



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice



In this issue:

Registrar's message—sale and dispensing of drugs.....	3
Twenty-first century challenges: informing medical practice in an era of increasing complexity and rising expectations.....	4
Consultation results on two professional standards.....	5
Patients with chronic pain need family physicians—it's unprofessional to turn them away	7
Health application forms must not be used to screen prospective patients.....	9
College Bylaws amendment: Methadone Maintenance Program	11
Urine drug testing: 10 things you might not know	12
Seeking members for the Physician Practice Enhancement Program dermatology working group ...	14
Answers provided to physician inquiries about medical device reprocessing assessments.....	15
Launch of the community neurodiagnostics accreditation standards.....	16
Revised spirometry quality control grading and escalation criteria	17
Surgical site infections.....	19
Use of positive end-expiratory pressure (PEEP).....	20
Cochrane and BMJ team up for better information for physicians	22
New or updated professional standards and guidelines.....	24
CPD events: mark your calendars.....	25
Regulatory actions.....	26

The *College Connector* is sent to every current registrant of the College. Decisions of the College on matters of standards and guidelines are contained in this publication. Questions or comments about this publication should be directed to communications@cpsbc.ca.



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Registrar's message—sale and dispensing of drugs



Many physicians have inquired whether the standard applies in the context of providing short-term samples to their patients. It does not. The existing standard is clear that providing short-term samples to patients free of charge is excluded.

Most Canadian regulatory colleges have set out expectations of physicians who sell and dispense drugs to their patients through policy, standards and/or regulations. First and foremost is the expectation that physicians must act in the best interest of their patient. There are requirements to comply with both federal and provincial laws and regulations as they relate to sale and dispensing of drugs, such as the use of proper methods of procurement, chain of custody and secure storage of drugs; records retention for purchase and sale of drugs; appropriate packaging, labeling and patient-related material for drugs they dispense; and the general observation that it is a conflict of interest for a physician to profit from the sale of a drug except in limited circumstances. For that reason, it is expected that physicians will only sell and dispense drugs that are necessary for the immediate treatment of the patient or where the services of a pharmacist are not reasonably available.

The regulations for the practice of medicine in BC require physicians to seek the written consent of the College Board to sell and dispense drugs to their patients. The College is working with the Ministry of Health to consider how best to regulate this area of practice. In the meantime, physicians who sell drugs to patients are encouraged to seek the written consent of the Board as is required. Examples would include physicians who sell vaccines to patients at a travel clinic or sell prescription medications to patients that are administered as part of a procedure.

The standard [Sale and Dispensing of Drugs by Physicians](#) is currently under review. Future editions of the College Connector will provide updates. I would also like to remind physicians of the existing standard [Promotion and Sale of Products](#), which stipulates that physicians must only charge patients a reasonable markup of no more than 15% when selling drugs to patients.

While the consultation on the Bylaw amendment has closed, feedback on the standard is still welcome. Comments can be emailed to salerxbylaws@cpsbc.ca.

H.M. Oetter, MD
Registrar and CEO

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Twenty-first century challenges: informing medical practice in an era of increasing complexity and rising expectations

2017 SEPT 29
Education
Day + AGM

#InforMed2017

Save the date for the much-anticipated College Education Day, held again this year at the Vancouver Convention Centre. With guidance and insight from experienced, engaging experts, this year's program will provide an opportunity for deep reflection on some major challenges, which are often brought to the College.

The College is pleased to welcome Dr. Pat Croskerry from Dalhousie University as its morning plenary presenter to address his work in understanding how physicians think in order to avoid diagnostic errors.

The first afternoon plenary presenter is Dr. Alain Naud from Université Laval, who will discuss his experiences in medical assistance in dying from a Quebec perspective.

The final afternoon plenary presenter is Dr. Hakique Virani from the University of Alberta who will address the opioid crisis from public health and clinical perspectives.

