Sexual Health Medicine Advanced Training
Record of Cases

	Date	Age of Patient	Diagnosis or Condition	Management/Reflections/Outcomes
1.	[redacted]	40 M	HIV	1. HIV infection - Diagnosed 2008 - Fully susceptible virus - Currently on Truvada (TDF/FTC), Atazanavir/ritonavir - VL < 40 (undetectable), CD4: 1,590 (43%) 2. Helicobacter infection - Diagnosed on biopsy after gastroscopy - Requires eradication therapy 3. Hypertriglyceridemia Reflection: H. pylori eradication therapy includes the use of proton pump inhibitors (PPIs). Coadministration of atazanavir with proton pump inhibitors is not recommended. No data are available with esomeprazole; lansoprazole decreased atazanavir AUC by 94%, omeprazole decreased atazanavir AUC by 75%. If coadministration is judged unavoidable, close clinical monitoring is recommended and doses of proton pump inhibitors comparable to omeprazole 20 mg should not be exceeded and must be taken approximately 12 hours prior to the atazanavir/ritonavir. The European SPC recommends increasing the dose of atazanavir to 400 mg with 100 mg of ritonavir. Management: Given that he has no viral resistance mutations as well as his hypertriglyceridemia, the decision was made to cease his protease inhibitor (PI) treatment and change him over to an integrase inhibitor combination which does not have the drug-drug side effects with PPIs and may have a more favourable effect on his lipid profile. He was changed over to Truvada and Dolutegravir with no loss of viral control and no side effects. He completed his H. pylori eradication therapy with good results and remains on Truvada/DTG.
2.	[redacted]	68 M	HIV	HIV - diagnosed 1996 - no physical follow up since 2009 - last bloods - undetectable viral load, CD4: 710 (29%) - on Kivexa (abacavir & lamivudine) & Nevirapine - reports no problems with meds, although has multiple CVS risk factors

				2. Hypertension - untreated 3. T2DM - untreated 4. Dyslipidaemia - untreated Non smoker Not prepared to see GP in hometown (has falling out with the only GP there). Has a lot of difficulty getting to see a GP. Finds it really hard to come to our clinic for HIV review visits. Reflection: 1. People living with HIV (PLWHIV) still continue to experience perceived discrimination from some healthcare professionals, resulting in barriers to accessing primary care. This results in the potential for other chronic medical problems to remain untreated. 2. In March 2008 the D:A:D study, a collaboration of eleven prospective cohorts from across Europe, Australia, and the US, totalling over 30,000 participants, first published results showing an almost doubled risk of heart attack in people taking abacavir. While subsequent updates from D:A:D and some other studies have also found evidence of a link between abacavir and heart attacks, some other studies, including a meta-analysis by the US Food and Drug Administration, have found no evidence of increased risk. D:A:D' s own evidence suggests the increased risk is only significant in people who already have risk factors for a heart attack, a finding possibly confirmed by some studies that show abacavir is associated with inflammatory changes in the blood vessels that are also associated with HIV infection itself. Other studies have failed to find such changes, however, or have found that traditional risk factors for heart attack lie behind the apparent increase in risk associated with abacavir.In this particular case I have consulted with my supervisor as well as the ID team. The consensus was made that starting to address all of his CVS risk factors prior to initiating a change from Abacavir would take priority.(1) 3. His CVS risk factors were optimised and we have chosen to change his cART to a tenofovir/emtricitabine backbone. This does not have the increased CVS risk associated. We will monitor his urine protein/creatinine ratios, along with his renal functions closely to watch for the potential renal side effects of tenofovir disoproxil fumarate (TDF). Tenofovir alafenamide (TAF) does not have these renal or osteopaenia side effects and therefor, he was changed onto TAF as soon as it became available. The Integrase Inhibitor, raltegravir (RTG) was chosen due to its little

				drug-drug interactions in this case. 4. His CVS risk factors are now well controlled. His HIV infection is also well controlled on Descovy/RTG. Reference: 1. Sabin C et al. Is there continued evidence for an association between abacavir and myocardial infarction risk? 21st Conference on Retroviruses and Opportunistic Infections, Boston, abstract 747LB, 2014.
3.	[redacted]	46 M	HIV	HIV - diagnosed in 1998 - poor compliance history - last on ART in 2011 * Truvada (TDF/FTC), Atazanavir, Ritonavir - GRA in April 2010 showed * High level resistance to: - 3TC, FTC, DLV, EFV,NVP * Low level resistance to: - ETR * Potential low-level resistance to: - ABC * NRTI mutations: M184V, K219KR * NNRTI mutations: K103N, P225H HLA B57-01: excluded Current results: CD4: 40 (3%) VL: 510 498 No current symptoms of opportunistic infections Plan: - Restart ART - Bactrim prophylaxis. - Extensive resistances tricky with pill burden. No single FDC will be OK as resistance to FTC / 3TC so both Kivexa and Truvada probably not OK. Could risk Kivexa / Atazanavir, but only 2 active drugs and already resistant. If not an issue from interaction POV, might be better to use Triumeq + Boosted ATV.

				Commenced on Triumeq, ATV/rit. Biochem in 2 weeks. Review with VL in 6 weeks. To call before if any problems. At 6 weeks follow up: Routine biochem all fine. No problems with tablets. No IRIS CD4 170 VL 317 (only a couple of months after restarting) - Repeat Viral Load in 1 month. Repeat viral load, 1 month later = undetectable. Still remaining undetectable with current good compliance.
4.	[redacted]	49 M	HIV	Recent admission to hospital after acute MI: Findings: - Angiography revealed a thrombotic - 100% occlusion of LMCA and a - 75% stenosis of mid-RCA. LV-gram demonstrated an akinetic anterolateral wall with moderately reduced LV systolic function and an EF of 35%. Echocardiography demonstrated an EF of 30% and no significant valvular abnormalities. Intra-operative Findings: Heart was free within the pericardium. The aorta had no palpable calcification. Left ventricular function was moderately impaired. The lungs were very hyperinflated and meeting at midline. Quality of Conduit: LIMA and SVG both excellent quality. Quality of Coronary Vessels: LAD was heavily, diffusely diseased. OM1 and PDA were normal at area of grafting, with proximal disease only. Discharge medication: - Truvada - Dolutegravir - amiodarone 200 mg daily - aspirin 100 mg daily - Seretide 250/50 - metoprolol 100 mg bd - warfarin - INR monitored by GP

				Wanted to discuss ART and starting statin DDI checked Start Descovy 200/25 - 200/10 was recommended according to Liverpool HIV Drug Interaction Checker, due to TAF levels being elevated by amioderone, * but compliance has been an issue in the past and current VL still high * If he was on 200/10 and cardiologist ceased amioderone without our knowing he would be sub-optimally treated * slight elevation in TAF is still much less than his usual TDF 300mg * thus commenced on Descovy 200/25 (DTG 50mg continued) Also start rosuvastatin 40 mg nocte Outcomes: His HIV viral load remains undetectable and his CD4 count is 1100 (46%). His cardiovascular risk factors all remain well controlled and he is not reporting any medication side effects. His renal function remains normal.
5.	[redacted]	68 M	HIV	HIV and ageing: [redacted]at age 52 • First contact with our clinic • Presented with a sexuality/identity crisis • Married - wife and two daughters • Casual male sexual partners - mostly from Southeast Asia • Guilt and risk taking activity • Referred to psychologist - did not attend • STI screen • HIV negative • No other STI's • Lost to follow up • [redacted]4 years later, age 56 • Presented with HIV seroconversion illness • Diagnosis of HIV confirmed • Recently started a relationship with a 26 year old man from the Philippines

				• In the process of immigration to Australia • Referred to peer support groups • Has earlier been diagnosed with depression and already on an SSRI • July 2007 - commenced ART: • abacavir/lamivudine & efavirenz • Psycho-Social Factors • Separated from wife • Disowned by all family members - for being "gay" and for his relationship with a younger man • Only acceptance and support from his elderly father • Became socially isolated • Turbulent dealings with Department of Immigration regarding visa for his partner • Worsening depression - still on SSRI • Referred to psychology and developed a good therapeutic relationship • Memory Issues • [redacted]aged 61 • Reports poor memory for the first time • Neuropsychological screen [redacted] • [redacted]presented to hospital after an episode of confusion • Differential diagnosis: • Transient global amnesia • Transient ischaemic attack (TIA) • Mood related • Psycho-Social impacts • [redacted] • Relationship breakdown • Started meeting young men online - all from Southeast Asia. He started to regularly pay for these young men to visit him in Australia • [redacted] • Father passed away (Only support person) • Estranged family contesting the will - adding a lot of stress • Extended hospital stay from May to July 2016

				• Admitted with substantial paranoid and persecutory delusions • DDx of: • HIV-associated neurocognitive disease (HAND) • Multifactorial brain syndrome • Infective • Depressive episode • Mania • Efavirenz • Working diagnosis • ? Alzheimer's type / vascular dementia. Possible element of pseudodementia related to longstanding poor mood. • HAND less likely on basis of: • Not severely impaired immune function at diagnosis (nadir CD4 200) • HIV controlled • Reasonable CD4 count (560; 46%) • Undetectable viral load • Hospitalisation • Decreased conditioning with recurrent falls • Expressed suicidal ideation • Social isolation as no family, loved ones or visitors • Adult Guardian agreed for short outings with Queensland Positive People (QPP) and Sexual Health psychologist • Complex discharge planning • Difficulty in finding a suitable nursing home placement • Fear of discrimination due to being a gay man and being HIV positive • Involvement of Adult Guardian regarding decision making • Trial of home with Transitional Care in July 2016 • Re-admitted to hospital in September 2016 • Current situation • Still in hospital due to significant discharge challenges • Aiming for nursing home placement, at the decision of the Adult Guardian, on the balance of evidence after John failed a trial of home Reflection: This case highlights the multiple difficulties faced by the ageing person with HIV.

