COVID-19 Shared Cared Drug Monitoring Guide North Staffordshire & Stoke-on-Trent Joint Medicines Formulary

COVID-19 NICE rapid guideline: rheumatological autoimmune, inflammatory and metabolic bone disorders:
In patients known or suspected to have COVID-19 the Specialist Team are to advised to:
- inform the patient to continue hydroxychloroquine and sulfasalazine
-inform the patient to not suddenly stop prednisolone
-only give corticosteroid injections if the patient has significant disease activity and there are no alternatives, and refer to NHS England's clinical guide on the management of patients with musculoskeletal and rheumatic conditions on corticosteroids.
-temporarily stop other disease-modifying antirheumatic drugs, JAK inhibitors and biological therapies and tell the patient to contact their rheumatology department for advice on when to restart treatment.

North Staffordshire & Stoke-on-Trent COVID-19 interim guidance with existing shared care arrangements in place for patients <u>not known or suspected of COVID-19</u>:
Monitoring responsibility remains unchanged to the agreements in place prior to the crisis.
For the North Staffordshire and Stoke on Trent Health Economy, monitoring responsibility for ESCA medicines (AMBER-E) lies with the specialist team in the vast majority of cases.
This guide is to support GPs at the point of issuing a prescription and to support any agreed Treatment Room LES patient arrangements (where already in place).
The specialists where possible will maintain the monitoring intervals in line with the agreed ESCA but should the need arise for the interim COVID crisis period only, the interval between monitoring may be extended in line with the advice below.
This guide will be retired as soon as possible.

Drugs in Class	BNF or ESCA Classification	North Formulary Status	GP or Consultant (C) Monitoring	NORTH ESCA Guidance or Standard Monitoring Advice * Provided by Specialist Pharmacist Services (SPS)	Interim COVID-19 Shared Care Drug Monitoring Advice for Patients Not Known or Suspected to Have COVID-19 In agreement with UHNM, MPFT & NSCHT
Amiodarone	**Antiarrhythmic**	**AMBER- NO ESCA**	C/GP	LOCAL ESCA PENDING- move to consultant led monitoring Annual ophthalmological check recommended patient to highlight any blurred or decreased visual symptoms. Annual ECG, CXR & PFTs. 6 monthly TFT, LFT, U&Es. TFTs for up to 12 months after discontinuation. If on warfarin, INR more frequent monitoring during and after discontinuation.	No change to monitoring during initiation & stabilsation of the medicine or during the first 12 months of treatment. No change to monitoring for those with previous abnormal results. In the absence of symptoms suggestive of side effects in a stabilised patient including patient reported dyspnoea or eye health concerns, monitoring can be deferred for 1 to 2 months.
Amisulpride	**Antipsychotic 2nd Gen**	**AMBER- NO ESCA**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Anagrelide	**Essential thrombocythaemia**	**AMBER-E**	C	Consultant led monitoring. Specialist to check serum U&Es, FBC and LFTs at baseline and on initiation phase to week 12, then every 2 to 6 months.	ESCA monitoring likely to remain unaltered.(frequency of FBC testing will be about 50% of what is mentioned in ESCA – the testing frequency of U&Es and LFTs likely to remain the same.)
Antipsychotic Depot Injections		**RED**	C	Consultant led monitoring & prescribing	Consultant led monitoring & prescribing
Apomorphine	**Parkinson's disease**	**AMBER-E**	C	Consultant led monitoring. Specialist to check FBC & monitor BP every 3 to 6 months and after dose change & monitor general response to therapy.	No change from standard monitoring advice. Ref: https://www.sps.nhs.uk/wp-content/uploads/2017/12/Drug-monitoring_October-2017.pdf
Aripiprazole	**Antipsychotic 2nd Gen**	**AMBER- NO ESCA**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.

