Canadian HIV and Viral Hepatitis Pharmacists Network (CHAP)

Réseau Canadien des Pharmaciens en VIH et hépatites virales

CHAP ANNUAL GENERAL MEETING (Live)

Room 205C, Quebec City Convention Centre, Quebec City

Wednesday, April 26, 2023; 7:15 am to 17:00 pm EDT (all times EDT)

7:15-7:50	**Breakfast**
7:50-8:00	**Welcome: Carley Pozniak** It is wonderful to see everyone in person! Thank you to all of our generous sponsors. Platinum: Gilead, Merck. Silver: Viiv. Bronze: Pfizer. Other: Abbvie. **In Attendance:** Carley Pozniak, Linda Robinson, Tasha Ramsey, Jenn Hawkes, Alice Tseng, Benoit Lemire, Debbie Kelly, Pierre Giguere, Sue Gill, Stacey Tkachuk, Caitlin Olatunbosun, Kathy Lee, Jackie Myers, Nancy Sheehan, Tracy Janzen Cheney, Erin Ready.
8:00-9:00	**Opening Plenary:** *Managing and Supporting ART Adherence in a Modern World* **Guest Speaker:** Dr. Bertrand Lebouche; McGill University Health Centre, Montreal, QC. A new era of HIV self-management requires evolution in the model of care. Beyond viral undetectability, there is now increasing importance of patient-reported outcomes. Reviewed predictors of nonadherence of ART. Self-management in HIV as a chronic condition where the patient manages care, not the healthcare provider team. Tools are needed to support regular follow-up of adherence barriers. Discussed mHealth to improve self-management in HIV care and capture patient perspectives and patient-reported indicators for HIV care. It is also important to engage patients in research, to go from a patient reported outcome to a patient important outcome. Reviewed user-centered mobile health and patient-reported outcome measure (PROML) to evaluate HIV care and I-Score PROM concept of minimal interference in the patient's life. Found no existing tool to meet their needs and created a conceptual framework to guide content development, then moved to content validity, construct validity, and use. It was key that the PROM was made by patient and healthcare providers to address patient concerns (not adherence).

	A preliminary analysis on the predictive capacity for the 7 item I-Score as an index of perceived difficulty of taking an ART regimen for key outcomes was conducted. The I-Score (7 item interference score) was useful to predict almost all self-reported adherence variables and excellent to predict the self-reported viral load 4 weeks in advance and suggests clinical utility. Opal was also discussed, a connected health portal app developed by a patient, physician and a medical physicist. The goal of Opal is to empower patients to access their data, including mobile appointment check in, monitor wait times, report their symptoms, and to donate their data. Clinicians use a virtual waiting room, record outcome data, improve workflow, and manage a virtual clinic dashboard. Opal is also research tool that can be used to recruit patients, access patient reported outcomes and multi-institutional real world data. Opal/I-Score pilot: patients had access to resources, can see their I-Score and their level of barrier from 1-10. Example case reviewed where with use of I-Score learned: barriers were pill fatigue, pill side-effects and that can led to ART discontinuation. Addressing these concerns led to an improved medication score, perception of care from healthcare team, and acceptance of HIV. I-Score is able to capture subjective outcomes often missed. Monitoring care and adherence with PROMS can: complete the usual follow-up, include patients' priorities for HIV including consideration of stigma, quantify their perspective, follow up between regular visits, and save time. Use of I-Score is captures patient experience, happiness with treatment rather than traditional treatment adherence as do not ask how much are taking.
9:00-11:15	**AGM BUSINESS** • Executive Report – Carley Pozniak o Introduction to executive team and thank you ▪ Past Chair: Linda ▪ Co-treasures: Deb and Alice ▪ Secretary: Tasha o There were 8 executive meetings this year o Approval of 2022 AGM minutes ▪ 13/20 working group members responded. 12 voted to approve, 1 abstained as was not at the meeting. o CHAP chats ▪ 31 responses, 93% to continue ▪ 2 seems to be the preferred number of CHAP chats ▪ There were 4 CHAP chats this year. Our two plenary speakers at the AGM today, the fall conference update, and the Canadian Pediatric and Perinatal HIV/AIDS Research Group Consensus Recommendations for Infant Feeding in the HIV Context by Dr. Kahan. • Election of a new secretary