To learn more about the plenary and workshop topics and presenters, click [here](#).

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Consultation results on two professional standards

Professional Standards & Guidelines

The feedback provided by registrants on two revised standards (previously guidelines) was extremely helpful in developing the final versions approved by the Board at its May meeting. Following is a summary of the results.

Physical Examinations and Procedures

- 219 physicians completed the survey
- 94% agreed that the standard clearly described expectations of physician conduct during examinations
- 98% agreed that the standard was easy to understand
- 98% agreed that the standard was written in plain language
- 96% agreed that the standard was well organized

Summary of reoccurring themes

- Be more specific about the type of examination where a gown or drape is required, and where the patient may wish to have a third party present
- The expectation that a third party be present for every examination is not reasonable
- Some situations don't allow for a patient-selected third party (e.g. emergency room)

Boundary Violations in the Patient-Physician Relationship

- 346 physicians completed the survey
- 93% agreed that the standard clearly described a boundary violation
- 94% agreed that the standard clearly described expectations of physician conduct and behaviour
- 96% agreed that the standard was easy to understand
- 97% agreed that the standard was written in plain language
- 94% agreed that the standard was well organized

Summary of reoccurring themes

- Provide more clarity around an “inappropriate gift”
- Provide more detail about non-sexual boundary violations; give examples
- Be more specific about forming non-professional relationships with patients; in small communities, personal relationships with patients are often difficult to avoid completely

Note: Not all questions and comments about the standards were directly incorporated into the final versions. The College is currently developing supporting FAQs, which will address some of the questions, and provide specific examples on topics such as gifting, seeking donations for hospital foundation campaigns, and forming non-professional relationships with patients in small communities.

Thank you to all physicians who participated in this consultation. As part of this process, the College also developed a patient information bulletin, which physicians may wish to print and post in waiting areas and examination rooms: [Patient-Physician Relationship – What to Expect](#)

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Patients with chronic pain need family physicians—it's unprofessional to turn them away



A real case*

A 38-year-old man with severe peripheral neuropathy complicating type 1 diabetes relocated from Calgary to Greater Vancouver. At the time, he was on long-term opioid monotherapy (no sedatives) at a modest, stable dose, well within the range suggested in the College standard [Safe Prescribing of Drugs with Potential for Misuse/Diversion](#), and the new Canadian guideline. He approached a number of clinics about becoming a patient. Some reportedly turned him down outright, advising that they never prescribe opioids for chronic non-cancer pain. Several asked him to complete an application form, only to contact him later to say they have no capacity in their practice. Is this acceptable?

An article in the September/October 2016 edition of the College Connector titled [Can a physician turn a prospective patient away?](#) describes how physicians are expected to respond in such circumstances:

Rather than dismissing prospective patients summarily because they are taking long-term opioids and/or benzodiazepines or Z-drugs for chronic pain, they should be told in clear and simple terms at the outset that the College's standard for prescribing these drugs has evolved based on emerging scientific evidence. Patients should be advised that they will be prescribed medications cautiously, in accordance with the standard, which means that combinations of opioid analgesics (strong pain medications) and sedatives (usually sleeping medications) are not allowed.

The standard *Safe Prescribing of Drugs with Potential for Misuse/Diversion* does not prohibit long-term opioid therapy; it makes it safer. It obliges physicians to “Base decisions to prescribe long-term psychoactive medications, including LTOT, on well-documented, comprehensive initial assessments and frequent (at least every three months) reassessments.” This cannot be done without seeing the patient.

For a new patient, that will almost always mean a series of visits—one or two each for history, physical assessment, discussion of old records, and investigations. Based on the assessment, it may be appropriate to advise that the medications are not indicated and must be tapered. At that point, the patient may choose to follow the treating physician's advice or seek care elsewhere. A taper may unmask a substance use disorder that must be recognized and treated, often with opioid agonist therapy—an opportunity to save a life.

