

**MINISTRY OF HEALTH  
DECISION BRIEFING NOTE**

**Cliff:** 1035358

**PREPARED FOR:** Stephen Brown, Deputy Minister - **FOR DECISION**

**TITLE:** Health Authority Delegated Authority to Charge Fees

**PURPOSE:** To reinforce and clarify that health authorities have delegated authority to charge fees

**BACKGROUND:**

The province's health authorities (HA) are responsible for providing health services to patients accessing hospital services. The *Canada Health Act* and various pieces of provincial legislation identify the terms and conditions on how health care services are provided in the province and whether the HAs are permitted to charge fees for providing health care services to non-residents of Canada (NRC) and residents of Canada who are not enrolled in a provincial health insurance program or who are seeking services/treatments that are not medically insured benefits. The collective "basket" of provincial legislation also provides the basis to delegate authority to the HAs to charge fees.

Some third party insurance providers have recently questioned the HAs' delegated authority to charge their clients for health care services rendered and have subsequently not fully paid medical bills on behalf of their clients. HAs have asked Ministry of Health (the Ministry) staff for assistance to clarify HAs' delegated authority, and conditions when HAs may charge for medical services. Ministry staff has been working with Ministry of Justice (MoJ) legal counsel to resolve the issue.

In 1998, the Ministry provided a letter (see Appendix A) to the province's HAs delegating them authority to do certain things related to sections of separate pieces of legislation. However, there have been significant changes to these pieces of legislation over time (e.g., *Hospital Act*, *Continuing Care Act*, *Hospital Insurance Act*, and the *Community Care Facility Act* has been replaced with the *Community Care and Assisted Living Act*) making it difficult to confirm the delegated authority structure remains firm and intact.

**DISCUSSION:**

s.13,s.14

s.13,s.14

**OPTIONS:**

s.13,s.14

**RECOMMENDATION:**

Option 2



Lynn Stevenson, on behalf of:

June 24, 2015

Approved/Not Approved

Stephen Brown

Deputy Minister

Date Signed

**Program ADM/Division:** Manjit Sidhu, ADM, Finance and Corporate Services

**Telephone:** 250-952-2066

**Program Contact:** Gordon Cross, Executive Director, Regional Grants and Decision Support

**Date:** June 18, 2015

## APPENDIX A



May 20, 1998

To: Chief Executive Officers  
Health Authorities

Attached for your information is a schedule signed by David Kelly, Deputy Minister of Health, showing the statutory powers delegated by the Minister of Health to various health authorities.

The information on delegation of authority is being provided in this format as it may be necessary to revise the delegations from time to time if statutes are amended or section references are changed. A revised schedule, rather than individual letters, will be provided to you at that time.

The attached schedule replaces the letter of April 8, 1998. If you have any questions, please do not hesitate to contact me.

Yours truly,

John Herbert  
Senior Financial Officer  
Finance and Management Services

Attachments

pc: Regional Directors

Ministry of Health and  
Ministry Responsible for Seniors

Senior Financial Officer  
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## APPENDIX A

DELEGATION OF AUTHORITY TO  
HEALTH AUTHORITIES

In accordance with authority established pursuant to Section 1 of the Continuing Care Act and Section 4(2) of the Ministry of Health Act, the Minister hereby delegates the following duties, powers and functions granted and imposed by the following Acts:

	REGIONAL HEALTH BOARDS (see attached list)	COMMUNITY HEALTH COUNCILS (see attached list)	COMMUNITY HEALTH SERVICES SOCIETIES (see attached list)
<b>HOSPITAL ACT (SEE NOTE 1)</b>			
Section 2(1)	X	X	Not delegated
Section 2(2)	X	X	Not delegated
Section 2(3)	X	X	Not delegated
Section 42	X	X	Not delegated
<b>CONTINUING CARE ACT (SEE NOTE 3)</b>			
Section 4(1)	X	X	Not delegated
Section 4(4)	X	X	Not delegated
Section 4(5)	X	X	Not delegated
Section 7(1)	X	X	Not delegated
Section 8(1)	X	X	Not delegated
Section 8(3)	X	X	Not delegated
Section 8(4)	X	X	Not delegated
Section 8(3)	X	X	Not delegated
Section 8(4)	X	X	Not delegated
Section 9(4)	X	X	Not delegated
Section 9(5)	X	X	Not delegated
Section 9(7)	X	X	Not delegated
<b>COMMUNITY CARE FACILITY ACT</b>			
Section 10(1)	X	Not delegated	X
Section 10(2)	X	Not delegated	X
Section 10(3)	X	Not delegated	X
Section 10(5)	X	Not delegated	X
Section 10(6)	X	Not delegated	X
<b>HOSPITAL INSURANCE ACT (SEE NOTE 3)</b>			
Section 9(1)	X	X	Not delegated
Section 9(3)	X	X	Not delegated
Section 9(4)	X	X	Not delegated

NOTE 1: The delegation of authority under the Hospital Act is subject to the following condition. Health authorities will not make the decision to approve or disapprove requests for the Minister's approval under Sections 2(1), 2(2), 2(3) and 42 of the Hospital Act without the Minister's approval.

NOTE 2: The delegation of authority to Regional Health Boards, Community Health Councils and Community Health Service Societies shall not be interpreted to derogate from their authority to appoint persons or exercise any power pursuant to by-laws of any Health Facility.

NOTE 3: When the health authority determines the amount to reimburse a hospital under Section 9(1) of the Hospital Insurance Act or determines the amount to be paid to an operator under Section 4(1) of the Continuing Care Act, the amount must not exceed the Grant specified in the Funding and Transfer Agreement and the amount must come out of the Grant received from the Province pursuant to the Funding and Transfer Agreement.

  
David S. Kelly - Deputy Minister

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APPENDIX A

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COMMUNITY HEALTH COUNCILS

Elk Valley and South Country Community Health Council  
Powell River Community Health Council  
Cranbrook Community Health Council  
Sea To Sky Community Health Council  
Kimberley Community Health Council  
Comox Valley Community Health Council  
Columbia Valley Community Health Council  
Mount Waddington Community Health Council  
Creston and District Community Health Council  
Central Coast Community Health Council  
Nelson and Area Community Health Council  
South Peace Community Health Council  
Castlegar and District Community Health Council  
North Peace Community Health Council  
Arrow Lakes/Upper Slokan Valley Community Health Council  
Fort Nelson-Liard Community Health Council  
Greater Trail Community Health Council  
Houston/Smithers Community Health Council  
Boundary Community Health Council  
Upper Skeena Community Health Council  
Golden Community Health Council  
Terrace and Area Community Health Council  
100 Mile House & District Community Health Council  
Kitimat and Area Community Health Council  
Central Cariboo Chilcotin Community Health Council  
North Coast Community Health Council  
Quesnel & District Community Health Council  
Queen Charlotte Islands/Haida Gwaii Community Health Council  
Sunshine Coast Community Health Council  
Snow Country Community Health Council  
Campbell River/Nootka Community Health Council.