	○ **Pierre Giguere**: declined as heavily involved with University of Ottawa new program ○ **Sue Gill**: well established clinical practice, experience organizing and co-chairing the Ontario HIV Pharmacists Education Day along with Linda. As she recently joined the working group, prefers to remain on the working group for a few more years before taking on an executive role. ○ **Sharan Lail**: has attended 2 AGMs, including last year as a working group member. Expressed she has benefitted so much from being part of CHAP that she would be happy to take on the Secretary role either this year or in the future in case there are other applicants for this year. ○ **Sharan Lail will be the 2023-2024 CHAP secretary** • CHAP Endorsements: ○ Breastfeeding guidelines: ▪ CHAP was a reviewer and endorser. Noted CHAP was listed in authorship list despite offering endorsement and that we did not act in an authorship role. ○ PEP/PREP guidelines: Endorsement request is to come. Debbie Kelly is also part of the panel. ○ International PK workshop: Endorsed. ○ Consensus recommendations for use of LA-ART in treatment and prevention of HIV: International consensus panel. Alice involved to represent CHAP. ○ Discussed the CHAP endorsement policy. ▪ Recommended for executive to review the endorsement policy and ensure endorsement description is clear. Clarify if they outline authorship acknowledgment. For future endorsement, ask how will be acknowledged and to see a proof. In future CHAP can also list documents we have endorsed on the website by year. In 2012 endorsements officially started. ▪ CHAP members are asked to recommend CHAP endorsement to increase our visibility when they are involved as a co-writer on guidelines. ▪ Send out a questionnaire to see if it is ok with membership to showcase endorsements on the website. • Treasurer's report – Deb Yoong and Alice Tseng ○ AGM 2022: 24 virtual attendees: 13 WG, 9 nWG, 2 emeriti members ○ Grant received: $21, 000 ▪ $11,000 AGM + $10, 000 CHAP chats ○ Expenses: $16, 016.85 ▪ Chair grant $2,000 ▪ UberEATS $1,425 (19X 75) ▪ AGM plenary speaker $2,000 ▪ CHAP chats $10,000

- Goal is to keep enough for 2 meetings in reserve
- AGM 2023:
  - AGM+ CHAP chats: $46, 500
  - In the future encourage platinum level donations
  - MODERNA is pursuing a HIV vaccine. Ask them to sponsor and send a speaker for the next AGM.
  - Have a verbal conversation with past chair and company before send letter when asking for sponsorship to ensure the letter meets the needs of CHAP and the company.
  - Don't be shy about asking for what want and also ask directly what they are looking for in a letter in addition to what they can pay for.
    - Viiv ~15,000 or % of total will not pay more than 25% of a project. Gilead/Viiv cannot pay for travel.
    - Viiv can provide money for facilitation
  - Carley to work on a timeline for the chap year, what the duties are, what months executive completes tasks, and all funding deadlines save under meeting year.

- CHAP projects and initiatives:
  - Update on role of the pharmacist article-Erin Ready, Stacey Tkachuk
    - Will follow cascade of care model
    - Pictograph made to illustrate pharmacist's role in the HIV cascade of care: prevention through diagnosis, linkage to care, initiation of treatment, and achievement and maintenance of viral suppression.
    - Target: CPJ with consideration for a CJHP article in the future
- **Break-15 minutes**
  - Observership program update-Alice Tseng
    - Becki Rosennbaum
    - Jon Smith
    - Janhavi Malhotra
  - Update on infant arv dosing project-Carley Pozniak
    - Collaborating with Stacey and Karen
    - Goal is to create an informal unpublished review as there are concerns with publishing expert opinions from a liability perspective.
    - Eventually hope to explore a case series for publication and TDM.
      - Nancy offered to present a presentation on neonates and TDM to CHAP. Anecdotally the levels are not what would be expected.
      - Mg/kg dosing seems to work well and confirm with TDM and others need adjustment.
    - New DHHS guidelines say need positive rapid test before start ARV in infant. However many get ARV for RF alone.