In some circumstances stable monotherapy in modest doses for a condition like diabetic neuropathy is entirely appropriate and should be continued.

The College acknowledges that this is challenging medicine, but medicine is a demanding occupation. A family physician who can manage diabetes or COPD is capable of providing primary care for the one in five adults who live with chronic persistent pain.

Chronic non-cancer pain, inappropriate use of psychotropic medications, and addiction are all medical conditions. The CMA *Code of Ethics* prohibits discrimination on the basis of medical condition. In the event of a complaint, discrimination may be considered unprofessional conduct worthy of sanction.

Family physicians are urged to take advantage of relevant College courses and the Practice Support Program (PSP) Chronic Pain module. GP consults with respected colleagues are also helpful. Physicians who are struggling with this inherently challenging area of practice are welcome to call the College or the CMPA for advice.

***Note:** The details in this case study have been changed to protect the privacy of the patient.

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Health application forms must not be used to screen prospective patients



Pursuant to section 7-2 (1) of the College Bylaws, registrants are legally bound not to make statements that are false, inaccurate, misleading or reasonably capable of being misinterpreted.

Another article in this edition, [Patients with chronic pain need family physicians—it's unprofessional to turn them away](#), describes the experience of a patient with a chronic pain condition who was rejected by a number of clinics based on answers he provided on an application form that was largely a health questionnaire. The patient was certain it was because he was taking opioids for his pain disorder.

The College has also received reports of physicians advising clinic staff and prospective patients that they will not see new patients with open claims with WorkSafeBC or ICBC.

The use of application forms to screen patients and refusing patients with insurance claims both contravene the College standard [Access to Medical Care](#). Under the subheading Discrimination, the standard says in part:

[Prospective patients not meeting the definition of discrimination in the CMA Code of Ethics] may be vulnerable and marginalized, and also deserving of respectful and fair access to medical services. These individuals may have communication challenges, complex medical problems or medical conditions related to aging where extra time for assessment may be necessary. Some may be dealing with insurance claims, which require a physician to complete lengthy forms on their behalf. Others may have difficulty complying with recommended medical treatments as a consequence of active addictions, limited education, involvement in the criminal justice system or social problems. Refusing to treat anyone in such circumstances violates the medical profession's ethical principles.

Allegations of discrimination are carefully investigated on a case-by-case basis and may be sustained by the College where impact is demonstrated even if the physician did not intentionally discriminate.

Physicians should note that allegations of discrimination may not only result in complaints to the College, but also to the BC Human Rights Tribunal.

Physicians must not use the health information provided on application forms to determine whether to accept a patient. Prospective patients naturally regard that as discrimination and, as noted above, have recourse to the College complaints process and the BC Human Rights Tribunal. Patients who are turned down by a physician are owed a legitimate reason, as determined by law.

Health application forms must not be used to screen prospective patients

Questions regarding patient access to medical care should be directed to the College or the CMPA.

[*Back to table of contents »*](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

College Bylaws amendment: Methadone Maintenance Program

DRUG PROGRAMS Update

On June 5, 2017, sections 1-19, 9-2 and 9-3 of the College [Bylaws](#), which directed the former Methadone Maintenance Program, were repealed, and most components of the program transitioned to the BC Centre on Substance Use (BCCSU), including authorizing exemptions to physicians who wish to prescribe methadone for opioid use disorder under section 56 of the *Controlled Drugs and Substances Act*.

This transition will allow the College to focus its efforts on the enhanced monitoring of all prescriptions for medications that pose challenges to patient safety. The College will continue to manage the following functions:

- operationalizing full and temporary authorizations to prescribe methadone for analgesia
- ordering regular duplicate and methadone duplicate prescription pads
- identifying methadone authorizations (both analgesia and opioid use disorder) to PharmaNet through the Provider Services Registry

To obtain an authorization to prescribe methadone for analgesia, physicians must complete the [Application for Authorization to Prescribe Methadone for Analgesia](#) available on the College website, or contact the Drug Programs by email at drugprograms@cpsbc.ca, phone at 604-733-7758 extension 2629, or fax at 604-733-1267.

