and should include the following:
a. Medical conditions and/or defined patient groups.
b. Drug Formulary (excluding clinical trial drugs).
c. Clinical Decisions.
d. Tests and Investigations.
e. Escalation Criteria.
f. Patient Exclusion Criteria.

Credentialing is the formal process of reviewing, verifying and evaluating a professional's credentials (i.e. education, training, experience, certification, licensure and other professional qualifications) to ensure that they are sufficiently competent to be awarded clinical privileges to practice within an approved scope of practice.

Privileging is the process of determining each professional's level of competence to carry out specific diagnostic, treatment procedures and prescribing. It focuses on the individual's current skills and competence. Clinical privileges are granted when professionals are assessed to be qualified to perform the specific service/procedure required.

Prescriptions written and signed off by a CP Practitioner authorises a patient to be issued a medication or treatment as defined in their Collaborative Practice Agreement, which can be filled at any PHMCA-licensed facilities or pharmacy in Singapore.

Roles and responsibilities of the CP practitioner

Accountability

CP Practitioners are accountable for all aspects of their prescribing decisions including actions and omissions, and are not permitted to delegate this accountability to any other person.

They must be able to ensure that the:

a. Medicines prescribed are safe and effective for the patient under their care and the condition being treated;
b. Potential influence from the patients, colleagues and pharmaceutical industry that may result in inappropriate prescribing are recognised and managed; and
c. Choice of medicinal product for the patient is made based on clinical suitability and cost effectiveness.

CP practitioners should only see patients on first visit as part of a care team led by a medical practitioner within the ambit of a CPA.

Roles and responsibilities of the Collaborating Medical Practitioner

Accountability

Collaborating medical practitioners are held accountable for the scope of practice of the CP practitioner as indicated in the Collaborative Practice agreement, and must ensure that:

a. All acts of prescriptive authority are document and utilised in a manner that is consistent with any rules and conditions imposed upon the CP service;
b. They are available for consultation or assistance, as required by the CP practitioners; and
c. The CP practitioners have avenues to review and improve on their service, when necessary.

The Collaborative medical practitioner can delegate his/her supervisory duties to medical practitioners within the same care team.

Roles and responsibilities of the Employing institution

CP services within employing institution

The employing institution is held vicariously responsible for the CP practitioners, who are permitted to prescribe as part of their professional duties with the institution's consent.

The CP Practitioner should not be the prescriber, reviewer, and dispenser for the same patient at the same visit. Under circumstances where the CP practitioner has to take on multiple roles, a second suitable competent person (i.e. registered nurse, medical doctor, pharmacist) should be involved in the checking process.

CP services with external institution

For CP services provided by the CP practitioner to an external healthcare institution, as agreed upon by the employing institution, a service contract which details the accountability of each institution is required in addition to a CPA.

Scope of practice in collaborative services

a. The CP Practitioner and the medical practitioner's (who may be employed by the external institution) scope of practice and specifically parameters of prescribing must be clearly defined in the CPA. The following should be considered when drafting the CPA:

i. The prescriber's professional competency in the area of practice.

ii. Ability to value add to current service.

Practice framework

a. Clinical governance - The services of a CP Practitioner can be contracted by institutions with differing operational structure and clinical governance systems, as such arrangements must be in place to audit practices and safeguard the patients under their care.

b. Support and escalation – The employer and the respective collaborating institutions must ensure that there are adequate support mechanisms, resources, and escalation processes to support and guide the CP practitioner's practice for the contracted services.

Accountability

CP practitioners are accountable for all aspects of their prescribing decision, and should only prescribe within the stated agreement and work within their own level of professional competence and expertise.

Dispute resolution (i.e. Prescribing conflicts)

Institutions involved should include considerations of dispute resolution (e.g. differing opinions involving course of treatment) as part of the service agreement.

Institutional Collaborative Prescribing Governance

Clinical Governance Officer

The Clinical Governance Officer ("CGO") of Collaborative Prescribing services should

a. Be a Registered Medical Practitioner who fulfils the requirements stipulated under Regulation 56C(4)(b) of the Private Hospitals and Medical Clinics Regulations.

b. Review the findings of the Service Review Committee and ensure that necessary measures be put in place to address any issues raised by the committee.

c. Identify and harmonise the same CP services across multiple departments.

d. Work with the Nursing, Pharmacy, and/or Allied Health Head of Departments to appoint the CP leads.

e. Suspend CP practitioners and/or their services, or escalate to the PHMCA Licensee where necessary.