	▪ Discussed if anyone is using rapid tests in labour and delivery. Is considered in parts of BC and SK (however removed in Regina due to training concerns for nurses). ▪ Role for testing in 3rd trimester? In BC do. o Educational series-Resistance, DDI's etc-Linda Robinson ▪ Discussed the creation of a basic educational series to be stored on the CHAP website. Zoom or other recording and an expert talking about content. Ideally topics that do not rapidly change: fundamentals of ARV, TDM, testing basics. ▪ Pros- is this something we already to in our day to day jobs and can promote on our website ▪ Cons- why reinvent the wheel? Ensure do not duplicate materials already available online (e.g.: Florida materials: AIDS education training center) and via the National HIV training curriculum. Discussed concerns about liability and copyright concerns of posting materials and images on CHAP website that would normally use on a smaller scale. If proceed we need to ensure we get help with copyright assistance. ▪ Survey the working group about interest, topics to decide if go forward or not ▪ Gliead interested in sponsoring. CHAP would want to ensure this is an unrestricted educational grant. ▪ Next steps: consider 1 module q 6 months. Ask for people to volunteer to the group. ▪ Linda spoke to knowledge translation importance as experienced leaders retire. ▪ Before dedicating too much time, can review metrics of first few videos on YouTube to determine future need. ▪ It was recommended to build a quiz at the end of each module to prove they did it. • New working group members: Jackie Myers, Catilyn Olatunbosun, Sue Gill, and Stacey Tkachuk. • Coming soon: Affirmation for working group members, call for new working group members, changes to membership, directory to be sent out and corrections made, and minutes from this meeting. • CHAP presence at conferences/meetings: Linda Robinson- defer due to lack of time
11:15-11:30	**Group photo**
11:30-12:00	**Lunch**
12:00-13:00	**Lunch Plenary** Resilience of Programmatic Care Approaches to Communicable Diseases: a COVID silver lining? **Guest Speaker:** Dr. Lisa Barrett; Dalhousie University, Halifax, NS

	The pandemic exposed vulnerabilities in the HIV cascade of care. In Nova Scotia changes were made to the HIV cascade of care with lessons learned from the COVID non-severe therapeutics response and a less vulnerable HCV care model. Self-**testing was reviewed** an important new direction for initiation of care. Prior to COVID, lab based testing or confirmatory testing was often required for care. Many lack primary are in NS making the current model challenging to be tested and linked with care. Pre-pandemic, NS used a high cost drug program to pay for ARV in those that do not have private insurance that requires an HIV clinician from a centralized clinic to access supply. The HIV clinic cares for 850-900 individuals living with HIV in NS. Challenging as funding was not dedicated for pharmacy or physician support, the HIV responsibilities are in addition to other infectious diseases roles. Clinic also had vulnerabilities relies on manual processes. Agreement in room that there are other HIV clinics across Canada that lack dedicated staff and rely on manual processes. During the pandemic, the HIV clinic lost its nursing, physician, and pharmacist support. At times there was no testing as the lab had to re-direct staff to process COVID tests and the STI clinic had to temporarily close to accommodate COVID workload. There was a greater than 90% reduction in HIV clinic visits in first 2.5y of the pandemic. At the same time local cases with low level TDF resistance were observed. At the same time, an NS HCV clinic fared better through the pandemic. It is partially funded with a nurse, administrative support and database to reduce manual processes and maintain metrics. COVID taught us that healthcare professionals do not have to be the gatekeepers of testing. With COVID self-tests, as many as 20 000 people were tested a day. In NS an online portal, called the report and support form, was created that allowed self-referral for COVID therapeutic assessment (e.g.: nirmatrelvir/ritonavir, remdesivir) based on a positive rapid test. Referral is done online or via phone. Learned that if patients are allowed to report their rapid results on their own, they do quickly and engage in care. 87 000 patients were referred to the non-severe team in the first year. These referrals went to a team of dedicated pharmacists able to independently prescribe medication. This was a task shifting success story as now only the most complex cases are referred to physicians for assessment. Lessons learned for HIV care from success with linkage to care for COVID therapeutics and a HCV clinic that was resilient during the pandemic: • Patients want to know their status via self-testing. Advocate for POCT regulatory changes- it makes a difference.