To obtain an authorization to prescribe methadone for opioid use disorder, physicians must contact the BC Centre on Substance Use at www.bccsu.ca or by phone at 604-682-2344.

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Urine drug testing: 10 things you might not know

DRUG
PROGRAMS
Update

Urine drug testing: 10 things you might not know (and should)

1. Opiates are drugs derived from opium (morphine, codeine and heroin). The term opioids refers to the entire family of opiates including natural, synthetic and semi-synthetic such as hydromorphone, oxycodone, fentanyl, tramadol and tapentadol.
2. A standard MSP urine drug screen (UDS) includes opiates, amphetamines, benzodiazepines, cocaine metabolite and methadone metabolite only. Additional tests (e.g. fentanyl, hydromorphone, oxycodone, buprenorphine) must be requested individually and explicitly. For example, if the patient is on oxycodone only, order a urine drug test and a urine screen for oxycodone. The result should be negative for opiates, and positive for oxycodone. A positive result for opiates would indicate that the patient is likely using morphine, codeine or heroin.
3. An “opioid screen” is not available at present.
4. In the Lower Mainland, 10 to 15% of positive fentanyl screen samples now also contain carfentanil and/or furanylfentanyl.
5. It may take 10 to 15 days since the last fentanyl dose to obtain the first negative urine drug screen.
6. False positive screen results: while some medications are known to give false-positive screen results, the patient may have taken an additional illicit drug. Only a confirmatory test can resolve this situation definitively.
7. Confirmation by mass spectrometry (GC/MS or LC/MS) is usually performed only when requested. If a positive screen result would have significant medical consequences, this test can be added by writing “confirm [drug name] if positive” on the requisition to minimize turnaround time.
8. Reliability of positive screen results: cocaine is more reliable than opiates, EDDP (methadone metabolite) and fentanyl. The least reliable screen results are benzodiazepines and amphetamines.
9. A low sample volume (<45 ml) or low temperature (<32°C) increases the risk of the sample having been substituted (e.g. with normal drug-free urine) by the patient. Supervised collection is recommended if the patient’s reliability is in doubt.

10. Physicians should call their local lab with any questions related to analytical or interpretive issues.

Contributors to this article include:

- Jan Palaty, PhD, FCACB
- Jennifer Melamed, MBChB, B.Sc., ABAM Diplomate, CCSAM, CISAM, MRO, CSAT Candidate
- Maire Durnin-Goodman, MD, MSc., PhD, CCFP, ABAM Diplomate, CCSAM, CISAM, MRO
- Alan Brookstone, MBChB

[*Back to table of contents »*](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Seeking members for the Physician Practice Enhancement Program dermatology working group



The Physician Practice Enhancement Program is an educational program aimed at improving a physician's medical practice through feedback. The goal of the program is to promote quality improvement in community-based physicians' medical practice by highlighting areas of excellence and identifying opportunities to guide self-directed professional development and lifelong learning. Each year, hundreds of BC physicians participate in the program. The program continues to expand its scope to include all physicians in community-based practice. This year, in addition to psychiatry, pediatrics and internal medicine, PPEP will expand to include dermatology. The program is currently seeking dermatologists to serve on an assessment development working group.

As with all PPEP assessments, assessments of dermatologists will be based in large part on reviews by their peers. Members of the working group will provide expertise, guidance, and feedback in reviewing standards for dermatology and the development of the assessment tools. The materials developed by the working group will directly impact the structure of PPEP assessments and ensure that it is appropriate for use with dermatologists in BC.

Current PPEP working group members routinely tell the College how much they enjoy serving their colleagues and the profession in this way. Dermatologists interested in joining the College to support a culture of quality improvement for BC physicians should contact:

Ms. Tania Froysaa
Coordinator, Operations and Physician Relations
Physician Practice Enhancement Program
tfroysaa@cpsbc.ca

For more information on PPEP, visit the [College website](#).