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APPENDIX A

**REGIONAL HEALTH BOARDS**

North Okanagan Health Region  
Okanagan Similkameen Health Region  
Thompson Regional Health Board  
Fraser Valley Health Region  
South Fraser Health Region  
Simon Fraser Health Region  
Central Vancouver Island Health Region  
Northern Interior Regional Health Board  
Vancouver/Richmond Health Board  
North Shore Health Region  
Capital Health Region

**COMMUNITY HEALTH SERVICES SOCIETIES**

East Kootenay Community Health Services Society  
West Kootenay/Boundary Community Health Services Society  
Coast Garibaldi Community Health Services Society  
Upper Island/Central Coast Community Health Services Society  
Cariboo Community Health Services Society  
North West Community Health Services Society  
Peace Liard Community Health Services Society

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**APPENDIX****Excerpt from *Hospital Insurance Act*****Nonbeneficiaries**

- 10** (1) The government is not liable for payment of the cost of providing any hospital service or treatment rendered to a person who is not a beneficiary.
- (2) [Repealed 2003-33-6.]
- (3) Despite a contract or any other Act, payment for hospital services or treatment rendered to a person who is not a beneficiary must be made to the hospital by the person or on the person's behalf.
- (4) For the purposes of subsection (3),
- (a) the hospital must compute the amount owing by or on behalf of that person in a manner approved by the Minister, and
  - (b) each computation must be based on the rate or charge approved by the Minister.
- (5) If a patient is not a beneficiary, the hospital has a cause of action against the patient or the person legally liable to pay for the hospital services or treatment rendered to the patient for the amount owing in respect of them as determined under this section.
- (6) For the purposes of subsection (5), if the patient claims to be entitled to benefits under this Act, the burden of proving that he or she is a beneficiary is on that person.
- (7) If a person receives hospital services or treatment other than services or treatment authorized under this Act, payment of a sum computed by the hospital must be made to the hospital by or on behalf of that person for the cost of the other special services or treatment, in addition to the payment of other sums to which the hospital is entitled for any general hospital care which the hospital has rendered to that person.



**Excerpts from Interpretation Act****Definitions**

1 In this Act, or in an enactment:

...

"**enactment**" means an Act or a regulation or a portion of an Act or regulation;

"**public officer**" includes a person in the public service of British Columbia;

...

**Application**

2 (1) Every provision of this Act applies to every enactment, whether enacted before or after the commencement of this Act, unless a contrary intention appears in this Act or in the enactment.

(2) The provisions of this Act apply to this Act.

(3) Nothing in this Act excludes the application to an enactment of a rule of construction applicable to it and not inconsistent with this Act.

...

**Powers to act for Ministers, Deputy Ministers and public officers**

23 (1) Words in an enactment directing or empowering a Minister of the government to do something, or otherwise applying to the Minister by his or her name of office, include a Minister designated to act in the office and the deputy or associate deputy of the Minister.

(2) If a Deputy Minister is absent or unable to act, an assistant Deputy Minister, or some other official authorized by the Minister, has the powers and must perform the duties of the Deputy Minister.

(3) Words in an enactment directing or empowering a public officer to do something, or otherwise applying to the public officer by his or her name of office, include a person acting for the public officer or appointed to act in the office and the deputy of the public officer.

(4) This section applies whether or not the office of a Minister or public officer is vacant.

(5) Subsection (1) does not authorize a deputy or an associate deputy of a Minister to exercise an authority conferred on the Minister to enact a regulation as defined in the *Regulations Act*

**MINISTRY OF HEALTH  
DECISION BRIEFING NOTE**

**Cliff 1035658**

**PREPARED FOR:** Honourable Terry Lake, Minister of Health - **FOR DECISION**

**TITLE:** Release of Population Needs-Based Funding Review Final Report

**PURPOSE:** To seek approval to release the KPMG and Preyra Solutions Final Report on a review of the Population Needs-Based Funding (PNBF) Model to health authorities (HAs) and other interested stakeholders.

**BACKGROUND:**

In July 2014, the Ministry of Health (the Ministry) engaged KPMG and Preyra Solutions Group (Preyra) to provide an independent and objective review of the PNBF model. The consultants were engaged as a result of a public request for proposals process. The review was seeking to determine the appropriateness of the model based on the following:

- an overall assessment of the model and the Ministry's use of it in the operating funding allocation process;
- an examination of the complexity factor used in the model (i.e., the adjustment for cost differentials between large/small, teaching/non-teaching and urban/rural facilities);
- an examination of the remoteness factor used in the model (i.e., the adjustment to account for diseconomies of scale [higher unavoidable costs] in small facilities based on a scale measured by community population size, distance to nearest large hospital, distance to Vancouver, latitude);
- an examination of the Ministry's approach to adjusting for the inter-regional flow of patients receiving health care services; and,
- an examination of possible other factors that should be included/excluded from the model (e.g., workload attributable to provincial programs provided under the direction of the Provincial Health Services Authority and other HAs).

This also included a review of population-based funding models in other jurisdictions and a comparison to the Ministry's current model.

**DISCUSSION:**

As part of the review process and deliverables, the Ministry insisted that KPMG/Preyra engage HAs and other stakeholders. The consultants interviewed representatives from all HAs as well as former HA senior executives who had prior, significant experience collaborating with the Ministry on previous PNBF review projects.

The Ministry created a Project Board (chaired by Manjit Sidhu, Assistant Deputy Minister and including Dr. Brendan Carr, Chief Executive Officer, Vancouver Island Health Authority, Sabine Feulgen, Associate Deputy Minister, and Heather Davidson, Assistant Deputy Minister) to oversee the project and also established the Chief Financial Officers' (CFOs) Committee as an "Advisory Group" to the Project Board. The consultants provided progress reports and reviewed their findings with the Project Board, Leadership Council and CFOs.

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**OPTIONS:**

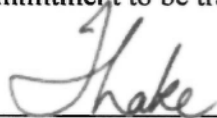
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**FINANCIAL IMPLICATIONS:**

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**RECOMMENDATION:**

Option 1, Release the report to health authorities – the Ministry will fulfil its stated commitment to be transparent regarding the findings of the report.



Approved/Not Approved  
Honourable Terry Lake  
Minister

06/29/2015

Date Signed

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**Program ADM/Division:** Manjit Sidhu, ADM, Finance and Corporate Services

**Telephone:** 250-952-2066

**Program Contact:** Gordon Cross, Executive Director, Regional Grants and Decision Support

**Date:** June 10, 2015

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**MINISTRY OF HEALTH  
INFORMATION BRIEFING NOTE**

**Cliff #** 1031861

**PREPARED FOR:** Honourable Terry Lake, Minister – **FOR INFORMATION**

**TITLE:** Call for Less Antipsychotics in Residential Care (CLeAR)  
Initiative for Reducing Antipsychotics in Residential Care

**PURPOSE:** To inform of results from the CLeAR initiative

**BACKGROUND:**

- In response to media and public concern, the Ministry of Health (the Ministry) completed a review in December 2011 of antipsychotic medication prescribing in residential care settings.
- In October 2012, the Ministry released the *Best Practice Guideline for Accommodating and Managing Behavioural and Psychological Symptoms of Dementia in Residential Care* (the Guideline), an evidence-based tool for supporting the delivery of non-pharmacological interventions to manage behavioural and psychological symptoms experienced by residents with dementia.
- In June 2013, the BC Patient Safety and Quality Council (the Quality Council), in partnership with the Shared Care Committee, launched the CLeAR initiative:
  - All residential care facilities in BC were invited to participate in quality improvement and collective learning activities, including the development of evidence-based, inter-professional strategies for implementing the Guideline.
  - Clinical coaching, regional workshops, practice improvement tools, webinars, progress reports, and an online community of practice were made available by the Quality Council to support CLeAR improvements.
- The aim of CLeAR was to achieve a 50 percent reduction (from baseline) in the inappropriate use of antipsychotics through evidence-based management of the behavioural and psychological symptoms of dementia for residents in participating care facilities.
- In total, 48 residential care facilities voluntarily participated in the CLeAR initiative. Of these, 15 were health authority owned and operated, 26 were affiliated sites, and seven were denominational facilities.
- The Quality Council's final report on CLeAR, *The Journey Towards Dignity & Resident-Centred Care: Summary Results from the Call for Less Antipsychotics in Residential Care* (the CLeAR Report), was received by the Ministry on March 24, 2015. The CLeAR Report is attached as Appendix A.