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Atomoxetine adults	**Drugs for attention deficit hyperactivity disorder**	**AMBER-E**	GP	GP to monitor HR, BP every 3 months and weight every 6 months. Specialist to monitor HR and BP at baseline and check FH for CVD.	NSCHT advise the 3 monthly BP and HR check may be delayed by up to 6 months but review decision monthly. However as this is the responsibility of the GP, any concurrent CVD or a family history of CVD should be taken into consideration.
Atomoxetine children and adolescents	**Drugs for attention deficit hyperactivity disorder**	**AMBER-E**	C	Consultant led monitoring. Specialist to monitor HR, BP & weight at baseline and check FH for CVD. Specialist to monitor HR & BP every 3 months and weight & height every 6 months.	ESCA Monitoring and physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Azathioprine for inflammatory bowel disease	**Chronic bowel disorders**	**AMBER-E**	C	Consultant Led Monitoring. Specialist monitoring at baseline, initiation, stabilisation and ongoing. FBC & LFTs every 3 months and U&Es & CRP/ESR annually.	National guidance for patients well established on DMARDs is for 3 monthly blood tests – **for patients with stable monitoring (defined by specialist) this will be reduced to 6 monthly** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the gastroenterology team if their monitoring frequency can be safely reduced & GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects. Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients under 16 years old Extra Advice to Primary Care: 1. All our patients are advised to continue with their treatment whether it be azathioprine, 6 mercaptopurine, methotrexate or biologics. 2. Patients are advised not to reduce the dose of their regular IBD medications unless advised to do so by their clinician in secondary care. 3. In the event of flare up a shorter course with a low dose of steroid can be used. [Prednisolone or budesonide] 4. Patients can use the IBD hotline if they have any queries. Unlike in the past we have prioritised the hotline service and therefore patients and GP can expect a fairly rapid response to their query. At the moment we are getting approximately 80 calls per day. 5. The IBD MDT is still running every week but with limited participation. 6. Newer treatment are not being commenced unless we believe it will make a marked difference to the patient. 7. The biologics infusion is continuing as normal
Azathioprine for inflammatory skin disease	**Immunosuppressants**	**AMBER-E**	C	Consultant led monitoring. Specialist led initiation, stabilisation and then every month to 3 months thereafter for FBC, LFTs, Serum U&Es.	An extension to blood monitoring arrangements not anticipated to be required.
Azathioprine for Rheumatic disease	**Autoimmune Rheumatic Diseases**	**AMBER-E**	C	Consultant led monitoring. Specialist led initiation, stabilisation and then every 3 months thereafter for FBC, LFTs, U&Es and Albumin.	National guidance for patients well established on DMARDs is for 3 monthly blood tests – **for patients with stable monitoring (defined by specialist) this will be reduced to 6 monthly.** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the rheumatology team if their monitoring frequency can be safely reduced & the GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients on methotrexate and leflunomide in combination -Patients under 16 years old

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Chlorpromazine	**Antipsychotic 1st Gen**	**GREEN**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Ciclosporin - Transplant Patient	**Immunosuppressants**	**AMBER-E**	C	Consultant led monitoring. Specialist - Perform initial baseline tests. These include FBC, LFT's, U&E's, creatinine clearance, lipids and BP. Follow-up assessments - Review immunosuppressant therapy including ciclosporin levels. Monitor patients Creatinine / eGFR at required intervals. Monitor patients LFT's, U&E's, blood pressure and lipids as required.	UHNM renal repatriation should be complete, any issues for **UHNM** email nstccg.staffsmedicineoptimisationqueries@nhs.net. For Out of Area Provider transplant patients in the first year following transplant should be prioritised for monitoring. Seek specialist advice for individual patient information on monitoring.