Credentialing Committee

The functions of the Credentialing Committee ("CC") with respect to CP practitioners are to:

a. Review the application and renewal of CP practitioners.

b. Review and approve the Collaborative Practice Agreements ("CPA").

c. Where conditions of credentialing have not been met or have been contravened, recommend the suspension of the CP practitioner to the CGO if necessary.

The CC will consist of a minimum number of 3 members, which shall include a medical practitioner, and all the remaining members of the CC shall fall within one or more of the following categories of persons:

a. Profession-specific CP practitioner (i.e. APN and/or Pharmacist); and

b. Member of a Safety Committee or equivalent.

The Chair of the CC must be a medical doctor, appointed by the Chairman Medical Board or equivalent. The term of office of the members of the Credentialing Committee shall be determined by the Chairman Medical Board or equivalent.

Institutional Collaborative Prescribing Governance

Collaborative Prescriber Lead

The profession-specific CP Lead(s) would be appointed by the CGO, with recommendations from the Nursing, Pharmacy, and/or Allied Health Head of Departments, and their roles are to:

a. Communicate: To convey relevant national CP updates to their employed institutions.
b. Advocate: Identify and review areas of service needs where CP can improve the quality of care and/or improve clinical workflow.
c. Coordinate: Identify and collaborate with the designated medical practitioner for APNs and pharmacists enrolled in the CP training programme, and ensure the sustainability of the CP services.
d. Clinical governance: Ensure that the CP practitioners maintain and update their personal competency portfolio.
e. Support: Serve as a mentor to the CP practitioners.

Service Review Committee

Every institution that sets up CP services must appoint a CP Service Review Committee ("SRC"). The functions of the committee are to:

a. Identify trends and patterns that do not comply with the service standards set up for CP service (e.g. against a DMS directive, licensing terms and conditions), which should prompt further investigations into the appropriateness of care.
b. Recommend solutions or interventions to improve the utilisation trends or patterns of such services in the institution.
c. Assess the effectiveness of implemented solutions.
d. Oversee the implementation and compliance to the CPAs.
e. Conduct regular reviews of the monitoring and outcome indicators and report the findings to the CGO and CC.
f. Make recommendations to suspend the CP service to the CGO, if necessary.

The committee will consist of a minimum number of 5 members, which shall include a medical practitioner, and all the remaining members of the SRC shall fall within one or more of the following categories of persons:

a. Profession-specific CP practitioners (i.e. APN and/or Pharmacist).
b. Member of a Safety Committee or equivalent.

The Chair of the SRC must be a suitably qualified healthcare professional with the understanding of CP services and be appointed by the Chairman Medical Board or equivalent.

Credentialing Process

Pre-requisites for CP service application

A service need must first be identified by the Head of Department where a CP Practitioner prescribing would improve the clinical workflow. Thereafter, the clinical head(s) of department identifies the suitable APN(s) and/or Pharmacist(s) suitable to provide the service. The identified APN and/or Pharmacist can then proceed to register for the CP training programme with a Letter of Support from their respective Heads of Department endorsed by their collaborating medical practitioner and the Clinical Governance Officer.

Upon completion of the CP training programme, the Advanced Practice Nurse or Pharmacist should enter into a Collaborative Practice Agreement ("CPA") with a medical doctor(s) within 3 years. The CPA must subsequently be reviewed and approved by a CC, before the CP practitioner is awarded the clinical privilege to prescribe. The Advanced Practice Nurse or Pharmacist can then submit their CP certification and CPA to the Ministry of Health ("MOH") to be entered into the list of CP Practitioners that is published on the MOH's Healthcare Professionals Portal.

Review of Collaborative Practice Agreements

The CPA must be reviewed once every 3 years and may be amended in writing and signed by all parties.

For each CP service, the CP Practitioner should submit monitoring indicators to the respective institutional professional designates for tracking and audit purposes. These could include the following:

a. Safety (e.g. number of errors/near misses, number of CPA deviations, number of ADRs reported) [Compulsory].
b. Process (e.g. number of patients prescribed under CPA).
c. Outcome (e.g. time within therapeutic range, number of bleeding events, number of disease flares).
d. Quality (e.g. patient satisfaction).