**DISCUSSION:**

Results

- The CLeAR initiative reported a reduction in all antipsychotic use from 38 percent in October 2013 to 32 percent in December 2014. This is a statistically significant reduction from baseline levels.
- While some facilities exceeded the goal of reducing the inappropriate use of antipsychotics, the initiative did not meet its overall reduction target of 50 percent across all participating sites.

## Methodological Challenges

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- The normal turnover rate of the resident population due to death lessened the statistical calculation of CLeAR improvements. Although teams made progress on discontinuing or reducing antipsychotics within facilities, positive outcome measures were reduced by newly admitted residents who often arrived on antipsychotics.
- Any future CLeAR initiatives can build on these lessons learned to refine and enhance improvement metrics in order to account for admitted residents with antipsychotic prescriptions.

## Building on CLeAR Successes

- The CLeAR initiative successfully identified and tested facility-level strategies that can be used as the foundation for future quality improvement work in residential care.
- CLeAR established new clinical and improvement-related resources that support individualized assessment and evidence-based care.
- Participant surveys completed after the conclusion of CLeAR, noted improvements in communication, teamwork, and culture within participating facilities.
- The Quality Council is working to connect CLeAR teams with the Shared Care Committee's polypharmacy initiative. Incorporating CLeAR resources into polypharmacy education materials is planned.

## **ADVICE:**

- The CLeAR initiative demonstrated that facilities, care teams, residents and families can benefit from coordinated, provincial quality improvement initiatives targeting antipsychotic prescribing in residential care settings.
- The Ministry should publicly release the CLeAR Report.
- The Ministry will continue in partnership with the Patient Safety and Quality Council to support the CLeAR initiative as a means to support organizations with continuing improvements in dementia care and reducing inappropriate use of antipsychotics in residential care.
- The implementation of guidelines for managing behavioural and psychological symptoms of dementia (BPSD), including the management of inappropriate use of antipsychotics in residential care, is being considered for implementation province-wide through the Clinical Care Management initiative.

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**Program ADM/Division:** Doug Hughes, ADM, Health Services Policy and Quality Assurance Division

**Telephone:** (250) 952-1049

**Program Contact (for content):** Teri Collins, Executive Director, Quality Assurance

**Drafter:** Brian Sagar & Leah Smith, Patient Safety

**Date:** April 13, 2015

## **MINISTRY OF HEALTH DECISION BRIEFING NOTE**

**Cliff #** 1015075 (XREF: 935239)

**PREPARED FOR:** Stephen Brown, Deputy Minister - **FOR DECISION**

**TITLE:** Charges to patients who reside in the hospital while waiting for transfer to residential care

**PURPOSE:** Determine response to the Ombudsperson's recommendation on charging patients who remain in hospital for longer than 30 days while waiting for residential care

### **BACKGROUND:**

The BC Ombudsperson has recommended eliminating charges to patients who wait in hospital for a residential care bed more than 30 days, on the basis that it is unfair to patients. The Ombudsperson acknowledges that the *Canada Health Act* permits a province to charge a user fee for accommodation and meals provided to a person who, in the opinion of a doctor, requires chronic care and is "more or less permanently resident" in a hospital or other institution.

The Ministry of Health has a long-standing policy (Appendix A) which allows health authorities to charge hospital patients who are assessed as requiring residential care and are waiting for placement Alternate Level of Care (ALC) patients, after a 30-day grace period. In March 2012, the policy was revised on instruction from the Minister to clarify the maximum daily charge is the short-term residential care rate, currently \$31.90 per day.<sup>1</sup> This low rate was selected to reflect the fact that patients do not receive the full bundle of services normally included in residential care.

This policy was intended to ensure there are no financial incentives for patients to stay in hospital rather than move to residential care, and thus to support patient flow out of the hospital, and ensure acute care beds are available for acute care patients. The policy was also intended to ensure that people receiving residential care in various locations are treated equitably in terms of making a financial contribution for accommodation and meals.

### **DISCUSSION:**

While charges for ALC patients have played a role in patient flow and patient equity, these issues should become less important as health authorities implement their "Home First" or "Home is Best" programs. In accordance with the health system priorities, all health authorities are working to provide more appropriate care to frail seniors in community rather than hospital settings. Home First programs provide enhanced levels of support to seniors discharged from hospital, with the aim of delaying the need for residential care admission, and supporting the person to wait for residential care at home (rather than in hospital), if that level of care is eventually needed.

Home First programs are expected to significantly reduce the number of frail seniors waiting in hospital for placement in residential care. Health authorities are working to build up service levels to support greater numbers of seniors with high care needs to remain in their own homes.<sup>s.13</sup>

### **OPTIONS:**

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<sup>1</sup> BC Ministry of Health Home and Community Care Policy Manual



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**FINANCIAL IMPLICATIONS:**  
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Approved/Not Approved  
Stephen Brown, Deputy Minister

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Date Signed

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<b>Program ADM/Division:</b>	Doug Hughes, Health Services Policy and Quality Assurance
<b>Telephone:</b>	250 952-1049
<b>Program Contact (for content):</b>	Michele Lane, Executive Director
<b>Drafter:</b>	Tricia Braidwood-Looney
<b>Date:</b>	January 8, 2015

**MINISTRY OF HEALTH  
INFORMATION BRIEFING NOTE**

**Cliff # 1036621**

**PREPARED FOR:** Honourable Terry Lake, Ministry of Health -  
**FOR INFORMATION**

**TITLE:** Delta Corporation's "Enhancing Medical Care in Delta" Bylaw

**PURPOSE:** To provide background and advice on how the Ministry and/or BC Emergency Health Services (BCEHS) may wish to respond to a bylaw amendment by the Corporation of Delta which authorizes Delta firefighters to provide enhanced medical care

**BACKGROUND:**

The Corporation of Delta has been actively working on finding a way for Delta firefighters to provide a higher level of emergency medical care than regular First Responders since 2013.

The Corporation continues to express concerns about ambulance response times across the Delta geography. The situation was further exacerbated with the introduction of the Resource Allocation Plan (RAP) by BCEHS.

A Delta pilot proposal, which was brought to the BCEHS Board of Directors for review in December of 2014, was not approved. A meeting was set up with the Municipality of Delta to discuss the Board's decision. Delta was informed that the BCEHS Board of Directors had determined not to move forward with this project as it does not align with the strategic objectives and goals of BCEHS as set out by the Ministry of Health.