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Answers provided to physician inquiries about medical device reprocessing assessments



The following questions and answers have been added to the [FAQs on MDR](#) section on the College website:

General

- With the launch of POMDRA, has the College rolled out new practice standards?
- Will the College shut down a physician's practice if it identifies deficiencies in reprocessing?
- Can a physician fail the assessment, and if so, how does that impact his/her practice and office procedures?

[Read the answers](#)

Medical Devices

- What if a physician doesn't have a dedicated physical space for reprocessing reusable medical devices?
- Why are MIFUs important?
- What's the concern about packaging reusable medical devices that are reprocessed by steam sterilization and what is "point of use"?

[Read the answers](#)

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Launch of the community neurodiagnostics accreditation standards



Questions and answers

How were the standards developed?

The standards development process began with a comprehensive review of current hospital-based neurodiagnostics standards by an expert advisory panel to the DAP. This panel included neurologists, psychiatrists, and technologists. Once draft standards were written, program staff distributed them to all neurologists registered with the DAP for feedback, and conducted pilot assessments at two community neurodiagnostics facilities. Knowledge gained from these pilot assessments was used to revise the draft standards, which were then forwarded to the DAP Committee for approval.

Where are these standards applicable?

These standards apply to all community neurodiagnostics facilities. The DAP defines “community neurodiagnostics” as neurodiagnostic testing performed outside of the hospital in a physician office setting. Neurodiagnostic testing includes electromyography (EMG) and nerve conduction studies (NCS).

What does this mean for community neurodiagnostic practices?

The standards are now in effect for all community neurodiagnostic facilities and will be used for the assessment of facilities in September 2017. Program staff will be contacting community neurodiagnostic facilities over the coming months to inform them of their assessment date and to offer support and information about the accreditation process and these standards.

Questions?

A complete copy of the standards can be downloaded from the DAP website [here](#).

DAP contact

Mr. Nav Rakhra
Accreditation Research and Development Officer
Diagnostic Accreditation Program
nrakhra@cpsbc.ca

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Revised spirometry quality control grading and escalation criteria



Questions and answers

What are the new grading criteria?

The revised criteria include:

1. Test performance grading is new. The grading assesses the technical criteria of patient test reports.
2. Biological QC performance grading includes additional categories, to assess biological QC data in a standardized manner.
3. Linearity performance grading is new. The grading assesses the linearity data in a standardized manner.
4. Escalation action column is new to each table and outlines the steps DAP will take in response to unacceptable performance. This information was previously in a stand-alone table.

Why was this change made?

Original grading criteria did not include technical criteria regarding system linearity performance. In response to this, the DAP conducted a full review of the previously approved *DAP Spirometry Accreditation Awards and Ongoing Monitoring* document. This review was conducted by DAP staff, DAP pulmonary function technical consultants and DAP pulmonary function medical consultant. The guiding principles for the review included standardization, consideration of risk, clarity and transparency, with the goal being a document that is more easily understood.

This revised document is now titled *Spirometry Quality Control Grading and Escalation Criteria*. The grading criteria will help to make facilities and the public aware of the steps taken by the DAP to protect the safety of the public, as well as ensure that unacceptable spirometry QC performance is handled consistently and fairly across all facilities.

What happens if unacceptable spirometry QC performance is not resolved?

Failure to participate and/or ongoing unacceptable spirometry QC performance will result in the facility's DAP file being referred to the DAP Committee for reconsideration of the accreditation award.

Questions?

Facilities are always encouraged to contact the DAP if they have questions. This revised document, [DAP Spirometry Quality Control Grading and Escalation Criteria](#), is available on the DAP website.

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Surgical site infections

NHMSFP
Update

One of the current clinical improvement initiatives of the BC Patient Safety & Quality Council is preventing surgical site infections.