Ciclosporin for autoimmune rheumatic disease	**Autoimmune Rheumatic Diseases**	**AMBER-E**	C	Consultant led monitoring. Specialist led initiation, stabilisation (approx 7 weeks) then monthly for 3 months & then every 3 months thereafter- FBC, LFTs, U&Es, Albumin & eGFR, BP and plasma glucose.	National guidance for patients well established on DMARDs is for 3 monthly blood tests – **for patients with stable monitoring (defined by specialist) this will be reduced to 6 monthly.** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the rheumatology team if their monitoring frequency can be safely reduced & the GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients on methotrexate and leflunomide in combination -Patients under 16 years old
Clozapine	**Antipsychotic 2nd Gen**	**RED**	C	Consultant led monitoring & prescribing	Consultant led monitoring & prescribing
Dalteparin Cancer Patients	**Anticoagulants**	**AMBER-E**	C	Consultant led monitoring. Baseline FBC, U&E, eGFR, LFT, INR, APTT. Day 4 to 14- FBC. Monthly FBC, U&E, eGFR & LFT	No change to ESCA requirements.
Dalteparin Obstetrics	**Anticoagulants**	**AMBER-E**	C or midwife when stable	Consultant or midwife led monitoring. Baseline FBC, U&E, eGFR, LFT, INR, APTT. Day 5 to 14- FBC. Monthly FBC	No change to ESCA requirements.
Demeclocycline	**Tetracyclines- SIADH**	**AMBER-E**	C	Consultant led monitoring. Specialist led initiation, stabilisation and then every 3 to 4 months. FBC, LFTs & U&Es. *(to reduce the frequency of initial monitoring from 'every 2 weeks' to 'every 4-6 weeks' and long term monitoring to every 6 monthly)*	Shared care requested at point of stabilisation. Monitoring change not anticipated but FBC, LFT and U&E's monitoring interval to increase from 3 to 4 monthly up to a max of 6 monthly if required by specialist & GP to be informed *(to reduce the frequency of initial monitoring from 'every 2 weeks' to 'every 4-6 weeks' and long term monitoring to every 6 monthly)*
Donepezil	**Acetylcholinesterase Inhibitor**	**AMBER- NO ESCA**	C	Consultant led monitoring. Specialist team: Monitor for effectiveness at least once every 12 months (using cognitive, global, functional and behavioural assessment) as clinically appropriate. As cholinesterase inhibitors have been associated with weight loss, weight should be monitored on a regular basis. Patients at increased risk for developing ulcers, e.g. those with a history of ulcer disease or those receiving medicines which will increase risk of bleeding e.g. non-steroidal anti-inflammatory drugs(NSAIDs), aspirin, anticoagulants, selective serotonin reuptake inhibitors (SSRIs), should be monitored for symptoms of peptic ulcer disease or gastrointestinal bleeding, or prophylactic prescribing of a gastro-protectant considered. Contact the specialist team between specialist's yearly reviews if there are any concerns which may need earlier attention.	No change from standard monitoring advice. Ref: https://www.sps.nhs.uk/wp-content/uploads/2017/12/Drug-monitoring_October-2017.pdf

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Dronedarone	**Anti-arrhythmic Drugs**	**AMBER-E**	C	Consultant led monitoring. Specialist led baseline, initiation, stabilisation (ECG, LFTs & Cr) and then ECG & LFTs every 6 months.	Shared care requested at point of stabilisation. Therefore no change to monitoring from GP perspective. Monitoring change not anticipated but LFTs only may reduce from ESCA regimen to baseline, week 1, month 1, month 3, month 6, month 12 then to 6 monthly if required by the specialist.
Eplerenone	**Aldosterone Antagonist**	**AMBER- NO ESCA**	Patient specific	Initiation by Consultant Cardiologists only for patients who have had an acute myocardial infarction (MI) and who have symptoms and/or signs of heart failure and left ventricular systolic dysfunction. After stabilisation: U&Es (including Creatinine) and eGFR at 6 months and every 3 to 6 months thereafter.	Stabilisation complex and via specialist team input. Seek specialist advice for an individual patient.