At their council meeting on Monday, May 25<sup>th</sup>, The Corporation of Delta Council passed a bylaw which authorized Delta firefighters to provide enhanced emergency care.

The Council Report indicates that "to date, 121 Delta firefighters (approximately three-quarters) have completed training and licensing through the Emergency Medical Assistants Regulation."

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**DISCUSSION:**

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**MINISTRY OF HEALTH  
INFORMATION BRIEFING NOTE**

**Cliff # 1027736**

**PREPARED FOR:** Honourable Terry Lake, Minister of Health -  
**FOR INFORMATION**

**TITLE:** BC Smoking Cessation Program: Evaluation Overview and Update

**PURPOSE:** To provide an overview and update on various program evaluation and quality improvement initiatives for the BC Smoking Cessation Program.

**BACKGROUND:**

In May 2011, Premier Christy Clark announced the BC Smoking Cessation Program (the Program) and it was quickly launched September 2011. Prior to the Program launch, the Ministry of Health (the Ministry) thoroughly reviewed the clinical evidence for safety and efficacy of the nicotine replacement therapies (NRTs) and drugs (varenicline and bupropion) covered by the Program. The Ministry worked with the Canadian Agency for Drugs and Technologies in Health (CADTH) on a comprehensive evidence review and the Ministry's Drug Benefit Council for expert advice. The Ministry also relied upon Health Canada's drug approval and ongoing safety monitoring process to ensure the safety of approved products for the Canadian market.

**DISCUSSION:**

From September 30, 2011 to October 31, 2014, almost 178,000 patients have received smoking cessation aid (122,000 for nicotine gum or patches, and 74,000 for varenicline or bupropion), and the Ministry has invested approximately \$34.4 million for drug coverage.

The Ministry has undertaken and completed a number of initiatives to evaluate the Program:

**1. Impact Evaluation:**

To determine the impact of the Program on smoking quit rates, the Ministry commissioned BC Stats to conduct a survey on quit rates using NRTs, which included predictors of success for quitting, and client experiences. Clients who registered for NRTs in 2014 were contacted to voluntarily participate in the survey in January and February 2015.<sup>s.17</sup>

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In addition, an evaluation of the data file for the Canadian Community Health Survey (CCHS) was proposed as it will allow for the analysis of clients taking NRTs as well as those taking the prescription drugs for smoking cessation. Unfortunately, this evaluation is on hold pending an Omnibus agreement between the Ministry and Statistics Canada.

**2. Operational Review:**

The Ministry conducted an operational review (process evaluation) to determine how well the Program was working, and how processes can be improved. The focus was to characterize and determine registration preferences, accessibility, and interest in behavioural support, with the intention to make adjustments in improving operational processes. Data was collected from HealthLink BC (HLBC), QuitNow Services, the Product Distribution Centre (PDC), and PharmaNet. The results of this review has lead to a number of recommendations for changes that will make the Program more efficient.

### 3. Safety and Effectiveness:

The Ministry primarily relies upon the safety surveillance activities performed by Health Canada. To supplement Health Canada's safety information and the prior evidence review completed by CADTH, a request was previously made to the Drug Safety and Effectiveness Network (DSEN) to conduct an evaluation. In addition, Health Canada's approved drug product monographs provide warnings about potential risks, and health care professionals need to discuss appropriateness and to monitor each patient as part of their professional practice. There are no recent changes to these warnings. In January 2015, the Ministry contacted Health Canada, which advised that, while varenicline and bupropion have been subject to safety reviews in the past, these drugs are not currently subject to any specific safety review.

In May 2014, the DSEN researchers concluded that the covered drugs under the Program are safe and effective. They concluded that the continuous abstinence rate at 12 months was better for varenicline, bupropion and nicotine gum compared to placebo. No safety signals for cardiovascular events or suicides were identified; however, the results should be interpreted with caution given the small number of trials reporting these outcomes and the low number of events available for analysis.<sup>1</sup> The DSEN findings are consistent with CADTH's review findings completed in 2011.

Based on the evidence and information reviewed to date, the Ministry continues to support the drugs currently covered under the Program, including varenicline and bupropion as prescription options. For those interested in conducting additional evaluations on the safety of these two drugs, academic researchers may conduct research using BC data through the established Ministry process for data access.

#### **ADVICE:**

In March 2015, the final analysis of the BC Stats impact survey of NRT clients was completed.s.17

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Based on various safety assessments conducted by Health Canada (and their ongoing usual surveillance) and after several comprehensive reviews of the clinical published evidence by Ministry health partners CADTH and DSEN, the Ministry continues to support the inclusion of varenicline and bupropion as prescription options offered in the Program.

Based on the Program evaluations completed and ongoing work, the evidence supports that the Program is working to help British Columbians quit smoking; that the prescription drugs included in the Program remain safe and effective; and the NRT-related operations will be adjusted to improve efficiency.

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**Program ADM/Division:** Barbara Walman, Medical Beneficiary & Pharmaceutical Services Division  
**Telephone:** 250-952-1705  
**Program Contact (for content):** Eric Lun, Kelly Uyeno  
**Drafter:** Anne Nguyen, Elaine Chong  
**Date:** June 10, 2015

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<sup>1</sup> [http://www.ottawaheart.ca/research\\_discovery/cardiovascular-research-methods-centre.htm](http://www.ottawaheart.ca/research_discovery/cardiovascular-research-methods-centre.htm) (accessed 13jan2015)



**MINISTRY OF HEALTH  
INFORMATION BRIEFING NOTE**

**Cliff #1035761**

**PREPARED FOR:** Honourable Terry Lake, Minister of Health - **FOR INFORMATION**

**TITLE:** Reducing Cost Barriers for Asthma Medications for Children

**PURPOSE:** To provide high level information with regard to reducing cost barriers for pediatric asthma medications

**BACKGROUND:**

PharmaCare currently provides coverage for asthma medications under the child's primary PharmaCare plan – 100 percent, first dollar coverage under the Income Assistance and Children in the At Home Program plans (C and F) and coverage under Fair PharmaCare that requires families to pay 100 percent of costs until they meet an income-based deductible to receive 70 percent coverage and co-pays until they meet a Family Maximum to receive 100 percent coverage.

In 2014/15, PharmaCare spent a total of \$0.8 million on asthma prescription medications for children 18 years and younger. The vast majority of the 63,400 pediatric patients eligible for PharmaCare coverage of asthma medications were enrolled in Fair PharmaCare (92 percent). However, only 9,400 (14.8 percent) of patients had paid benefits; 5,200 (8.2 percent) had first dollar coverage and 4,200 (6.6 percent) received paid benefits through Fair PharmaCare. Families of the remaining 54,000 patients (85.2 percent) did not meet their income-based deductibles, co-pays and family maximums, therefore did not receive paid benefits.

Non-adherence is common in patients with chronic diseases such as diabetes, heart disease and asthma. It is associated with increased disease severity, increased numbers of physician visits and hospital admissions, and increased mortality. High drug costs are just one of a number of factors that can lead to non-adherence (see Appendix A).

Initiatives aimed at improving medication adherence mainly involve health care provider interventions and/or economic incentives such as lowering or removing cost barriers on classes of medications used for managing chronic conditions such as asthma.