6.	07/04/2016	57 M	HIV	1. HIV infection - well controlled on eviplera 2. HCV infection - completed sim/sof & riba on 15/03/2016 - SVR12 undetectable 3. Osteoporosis - new diagnosis following L4 vertebral compression fracture - seeing his GP regarding this and planning to start on denosumab once dental clearance received and fracture healed Discussed contributory role of tenofovir in osteoporosis Happy to change over to TAF (Genvoya) No DDIs on current meds - perindopril 5 mg daily - spironolactone 100 mg daily - ultibro inhaler Reflection: Tenofovir disoproxil fumarate has been associated with greater decreases in bone mineral density (BMD) and increases in biochemical markers of bone metabolism, compared with comparator agents; suggesting increased bone turnover (Prod Info VIREAD(R) oral tablets, oral powder, 2016). Although one study did not find impaired BMD accrual in HIV-infected children following tenofovir therapy over a 12-month period (Giacomet et al, 2005), other studies have observed absolute decreases in BMD with tenofovir use in children (Gafni et al, 2006; Purdy et al, 2008).
7.	[redacted]	65 M	HIV	HIV review Reports no side effects on meds Currently on Triumeq - very strong family history of coronary artery disease - personal history of untreated hypercholesterolaemia and hypertension 2. Hypercholesterolaemia - needs to recommence statin CVS calculated risk today 14% ABC increases risk even more

				Past regimens: - Combivir/Nevirapine 03/2005 - Kivexa/Nevirapine 07/2007 - Kivexa/Dolutegravir 04/2015 - Triumeq (current) Virological control since 08/2005 No GRA With virological control while on AZT/3TC, unlikely to have significant NRTI resistance Change to Truvada/Dolutegravir today Normal renal function No other regular medication at present Start rosuvastatin 10 mg nocte and ACE inhibitor Weight 78 Pulse: 66 Blood presure: 148/87 mmHg Repeat VL in 4 weeks. TREATMENT: 17/06/2016 - Truvada 17/06/2016 - Dolutegravir Outcomes: His HIV and cardiovascular risk factors all remain well controlled.
8.	[redacted]	56 M	HIV	HIV - Well controlled on Triumeq (ABC,3TC,DTG) Recurrent staph skin infection - Has already completed decolonisation regimen - S aureas on nasal swab confirmed As discussed with and authorised by Infectious Diseases, needs: - Rifampicin 300 mg bd x 1 week plus - Flucloxacillin 500mg qid x 1 week Reflection: On Triumeq Rifampicin will decrease dolutegravir plasma levels

				Needs additional 50mg daily of dolutegravir during treatment Will have to repeat decolonisation regimen then Recommence chlorhex or triclosan body wash Above treatment was successful.
9.	[redacted]	59 M	HIV	Patient presented with a letter from his GP, asking whether Genvoya may be causing an increase in his gout flare ups. His concurrent medications included perindopril 10 mg daily and hydrochlorothiazide 25 mg daily. My letter back to his GP: Thank you for your letter regarding XXX' s increased flares of episodes of gout since he was started on Genvoya. Genoya per se has no association with hyperuricemia; it does however contain an ingredient called cobicistat, which is a potent liver enzyme inhibitor (often referred to as a booster). It has therefore a lot of potential drug-drug interactions and in [redacted]case I suspect that his hydrochlorothiazide levels were boosted by cobicistat, leading to his increased episodes of gout. I have discussed this with him and we have decided to change him to a non-boosted regimen. I am replacing his Genvoya single tablet regimen with a two tablet regimen of Descovy (tenofovir/emtricitabine) and Dolutegravir. Please note that Dolutegravir has the potential to artificially raise creatinine levels by about 5 - 10% from the baseline, which is completely acceptable. I suspect that his gout will settle down on the new regimen, but if not, allopurinol could certainly be started as it does not have any drug-drug interaction with this regimen. Please feel free to contact me should you have any further questions. Since changing his cART, his uric acid levels have returned to normal and he has not had any further episodes of gout. His HIV remains well controlled.
10.	[redacted]	43 M	HIV	Problem list: 1. HIV infection - Diagnosed in 2006 - Commenced ART in August 2007 with a CD4 count of 278 (21%) - Changed to Triumeq (dolutegravir/abacavir/lamivudine) in April 2015 from Kivexa (ABC/3TC), Darunavir/ritonavir due to ongoing viral blips and unacceptable elevation in triglycerides. - Sustained undetectable Viral Load since May 2015 - CD 4 count on 31/05/2016: 1020 (46%) - Genotype fully sensitive - Normal urine PCR

				2. Hypertriglyceridemia - Grade 3 elevation while on boosted PI (TG = 22.7 mmol/L) - Much improved since discontinuing PI and starting statin/fibrate combination, now 2.7 mmol/L 3. Depression/Anxiety - Well controlled on citalopram 4. Recurrent, severe genital herpes 5. Syphilis - Diagnosed in August 2014 with RPR 1:256 - Appropriately treated with benzathine penicillin at the time - RPR serofast at 1:4 Current treatment: · Triumeq (dolutegravir/abacavir/lamivudine) 50mg;600;300mg, one tablet daily · Rosuvastatin 40mg tablets, one at night · Fenofibrate 145 mg tablets, one daily · Citalopram 20 mg tablets, one in the mornings · Valaciclovir 500mg tablets, one daily References: 1. Grade 2 triglyceride elevations (500 to 750 mg/dL) were reported in 3% of patients who received darunavir 800 mg plus ritonavir 100 mg once daily (n=343) compared with 10% of patients who received lopinavir 800 mg/ritonavir 200 mg per day (n=346) in a randomized, controlled, open-label, phase 3 study of HIV-1-infected, treatment-naive adults. Grade 3 elevations (751 to 1200 mg/dL) were reported in 2% and grade 4 elevations (greater than 1200 mg/dL) were reported in 1% of patients receiving darunavir plus ritonavir compared with 5% and 1%, respectively, in the lopinavir/ritonavir treatment group. Both arms used a fixed background regimen consisting of tenofovir disoproxil fumarate 300 mg/day and emtricitabine 200 mg/day. Total mean treatment exposure was 162.5 and 153.5 weeks, respectively (1). 2. Grade 2 triglyceride elevations (500 to 750 mg/dL) were reported in 10% of patients who received darunavir 600 mg plus ritonavir 100 mg twice daily (n=298) compared with 11% of patients who received lopinavir 400 mg/ritonavir 100 mg twice daily (n=297) in a randomized, controlled, open-label, phase 3 study of HIV-1-infected, treatment-experienced adults. Grade 3 elevations (751 to 1200 mg/dL) were reported in 7% and grade 4 elevations (greater than 1200 mg/dL) were reported in 3% of patients receiving darunavir plus ritonavir compared with 10% and 6%, respectively, in the lopinavir/ritonavir treatment group. Total mean treatment exposure was 80.7 and 76.4 weeks, respectively(1).

				3. In a randomized, controlled phase 2b trial (n=318) assessing the safety and tolerability of therapy, rates of hypertriglyceridemia reported in protease inhibitor-experienced patients who received darunavir 600 mg plus ritonavir 100 mg twice daily (n=65, mean exposure=40.6 weeks) as compared to the control group (n=63, mean exposure=26.3 weeks) were as follows: grade 2 triglyceride abnormality (1.5% vs 20.6%), grade 3 (7.7% vs 4.8%), and grade 4 (3.1% vs 3.2%) (2) References: 1. Product Information: PREZISTA(R) oral suspension, oral film coated tablets, darunavir oral suspension, oral film coated tablets. Janssen Therapeutics (per FDA), Titusville, NJ, 2012. 2. Grinsztejn, B: TMC114/r is well tolerated in 3-class-experiencedpatients: Week 24 primary safety analysis ofPOWER 1 (TMC114-C213). Tibotec Pharmaceuticals. Rio de Janerio, Brazil.
11.	[redacted]	63 M	HIV	1. HIV/HCV coinfection - GT 3 - non cirrhotic - normal LFTs in [redacted] ALT 13, AST 23 - decreased albumin 34 - HIV well controlled with CD 4 550 (47%), VL <40 2. Anaemia of chronic disease - results from April 2016: Hb 117, MCV 78 - iron 4, ferritin 44, trans 2.6, trans% 6 - has started iron supplement (by GP) - Colonoscopy in Oct 2015 - Tubular adenoma - no history of gastroscopy - h pylori screening negative - TSH 3.8 3. CKD, stage 3a - was investigated [redacted] for nephrotic syndrome renal biopsy -probably favour IgA nephropathy - eGFR 50, ACR 2.4 - creat 130 - no renal abnormality on USS [redacted] 4. Hypertension - well controlled 5. Generalised vascular disease - AAA repair in 2013

				- Previous coronary ischaemia - unclear details - stress echo in 2013 normal 6. ANA-positive polyarthralgia - reviewed by rheumatology - symptomatic management. 7. LUTS - prostatomegaly on USS with volume = 41cc PMHx: - Hypogonadism - Osteoarthritis Meds: Perindopril 5 mg daily Triumeq Sustenon (ceased today due to LUTS) Iron supplement Ex-smoker Ex-IDU No alcohol use Absolute CVS risk 9% Examination: BP- 136/86 HR: 72 I-PSS: 5 Discussed prostatomegaly Plan: 1. Cease testosterone replacement 2. ? Awaiting new ribavirin - free HCV treatment 3. Iron infusion. Review in 1 month to check on effects from ceasing testosterone. Reflection:

				This patient has co-infection HIV/HCV. He continued to receive 12 weeks of Sofosbuvir/Daclatasvir for the treatment of HCV genotype 3 infection, after the potential drug-drug interactions were checked on the Hep C ichart website of the Liverpool University. His hepatitis C was successfully cured. His HIV remains well controlled. His renal function remains stable and he continues to be followed up by his renal physician.
12.	[redacted]	47 M	HIV	HIV - Well controlled on Truvada/Nevirapine(NVP) - Reports no symptoms of side effects Longstanding elevated liver functions - viral hepatitis screen negative - auto-immune hepatitis screen negative - normal iron and heavy metal levels - normal liver ultrasound - ? secondary to NVP Meds -TRU/NVP -Paracetamol/codeine -Amitriptyline 150mg -multi-vitamins Allergies: Nil Reflection on NVP: Severe and life-threatening hepatotoxicity, including hepatic failure, fulminant and cholestatic hepatitis, and fatal hepatic necrosis, has been reported in patients receiving nevirapine. The first 18 weeks of treatment are a critical period for these events, with the greatest risk occurring in the first 6 weeks, but such events may also occur later. Clinical hepatic events (regardless of severity) occurred in 4% (0% to 11%) of patients receiving nevirapine and 1% of control patients. Hepatic events may or may not occur in association with signs of hypersensitivity. Some patients had nonspecific prodromal signs or symptoms of hepatitis progressing to hepatic failure. Rash occurred in 50% of patients with symptomatic hepatic adverse events. Patients with higher CD4 cell counts may be at higher risk for rash-associated hepatic events. Women appear to be at higher risk for rash-associated nevirapine-related hepatic events (3-fold higher than men), and women with CD4 cell counts greater than 250 cells/mm(3) were reported to be approximately 12 times more likely to experience nevirapine-associated hepatotoxicity (symptomatic with rash) than women with lower CD4 cell counts. Men with CD4 cell counts greater than 400 cells/mm(3) were observed to have an increased risk for rash-associated hepatic events than men with CD4 cell counts less than 400

				cells/mm(3) (6% vs 1%, respectively) (1.2) Management: This patient was changed over to Truvada/Dolutegravir with excellent virological control and normalisation of LFTs. References: 1. Product Information: Viramune(R) oral tablets, oral suspension, nevirapine oral tablets, oral suspension. Boehringer Ingelheim Pharmaceuticals, Inc. (per FDA), Ridgefield, CT, 2012. 2. Department of Health and Human Services: Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. National Institutes of Health. Bethesda, MD, USA. 2004.
13.	[redacted]	25 M	HIV	[redacted] a 25 year old heterosexual male from East Timor. He was diagnosed with HIV infection in August 2013. Antiretroviral therapy was commenced in November [redacted] while in East Timor. His initial ART regimen consisted of tenofovir/emtricitabine/efavirenz (TDF/FTC/EFV). He did not engage with our service until February [redacted] at which time his HIV-1 RNA viral load was 875 copies/mL and CD4 count 130 (8%). Compliance with treatment and follow up visits were difficult during the following ten months and he became completely lost to follow up from [redacted] In October [redacted] he represented with a dry cough, fever, loss of weight and insomnia. At this stage he was still on his initial ART regimen, but was taking it very infrequently. His HIV-1 RNA viral load was now 457,088 copies/mL and his CD4 count 0 (0%). His genotype resistance assay showed significant NRTI resistance mutations: K65R, V75M, M184I and NNRTI resistance mutations: K103N, Y188H, H221HY. Prior to the results being available he was changed from (TDF/FTC/EFV) to abacavir/lamivudine/dolutegravir (ABC/3TC/DTG). Unfortunately compliance and follow up was again troublesome until December [redacted] During late November to early December [redacted] he started to develop paranoid delusions which resulted in hospitalisation. The delusions were thought to be due to HIV encephalopathy. Screenings for opportunistic infections were negative. At admission his HIV-1 RNA viral load was 26,747 copies/mL and his CD4 count 30 (4%). Due to his resistance profile his ART was then changed over from ABC/3TC/DTG to darunavir/ritonavir/etravirine/raltegravir (DRV/rtv/ETR/RAL). He was also started on cotrimoxazole for PJP prophylaxis, azithromycin for MAC prophylaxis as well as fluconazole and sertraline. He made a good recovery and was discharged after ten days. Since discharge from hospital he is remaining very compliant with his treatment and returns for review regularly. His HIV-1 RNA viral load has become undetectable (< 40copies/mL) since January 2016 and has remained undetectable ever since. His most recent CD4 count was 290

				(13%) on 11 November 2016, with HIV viral load still undetectable. He has however developed a significant hypertriglyceridemia on the combination of DRV/rtv/ETR/RAL and was therefore, as well as for dosing simplification, changed over to Genvoya/Darunavir in September 2016 without any side effects or loss of virological control. His current medications are: - Elvitegravir 150mg - Cobicistat 150mg - Emtricitabine 200mg - Tenofovir Alafenamide 10mg (Genvoya). Take 1 tablet in the EVENING with food - Darunavir (Prezista) 800mg Tablets. Take 1 tablet in the EVENING - Sertraline (Setrona) 50mg Tablets. Take 1 tablet in the MORNING
14.	[redacted]	41 M	HIV	HIV - Diagnosed 15 years ago - Started on Kaletra and NVP [redacted] 5 years ago, due to mild renal dysfunction thought to be HIVAN per email [redacted] - VL undetectable, CD4 330 in February 2015 - Complains of many gastrointestinal side effects, predominantly chronic diarrhoea Seen with his positive partner. No known family history of heart disease 10 pack-year smoker, says quit 5 years ago no alcohol no drugs minimal exercise ?mild hypertension or white coat - check at pharmacy and bring in results slightly elevated lipids renal function normal, but has mild proteinuria no unprescribed drugs no other sexual partners bloods including lipid profile discussed STRs wants no side effects and STR for cost reduction and convenience unfazed by food requirement for Eviplera compliance good Partner on Eviplera, advantages and disadvantages of being on same regimen... Patient's main concern is side effects over the GI side effects of Kaletra fairly low CV risk (NZ risk 2.5% 5 yrs) but smoking history and slightly overweight

				already UD and ok with food requirement so changed to Eviplera with repeat bloods and urine today and in 4 weeks (Triumeq also reasonable choice given HLA excluded) if any problem with compliance to discuss with us, aware other STR options Reflection on lopinavir: The most common adverse effect associated with antiretroviral regimens containing lopinavir (formulated with ritonavir) is diarrhoea of mild to moderate severity. Pancreatitis has been seen in patients receiving lopinavir, including those who developed marked triglyceride elevations; in some cases fatalities have occurred. Severe, and in some cases fatal hepatotoxicity has also been reported in patients given ritonavir-boosted lopinavir, particularly in the setting of pre-existing chronic liver disease. Other commonly reported adverse effects include asthenia, headache, insomnia, pain, paraesthesia, gastrointestinal disturbances, acne, and rash. Abnormal laboratory test results associated with lopinavir-containing regimens include increases in serum cholesterol and triglycerides and raised liver enzymes. ECG abnormalities such as prolongation of the PR interval, in some cases progressing to second- and third-degree AV block, have occurred in some patients; QT-interval prolongation and torsade de pointes have also been reported.
15.	[redacted]	42 M	HIV	HIV - well controlled on Atripla Depression - on citalopram - also well controlled - reports unwanted bad dreams Patient asked questions regarding possibility of changing from Atripla. Has read up on ? Efavirenz role in depression. No other chronic medications HLA B57 excluded No resistance (Feb 2013) Single Tablet Regimen (STR) priority to him. Options discussed 1. Change to Eviplera (most simple change) 2. Change to Tru/Dolu, though STR patient priority. 3. Change over to Triumeq

				The patient decided to change over to Eviplera. He had a repeat HIV viral load done one month after the change-over. His HIV remains well controlled. His depression remains unchanged, but he's happy to report that his bad dreams have stopped. Reflection on EFV: EFV is known to cause central nervous system side effects, including vivid dreams and morning "hangover" effect. EFV is matabolised hepatically and is contraindicated in mod/severe liver impairment. Food increases EFV levels - take on empty stomach. If daytime symptoms are problematic, take before sleep to minimise side effects during the day. EFV may cause false positive THC test, which should be considered for people who might have to undergo drug testing.
16.	[redacted]	23 M	HIV	. HIV - diagnosed May 2014 - initial emotional upset causing him to return [redacted] - had difficulty accepting diagnosis and couldn't face [redacted] friends - had good family support [redacted] and has disclosed diagnosis to his sister - feels ready to start treatment now - gets regular, bad dreams - investigations at time of diagnosis: * VL 209 430 * CD4 740 (31%) 2. Rheumatic heart disease 3. Asthma Meds: Fluticazone Salbutamol Allergies: Nil Lengthy discussion regarding diagnosis, treatment as well as possible side effects Investigations requested. Referral to peer support group. Review in 1 week to start treatment. On [redacted] Presented today to start treatment Feeling well Keen to start and fully counselled

				Also due to have penicillin injection for rheumatic heart disease HLAB57 not done before - requested today Bloods from 05/02/2015: VL 408,710 CD4: 370 (33%) TB Quantiferon Negative Normal renal and liver functions Plan: 1. Start truvada & dolutegravir 2. Review in 4 weeks 3. benzathine penicillin 900mg im given, left glute This patient requires a lot of support from doctors, nurses and health workers from our clinic in terms of following up appointments, transport to and from the clinic, as well as regular dose reminders. He receives his medications in a doset box and has since been changed over to Genvoya for easier dosing. His HIV remains well controlled.
17.	[redacted]	51 M	HIV	HIV - Diagnosed 2014 Married; lives with wife, but casual MSM. Very anxious / depressed recently and having some self-destructive and risky sexual behaviours. Commenced on SSRI 2 weeks ago with minimal impact so far. Has had some suicidal thoughts. Identifies his family as protective factors. Given number for acute care team and will ask our psychologist to touch base with him. Also discussed URAI; 1) Risk of other STIs 2) (Low) risk of transmission of HIV 3) In contravention of Public Health act disclosure requirements Not currently sexually active with his wife.