Flupentixol	**Antipsychotic 1st Gen**	**AMBER- NO ESCA**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Galantamine	**Acetylcholinesterase Inhibitor**	**AMBER- NO ESCA**	C	Consultant led monitoring. Specialist team: Monitor for effectiveness at least once every 12 months (using cognitive, global, functional and behavioural assessment) as clinically appropriate. As cholinesterase inhibitors have been associated with weight loss, weight should be monitored on a regular basis. Patients at increased risk for developing ulcers, e.g. those with a history of ulcer disease or those receiving medicines which will increase risk of bleeding e.g. non-steroidal anti-inflammatory drugs(NSAIDs), aspirin, anticoagulants, selective serotonin reuptake inhibitors (SSRIs), should be monitored for symptoms of peptic ulcer disease or gastrointestinal bleeding, or prophylactic prescribing of a gastro-protectant considered. Contact the specialist team between specialist's yearly reviews if there are any concerns which may need earlier attention.	No change from standard monitoring advice. Ref: https://www.sps.nhs.uk/wp-content/uploads/2017/12/Drug-monitoring_October-2017.pdf
Haloperidol	**Antipsychotic 1st Gen**	**GREEN**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Hydroxycarbamide	**Antineoplastic**	**AMBER- NO ESCA**	Patient specific	Ongoing Monitoring In sickle cell Monthly FBC if blood counts stable and 3 monthly U+Es, LFTs, Urate, LDH and HBF%. However BNF recommends FBC every 2 months unless on maximum dose in which case FBC should continue to be monitored every 2 weeks In psoriasis FBC every 1-3 months Serum creatinine, uric acid and LFTs should also be monitored Action required if abnormal results - **seek specialist advice** If neutrophils < 1.5 x109/L, platelets < 80 x109/L, reticulocytes< 10 x109/L or Hb drops by >3g/dL from baseline stop hydroxycarbamide until blood counts have recovered If creatinine clearance < 60ml/min **seek specialist advice**	Patient specific monitoring advice from the specialist.

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Hydroxychloroquine	**Autoimmune Rheumatic Diseases**	**AMBER-E**	C	Consultant Led Monitoring: Referral for annual assessment including optical coherence tomography if continued for more than 5 years	Consultant led - no change to primary care
Lanthanum for CKD	**Phosphate - binding agents**	**AMBER-E**	C	Consultant led monitoring. Baseline FBC, LFT and U&Es. Ongoing FBC & LFT where applicable and U&Es all. Patients with CKD- cared for under ESCA in primary care. Patients on dialysis- cared for by UHNM not via GP (NHSE commissioned)	Monitoring currently patient specific, any change to be advised by the specialist.
Leflunomide	**Autoimmune Rheumatic Diseases**	**AMBER-E**	C	Consultant led monitoring. Specialist led baseline, initiation, stabilisation and then every 3 months. FBC, LFTs, U&Es, Albumin, weight and BP.	National guidance for patients well established on DMARDs is for 3 monthly blood tests – **for patients with stable monitoring (defined by specialist) this will be reduced to 6 monthly.** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the rheumatology team if their monitoring frequency can be safely reduced & the GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients on methotrexate and leflunomide in combination -Patients under 16 years old
Lithium	**Antimanic Drugs**	**AMBER-E**	C	Consultant led monitoring. Specialist led monitoring: baseline (weight, BP, eGFR, TFT, Ca, ECG), Li level every 3 months and after dose change, eGFR & TFT every 6 months and Ca levels annually.	NSCHT advice no change to monitoring planned however Pathology Lab are experiencing insufficient supplies of lithium testing reagent. Interim arrangement:- whilst path lab reagent issues in place, the Trust will be reviewing and prioritising sampling as per NICE guidance (CG185) until such time as UHNM have supplies. GP to be kept informed by NSCHT.