The respective Heads of Department must prepare a performance report regularly (not less than 3 yearly) detailing the various submitted indicators, gaps and deficiencies identified, and proposed improvement plan (within 6 months) to bridge gaps and deficiencies identified. This report should be submitted to the institution's SRC for review and audit.

Credentialing Process

Ad-hoc review of Collaborative Practice Agreements

For changes that need to be made prior to the scheduled review of the Collaborative Practice Agreements, the CP practitioner should seek approval and inform the respective parties.

CP Practitioners must seek approval from the CC for the following changes to the CPA:

a. Changes in partnering institutions for collaborative services.
b. Changes to the scope of practice (e.g. change in list of medical conditions, addition of new procedures).
c. Changes to the escalation criteria to medical doctors.
d. Inclusion of new prescription-only-medicines to the drug formulary.

CP Practitioners can seek approval from their Head of Pharmacy Department and/or Director of Nursing and subsequently inform the CC for the following changes to the CPA:

a. Changes to the department of practice.
b. Change to the clinical team and signatories.
c. Inclusion of new general sales list medications and pharmacy-only medications to the drug formulary.
d. Inclusion of new investigations and tests.

The Ministry of Health should be informed of any changes to the CPA (e.g. change practitioners, scope of formulary, supervisors or drug formulary). This can be done by submitting the Notification Form for Planned Changes to a Collaborative Prescribing Service and the updated CPA to elis@moh.gov.sg.

Disciplinary Management

Complaints and disciplinary actions against CP practitioners

Any complaint of a CP practitioner should be submitted to the SRC for review in writing, and can consist of:

a. Improper conduct of a CP which brings disrepute to his/her profession;
b. Information on the conviction of a registered CP practitioner of any offence implying a defect in character which makes him unfit to practise as a CP practitioner;
c. Professional services provided by a CP are substandard; or
d. Information that indicates that the CP practitioner is physically or mentally unfit to practice.

Any wilful acts of disregard for approved CPA and policies and procedures should be escalated by the SRC to the CGO. The CGO shall inform the relevant authorities in the event of the scenarios listed below.

Professional Boards

a. Act of negligence.
b. Professional misconduct.
c. Action that causes or would cause harm to the patient.

Health Sciences Authority

Any medication prescribed by the CP practitioner that is not on their approved medication list as stated in the CPA.

Incident reporting

All errors, near misses, and deviations from the CPA should be:

a. Reported in institutional risk management system as per institutional policy.
b. Submitted to the SRC within 48 hours.

All errors that had resulted in any form of harm will require a root cause analysis to be conducted by the institutional medication safety committee or equivalent. The results of the investigation and the recommended course of action shall then be routed to the SRC for review.

Suspension of services provided by CP practitioners

This section refers to the suspension of CP service in a particular service area if the review of the SRC reveal:

a. Significant number of adverse drug events as decided by SRC.
b. Negligent prescribing outside the list of approved medications.
c. Negligent prescribing/consultation for patients not registered with the CP service.
d. Unauthorized delegation of prescribing.
e. Any other deviations from the CPA, as determined by the SRC that may compromise patients' safety and welfare or bring disrepute to the profession.

The service may be suspended for the duration of investigations by the institutions' SRC. The CGO must be notified of all suspensions and outcomes of the investigations.

The continuation of the CP service after the investigation has been completed would be subject to the SRC's findings and CGO's decision. MOH must be informed should there be a need for all CP services within the institution to be suspended.

Disciplinary Management

Suspension of CP practitioners

The following situations may warrant an investigation by the SRC and result in suspension of the CP practitioner:

a. Failure to renew CP privilege and CPA.
b. Significant number of adverse drug events as decided by SRC.
c. Wilful prescribing outside the list of approved medications.
d. Wilful prescribing/consultation for patients not registered with the CP service.
e. Unauthorized delegation of prescribing.
f. Any other situations deviations from the CPA, as determined by the SRC that may compromise patients' safety and welfare.

The CP practitioner's right to prescribe may be withheld by the institution pending investigation by the SRC. The CP practitioner will be notified of their suspension in writing by the CC.

The CP practitioner should not prescribe during the investigation period, and any non-compliance will be escalated to the respective professional boards and HSA. The CP practitioner's prescribing rights will be restored by the CC only after the investigation has been completed, subject to the SRC's findings and the CGO's decision.