				Advised: 1) disclosure 2) condoms Plan: - See again in a couple of weeks to consider up-titrating/changing SSRI - STI screen today Reflection: This case highlighted some of the psychosocial difficulties that many PLWHIV and the MSM community still face. His depression is currently well controlled and he is still receiving medical and psychological support from our clinic.
18.	[redacted]	66 M	HIV	. HIV - on Eviplera at present - VL <40 - CD4 540 (28%) 2. Renal dysfunction - creat 127, urea 5.6, eGFR 50, CrCL = 49 mL/min - u-ACR 12, u-PCR 74 - compared to results from July [redacted] very similar - has not been on dolutegravir since March (changed over to eviplera then), so unlikely artifactual raise in creatinine - cannot recall any renal imaging - denies LUTS, though does have some post void dribbling - UC&E repeated today, if CrCL still < 50 mL/min - would need dose adjustment of tenofovir Plan: 1. Bloods repeated today 2. Referred for USS KUB/Prostate 3. Renal dysfunction possibly due to TDF. 4. Review in 1 week At review his renal function remained unchanged. His HIV remained well controlled. Ultrasound imaging showed no pathology. He was consequently changed over to Genvoya, which at that stage was the only available TAF containing regimen. On [redacted] 1. HIV

				- very well controlled on Genvoya - VL undetectable - CD4: 520 (31%) - eGFR 70 (up from 47) - u-PCR <29 (down from 73) - no side effects on Genvoya and happy to continue 2. Hypercholesterolaemia - t-Chol 7.0 Pulse: 61 Blood presure: 115/70 Absolute CVS risk >15% Recalculated using target t-Chol of 4.0 = 5% Long discussion regarding getting cholesterol down Demonstrated 10% reduction in heart attack and stroke risk Absolutely against use of statin and says he will NEVER use a statin Tried to explain importance - not interested Discussed Smoking, Nutrition, Alcohol and Physical activity. HIV R/V 3 months Sooner if any problem
19.	[redacted]	70 M	HIV	HIV - Diagnosed 9 months ago. - On Stribild Meds: - Stribild - Vit B12 - Aspirin 100mg Tablets - Clopidogrel 75mg Tablets - Metoprolol 50mg Tablets1/2 tab PO BD - Perindopril 2.5 mg 1 tab PO mane - Prochlorperazine 5mg - Simvastatin 80mg Tablets Increasing viral load past 6 months Patient denies any missed tablets on repeat questioning - reports 1-2 tablets missed in last month only.

				Discordant partner - advised regarding increased risk of transmission due to increased viral load. Partner reports suspicion that patient not taking his meds regularly. Integrase resistance very rare - poor compliance most likely Plan - continue Stribild - discussed methods of improving compliance. - repeat VL and CD4 - GRA - including integrase inhibitors - Review in 2 weeks. Outcome: GRA showed no integrase inhibitor resistance. Compliance now good with the use of a doset box. No further viral blips. Polypharmacy thought to be the cause of difficult compliance.
20.	[redacted]	53 M	HIV	Acute watery diarrhoea ~ 1/52. Fever, watery diarrhoea, no blood No recent travel No unwell contacts. No suspect foods. Asking if it could be related to Stribild - been on it for about a year. Imp: - sounds infective Plan: - long chat reassuring about Stribild. - Also quite a few questions about TasP (read an article in Time Magazine) - discussed risks of transmission - importance of safe sex for other STIs - discussion about serosorting - Reiterated current legal requirement to disclose status if unprotected, but importance of informed consent with partners. - Stool samples for: Entamoeba histolytica PCR, Giardia intestinalis PCR, Cryptosporidium species PCR, Rotavirus PCR, Norovirus PCR, Adenovirus 40/41, Adenovirus PCR, Vibrio parahaemolyticus PCR, Vibrio

				cholerae PCR, Yersinia enterocolitica PCR, Campylobacter species PCR, Shigella species PCR, Salmonella species PCR and C.difficile Toxin. Returned reactive result for Shigella spp. Treated with oral azithromycin for 7 days. Not a food handler. Diarrhoea resolved.
21.	[redacted]	18 F	HIV	18 year old lady with a respiratory illness on a background of poorly controlled HIV - Presented 3/5 with a 2-3 week history of increasing SOB - Cough productive of white sputum; fevers and headache - Medicare inelligible so does not want to go to hospital (is still paying off her bill from last time) - Started on empiric Bactrim DS 2xtab tds for presumed PJP - Has not taken her Atripla for 8/12; couldn't afford it according to px - No diarrhoea - Did not have a CXR as couldn't afford it - Started on triumeq 2/7 ago - CD4: 130 (14%) - HIV VL pending - No neutrophilia Currently: - States she is no longer having fevers and headache has resolved - Ongoing SOB; has to pause when walking up a flight of stairs - tolerating the high dose Bactrim - No rash - Was very anxious when discussing that her CD4 count was low and her HIV VL high O/E: Obviously SOB RR: 25-30; sats: 93% RA PR: 95 BP: 105/75 No thrush Chest: Scattered fine creps and occasional wheeze HS dual nil added No peripheral oedema No neck stiffness Impression: Likely PJP in a px with a CD4 count of 130. Severe as sats: 93% but due to complex social issues does not want to come to hospital Plan (in consultation with ID): 1. Start prednisolone (as per eTG)

				2. Continue Bactrim 2x tabs tds for 3/52 3. Continue triumeq (we have managed to get this on compassionate access) 4. To present to hospital if she worsens; if she improves we will RV her next week (will do bloods then to check UEC/ FBC on the bactrim) 5. Urinary strep pneumo and legionella antigen to help exclude another aetiology for her pneumonia
22.	[redacted]	48 F	HIV	1. HIV infection - diagnosed in 2010 - Late presentation with viral load: 591,450, CD4: 80 at diagnosis - Heterosexual, single female. - Commenced on Truvada, Darunavir, ritonavir with good virological control and return of CD4 to mid 500's 2. Plamablastic large cell lymphoma - Diagnosed August 2015. - HSV I + II, CMV + EBV - positive - Commenced EPOCH (etoposide, prednisolone, oncovin [vincristine], cyclophosphamide and hydroxydaunorubicin [doxorubicin/adriamycin]) - Potential drug-drug interactions with darunavir and EPOC, as well as ritonavir and EPOC as per University of Liverpool database. - Changed over to Truvada/Dolutegravir with no loss of virological control during chemotherapy. Reflection: 1. The risk of developing NHL is dramatically increased in people with HIV infection, with a 134-fold increased incidence above that seen in the general population. Since the widespread use of cART, the prognosis of HIV-NHL has improved with better tolerance of chemotherapy and better response rates. Both the rate of complete remission and the duration of complete remission have increased. Plasmablastic lymphoma has a strong association with Epstein Barr virus, distinguishing it from plasmacytomas, with which it is frequently histologically confused. 2. It is important to consider potential drug-drug interactions when prescribing any other medications concurrently with cART. 3. Good communication within the multidisciplinary team, in this case haematology, is very important.
23.	[redacted]	35 M	HIV	New diagnosis HIV. Diagnosis made on [redacted] by GP STI screen done there - NAD No chronic medical conditions No medications

				Allergic to penicillin MSM Negative HIV screening test 6 years ago [redacted] Had Dengue-like illness in [redacted] with no serological evidence of dengue at the time - ? time of seroconversion illness. Currently in relationship - partner tested negative on Friday Few partners outside of relationship Denies unprotected anal sex. Has not had any sex with partner for many years No IDU Tattoo in Thailand [redacted] Weight 85 BMI: 27.4 Blood pressure: 158/99 mmHg Sitting Chest clear Abdo normal No neurological signs Lengthy discussion regarding diagnosis and treatment Keen to start straight away Options discussed - wants to start on Stribild Baseline blood all done today. Discussed legal requirements Written information provided For repeat renal function tests in 1 month Psychology referral
24.	[redacted]	62 M	HIV	Scheduled RV PMHx: 1. HIV -Dx 2014 via screening (wife had just been Dx antenatally) -Started on Stribild with good response -last CD4: 580 (58%) and HIV VL: <40 (Nov 2014) -No resistance -HLA-B57 negative

				2. Hypercholestrolaemia -Dx recently by GP; started on rosuvastatin 3. Impaired glucose tolerance -GP apparently just checked this and the Px states he "does not have diabetes" 4. Hypertension -Controlled on anti-hypertensives 5. deranged LFTs thought sec. to fatty liver -Liver USS has been done by his GP according to Px 6. Obesity (non-smoker) Currently: Px feels well No issues with tablets Good compliance GP recently ceased amilioride (which is is on for hypoaldosteronism) due to low K; Px states this tablet made him put on weight Meds: Moxonidine 400mcg am; 200mcg pm Olmesartan/ HCT 40/12.5 Allopurinol 300mg D rosuvastatin 5mg D (I looked up for interactions; none recorded) Impression: Px stable Newly Dx hypercholestrolaemia with rosuvastin started by GP Plan: 1. HIV VL/ CD4/ Hep A/B/C; 2. urine alb:Cr ratio 3. Discussed weight management issues 4. Script for Stribild 5. RV 3/12
25.	[redacted]	40 M	HIV	Problem list: HIV infection