Memantine	**Acetylcholinesterase Inhibitor**	**AMBER- NO ESCA**	C	Consultant led monitoring. Specialist team: Monitor for effectiveness at least once every 12 months (using cognitive, global, functional and behavioural assessment) as clinically appropriate. As cholinesterase inhibitors have been associated with weight loss, weight should be monitored on a regular basis. Patients at increased risk for developing ulcers, e.g. those with a history of ulcer disease or those receiving medicines which will increase risk of bleeding e.g. non-steroidal anti-inflammatory drugs(NSAIDs), aspirin, anticoagulants, selective serotonin reuptake inhibitors (SSRIs), should be monitored for symptoms of peptic ulcer disease or gastrointestinal bleeding, or prophylactic prescribing of a gastro-protectant considered. Contact the specialist team between specialist's yearly reviews if there are any concerns which may need earlier attention.	No change from standard monitoring advice. Ref: https://www.sps.nhs.uk/wp-content/uploads/2017/12/Drug-monitoring_October-2017.pdf
Mercaptopurine for inflammatory bowel disease	**Chronic bowel disorders**	**AMBER-E**	C	Consultant led monitoring. Specialist monitoring at baseline, initiation, stabilisation and ongoing, FBC & LFTs every 3 months and U&Es & CRP/ESR annually.	National guidance for patients well established on DMARDs is for 3 monthly blood tests – **for patients with stable monitoring (defined by specialist) this will be reduced to 6 monthly** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the gastroenterology team if their monitoring frequency can be safely reduced & GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects. Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients under 16 years old Extra Advice to Primary Care: 1. All our patients are advised to continue with their treatment whether it be azathioprine, 6 mercaptopurine, methotrexate or biologics. 2. Patients are advised not to reduce the dose of their regular IBD medications unless advised to do so by their clinician in secondary care. 3. In the event of flare up a shorter course with a low dose of steroid can be used. [Prednisolone or budesonide] 4. Patients can use the IBD hotline if they have any queries. Unlike in the past we have prioritised the hotline service and therefore patients and GP can expect a fairly rapid response to their query. At the moment we are getting approximately 80 calls per day. 5. The IBD MDT is still running every week but with limited participation. 6. Newer treatment are not being commenced unless we believe it will make a marked difference to the patient. 7. The biologics infusion is continuing as normal

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Methotrexate for autoimmune rheumatic disease	**Autoimmune Rheumatic Diseases**	**AMBER-E**	C	Consultant led monitoring. Specialist led baseline (incl CXR), initiation, stabilisation and then every 3 months. FBC, LFTs, U&Es & Albumin	National guidance for patients well established on DMARDs is for 3 monthly blood tests – **for patients with stable monitoring (defined by specialist) this will be reduced to 6 monthly.** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the rheumatology team if their monitoring frequency can be safely reduced & the GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients on methotrexate and leflunomide in combination -Patients under 16 years old
Methotrexate for inflammatory bowel disease	**Chronic bowel disorders**	**AMBER-E**	C	Consultant led monitoring. Specialist led baseline, initiation, stabilisation and then every month FBC, LFTs & U&Es	**For patients with stable monitoring (defined by specialist) this will be reduced to 3 monthly** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the gastroenterology team if their monitoring frequency can be safely reduced & GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects. Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients under 16 years old Extra Advice to Primary Care: 1. All our patients are advised to continue with their treatment whether it be azathioprine, 6 mercaptopurine, methotrexate or biologics. 2. Patients are advised not to reduce the dose of their regular IBD medications unless advised to do so by their clinician in secondary care. 3. In the event of flare up a shorter course with a low dose of steroid can be used. [Prednisolone or budesonide] 4. Patients can use the IBD hotline if they have any queries. Unlike in the past we have prioritised the hotline service and therefore patients and GP can expect a fairly rapid response to their query. At the moment we are getting approximately 80 calls per day. 5. The IBD MDT is still running every week but with limited participation. 6. Newer treatment are not being commenced unless we believe it will make a marked difference to the patient. 7. The biologics infusion is continuing as normal
Methotrexate for inflammatory skin disease	**Immunosuppressants**	**AMBER-E**	C	Specialist led baseline (incl CXR & pro-collagen), initiation, stabilisation and then every month. FBC, LFTs, U&Es & pro-collagen every 3 months.	If issues arise with access to blood tests, a small number of very stable long term patients will move to 3 monthly blood testing. Any change to a patient's monitoring interval will be communicated to the GP by the specialist. For patients who are new to the medication or have been unstable monthly blood tests will remain unchanged.