Peer-reviewed literature shows that eliminating cost barriers may result in modest adherence improvements for some chronic conditions. Evidence is limited on whether these improvements can be sustained in the long term.

**DISCUSSION:**

There are options for reducing cost barriers for pediatric asthma medications for Fair PharmaCare beneficiaries including:

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**FINANCIAL IMPLICATIONS:**  
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**ADVICE:**  
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**Program ADM/Division:** Barbara Walman/Medical Beneficiary and Pharmaceutical Services  
**Telephone:** 250 952 1705  
**Program Contact (for content):** Mitch Moneo  
**Drafter:** Greg Abbott  
**Date:** June 12, 2015

## APPENDIX A: Medication Adherence Factors

**Table 2 – Approaches to medication adherence interventions.**

Type of barrier	Specific barriers	Possible adherence interventions
Patient–Provider	<ul style="list-style-type: none"> <li>• Unfavorable beliefs about medications or poor understanding of risks and benefits of medications</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced counseling (e.g., motivational interviewing, collaborative care approach)</li> <li>• Decision-aids</li> </ul>
	<ul style="list-style-type: none"> <li>• Regimen complexity, especially in cognitively impaired patients</li> </ul>	<ul style="list-style-type: none"> <li>• Pill-organizer or special packaging (e.g., pillboxes, blister packs)</li> <li>• Polypills</li> <li>• Reduce frequency of dosing</li> <li>• Reminders (by telephone, e-mail, or alarms on electronic pill monitoring systems)</li> <li>• Enlist social support</li> <li>• Behavioral counseling to increase habit strength</li> <li>• Enhanced psychiatric care</li> </ul>
	<ul style="list-style-type: none"> <li>• Psychological vulnerabilities (e.g., depression, PTSD)</li> <li>• Poor detection of non-adherence</li> </ul>	<ul style="list-style-type: none"> <li>• Integrate validated self-report tools or objective adherence measures into clinical work-flow</li> </ul>
Patient–Health System	<ul style="list-style-type: none"> <li>• High cost of drug co-pays</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminate cost of drug co-pays</li> <li>• Financial incentives for adherence</li> </ul>
	<ul style="list-style-type: none"> <li>• Poor access to care</li> </ul>	<ul style="list-style-type: none"> <li>• Broaden eligibility to affordable health care</li> </ul>
Provider–Health System	<ul style="list-style-type: none"> <li>• Insufficient time for counseling during appointments</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate with care managers or allied health professionals (e.g., pharmacists) to assist with adherence counseling</li> </ul>
	<ul style="list-style-type: none"> <li>• Lack of timely access to pharmacy refill data</li> </ul>	<ul style="list-style-type: none"> <li>• Integrate pharmacy data into clinic work-flow</li> </ul>

# MINISTRY OF HEALTH INFORMATION BRIEFING NOTE

**Cliff # 1032474**

**PREPARED FOR:** Honourable Terry Lake, Minister - **FOR INFORMATION**

**TITLE:** PharmaCare Coverage of Biologic Drugs

**PURPOSE:** Minister Lake requested information regarding PharmaCare coverage and expenditure for biologic drugs to treat rheumatoid arthritis and related conditions.

## **BACKGROUND:**

- The group of drugs called biologic response modifiers or biologics are genetically engineered proteins that inhibit components of the immune system that play pivotal roles in fueling inflammation, which is a central feature of rheumatoid arthritis and several related conditions.

## **DISCUSSION:**

- The PharmaCare coverage status of the biologic drugs for treatment of rheumatoid arthritis and related conditions is as follows:

Indication	Drugs	PharmaCare Coverage Status
Rheumatoid Arthritis (RA)	abatacept (Orencia), adalimumab (Humira), certolizumab (Cimzia), etanercept (Enbrel), golimumab (Simponi), infliximab (Remicade), rituximab (Rituxan), tocilizumab IV (Actemra)	Limited Coverage
	infliximab (Inflectra), tocilizumab subcutaneous injection (Actemra), tofacitinib (Xeljanz)	Under Review
	golimumab IV	Under Review by the CDR
Ankylosing Spondylitis (AS)	adalimumab, etanercept, golimumab, infliximab (Remicade)	Limited Coverage
	certolizumab	Non-Benefit
	infliximab (Inflectra)	Under Review
	certolizumab	Under Review by the CDR
Psoriatic Arthritis (PsA)	adalimumab, etanercept, golimumab, infliximab (Remicade)	Limited Coverage
	infliximab (Inflectra), certolizumab, ustekinumab (Stelara)	Under Review
	certolizumab, ustekinumab	Under Review by the CDR

Indication	Drugs	PharmaCare Coverage Status
Plaque Psoriasis	adalimumab, etanercept, infliximab (Remicade), ustekinumab	Limited Coverage
	infliximab (Inflectra)	Under Review
Polyarticular Juvenile Idiopathic Arthritis (pJIA)	adalimumab, abatacept, tocilizumab	Limited Coverage
Systemic Juvenile Idiopathic Arthritis (sJIA)	tocilizumab	Limited Coverage
Granulomatosis with Polyangiitis (GPA, or Wegener's Granulomatosis) and Microscopic Polyangiitis (MPA)	rituximab	Limited Coverage
Crohn's Disease (CD)	infliximab (Remicade), adalimumab	Limited Coverage
Ulcerative Colitis (UC)	adalimumab, golimumab	Non-Benefit
	infliximab (Remicade)	Exceptional case-by-case through Special Authority
	golimumab	Under Review by the CDR

- BC does not officially provide coverage for any biologics for treatment of Ulcerative Colitis (UC). PharmaCare does provide coverage for infliximab on an exceptional case-by-case basis with the assistance of the Crohn's Drug Benefit Adjudication Advisory Committee (DBAAC). Through this exceptional mechanism PharmaCare coverage extends to most cases of UC in the province.
- The Gastrointestinal Society recently released a Report Card that gave BC PharmaCare a B ("Acceptable") for its coverage of drugs to treat Crohn's disease and a D ("Not Acceptable") for drugs to treat UC and recommended providing formal listing criteria for all biologics for UC rather than case-by-case review.
- The number of patients annually receiving PharmaCare coverage for one of the biologic drugs for treatment of rheumatoid arthritis, psoriatic arthritis and ankylosing spondylitis has grown from 547 patients in 2002, the first year PharmaCare covered these drugs, to 6,409 in 2014.
- Similarly, the PharmaCare annual expenditure for these drugs and these indications has grown from \$6.4 million in 2002 to \$82.5 million in 2014. Over the last three years, expenditure has increased 12 percent annually for rheumatoid arthritis indications.
- In Fiscal Year 2012/13, infliximab was PharmaCare's largest single drug expenditure at \$51 million.
- Besides the biologics used for immune-mediated conditions like rheumatic disorders, psoriasis, and inflammatory bowel disease like UC or Crohn's, the Ministry also covers many other biologics, including:
  - Somatropin or growth hormone (to manage pediatric growth disorder)
  - Natalizumab, interferons and other biologics for multiple sclerosis
  - Interferon (for hepatitis C)
  - Bevacizumab and ranibizumab for retinal diseases (funded through PHSA)
  - Biologics covered on exceptional basis by PharmaCare: filgrastim (for neutropenia), erythropoietin (for anemia), omalizumab (for asthma) etc.
  - Drugs for rare diseases on exceptional basis: ivacaftor (for CF), eculizumab (for blood clotting), imiglucerase & velaglucerase (for Gaucher's), etc.