Appeal System

The CP Practitioner whose credentials have been denied or terminated has the right to appeal against the decision of the CC.

Appeals shall be made to the CC within 30 days of receipt of notification that the clinical privileges have not been granted or terminated. The appellant should attach to his/her letter of request for appeal relevant documentation such as a logbook that details the training courses attended, number of hours of hands-on experience, appropriate endorsement by renowned authorities and other relevant information to support his/her case.

The CC will reply within 14 days after receipt of all relevant documents and if the appellant is not satisfied with this outcome, he/she may then submit a final appeal to the institution's Chairman Medical Board or equivalent within the next 14 days.

The Chairman Medical Board or equivalent will appoint a panel (3 or more members) with no conflict of interest, minimally comprising a doctor, a pharmacist CP practitioner, and/or a nursing CP practitioner to review the appeal application. The panel will meet within 21 days of receiving the appointment letter to review the application. Information and opinion may be sought from external institutions if required. The CC will present the case to the institution's appeals panel. The panel may also conduct an interview with the appellant and the respective Heads of Department, and other involved parties to seek clarifications and identify their concerns if necessary.

The panel should submit a report on their final decision and recommendations to Chairman Medical Board within 60 days from the review commencement date.

A letter will be given to the appellant on the outcome of his/her appeal, with the reasons clearly stated if his/her appeal is rejected. The CP Standing Committee, Medical Board, CGO, SRC, and CC will be kept informed of the final outcome of the appeal.

Maintenance of Competency for CP Practitioners

CP Competency Portfolio

The CP lead should ensure that the CP practitioner maintains a competency portfolio for re-credentialing.

The portfolio should consist minimally of:

a. Collaborative Practice Agreement.
b. 4 Prescribing logs per year (please refer to Annex A for the template).
c. Continuing Professional Education log specific to area of CP practice (please refer to Annex B for the template).
d. Clinical supervision where applicable.

In addition, the CP practitioner should follow the Continuing Professional Education ("CPE") requirements of their respective professional boards but at least 30% of the CPE should be related to the area of CP practice. The review of the CP practitioner's credentialing should be carried out every 3 years, which should coincide with the review of Collaborative Practice Agreements by the CC.

Leave of absence

CP Practitioners who have taken a leave of absence exceeding 2 years should undergo a competency reassessment and/or clinical supervision for a period of time, before they can be re-credentialed by the CC to practice as a CP practitioner, as stipulated by their respective professional Heads of Department.

Annex A

Prescribing Log (Example)

CP practitioners will be expected to complete at least 4 prescribing logs on an annual basis to be included into their CP Competency Portfolio. Patient data must be anonymized to maintain confidentiality.

Signs and Symptoms (including Patient Medical History, medications, clinical examination and findings, allergies)	**Post assessment diagnosis**	**Treatment plan** (drug name, dosage form, dose, frequency, amount)	**Advice, Referral/ Review, Outcome**	**Reflections and Learning points**
Presenting complaint Hypertension Review. Chronic dry cough after taking Enalapril **Past medical history** Hypertension Type 2 Diabetes on lifestyle management Smoker 20 sticks per day LDL Cholesterol 4.3mmol/L **Examination** BP 160/90mmHg BMI 27kg/m2 **Current medication** (including OTC, Herbal, Internet)(must include dosage strength and be linked to PMH). Enalapril 5mg BD (not regular 4 weeks) **Allergies** None known	Adverse reaction to Enalapril BP remains elevated	Losartan 50mg OM x 28 days	**Advice** 50 year Chinese male Overweight with Type 2 Diabetes - Weight management & lifestyle modification Moderate smoker - Smoking cessation advice **Referral/Review** Review in 2/52 for repeat BP check and renal panel Discussed referral to smoking-cessation clinic- patient not ready at moment **Patient outcome** Patient has high atherosclerotic cardiovascular risk Review lifestyle modification and smoking status at future appointment Review response to losartan and check renal panel To consider initiation of statins if LDL cholesterol still elevated	Use of Enalapril is associated with potential side effect of cough and substitution with another class of renin-angiotensin-system blockade agents may be needed. Patient should be forewarned. Patient may not always be ready for change in a particular lifestyle habit (i.e. smoking) and principles of motivational interviewing can be employed to engage patient while going on to other lifestyle modifications. MOH Lipid Clinical Practice Guideline 2016 categorizes this patient as being at high atherosclerotic cardiovascular risk and statin treatment would be appropriate if LDL cholesterol remains at similar level at review.