In 2015, the [Canadian Patient Safety Institute](#) updated its tool kit *The Getting Started Kit for the Prevention of Surgical Site Infection*, which was originally launched in 2005 to assist health-care providers in prioritizing and implementing surgical site infection prevention efforts.

Just recently, the Centers for Disease Control and Prevention published its first surgical site infection prevention update in 18 years: [Guideline for the Prevention of Surgical Site Infection](#). Non-hospital medical and surgical facilities should review these updated evidence-based guidelines and incorporate any necessary practice changes into their surgical quality improvement programs.

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Use of positive end-expiratory pressure (PEEP)

NHMSFP Update

PEEP is part of a lung-protection ventilation strategy that has been highly successful in preventing further lung injury in patients with existing acute lung injury. Modern anesthetic machines can be easily set-up to provide a small amount of PEEP—at least 5 cm H₂O, to all patients once the ventilator is turned on.

While the latest Cochrane review published in 2014¹ did not find a reduction in mortality or pneumonia in a population of undifferentiated patients, overall patients had a higher PaO₂/FiO₂ on postoperative day 1 and less atelectasis as demonstrated on CT scan.

A small study in the *British Journal of Anaesthesia* from 2014 used lung compliance measurements in 40 patients and showed that likely more than 5 cm of PEEP is needed to prevent intratidal recruitment/de-recruitment that results in atelectasis.⁷ Levels of PEEP less than 5 cm H₂O add no benefit, and levels above 10 cm H₂O in patients without pulmonary disease may result in unacceptable hemodynamic effects.

References

1. Barbosa FT, Castro AA, de Sousa-Rodrigues CF. Positive end-expiratory pressure (PEEP) during anaesthesia for prevention of mortality and postoperative pulmonary complications. *Cochrane Database Syst Rev*. 2014 Jun 12(6):CD007922.
2. PROVE Network Investigators for the Clinical Trial Network of the European Society of Anaesthesiology, Hemmes SN, Gama de Abreu M, Pelosi P, Schultz MJ. High versus low positive end-expiratory pressure during general anaesthesia for open abdominal surgery (PROVHILO trial): a multicentre randomised controlled trial. *Lancet*. 2014 Aug 09;384(9942):495-503.
3. Severgnini P, Selmo G, Lanza C, Chiesa A, Frigerio A, Bacuzzi A, Dionigi G, et al. Protective mechanical ventilation during general anesthesia for open abdominal surgery improves postoperative pulmonary function. *Anesthesiology*. 2013 Jun;118(6):1307-21.
4. Guldner A, Kiss T, Serpa Neto A, Hemmes SN, Canet J, Spieth PM, et al. Intraoperative protective mechanical ventilation for prevention of postoperative pulmonary complications: a comprehensive review of the role of tidal volume, positive end-expiratory pressure, and lung recruitment maneuvers. *Anesthesiology*. 2015 Sep;123(3):692-713.
5. Serpa Neto A, Hemmes SN, Barbas CS, Beiderlinden M, Biehl M, Binnekade JM, et al. Protective versus conventional ventilation for surgery: a systematic review and individual patient data meta-analysis. *Anesthesiology*. 2015 Jul;123(1):66-78.

6. Ferrando C, Soro M, Canet J, Unzueta MC, Suarez F, Librero J, et al. Rationale and study design for an individualized perioperative open lung ventilatory strategy (iPROVE): study protocol for a randomized controlled trial. *Trials*. 2015 Apr 27;16:193.
7. Wirth S, Baur M, Spaeth J, Guttman J, Schumann S. Intraoperative positive end-expiratory pressure evaluation using the intratidal compliance-volume profile. *Br J Anaesth*. 2015 Mar;114(3):483-90.