### **Subsequent Entry Biologics (SEBs)**

- SEBs are biologic drugs that have entered the market following a biologic drug previously authorized in Canada, and which have a demonstrated similarity to a reference biologic drug. SEBs are intentionally developed to be less expensive versions of innovator biologics.
- Unlike generic drugs, which have the same active ingredient as the innovator drug, and therefore have identical biological activity, SEBs are considered to have similar (but not identical) biological activity as an approved innovator biologic. Generic drugs are approved by Health Canada based on bioequivalence studies that show they are chemically the same as the innovator drug, while approval of SEBs requires Health Canada to review comparative efficacy and safety clinical studies.
- Health Canada considers the authorisation of an SEB to not be a declaration of pharmaceutical or therapeutic equivalence to the reference biologic drug. Once an SEB receives a Notice of Compliance (NoC), Health Canada considers it to be a new product with the same regulatory requirements as other new products.
- The national Common Drug Review (CDR) reviews SEBs differently from how it reviews other biologics; the CDR still requires a manufacturer submission of clinical trial information but does not require a pharmacoeconomic analysis is required, as the SEB's cost is simply compared to the reference product.
- Physicians, patients and patient groups have expressed concerns that public and private drug plans such as PharmaCare will consider SEBs similar to how they consider generic drugs, despite the fact that SEBs are not identical to the innovator biologics, and practices such as substitution, or switching from a brand-name to drug to a generic, will be used without regards to the differences between SEBs and innovator biologics.
- Numerous SEBs have been or are now in development by the major pharmaceutical companies; for example, Merck has partnered with Samsung to develop a rituximab SEB. Other SEBs that can be expected to be marketed in Canada in the near future, based on their approval in the EU and the US, include epoetin (two are expected to be submitted to Health Canada in 2015), somatropin, and filgrastim.
- Infliximab (Inflectra), an SEB for Remicade, has been approved by Health Canada for treatment of rheumatoid arthritis, ankylosing spondylitis, plaque psoriasis and psoriatic arthritis.
- Inflectra is priced approximately 33 percent less than Remicade, and PharmaCare is currently reviewing Inflectra to determine its coverage.

### **ADVICE:**

- The Ministry makes PharmaCare coverage decisions by considering existing PharmaCare policies, programs, priorities and resources, and the evidence informed recommendations of an independent advisory body called the Drug Benefit Council (the Council).
- The Council's advice to the Ministry is based upon a review of many considerations, including available clinical and pharmacoeconomic evidence, clinical practice and ethical considerations, input from patients, caregivers and patient groups provided through the Ministry's *Your Voice* web page and the recommendations of the national Common Drug Review (CDR).
- PharmaCare provides coverage for numerous biologic drugs for treatment of numerous conditions, and is currently reviewing several submissions for new indications for these drugs.

- Biologics represent a significant cost and budget pressure for all drug plans due to the higher product price, high cost per patient, growing market demand. The growth rate of biologics costs continues to outpace other therapeutic areas without biologics and represents a key growth driver for BC PharmaCare.
- The Ministry may also participate in the Pan-Canadian Pharmaceutical Alliance (PCPA) negotiations with the manufacturer, if applicable, and consider the outcomes of the PCPA's negotiation when making a listing decision for the drug.
- To capitalize on the potential significant cost savings associated with SEBs, the Ministry should actively pursue reviewing and listing these drugs as appropriate.

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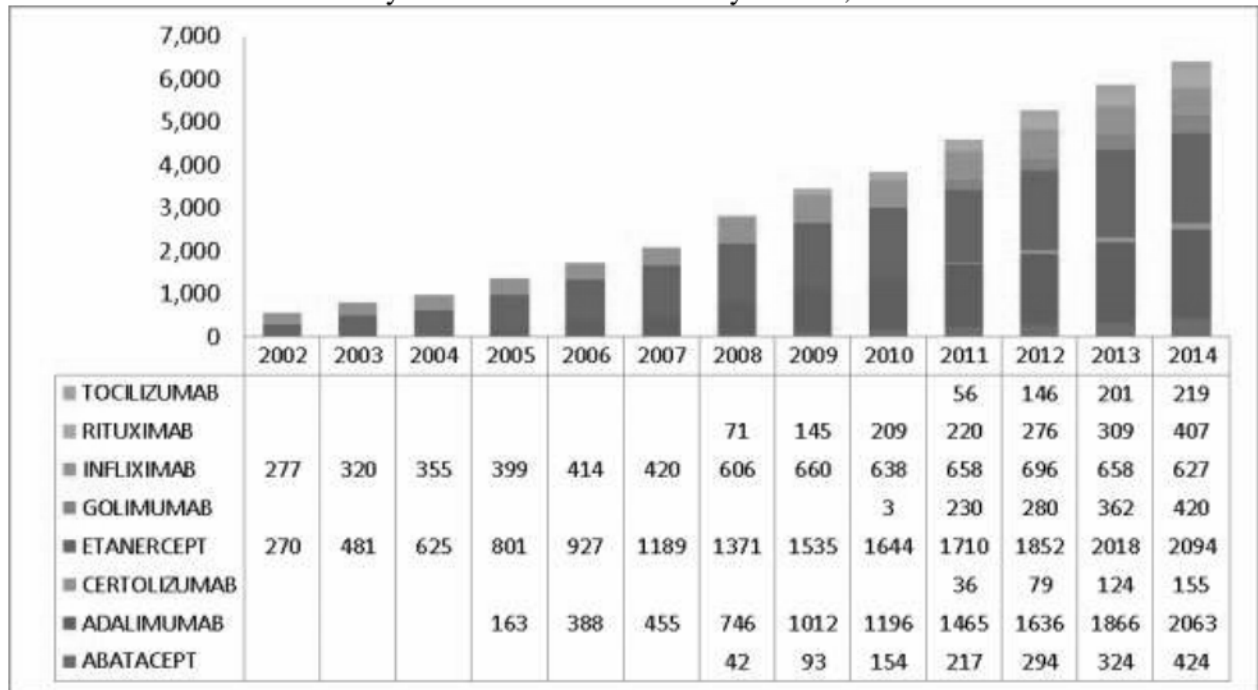
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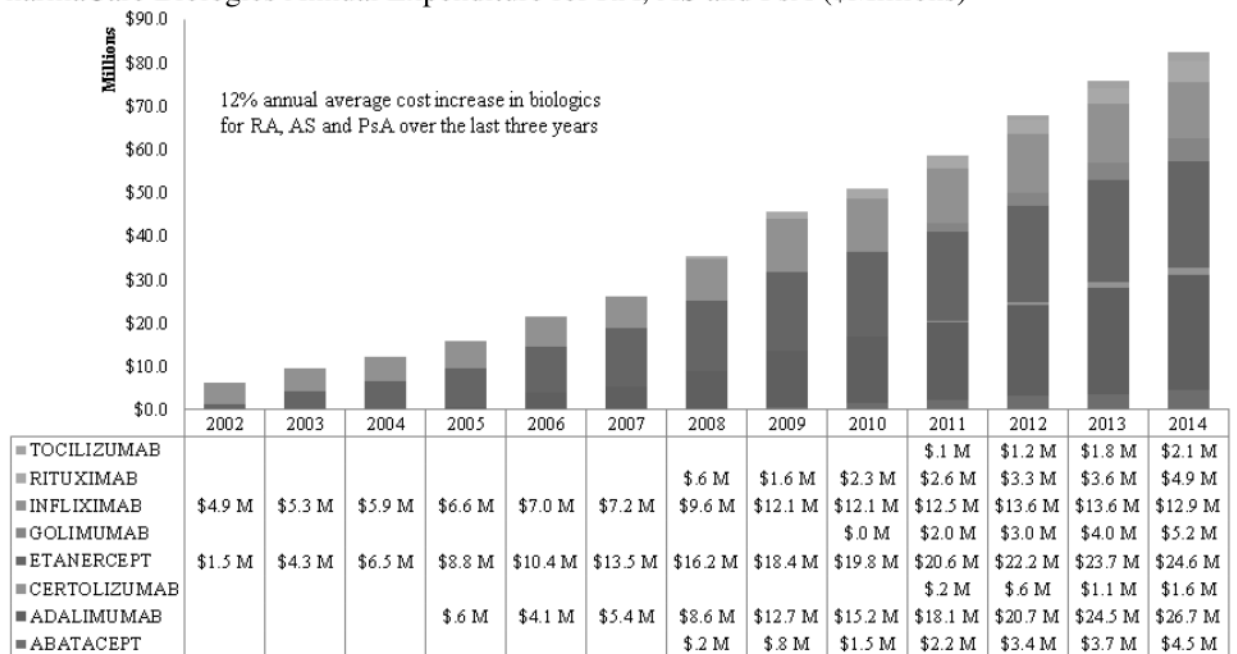
**Date:** May 11, 2015