CP Practitioner's Signature: _____ **Collaborating doctor's Signature:** _____

Annex A

Prescribing Log Template

CP practitioners will be expected to complete at least 4 prescribing logs on an annual basis to be included into their CP Competency Portfolio. Patient data must be anonymized to maintain confidentiality.

Signs and Symptoms (including Patient Medical History, medications, clinical examination and findings, allergies)	**Post assessment diagnosis**	**Treatment plan** (drug name, dosage form, dose, frequency, amount)	**Advice, Referral/ Review, Outcome**	**Reflections and Learning points**

CP Practitioner's Signature: _____ **Collaborating doctor's Signature:** _____

Annex B

Continuing Professional Education Log

CP Practitioners must refer to their respective professional boards for maintaining and recording of their Continuing Professional Education ("CPE") points.

NAME:

Date	Record of CPE taken	Number of hours of CPE	Record what you have learnt, how you will apply what you have learnt and what will be beneficial to your area of CP practice?

Glossary of Terms

Clinical Governance Officer

The Clinical Governance Officer ("CGO") is responsible for the oversight of the clinical management of patients registered with the Advanced Practice Nurse and/or Pharmacists-managed clinics providing Collaborative Prescribing services.

Credentialing Committee

The Credentialing Committee is responsible for the extension of prescribing rights, within an approved scope of practice, to selected Advanced Practice Nurses and/or Pharmacists that have completed the Collaborative Prescribing Programme offered by the National University of Singapore.

Collaborative Prescriber Lead

The profession-specific Collaborative Prescriber Lead(s) would be responsible for the welfare of the Collaborative Prescribing practitioner, and the resource person for the Collaborative Prescribing services across the institution.

Service Review Committee

The Service Review Committee is responsible for the regular review and monitoring of the Collaborative Prescribing services across the institution, so as to ensure that the quality and standards of these service are upheld.

Collaborative Prescribing Standing Committee

Chairperson

Prof Kenneth Kwek	Chief Executive Officer, Singapore General Hospital

Deputy Chairpersons

Ms Paulin Koh	Chief Nursing Officer, Ministry of Health
Dr Camilla Wong	Chief Pharmacist, Ministry of Health

Curriculum Sub-Committee Chairperson

A/Prof Tham Kum Ying	Senior Consultant (Emergency Department), Tan Tock Seng Hospital

Community Sub-Committee Chairpersons

Dr Angel Lee	Medical Director, St Andrew's Community Hospital
Ms Sylvia Lee Ling Ling	Advanced Practice Nurse (Palliative Care), Dover Park Hospice

Members

Dr Goh Khean Teik	Director (Manpower Standards & Development), Ministry of Health
Dr Ruth Lim	Director (Primary & Community Care), Ministry of Health
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Dr Lim Su-Fee	Advanced Practice Nurse (Rehabilitation Medicine), Singapore General Hospital
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Acknowledgement

The Chairman and Members of the Collaborative Prescribing Standing Committee, wish to thank the CP Community Sub-Committee, industry experts and stakeholders from the Ministry of Home Affairs, Central Narcotics Bureau and the Health Sciences Authority for their valuable contributions and support in the updating of Collaborative Prescribing Guidelines 2021.

Collaborative Prescribing Community Sub-Committee

Community Sub-Committee Chairpersons

Dr Angel Lee	Medical Director, St Andrew's Community Hospital
Ms Sylvia Lee Ling Ling	Advanced Practice Nurse (Palliative Care), Dover Park Hospice

Members

Ms Precilla Lai	Advanced Practice Nurse, Home Nursing Foundation
Ms Lee Hwei Khien	Principal Pharmacist, Tan Tock Seng Hospital
Mr Keegan Lin	Pharmacist, National Cancer Centre Singapore
Dr Ong Wah Ying	Medical Director, Dover Park Hospice
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Ms Tan Mui Lan	Advanced Practice Nurse, St Luke's Hospital
Ms Zuraidah Binte Sulaiman	Advanced Practice Nurse, Ren Ci Nursing Home
Ms Low Suat Fern	Principal Pharmacist, Yishun Community Hospital
Ms Tan Beng Le	Advanced Practice Nurse, Assisi Hospice