				- diagnosed in [redacted] acquisition likely in 2010 - presented with: i. Pneumocysis jirovecii pneumonia ii. CD4 count 160 (7%) - Viral load 282,676 - Heterosexual, married man. Wife HIV negative. IgA nephropathy - Diagnosed [redacted] - Proteinuria around 1000mg/24hr based on random urines. PCR sitting around 70. - Initially on Truvada / Dolutegravir, changed to Triumeq as precaution based on proteinuria. - Started ACE-inhibitor, renal risk factors addressed. Improved renal function and decreased proteinuria. Reflection: 1. Pneumocystis jirovecii (previously Pneumocystis carinii) is a fungus that is ubiquitous. It is unclear whether infection occurs as a primary event or as a result of colonisation with reactivation, although antibodies against the organism are present in more than 85% of children under 3 years of age, suggesting that reactivation with immunosuppression occurs. P. jirovecii pneumonia (PJP), is still the most common AIDS defining condition, and is usually seen in people presenting late in the course of HIV infection or in people with poor adherence to PJP prophylaxis or combination antiretroviral therapy (cART). PJP occurs uncommonly in persons with a CD4 T-lymphocyte (CD4) cell count > 200 cells/ μ L, or proportion of CD4 cells that is > 14% of total lymphocytes, although cases have occasionally been reported in people with more preserved immune function. Secondary prophylaxis after an episode of PJP is recommended to prevent relapse or recurrence until immune reconstitution has occurred. Discontinuing prophylaxis Cohort studies have demonstrated the safety of discontinuing both primary and secondary PJP prophylaxis after the CD4 cell count has risen above 200 cells/ μ L or the proportion of CD4 cells is > 14% of total lymphocytes for longer than 3 months, in the setting of viral suppression with cART. More recent data suggest that the risk of PJP is as low with even earlier discontinuation of prophylaxis when the CD4 cell count is > 100 cells/ μ L, in the setting of viral suppression. 2. Tenofovir disoproxil fumarate (TDF) may cause renal impairment, proximal renal tubulopathy, Fanconi syndrome and renal failure. In light of his IgA nephropathy, I decided to change him over onto a different backbone combination and chose Triumeq as a Single Tablet Regimen (STR) for dosing convenience. His HIV remains well controlled. 3. Recent data from interim analyses of two cohort studies presented at CROI in 2014 and 2015 reported no transmissions in serodiscordant homosexual male couples with undetectable viral load. This included data from the European PARTNER study (Rodger, 2014) which reported no HIV transmissions in 308 couple years of follow-up when condomless anal intercourse was

				reported, and the HIV positive partner had undetectable viral load (Rodger, 2014), and data from the Australian-Thai-Brazilian Opposites Attract study, which reported no transmissions when condomless anal intercourse was reported in 89 person years of follow up in couples with viral load less than 200 copies/mL (Grulich, 2015). Data from these two studies strongly suggest that anti-retroviral therapy greatly reduces HIV transmission in serodiscordant homosexual couples. However, a very low rate of transmission cannot be ruled out. Follow up continues in both studies and final study results are expected in 2016-17. The couple used TAsP successfully and his wife remains HIV negative.
26.	[redacted]	34 M		. Advanced HIV - CD4 40 on admission - on stibild now - CD4 70 ~2W ago 2. Cerebral toxoplasmosis - on Rx dose pyramethamine and sulfadiazine - will complete 6W intensive Rx on 23/6 3. ?CMV retinitis - seen by ophthal consultant - for rv in 2.5W - on valganciclovir Pt reports - paraesthesia in distribution of L superficial femoral nerve has resolved - ?some blurred vision in R eye (CMV retinitis is on the L) - bowels and bladder N - nil respiratory Sx - weight stable - all in all feels well - albeit busy - family stress - he may need to start caring for one of his sister' s 4 daughters Had a long discussion re. driving restriction post seizure - can't drive for at least 6 months (will probably end up being 12M). Quite upset about this and its potential impact on work (community health). Explained that we can provide whatever documentation is necessary. weight 96kg height 173cm BP 140/95 (lower in hospital) Pt refused dilated ophthal exam today (still upset post driving advice)

				Pt remains extremely emotionally labile. Hard to know how much is personality, how much is toxoplasma and how much is keppra. Management in consultation with ID: 1. Bloods taken - rpt HIV viral load, lymphocyte subsets, quant CMV 2. Outpt MRI-B - monitor toxo changes 3. R/V in 2W 4. Ophthal rv next month 5. Pt aware he can contact clinic earlier as required 6. Will aim to cease keppra in the next few months
27.	[redacted]	29 M		1) New diagnosis HIV referred in by GP - presented at GPs with productive cough and was treated for LRTI - respiratory symptoms since settled - denies dyspnoea or remaining dry cough - cannot recall specific time of seroconversion symptoms - MSM having insertive and receptive anal intercourse - has one regular sexual partner (buddy) - denies weight loss - only symptoms is generalised fatigue 2) Occasional oesophageal reflux - has regular meals Originally from [redacted] out living permanently [redacted] Unemployed Admits to binge drinking - up to 12 stubbies per occasion, mainly during weekends only. Ex-smoker, quit in last year No known chronic medical conditions No known TB contacts No regular medications Denies OTC meds No allergies Weight 65 BMI: 24.77 Pulse: 74 Blood pressure: 133/85 mmHg

				No jaundice or anaemia No oral lesions or candida Poor dental health with periodontitis Hoarse voice Chest clear No organomegaly Lengthy discussion regarding diagnosis and future treatment Briefly touched on contact tracing, but will discuss in more detail during next visit Plan: 1. Routine HIV baseline bloods 2. Full MSM STI screen 3. Follow up appointment on 27/08/2015 to discuss further results and start treatment. Will have appointment with pharmacist as well after clinic visit 4. Will return to clinic sooner than scheduled appointment if any symptoms occur 5. Happy to be contacted with any positive results which may require earlier treatment
28.	[redacted]	28 M	PEP	PNG National Presented requesting PEP Receiving condomless anal intercourse 36 hours ago, with internal ejaculation Unable to access PEP in PNG, so came on first available flight Source is also a PNG national Was insistent on not using condoms Told afterwards by mutual friend that partner is HIV positive. Uncertain if on treatment. PMH - Renal transplant in [redacted] - on tacrolimus, prednisolone - getting medical care in Singapore Made phone call to his renal physician in Singapore to check up on his last creatinine/eGFR Last results [redacted] Creat 140, eGFR 59 Weight 77 Height 178 cm CrCL (Cockcroft-Gault): 76mL/min High risk exposure HIV 4th generation Ag/Ab test: non-reactive 3 drug PEP indicated as per ASHM guidelines

				Long discussion with HIV pharmacist: - no dose modifications needed at present (creatinine clearance > 60mL/min) - close monitoring PEP: - Truvada x 28 days - Raltegravir Dose: 400 mg, bd x 28 days Baseline bloods and STI screening done Review in 1 week for repeat blood tests and STI screening. Reflection: Risk of HIV transmission = risk per exposure x risk of source being HIV positive. All patients having PEP should be assessed for renal impairment. Tenofovir should not be used if creatinine clearance is less than 60mL/min. Zidovudine with lamivudine with both doses adjusted to degree of renal function is recommended as a 2-drug regimen with a third agent as indicated.
29.	[redacted]	51 M		Recently relocated [redacted] HIV diagnosed in 1985 - treatment started in [redacted] (CD4 110) - started on Truvada & Kaletra - switched over onto Stribild in March this year - VL undetectable, CD4 623 (25.5%) PMH: 1. Anxiety disorder 2. Benzodiazepine dependence 3. Alcohol dependence 4. Hidradenitis suppurativa 5. Genital herpes Smoker 25/d - 40 years Meds: 1. Stribild (? DDI with mirtazipine - reports excessive morning grogginess) 2. Valtrex 500mg prn 3. Diazepam 10 mg daily 4. Mirtazipine 30mg nocte Management:

				Will get more info from previous doctor. Review in 2 weeks Psychology referral Changed from Stribild to Truvada/Dolutegravir at the next visit with no loss of viral control. Excessive somnolence since resolved.
30.	[redacted]	48 M	HIV	Recently relocated [redacted] Presenting with painless anal ulcer for the past week Has had (? primary) syphilis twice in the past 6 months MSM Versatile Also concerned about possible throat chlamydia Requesting treatment for this as well PMH: 1. HIV infection - diagnosed in 1996 - started treatment in 2008 (Kivexa & Dolugetravir) - switched to Triumeq earlier this year - awaiting results from previous GP 2. Vitamin D deficiency 3. Colitis ? cause 4. Recurrent genital herpes Current meds: Triumeq Valtrex Viagra Allergies: Doxycycline OE Small, painless ulcer at 6 o'clock Likely reinfection syphilis

				Would like to be treated today Full STI screening done TREATMENT: [redacted] azithromycin Dose: 1 gm for presumed chlamydia of the throat [redacted] benzathine penicillin Review in 1 - 2 months for repeat titre Will get old records from previous GP
31.	[redacted]	49 M		Relocated [redacted] at the start of last year [redacted] HIV - diagnosed 2009 - treatment naive - partnered, in open relationship - does not use condoms - partner (said to be neg) aware of his status and in agreement on condomless sex - VL: 111607 - CD4: 310 (20%) - normal renal function Current STIs - urethral chlamydia - rectal gonorrhoea - partner was treated 1 week ago Hep B non-immune - Hep B vaccination done today - 2nd dose due [redacted] - 3rd dose due [redacted] Med Hx: - Past, successfully treated Hep C infection Allergies: none

				Past Surgery: [redacted]cholecystectomy Alcohol: 1-2/day Smoker: 25/day Uses E once a month Denies IDU Weight 57 BMI: 18.6 Pulse: 64 Blood pressure: 139/75 mmHg TREATMENT: [redacted]Stribild [redacted]azithromycin Dose: 1 gm [redacted]ceftriaxone Dose: 500 mg Treatment options discussed Happy to start ART Script for Stribild Repeat bloods in 4 weeks Aware of IRIS Referred to support services Discussed legal requirements regarding HIV transmission Written information sheets provided. Will return sooner if any problems
32.	[redacted]	51 M	HIV	GP referral for newly diagnosed HIV/HCV co-infection 51 yo MSM - in 8 year relationship with his 44 year old male partner - no sexual intercourse of any kind with partner > 1 year ago partly due to partner's erectile dysfunction - Partner aware of new HIV diagnosis and is currently very supportive - not in open relationship, but had threesome together with another unknown guy who they met in a bar about 4 years ago. Had unprotected RAI, IAI and oral sex - 8 weeks ago had a threesome with another couple that he met on Grinder. This is not known to

partner. The couple recently relocated [redacted] Name of one known, can't recall the name of the second [redacted] at present. Has deleted them off Grindr, but knows where they live.
- Unprotected RAI, IAI and oral sex with both of them
- one had a Prince Albert and told him at the time the piercing got infected
- was contacted by the couple about 2 weeks after who then informed him of a pos gonorrhoea result
- Has seen his GP straight after being informed, who unfortunately did not request any investigations or offer treatment.
- denies having any SI with partner since the threesome

No clear history of seroconversion like illness
- has started complaining of a headache 5 weeks ago (3 weeks after threesome), headache is persistent and his GP in Port Douglas has prescribed Valium for this with not much effect
- denies photophobia, nausea or neck stiffness
- has lost 5kg of weight over the past 4 weeks.
- oral thrush symptoms for the past 5 weeks.
- has noticed swollen neck glands from the same time as thrush symptoms
- no cough or dyspnoea
- no skin rashes

New Hep C diagnosis
- cannot recall ever being told of elevated LFTs
- denies IDU
- tattoo left scapular area [redacted] 20 years ago

PMH:
Melanoma, left heel
- initially excised in [redacted] but recurred
- re-excised in [redacted]

Current meds
Valium 5 mg prn (for headaches??)