## Appendix A: PharmaCare utilization and Expenditure

Number of Patients Funded by BC PharmaCare Annually for RA, PsA and AS



PharmaCare Biologics Annual Expenditure for RA, AS and PsA (\$Millions)



## Appendix B: Comparative Cost of Therapy for RA, AS, PsA, Plaque Psoriasis

Comparative Cost of Therapy and Current Coverage Status of Biologics for the treatment of Rheumatoid Arthritis (includes 5% mark up)						
Drug	Strength	Dosage Forms	PharmaCare Status	Cost/ Unit	Recommended or Expected Dose per Treatment	Annual Cost of Therapy
Abatacept (Orencia)	250 mg/ 15 mL	Vial for infusion	Limited Coverage	\$504.43	500 to 1000 mg week 0, 2, and 4, then every 4 weeks thereafter	Year 1: \$14,124 to \$28,248 (14 doses) Thereafter: \$13,115 to \$26,230 (13 doses)
	125 mg/ mL	Pre-filled syringe	Limited Coverage	\$376.85	A single 500 mg to 1000 mg IV loading dose, then 125 mg SC within one day and once weekly thereafter	Year 1: \$20,605 to \$21,614 (includes IV loading dose) Thereafter: \$19,596
Adalimumab (Humira)	40mg/ 0.8 mL	Pre-filled syringe or pen	Limited Coverage	\$777.38	40 mg SC every other week	\$20,211
Certolizumab (Cimzia)	400 mg/ 2 mL	Pre-filled syringe	Limited Coverage	\$717.67	400 mg SC week 0, 2, and 4, then 200 mg SC every 2 weeks or 400 mg every 4 weeks	Year 1: \$19,377 (27 doses) Thereafter: \$18,659 (26 doses)
Etanercept (Enbrel)	50 mg/ 4 mL	Pre-filled syringe or auto injector	Limited Coverage	\$382.49	50 mg SC weekly or 25 mg SC twice weekly	\$19,889
	25 mg	Vial for injection				
Golimumab (Simponi)	50 mg/ 0.5 mL	Pre-filled syringe or auto injector for SC injection	Limited Coverage	\$1,596.22	50 mg SC once monthly	\$19,154



Comparative Cost of Therapy and Current Coverage Status of Biologics for the treatment of Rheumatoid Arthritis (includes 5% mark up)						
Drug	Strength	Dosage Forms	PharmaCare Status	Cost/ Unit	Recommended or Expected Dose per Treatment	Annual Cost of Therapy
	50 mg	Vial for infusion	Under Review	\$868.20 <sup>a</sup>	Year 1: 2 mg/ kg IV weeks 0 and 4, then every 8 weeks thereafter Year 2: 2 mg/ kg IV every 8 weeks thereafter	Year 1: \$20,836 (8 doses) Thereafter: \$19,534 (7.5 doses)
Infliximab (Inflectra)	100 mg/ vial for infusion	Lyophilized power	Under Review	\$682.50/ vial <sup>a</sup>	3 mg/kg (first year, 8 treatments per year) 4.45 mg/kg (subsequent years)	\$11,466 (first year) \$13,821 (subsequent years)
Infliximab (Remicade)	100 mg/ vial for infusion	Lyophilized power	Limited Coverage	\$1,036.94/ vial	(subsequent years, 6.5 treatments per year) <sup>b</sup>	\$17,421 (first year) \$20,998 (subsequent years)
Rituximab (Rituxan)	100 mg/ 10 mL 500 mg/ 50 mL	Vial for infusion	Limited Coverage	\$475.80 \$2,379	1000 mg in week 0 and 1000 mg week 2; reassess for retreatment at week 26, no sooner than 16 weeks after previous course	\$19,032 to \$28,548
Tocilizumab (Actemra)	80 mg/ 4.0 mL 200 mg/ 10.0 mL 400 mg/ 20.0 mL	Vial for infusion	Limited Coverage	\$188.16 \$470.40 \$940.80	4 mg/kg IV every 4 weeks, increasing to 8 mg/kg IV based on clinical response	4 mg/kg: \$8,561 (based on 13 doses/year) 8 mg/kg: \$17,123 (based on 13 doses/ year)

Comparative Cost of Therapy and Current Coverage Status of Biologics for the treatment of Rheumatoid Arthritis (includes 5% mark up)						
Drug	Strength	Dosage Forms	PharmaCare Status	Cost/ Unit	Recommended or Expected Dose per Treatment	Annual Cost of Therapy
	162 mg/ 0.9 mL	Pre-filled syringe for SC injection	Under Review	\$372.75 <sup>a</sup>	162 mg SC every other week, increasing to every week based on clinical response	\$19,383 (52 doses)

This table assumes a patient weight of 70 kg. Drug cost calculations include wastage of unused drug in an opened vial based on a threshold of 35% (defined as 35% of product remaining in vial, below which the manufacturer and CDR assumed that the provider will not use in the next patient). Adapted from the Common Drug Review Clinical and Pharmacoeconomic Review Report for Inflectra.