	• Programmatic approaches with dedicated and funded work are successful. • Recognize and prioritize full scope of practice. Task-shifting of assessment and prescribing from physicians to pharmacists worked well for COVID therapeutics, could work well for in HIV too.
13:00-16:30	**PRACTICE-RELATED HOT TOPICS AND ROUNDTABLE DISCUSSION** (15 minutes each) 1. Dried blood spot testing: Jennifer Hawkes • Reviewed DBS training • BC CDC will pursue ability to process • Started Dec 1 2021 • Screening via DBS was important in a hardly reached population • Found HIV and syphilis • Manual was developed that can be sent out • Underhoused individuals and those experiencing substance use: Incentives, handwarmers, meeting people where they were at were helpful 2. Biktarvy failure in pregnancy: Pierre Giguere • Patient individual on CAB + RPV and found to be 16 weeks pregnant • Viral load 65 about a month away from delivery • Repeat viral load 547. Genotype: EFV resistance. NNTRI resistance. No RPV resistance • Started on DTG, DRV/c • BIC exposure lower in pregnancy according to CROI poster • Biktarvy in pregnancy avoid or monitor closely. Some recommended TDM. 3. Breastfeeding case: Jackie Myers • 3 cases presented • Recommend having a plan for success considering patient goals (and expect plan to change) • One case of exclusive breastfeeding (no mixed feeding) and nevirapine monotherapy continue meds until 1/12 m after breastfeeding o Met with lactation consultant to ensure success o Ensure whole team is aware of plan, and those who fill in for the team to avoid tension and confusion 4. Paxlovid DDI's: Sue Gill • Used vaccination and testing staff to support Paxlovid assessment • Used an inpatient hospital pharmacy to follow patients virtually during treatment • 637 people in cohort o Held all NHPs o Co-medication held in 56.3%, dose of co-medication adjusted 21.6%, alternative drug initiated: 7.7%, co-medication continued with additional monitoring: 12.4%.

	○ Adverse events: ▪ Dysgeusia: 39% ▪ Diarrhea: 23% ▪ Nausea: 12% ▪ 4% did not complete he 5 day course ○ Nearly 70% had one clinically significant DDI **Refreshment break 14:30-15:00 (Catie representative will be present)** 1. Lessons learned (so far) from implementing a community pharmacy-based testing program for STBBIs: Debbie Kelly • Implementation: some pharmacists were keen to offer testing and join the Approach study, some not. Difficulty recruiting in some high need areas. • Of those in the study, there remain pharmacies where no tests have been performed • Implementation considerations: ○ Pharmacist testing for STBBIs could work as part of collaborative practice ○ Agreements were required from sender to NML for DBS ○ Differences in confirmatory testing and role of DBS across the country. In Alberta DBS is used for confirmatory testing and in NFLD and NS it is not. ○ There are many studies in the testing space at the moment. Some use an honorarium and other do not. ○ There is interest in outreach testing/corrections moving forward • Lessons learned: Many pharmacists have embraced STBBI testing and are really enthused about the study. Logistics to implement an STBBI testing program outside of the study context presents some significant challenges. Potential impact of pharmacist testing programs is considerable. Public health and primary care roles, with linkage to specialty care as needed. 2. Reflections on Lymphoma: Caitlin Olatunbosun • Two cases were presented reflecting on primary CNS lymphoma • Reviewed intersectional stigma- Goffmans' categorization: ○ Physician health aliments ○ Affiliation with marginalized groups ○ Factors attributed to one's moral charter or behaviours • Impacts are prominent for HIV • Intersectionality and women: Addressing intersectionality and reducing stigma is important. • Strengthening protective elements is important including women centered HIV care models