Alcohol: daily, up 10 beers a day
Smoking: 10 - 20 per day since age 18

On Examination

Height: 178.5
Weight 57

				BMI: 17.8 Pulse: 87 Blood pressure: 96/68 mmHg Temperature: 37 O2 sats 96% Generalised lymphadenopathy Oral thrush No focal neurological signs. no neck stiffness Chest clear Enlarged liver with smooth edge, spleen not palpable No skin rashes Diagnosis: 1. HIV/HCV co-infection - well aware of legal requirements and risk of transmission - will contact couple as mentioned above - not keen on engaging with any support organisation at present - will cut back on alcohol use 2. Oral candidiasis Plan: Routine HIV and HCV initial bloods workup Full STI screen CXR USS liver/spleen TREATMENT: 26/11/2015 - fluconazole Will return in 10 days to start treatment Happy to be contacted by phone if any more urgent results/review required Will return sooner if needed.
33.	[redacted]	18 M	HIV	18 year old Indigenous MSM referred from GP with newly diagnosed HIV Recent hospital admission with left inguinal abscess that required I&D Follow up tests done with GP included HIV test --> pos ~10 male sexual partners over the past year - versatile, mostly condomless

				- 2 of them known to him - last SI ~ 1 month ago - denies any seroconversion symptoms - has generalised, non-specific pigmented skin rash - denies any STI symptoms Cannot recall last neg HIV test Never been diagnosed with STI before VITAL SIGNS: [redacted] Height 177 Weight 66 BMI: 21.1 Pulse: 71 Blood pressure: 118/70 mmHg ENT normal Chest clear Abdo normal Bloods and full STI screen done Aware of pos diagnosis Aware of services and support available Aware of legal responsibilities regarding safe sex Treatment discussed and keen to start on treatment today. TREATMENT: [redacted] - Stribild To look out for IRIS Review in 10 days
34.	[redacted]	26 M	HIV	Referred by GP with newly diagnosed HIV infection 26 year old TSI heterosexual male Reports 2 female sexual partners in the past 2 years - one long-term partner for the past 3 years - another female partner since 4 weeks ago

				Reports being injected by someone while in prison Denies IDU Has homemade tattoos. Does not report sharing needles. Reports flu-like illness about a month ago Reports significant weight loss Last negative HIV test [redacted] No significant past medical history No chronic meds No allergies Smokes ~ 25 per day Cannabis use Regular alcohol use Weight 54 BMI: 21.9 Pulse: 78 Blood pressure: 107/53 mmHg No skin rashes Gingivitis No lymphadenopathy Chest clear Abdo soft, non-tender, no organomegaly Bloods as requested by GP: HIV Western Blot reactive VL pending, CD4 210 (16%) CMV IgG pos, Toxo IgG, IgM neg FBC, E/LFT, Chol, FCU neg Hep B & C neg Syphilis neg Routine HIV initial blood tests done today.

				Tests not repeated because already ordered through QML by GP: - HLA B57 Request form for CXR given Will return on 3 Feb for repeat bloods Follow up appointment on 10 Feb [redacted] TREATMENT: [redacted]Stribild Legal requirements and contact tracing discussed Referred to support services.
35.	[redacted]	57 M	HIV	57 year old male referred by GP with new diagnosis HIV - MSM - last UPAI 3 - 4 years ago at a Sex on Premises Venue - no sexual activity since then at all - all sexual encounters at SOPVs --> no contact details - aprox. 2 - 3 male sexual partners over past 5 years Used to be married, but divorced MHx: 1. Chronic diarrhoea - started about 4 years ago - frequent, unformed stool - abdominal pain prior to going to the toilet, then has to spend 30 mins on toilet (time for pain to subside) 2. Weight loss - 4 kg over the same 4 - 5 year period - noticed slowly starting to gain weight again 3. Chronic "tonsillitis" - no voice changes 4. Peripheral neuropathy - both feet - onset 2 -3 years ago 5. Hypothyroidism

				- diagnosed 4 - 5 years ago - on thyroxine 100mcg 6. Vit B12 deficiency - around 1 month ago - was treated by GP with weekly B12 injections 7. Asthma - generally well controlled 8. Oral thrush 9. GORD 10. Allergic rhinitis - anosmia - had nasal polypectomy No neurological symptoms No cough Healthy diet Not vegetarian Smoker Social drinker No history of IDU Meds: - Thyroxine 100mcg daily - Nystatin oral drops - Seretide 100/50 1 puff bd - Somac 40 mg daily - rhinocort INCS nocte Allergies: penicillin Weight 72 BMI: 24.0 Pulse: 90 Blood pressure: 104/76 mmHg

				Apthous ulcer on both tonsillar beds No lymphadenopathy No oral candidiasis FBC NAD E/LFT's - creat 94, eGFR 77 - ALT 127 Management: 1. Routine baseline bloods & STI screening 2. CXR 3. Start Truvada/dolutegravir 4. Review in 10 days 5. Request form for Faecal MCS & OCP given to be done Aware of IRIS Will phone if any problems FU Bloods in 4 weeks
36.	[redacted]	52 M	HIV	1. HIV infection - Dx 2009 - Truvada/raletegravir 2. Epilepsy - on carbamazepine Doing well. Nil health complaints. Attended as needs a new script. Works in an aged care home. No fluvax this year. Keen to have today. ETOH: 2 SD/day and occasional binges - is planning on cutting down Partner is awaiting visa and therefore he's is supporting him. Therefore requesting fee waiver Not suitable for a change from truvada to descovy due to the interactions of TAF with

				carbamazepine. Note previous discussions about withdrawing carbamazepine given no seizures in 20 years. Pt happy with current medications and doesn't wish to change/risk possibility of seizures. DH: Carbamazepine 100mg mane, 400mg nocte BP 117/75 Pulse 61 Wt 68kg Plan: 1) Script today 2) Fluvax administered (left deltoid): - observe in waiting room for 15min 3) Fee waiver form 4) Routine bloods in Oct --> form given and then review Reflection: The co-administration of Descovy is not recommended with carbamazepine as it decreases tenofovir alafenamide plasma concentrations which may result in loss of therapeutic effect and development of resistance. Coadministration of carbamazepine (titrated from 100 mg to 300 mg twice a day) with emtricitabine/tenofovir alafenamide (200/25 mg once daily) decreased tenofovir alafenamide AUC and Cmax by 55% and 57%, respectively.
37. [redacted]		34 M	HIV	HIV - diagnosed in [redacted] - started treatment in [redacted] - was living and working in Taiwan at that stage and started on: - Combivir (lamivudine/zidovudine) - efavirenz - VL <40 since [redacted] - moved to [redacted] now 2. Depression - Onset of symptoms at the time of commencing EFV No past medical history of note No other meds

				No allergies No drugs or alcohol No smoking Routine HIV bloods investigations requested. Discussed depression and the possible EFV related depression side effect. Change to Stribild one daily (very happy with change) Will return in 1 month for repeat VL .
38.	[redacted]	29 M	HIV	New diagnosis HIV POCT HIV reactive POCT syphilis non-reactive MSM - been with current partner since [redacted] - current partner HIV pos with undetectable VL on blood from [redacted] - versatile, unprotected - has not had sex with any other males for the past year - has never had any STI screens in the past - has had bloods done in WA in [redacted] included HIV bloods - negative then - no seroconversion like illness in the recent months - no weight loss in recent months Current partner also recently diagnosed with syphilis [redacted] and has presented for treatment today. MPHx: Nil Meds: None Allergies: None Drugs: cannabis, denies IDU Smoker: 10 per day Weight 55 BMI: 17.4 Blood pressure: 107/62 mmHg Skinny No stigmata Result of HIV POCT discussed

				Aware of legal implications regarding detectable VL Baseline assessment and full STI screen done Review in 1 week to start treatment after WB confirmation of diagnosis Contact details of support services provided. Plan: To start on ?Genvoya at next visit
39.	[redacted]	36 M	PrEP	PrEP - MSM - Regular condomless casual intercourse - Versatile, uncircumcised - Meeting guys of unknown HIV status on Grindr - Rectal gonorrhoea confirmed within one week prior to commencing PrEP - Confirmed 4th-generation Ag/Ab test non-reactive - Hepatitis B immune PMH: nil Meds: nil Allergies: nil Recreational drug use: nil Normal renal function Reflection: Utilising the ASHM Behavioural eligibility criteria for PrEP, this patient's risk of acquiring HIV infection is rated as high. He was therefore offered PrEP [redacted] The ASHM Behavioural eligibility criteria for PrEP for men who have sex with men categorises the risk of acquiring HIV infection as high in the following circumstances: Having had any of the following in the last 3 months: · At least one episode of condomless anal intercourse (CLAI) with a regular HIV+ partner (not on treatment and/or detectable viral load) · At least one episode of receptive CLAI with any casual HIV+ male partner or a male partner of unknown status · Rectal gonorrhoea, rectal chlamydia or infectious syphilis diagnosis (during the last 3 months or at screening for PrEP) · Methamphetamine use, which may increase the risk of HIV acquisition AND · Being likely to have in the next 3 months (indicating sustained risk)