<sup>a</sup> Manufacturer's submitted non-confidential price

Comparative Cost of Therapy and Current Coverage Status of Comparators for the treatment of Ankylosing Spondylitis (includes 5% mark up)						
Drug	Strength	Dosage Forms	PharmaCare Status	Cost/Unit	Recommended or Expected Dose per Treatment	Annual Cost of Therapy
Adalimumab (Humira)	40mg/ 0.8 mL	Pre-filled syringe or pen	Limited Coverage	\$777.38	40 mg SC every other week	\$20,211
Certolizumab (Cimzia)	200 mg/ mL	Pre-filled syringe	Non-benefit for ankylosing spondylitis	\$717.67	400 mg SC week 0, 2, and 4, then 200 mg SC every 2 weeks or 400 mg every 4 weeks	Year 1: \$19,377 (27 doses) Thereafter: \$18,659 (26 doses)
Etanercept (Enbrel)	50 mg/ 4 mL	Pre-filled syringe or auto injector	Limited Coverage	\$382.49	50 mg SC weekly or 25 mg SC twice weekly	\$19,889
	25 mg	Vial for injection				
Golimumab (Simponi)	50 mg/ 0.5 mL 100 mg/ mL	Pre-filled syringe or auto injector	Limited Coverage	\$1,596.22	50 mg SC once monthly	\$19,154

Comparative Cost of Therapy and Current Coverage Status of Comparators for the treatment of Ankylosing Spondylitis (includes 5% mark up)						
Drug	Strength	Dosage Forms	PharmaCare Status	Cost/Unit	Recommended or Expected Dose per Treatment	Annual Cost of Therapy
Infliximab (Inflectra)	100 mg/ vial for infusion	Lyophilized power	Under Review	\$682.50/ vial <sup>a</sup>	5 mg/kg (first year, 8 treatments per year)	\$19,110 (first year)
					5.5 mg/kg (subsequent years)	\$18,428 (subsequent years)
Infliximab (Remicade)	100 mg/ vial for infusion	Lyophilized power	Limited Coverage	\$1,036.94/ vial	(subsequent years, 7 treatments per year) <sup>c</sup>	\$29,034 (first year)
						\$27,997 (subsequent years)

This table assumes a patient weight of 70 kg. Drug cost calculations include wastage of unused drug in an opened vial based on a threshold of 35% (defined as 35% of product remaining in vial, below which the manufacturer and CDR assumed that the provider will not use in the next patient). Adapted from the Common Drug Review Clinical and Pharmacoeconomic Review Report for Inflectra.

<sup>a</sup> Manufacturer's submitted non-confidential price

Comparative Cost of Therapy and Current Coverage Status of Comparators for the treatment of Psoriatic Arthritis (includes 5% mark up)						
Drug	Strength	Dosage Forms	PharmaCare Status	Cost/Unit	Recommended or Expected Dose per Treatment	Annual Cost of Therapy
Adalimumab (Humira)	40mg/ 0.8 mL	Pre-filled syringe or pen	Limited Coverage	\$777.38	40 mg SC every other week	\$20,211
Certolizumab (Cimzia)	200 mg/ mL	Pre-filled syringe	Under Review	\$717.67	400 mg SC week 0, 2, and 4, then 200 mg SC every 2 weeks or 400 mg every 4 weeks	Year 1: \$19,377 (27 doses) Thereafter: \$18,659 (26 doses)
Etanercept (Enbrel)	50 mg/ 4 mL	Pre-filled syringe or auto injector	Limited Coverage	\$382.49	50 mg SC weekly or 25 mg SC twice weekly	\$19,889
	25 mg	Vial for injection				

Comparative Cost of Therapy and Current Coverage Status of Comparators for the treatment of Psoriatic Arthritis (includes 5% mark up)						
Drug	Strength	Dosage Forms	PharmaCare Status	Cost/Unit	Recommended or Expected Dose per Treatment	Annual Cost of Therapy
Golimumab (Simponi)	50 mg/ 0.5 mL 100 mg/ mL	Pre-filled syringe or auto injector	Limited Coverage	\$1596.22	50 mg SC once monthly	\$19,154
Infliximab (Inflectra)	100 mg/ vial for infusion	Lyophilized power	Under Review	\$682.50/ vial <sup>a</sup>	5 mg/kg (first year, 8 treatments per year)  5.5 mg/kg (subsequent years, 6.5 treatments per year) <sup>c</sup>	\$19,110 (first year)  \$17,745 (subsequent years)
Infliximab (Remicade)	100 mg/ vial for infusion	Lyophilized power	Limited Coverage	\$1,036.94/ vial	(subsequent years, 6.5 treatments per year) <sup>c</sup>	\$29,034 (first year)  \$26,960 (subsequent years)
Ustekinumab (Stelara)	45 mg/ 0.5 mL 90 mg/ 1.0 mL	Pre-filled syringe	Under Review	\$4,822.80	45 mg SC weeks 0 and 4, then every 12 weeks thereafter	\$28,936

This table assumes a patient weight of 70 kg. Drug cost calculations include wastage of unused drug in an opened vial based on a threshold of 35% (defined as 35% of product remaining in vial, below which the manufacturer and CDR assumed that the provider will not use in the next patient). Adapted from the Common Drug Review Clinical and Pharmacoeconomic Review Report for Inflectra.

<sup>a</sup> Manufacturer's submitted non-confidential price

Comparative Cost of Therapy and Current Coverage Status of Comparators for the treatment of Plaque Psoriasis (includes 5% mark up)						
Drug	Strength	Dosage Forms	PharmaCare Status	Cost/ Unit	Recommended or Expected Dose per Treatment	Annual Cost of Therapy
Adalimumab (Humira)	40mg/ 0.8 mL	Pre-filled syringe or pen	Limited Coverage	\$777.38	80 mg SC week 0, then 40 mg week 1 and every other week thereafter	\$21,767
Etanercept (Enbrel)	25 mg	Vial for injection	Limited Coverage	\$382.49	50 mg SC twice weekly	\$24,479

Comparative Cost of Therapy and Current Coverage Status of Comparators for the treatment of Plaque Psoriasis (includes 5% mark up)						
Drug	Strength	Dosage Forms	PharmaCare Status	Cost/ Unit	Recommended or Expected Dose per Treatment	Annual Cost of Therapy
	50 mg/ 4 mL	Pre-filled syringe or auto injector			for 3 months then once weekly thereafter	
Infliximab (Inflectra)	100 mg/ vial for infusion	Lyophilized power	Under Review	\$682.50/ vial <sup>a</sup>	5 mg/ kg (first year, 8 treatments per year) 5.5 mg/ kg (subsequent years)	\$19,110 (first year) \$17,745 (subsequent years)
Infliximab (Remicade)	100 mg/ vial for infusion	Lyophilized power	Limited Coverage	\$1,036.94/ vial	(subsequent years, 6.5 treatments per year) <sup>c</sup>	\$29,034 (first year) \$26,960 (subsequent years)
Ustekinumab (Stelara)	45 mg/ 0.5mL 90 mg/ 1.0 mL	Pre-filled syringe	Limited Coverage	\$4,822.80	45 mg SC weeks 0 and 4, then every 12 weeks thereafter	\$28,936

This table assumes a patient weight of 70 kg. Drug cost calculations include wastage of unused drug in an opened vial based on a threshold of 35% (defined as 35% of product remaining in vial, below which the manufacturer and CDR assumed that the provider will not use in the next patient). Adapted from the Common Drug Review Clinical and Pharmacoeconomic Review Report for Inflectra.

<sup>a</sup> Manufacturer's submitted public price