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Cochrane and BMJ team up for better information for physicians

College LIBRARY

The Cochrane Collaboration is a well-respected, independent, international producer of systematic reviews on health care and policy, that can be relied upon for validity and relevance to clinical practice. Cochrane systematic reviews are detailed and can be rather time consuming to read fully. Cochrane Clinical Answers distill Cochrane content into a more digestible format: a clinical question, a short answer, and links to the relevant full reviews. The intent is to provide “[a user friendly format, mixing narrative, numbers and graphics](#)” for health care practitioners and other health-care decision-makers.

Currently, 132 topics in BMJ Best Practice are integrated with Cochrane Clinical Answers content and another 100 topics will be integrated by the end of June. The integration work will continue through the end of 2017. See below for an example of Cochrane Clinical Answers integrated into the **Management Approach** section of the BMJ Best Practice module on sepsis in adults:

MENU Sepsis in adults Last updated: Aug 12, 2016

Adjunctive therapies

In patients with low cardiac output despite adequate fluid resuscitation, inotropes (e.g., dobutamine) can be added. Low cardiac output suspected through clinical examination (prolonged capillary refill times, low urine output, poor peripheral perfusion) can be confirmed through the use of cardiac output monitoring or by sampling central venous or pulmonary arterial blood to measure oxygen saturations. Heart rate should be kept <100 bpm to minimise myocardial oxygen demand. [106]

According to a landmark study published in 2002, [137] corticosteroids may be beneficial in patients with septic shock that is refractory to fluids and vasopressor agents. However, current evidence for giving corticosteroids to patients with sepsis or septic shock appears to be mixed. [138] [139] [140] [141] [142] [143] [144] [Cochrane] Current guidelines recommend that low-dose corticosteroids are given only to patients whose BP is poorly re [77] The use of the ACTH stimulation test to guide corticosteroid therapy is no longer re [77] and response does not predict efficacy of corticosteroids.

Of chlorhexidine washes, which may decrease the rate of hospital-acquired infections, [145] and an been used as an adjuvant therapy in sepsis with the aim of decreasing the levels of reactive ox effective and their use is not currently recommended. [146]

St

Cochrane Clinical Answers

How do corticosteroids affect outcomes when used to treat sepsis?

Show me the answer

The “Show me the answer” link in the screenshot above links to the [Cochrane Clinical Answer](#). Explore other examples of Cochrane Clinical Answers by searching any of these diseases in [Best Practice](#) and selecting **Evidence** in the **Management** section:

- COPD
- ST-elevation myocardial infarction
- Acute atrial fibrillation
- Allergic rhinitis

- Acute abdomen (Assessment of)
- Asthma in adults
- Type 2 diabetes in adults

Contact the library via:

- **Email:** medlib@cpsbc.ca
- **Telephone:** 604-733-6671
- **Fax:** 604-737-8582
- [Online article requests form](#)

An [overview of library services](#) is available on the College website.

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

New or updated professional standards and guidelines

Professional Standards & Guidelines

Physicians are encouraged to become familiar with the College's *Professional Standards and Guidelines*, which are reviewed regularly and may be updated over time.

New

- [Boundary Violations in the Patient-Physician Relationship](#)
- [Physical Examinations and Procedures](#)

Updated

- [Medical Assistance in Dying \(FAQs only\)](#)

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

CPD events: mark your calendars



Finding Medical Evidence – Computer Workshop

Friday, September 22, 2017 – Comox

[Learn more](#)

Education Day and Annual General Meeting 2017

Friday, September 29, 2017 – Vancouver

[Learn more](#)

Professionalism in Medical Practice: Avoiding the Pitfalls

Friday, November 3, 2017 to Saturday, November 4, 2017 – Vancouver

[Learn more](#)

[Back to table of contents »](#)



College of Physicians and Surgeons of British Columbia

Serving the public through excellence and professionalism in medical practice

Regulatory actions

- [Dr. Larry George Serelo](#)
- [Dr. Vu Ngoc Truong](#)

[Back to table of contents »](#)