				· Multiple episodes of CLAI with or without sharing intravenous drug equipment He has been started on co-formulation tenofovir/emtricitabine 300/200mg and continues to be monitored for HIV infection, STIs and renal function on a three-monthly basis. He has since completed nine months on the [redacted] demonstration project and remains HIV negative. He has had a number of STI treated over the past nine months and is continuing on PrEP without any side effects. Reference: Wright E, Grulich A, Roy K, et al. Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine HIV pre-exposure prophylaxis: clinical guidelines. Journal of Virus Eradication. 2017;3(3):168-184.
40.	[redacted]	63 M	HIV	Problem list: 1. HIV infection - On Truvada, Atazanavir/ritonavir - CD 4: 260 (12%) - Viral load < 20 2. Hyperbilirubinaemia 3. Hypercholesterolaemia Current treatment: · Truvada 300mg;200mg, one tablet daily · Atazanavir 300 mg, one tablet daily, boosted with Ritonavir 100mg daily Reflection: Atazanavir could be contributing to his increased total bilirubin and hypercholesterolemia. His renal function is normal. Calculated absolute cardiovascular risk put him at increased risk and therefore I did not recommend an Abacavir containing regimen. I recommended to keep him on Truvada 300;200mg daily and to change him from Atazanavir/ritonavir to Dolutegravir 50 mg daily. His bilirubin levels returned to normal and his HIV remains virologically suppressed.
41.	[redacted]	45 M	HIV	45 year old male Relocated [redacted] 10 days ago 1. HIV - Dx ~ 1992

				- started on treatment ~ years 5 ago - nadir CD4: 220 - well controlled at present 2. Valvular heart disease 3. Renal failure - 2 years ago - auto-immune - Cryoglobulinaemia - was close to dialysis - renal function since normalised 4. Depression 5. Hypertension - has been told in the past that he has high blood pressure, but was never keen to start treatment Came out of 9 year relationship 18 months ago 4 casual partners since Last STI screen just prior to leaving [redacted] Declined STI screen today, no sexual partners since last test PMH: Endocarditis, uncertain cause PSH: Appendectomy age 20 Meds: - Atripla, no side effects - Escitalopram 20 mg Drugs: none Alcohol: occasional Smoke: ex-smoker (stopped 2010); 1 pack a week Pulse: 64 Blood pressure: 145/105 mmHg HIV routine bloods done plus u-PCR Last bloods March [redacted] Has enough meds for another 1.5 months

				Management: 1. Start Ramipril 10 mg daily - needs to return in about 5 days for repeat renal function after commencing ACE 2. Suggested changing off from Atripla for 2 reasons: depression and history of renal disease. Recommended Genvoya - quite keen on this and will make the change over when running out of Atripla 3. Review again in 10 days from today to discuss results and check on BP
42.	[redacted]	36 M	HIV	. HIV new diagnosis on [redacted]2016 - HIV-1 subtype B - CD4: 270 (19%) - VL: 810,588 - GRA: fully susceptible - HLA-B*57: excluded - no OI - has both male and female sexual partners - exclusive receptive anal intercourse - never uses condoms - last sexual activity was in last year 2. Left renal abscess - recent hospital admission for iv-Ab's, also required blood transfusion (2 units) - self discharged on [redacted]2016 - was changed over to oral Bactrim prior to self discharge, but left without any meds 3. Sepsis - non multiresistant MRSA 4. Hepatitis - ? cause (? ischaemic vs drug induced vs paracetamol toxicity) - HBV & HCV non-reactive - HBsAb: 66 (immune) 5. Diabetes mellitus - non-complient - HbA1C 8.9 ([redacted] 6. Alcohol abuse

				Pre-discharge bloods: * CRP 27 (improving) * Hb 92, Plt 87, MCV 84, neutro 1.52, lymphocytes 0.70 * ALT 302, AST 143, GGT 167, ALP 684, Bilib 35 (conj. 19), LDH 671 (improving) * urea 1.4, creat 79, eGFR > 90, Urine PCR 66 * Na 133, * Glucose 10.8 Weight 48 BMI: 17.2 Pulse: 101 Blood pressure: 72/56 mmHg Temperature: 37.2 Clinically jaundiced Cachectic Chest clear Plan: 1. Very lengthy, but simplified, discussion regarding HIV, HIV transmission, ART treatment & treatment monitoring. Had him repeat what he understood and it seems like he understands the need for lifelong daily medication. Expresses readiness to start ART (want's to feel better). 2. Discuss oral Ab treatment with ID physician. Needs to continue on Bactrim DS 1 bd for total of 2 weeks. 3. FBC, CRP, LFT's and UC&E repeated today. 4. ART options: * needs simple, once daily, STR * ABC contra-indicated due to liver disease * Genvoya good option (no DDIs or contra-indications to start) * Discussed IRIS * aware of need to repeat VL around 4 weeks after commenced treatment. 5. Pharmacist happy to initiate ART on Monday 6. Will return with Health Worker on Monday morning for review and ART initiation. 7. To get in touch with us if any unexpected deterioration in clinical condition.
43.	[redacted]	46 M	HIV	Patient referred from GP with new diagnosis HIV infection. My letter back to GP below: Problem list: 1. HIV infection - New diagnosis on 18/07/2016, WB confirmed.

- CD4: 220 (15%)
- HIV Viral Load 544,269

2. Hypertension
- Has been prescribed an ACE-inh in the past, but non-compliant

3. T2DM
- HbA1C 7.3
- u-ACR 32
- eGFR73
- not taking any hypoglycaemic agents

4. Hypercholesterolaemia
- not to target

Current treatment:
· Genvoya (elvitegravir 150 mg, cobicistat 150 mg, emtricitabine 200 mg, tenofovir alafenamide fumarate 10 mg), one tablet daily

Thank you for referring XXX to our clinic after his recent diagnosis of HIV infection.
I have caught up with him again today after his initial visit to our clinic on [redacted]. He is still understandably quite shocked after being informed of his diagnosis, but has engaged with our psychologist and is currently doing well under the circumstances.
XXX reports no HIV-associated symptoms and his clinical examination was unremarkable. During his initial visit he was hypertensive with a blood pressure of 157/84, on repeat today his blood pressure was 137/82 mmHg. He weighs 88kg and is 175cm tall.
He told me today that he has a follow up appointment booked with yourself for tomorrow and that he will discuss the management of his cardiovascular risk factors with you.
He will be starting his antiretroviral therapy today and I have warned him to be on the lookout for symptoms of Immune Reconstitution Inflammatory Syndrome (IRIS) in which case he will contact us immediately. With a CD4 count of 220 he does not require any prophylactic treatment for opportunistic infections at present.
He is starting a single tablet (four agent) regimen, called Genvoya. Two of the ingredients, (elvitegravir and cobicistat) has potential drug-drug interactions with metformin, increasing the plasma concentration of metformin. We still advise metformin as first line therapy for his diabetes (in conjunction with the normal lifestyle modifications), but close monitoring is recommended. Rosuvastatin would be a safe choice of lipid lowering agent and ACE-inhibitors has no potential side effects.
I have asked [redacted] to return to our clinic in a week or two to review for any signs or symptoms of IRIS. He will have another follow up visit with us in 4 weeks to repeat his HIV viral load and CD4

				count. He knows that he can contact us at any time if needed. Please do not hesitate to contact us if you have any questions. Thank you for managing his CVS risk factors.
44.	[redacted]	56 M	HIV	56 year old retired truck driver referred from GP with new diagnosis of HIV - incidental finding on memory clinic screening tests 1. HIV - new diagnosis - CD4: 40 (3%), VL 704,165 - no resistance mutations - HLA B57 excluded - informed by GP - exclusively heterosexual - up until 12 months ago had been sexually active with 3 different Thai women over a period of 4 years - denies unprotected sex with any of these girls - contracted gonorrhoea [redacted] while in Thailand - denies any seroconversion symptoms - no dyspnoea, headache, visual changes or lymphadenopathy - had been in 9 year monogamous heterosexual relationship prior to this - currently been with same female partner in monogamous relationship for the past 12 months - has unprotected intercourse (had vasectomy) - also has UPAI with her - denies IDU, tattoos, steroid injections, blood transfusions 2. Chronic diarrhoea since Jan this year - current Aeromonas species on MCS - one documented Campilobacter in Feb 2016 - recent repeat faecal MCS done by GP clear - diarrhoea ongoing - no loss of weight - no fevers 3. Significant seborroic dermatitis - given a lot of different antibiotics for this by GP (?) 4. Probable eosinophilic folliculitis - on clinical appearance today

				5. Past CVA [redacted] - was told it affected a "central area" of his brain affecting his short term memory - has not been seen by memory clinic since then but re-engaged with local team 1 month ago. - says symptoms presented as meningitis 6. Cervicogenic headaches 7. Has been told in the past that he has hypercholesterolaemia, but says it's diet controlled 8. Was previously on antihypertensives but discontinued 9. Large soft tissue tumour removed from right upper thigh 18 months ago (unsure of specific diagnosis) - Being followed up by oncology - does have a lot of widespread lipomas (probably not related to above tumour though) Ex-smoker: 20/day for 20 years, quit 6 years ago Very rarely uses alcohol Denies drug use Current meds: - Sertraline 100mg daily - Ibuprofen 400 mg prn Allergies: Nil PMHx: - meningitis at age 15 PSHx: - vasectomy Relocated to our area in [redacted] Currently on disability pension due to multiple MSK problems Weight 105 BMI: 36.3 Pulse: 74 Blood pressure: 144/87 mmHg