Methylphenidate adults	**Drugs for attention deficit hyperactivity disorder**	**AMBER-E**	GP	GP led monitoring after baseline: HR & BP every 3 months and weight every 6 months. Specialist led baseline monitoring (HR, BP, weight & FH of CVD).	NSCHT advise the 3 monthly BP and HR check may be delayed by up to 6 months but review decision monthly. However as this is the responsibility of the GP, any concurrent CVD or a family history of CVD should be taken into consideration.
Methylphenidate children and adolescents	**Drugs for attention deficit hyperactivity disorder**	**AMBER-E**	C	Consultant led monitoring. Specialist to monitor HR, BP & weight at baseline and check FH for CVD. Specialist to monitor HR & BP every 3 months and weight & height every 6 months.	ESCA Monitoring and physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.

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Mycophenolate- Transplant Patient	**Immunosuppressants**	**AMBER-E**	C	Consultant led monitoring. Specialist – Initiation - Perform monitoring of FBC in accordance with local protocol - Follow-up assessments- Monitor patients Creatinine / eGFR at required intervals. Monitoring - Patients receiving mycophenolate mofetil should have complete blood counts weekly during the first month, twice monthly for the second and third months of treatment, then monthly though the first year. If neutropenia develops (absolute neutrophil count < 1.3 x 103/µl), it may be appropriate to interrupt or discontinue mycophenolate mofetil; these amendments should be decided by the specialist.	UHNM renal repatriation should be complete, any issues for **UHNM** email nstccg.staffsmedicineoptimisationqueries@nhs.net. For Out of Area Provider transplant patients in the first year following transplant should be prioritised for monitoring. Seek specialist advice for individual patient information on monitoring.
Olanzapine	**Antipsychotic 2nd Gen**	**AMBER- NO ESCA**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Penicillamine	**Autoimmune Rheumatic Diseases**	**AMBER-E**	C	Consultant led monitoring. FBC, LFT, U&E & albumin at baseline, every 2 weeks until 6 weeks after stable, the monthly for 3 months, then every 3 months thereafter. Urine analysis for protein/ blood - patient led weekly then monthly	National guidance for patients well established on DMARDs is for 3 monthly blood tests – **for patients with stable monitoring (defined by specialist) this will be reduced to 6 monthly.** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the rheumatology team if their monitoring frequency can be safely reduced & the GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients on methotrexate and leflunomide in combination -Patients under 16 years old
Phenindione	**Warfarin / Acenocoumarol / Phenindione**	**AMBER- NO ESCA**	C	As per STAC clinic advice	As per STAC clinic advice
Phenytoin	**Antiepileptic**	**AMBER- NO ESCA**	Patient specific	NICE suggest that regular blood test monitoring is not recommended as routine however they do suggest FBC, U&Es, liver enzymes, Vitamin D levels, and other tests of bone metabolism every 2-5 years for adults taking enzyme-inducing drugs.	No change from standard monitoring advice. Ref: https://www.sps.nhs.uk/wp-content/uploads/2017/12/Drug-monitoring_October-2017.pdf

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Promazine	**Antipsychotic 1st Gen**	**GREEN**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Quetiapine	**Antipsychotic 2nd Gen**	**AMBER- NO ESCA**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Risperidone	**Antipsychotic 2nd Gen**	**AMBER- NO ESCA**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Rivastigmine	**Acetylcholinesterase Inhibitor**	**AMBER- NO ESCA**	C	Consultant led monitoring. Specialist team: Monitor for effectiveness at least once every 12 months (using cognitive, global, functional and behavioural assessment) as clinically appropriate. As cholinesterase inhibitors have been associated with weight loss, weight should be monitored on a regular basis. Patients at increased risk for developing ulcers, e.g. those with a history of ulcer disease or those receiving medicines which will increase risk of bleeding e.g. non-steroidal anti-inflammatory drugs(NSAIDs), aspirin, anticoagulants, selective serotonin reuptake inhibitors (SSRIs), should be monitored for symptoms of peptic ulcer disease or gastrointestinal bleeding, or prophylactic prescribing of a gastro-protectant considered. Contact the specialist team between specialist's yearly reviews if there are any concerns which may need earlier attention.	No change from standard monitoring advice. Ref: https://www.sps.nhs.uk/wp-content/uploads/2017/12/Drug-monitoring_October-2017.pdf