	• Reflections: Address immediate actionable items, depression screening, women-centered care, social support/loneliness. 3. Our experience dosing a premie baby born to an HIV (+) mom: Kathy Lee • Infant was born to mom with detectable VL. • Initial dosing came from consultation with a physician from Canadian Pediatric and perinatal HIV AIDS group. • Consulted McGill for TDM • Decision was made to use raltegravir instead of nevirapine. Applied for raltegravir SAP. • 2 RAL levels obtained before the 3rd dose for TDM. • Pro viral DNA detected. • Lessons: limited information in prematurity, time factor in application for SAP RAL and for drug to arrive, turnaround time for levels (time during the week and when levels could be drawn), and all of our efforts matter. • Expressed thanks to McGill TDM team for their assistance 4. Cryptococcal meningitis case: Tracy Janzen Cheney • Ampho b liposomal and flucytosine were used for a cryptococcal meningitis case • Symptoms recurred after treatment and ARV start. Started on prednisone taper, re-induction with ampho b and flucytosine. • Repeated courses were used including thalidomide and thalidomide in a complex clinical course • RevAid process explained for thalidomide • Thalidomide SE described. Neuropathy limited use (small fibre neuropathy). ARVs picked to reduce neurological side effects. • Today: CD4 98, thalidomide allowed clearing of cryptococcus • 4 induction courses, 3 courses of corticosteroids and thalidomide. Benefit of thalidomide allowed prednisone to be tapered off. 5. Updated 2023 TDM Guidelines: Nancy Sheehan • Update to Quebec TDM guidelines • Literature search was done 3 times since 2017 • Effort to be more evidence based • Added all new ARVs now measuring and removed those no longer using • Reviewed targets • Detailed indications for ARV TDM. Used GRADE system. • Reviewed changes to pregnant and pediatric patients. Pediatric patients were noted to have large intra-patient variability. o If TDM is recommended, do q3-6 months. May be more often in neonates/infants. o Note age cut offs in recommendations (changes by medication and the recommendation).

	• Cabotegravir/ RPV, RPV will be low for first year but low rates of virologic failure. Questionable clinical significance as low virological failure and may wait but if virological failure can measure (or obese/pregnancy, etc). • Almost 50% of recommendations changed since 2013. A lot of new data since 2013. • Paper will review step by step care in Quebec to help hospital pharmacists. 6. Clopidogrel and Ritonavir DDI: Erin Ready • Reviewed a case that had an elective PCI that resulted in new clopidogrel, increased atorvastatin, and decreased dabigatran. • Patient experienced a GI bleed and ID was consulted. • Learned when admitted with cellulitis about two major interactions: atorvastatin/ritonavir and clopidogrel/ritonavir. The interactions were communicated with a hospitalist who documented that by reducing the dose of atorvastatin resolved interactions. Also flagged clinical pharmacist who called the community pharmacy to see what conversation went on prior to admission and didn't detect the interactions. Tried calling cardiologist without success. • In 2019 if put clopidogrel into drug interaction checkers would get 3 different results, Liverpool red, Toronto yellow, Lexi said there is no interaction. But in 2023 now all red. • With COVID, ritonavir is used more and the Ontario Science Table advice was helpful in providing context to interpreting the interaction. • Lessons learned: Drug-drug interaction knowledge, data, and management evolve. Changing antiretrovirals as a strategy to mitigate drug-drug interactions can be overlooked by clinicians without HIV experience. There are opportunities for continuing education on antiretroviral drug-drug interactions (community pharmacists, hospitalists, cardiologists). 7. Daily Ritonavir-boosted darunavir for viral suppression in pregnancy (DRV-P): Stacey Tkachuk • Once daily dosing in group of 35 patients showed suppression • Added integrase inhibitor right before delivery mostly due to non-adherence
16:30-17:00	**Slideshow**
19:00-21:00	**Annual CHAP Dinner and Clinical Sharing at Chez Boulay**