				No lymphadenopathy Significant facial, peri-ocular and peri-aural seborroic keratosis Severe intertrigeal tinea Clinically widespread eosinophilic folliculitis Chest clear No meningism Lengthy discussion with both him and his partner Very keen to start treatment as soon as possible Genvoya prescribed Warned to look out for IRIS Clinical review within a week or two, sooner if any problems Management and reflexion: His CXR showed no radiological evidence of an infective process. Lung fields are overinflated, in keeping with COPD. He was commenced on Genvoya for cART after potential drug-drug interactions were checked. Bactrim prophylaxis for PJP and Azithromycin prophylaxis for MAC was commenced. Biopsy of his skin lesions confirmed the diagnosis of eosinophilic folliculitis. He had no side effects on treatment and had an undetectable viral load within 8 weeks after commencing cART. This resulted in resolution of his chronic diarrhoea, eosinophilic folliculitis and tinea. His primary prophylaxis was ceased after his CD4 count was >100 for 3 months, along with an undetectable VL. Recent data suggest that the risk of PJP is low with early discontinuation of prophylaxis when the CD4 cell count is > 100 cells/ μ L, in the setting of viral suppression. Primary prophylaxis against MAC infection may be ceased with cART-associated immune reconstitution when the CD4 cell count is > 100 cells/ μ L for 3 months in the setting of adequate viral suppression. He has since been diagnosed with arthritis by his GP, who also commenced oral prednisolone. Due to significant drug-drug interactions of prednisolone and cobicistat, he was promptly changed over to Descovy plus Dolutegravir without any side effect. He remains virologically suppressed and is doing well with a CD4 of 220 (13%).
45.	[redacted]	49 M	HIV	49 year old female accompanying her male partner of 12 months who has recently been diagnosed with HIV infection 1. HIV - new diagnosis, confirmed - asymptomatic - cannot recall any seroconversion symptoms - had Ross River Virus in 2013, and "flare up of symptoms" around 12 months ago ? seroconversion

				- has been married for 27 years - husband passed away (? cause) - had platonic boyfriend for a few years when she moved to this area (man had ED, so they were not sexually active). He also passed away (says she heard afterwards that his ED was from steroid injections) - current partner for 12 months Otherwise in good health Not on any contraception - partner had vasectomy - peri-menopausal - no hot flushes Normal pap smear and mammogram within this year. Relocated to our area 3.4 years ago Smoker: 20/day since age 14 Very rarely uses alcohol Denies drug use Current meds: - Ibuprofen 400 mg prn Past surgery: cholecystectomy [redacted] Allergies: Penicillin - rash Weight 74 BMI: 28.2 Pulse: 73 Blood pressure: 143/97 mmHg No lymphadenopathy No skin rashes Chest clear No meningism Lengthy discussion with both her and her partner Very keen to start treatment today

				Genvoya prescribed Warned to look out for IRIS Clinical review within a week or two, sooner if any problems Reflection: This husband and wife couple was diagnosed with HIV infection. Her husband perceived his risk of HIV infection as low and never disclosed his sexual contacts in Thailand to his GP. This lead to the delay in diagnosing his infection and as such, also to his partner being infected. Her infection could potentially have been prevented, had his diagnosis been made early and he commenced on cART for treatment as prevention (TAsP). HPTN 052 showed that early treatment - started at a CD4 count between 350 and 550 cells/mm3 - reduced the risk of HIV transmission to an uninfected partner - by at least 96%. Almost all the study participants were heterosexual couples.
46.	[redacted]	53 M	HIV	. New diagnosis HIV - referred by GP - reactive WB. - MSM - UPRAI in Bali in first week of [redacted] - has not had any other risky exposures Seroconversion ~24/09/2016 - presented to GP with fevers, ILI symptoms - ongoing arthralgia and hyperaesthesia at present Last non-reactive HIV test in March 2016 (with GP) PMH: 1. Coeliac disease - 1996 2. Vit B12 deficiency - secondary to coeliac 3. Osteopaenia - secondary to coeliac 4. Childhood epilipsy - never had any seizures as adolescent or adult Meds: B12 injections

				Citracal + D Allergies: None Diagnosis discussed Keen to start treatment today DDIs with Genvoya checked - none identified Education and support offered Referral to support organisations/psychology - declined Not distressed by diagnosis Legal responsibilities discussed, including condom use and undetectable VL. Review in 4 weeks Warned on IRIS Reflection: This case demonstrated dealing with the initial diagnosis of HIV and the treatment planning involved.
47.	[redacted]	31 M	HIV	HIV - initial diagnosis in Feb [redacted] - contact tracing suggests infection in [redacted] during street fight ART history: - March 2013: started Atripla - discontinued due to psych SEs and changed over to Tru/Ral staight away. - April 2013 - Dec 2014: Tru/Ral - discontinued due to falling out with ART provider. Was unprepared to have 3-monthly bloods taken. - March 2015: recommenced treatment with Triumeq - discontinued after 1 month due to similar side effects as when he was on Atripla. - no ART at all since then Reports bloods done 3 months ago with (verbally provided by him) results: CD4: 290 (28%), concurrent URTI at the time VL: 43000 States that he has not been sexually active at all since discontinued treatment in Dec 2014

				Heterosexual Met new female partner (no sex yet). Wants to recommence prior to becoming sexually active again - been with current partner for the past month - partner aware of diagnosis No chronic medical conditions No daily meds No allergies No OTC meds Previous GRA (20/05/2015): - L10FIL, K20I mutations - Low-level resistance to nelfinavir - completely susceptible to NRTIs and NNRTIs Plan: Restart Genvoya Aware that he needs to have bloods repeated in 1 month Aware of transmission risk if not undetectable Lives in [redacted] and aware of availability at community pharmacy - not keen on this at the moment. RV 1 month Discussed at length what routine monitoring will involve. Reflection: This case highlighted some of the difficulties in keeping PLWHIV engaged with services. This is a heterosexual man, who was carrying a lot of anger related to being diagnosed with an infection that he felt, only affects MSM. He had disengaged from two other Sexual Health Clinics in the state after he felt unfairly treated by these services. In addition to the above difficulties, he now also lives in a regional area where access to specialised HIV services is difficult.
48.	[redacted]	33 M	HIV	HIV infection: - Diagnosed in 2012 - Initial presentation diarrhoea - First started on Truvada, atazanavir/ritonavir, but was changed to Kivexa, atazanavir/ritonavir due to renal dysfunction - discontinued all treatment > 1year ago - No resistance mutations

				Pneumocystis jiroveci pneumonia (PJP): - diagnosed March [redacted] - CD4: 70 (8%), viral load 197,631 Decreased renal function - On background of advanced HIV infection - Heavy proteinuria, without haematuria - Likely HIVAN Reflection: HIVAN and HIV immune complex kidney (HIVICK) disease are the predominant forms of renal disease related to HIV. HIVAN is seen almost always in patients with advanced HIV infection. Increased susceptibility to HIVAN among this group of patients is associated with polymorphisms in the apolipoprotein L1 gene. HIVAN typically manifests clinically with heavy proteinuria, without haematuria. Treatment for the underlying renal lesion is ART. Prednisone and antiproteinuric agents (ACE inhibitors, ARBs) may also be used. This patient was commenced on Descovy (TAF/FTC) and Dolutegravir for cART and was started on an ACE inhibitor. TAF has a more favourable renal side effect profile compared to TDF. The patient's renal function has normalised and he has no further proteinuria .
49.	[redacted]	32 M	HIV	Philippines National, not Medicare eligible. Presented for screening bloods after his male partner, who still lives in the Philippines, has tested positive for HIV. Works on a cruise ship, spending a lot of time out at sea. Will be in the [redacted] area until December [redacted] after which he returns to the Philippines. No chronic medical conditions. No medication. No allergies. Does not drink alcohol or use recreational drugs. Initial HIV workup showed: - Western Blot reactive - TB Quantiferon Gold, negative - CMV IgG reactive - Toxoplasma gondii non-reactive - HIV VL 7,158; CD4 330 (21%) - Hepatitis A and B immune - HLA B57:01 excluded - Fully sensitive virus, with no resistances Reflection: Medicare ineligibility was a barrier to start treatment. The choice of cART is also influenced by its availability in the Philippines. After careful deliberation I decided to commence him on Genvoya (TAF/FTC/EVG/COBI) which was one of two possible STRs accessible via compassionate access from the pharmaceutical company. Compassionate access was the only way for him to get treated without Medicare benefits. He is

				aware that this combination is not available in the Philippines and that he would need to be changed over to a different cART regimen once back home. His HIV remains well controlled and he will return for follow up before leaving for the Philippines.
50.	[redacted]	20 M	HIV	HIV infection. - Diagnosed May [redacted] - Lives remotely in [redacted] We' ve been working with his GP to start him on treatment in May. Was commenced on Genvoya and has a fully susceptible virus. His HIV viral load, however remains at high levels (most recent VL 49800), suggesting that he' s not taking his medication. Of particular concern is that he was also diagnosed with syphilis in June, suggesting that he' s probably having unprotected sexual intercourse with a detectable viral load. Management: This case highlights significant difficulties in managing HIV-infection in a remote and often transient population. This young man has no fixed address and is very difficult to engage in health services. The houses that he does live in at times are overcrowded and privacy is a major burden to treatment compliance. He is unable to take his medications home with him due to family and friend going through his things all the time and also has no privacy in taking his tablets. He is managed in a multidisciplinary setting by our clinic, his GP, a contact tracing officer and CNC, as well as a peer support group called [redacted] He has been given a mobile phone to assist in communication with health services, but does not answer phone calls due to privacy concerns. His syphilis diagnosis is of great concern regarding him transmitting the virus to sexual partners and he has been referred to the Public Health Unit for assistance and escalation of his risky behaviour.