Sevelamer for CKD	**Phosphate - binding agents**	**AMBER-E**	C	Consultant led monitoring. Baseline FBC, LFT and U&Es. Ongoing FBC & LFT where applicable and U&Es all. Patients with CKD- cared for under ESCA in primary care. Patients on dialysis- cared for by UHNM not via GP (NHSE commissioned)	Monitoring patient specific

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Sulfasalazine	**Aminosalicylate-Rheumatology**	**AMBER-E**	C	Consultant led monitoring. FBC, LFT, U&Es & Albumin at baseline, every 2 weeks during dose titration & for 6 weeks at stable dose. Then every month for 3 months, then every 3 months for 9 months. After 12 months on stable dose as clinically indicted by the specialist.	National guidance for patients well established on DMARDs is for 3 monthly blood tests – **for patients with stable monitoring (defined by specialist) this will be reduced to 6 monthly.** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the rheumatology team if their monitoring frequency can be safely reduced & the GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients on methotrexate and leflunomide in combination -Patients under 16 years old
Sulfasalazine	**Aminosalicylate - Gastroenterology**	**AMBER-E**	C	FBC, LFT, U&Es & Albumin at baseline, every 2 weeks during dose titration & for 6 weeks at stable dose. Then every month for 3 months, then every 3 months for 9 months. After 12 months on stable dose as clinically indicted by the specialist.	National guidance for patients well established on DMARDs is for 3 monthly blood tests – **for patients with stable monitoring (defined by specialist) this will be reduced to 6 monthly** This will result in the majority of patients on DMARDs not requiring blood tests for the next 3 months, which will hopefully limit patients infection risk over the peak Patients will be contacted by the gastroenterology team if their monitoring frequency can be safely reduced & GP will be informed. Patients will be able to refer themselves for DMARD monitoring if there are any new concerns of DMARD side effects. Patients still needing to attend DMARD monitoring with no frequency reduction include: -Patients on monitoring more often than 3 monthly -Any on a particular DMARD/biologic for less than 12 months -Patients with renal/liver/white cell abnormalities sufficient to have warranted an increase in monitoring to less than 3 months -Patients under 16 years old Extra Advice to Primary Care: 1. All our patients are advised to continue with their treatment whether it be azathioprine, 6 mercaptopurine, methotrexate or biologics. 2. Patients are advised not to reduce the dose of their regular IBD medications unless advised to do so by their clinician in secondary care. 3. In the event of flare up a shorter course with a low dose of steroid can be used. [Prednisolone or budesonide] 4. Patients can use the IBD hotline if they have any queries. Unlike in the past we have prioritised the hotline service and therefore patients and GP can expect a fairly rapid response to their query. At the moment we are getting approximately 80 calls per day. 5. The IBD MDT is still running every week but with limited participation. 6. Newer treatment are not being commenced unless we believe it will make a marked difference to the patient. 7. The biologics infusion is continuing as normal
Sulpiride	**Antipsychotic 1st Gen**	**GREEN**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Tacrolimus- Transplant Patient	**Immunosuppressants**	**AMBER-E**	C	Consultant led monitoring. Specialist - Perform initial baseline tests. These include FBC, LFT's, U&E's, creatinine clearance, lipids, BP, ECG, coagulation values and monitoring for diabetes. Follow-up assessments - Review immunosuppressant therapy including tacrolimus levels, Monitor patients Creatinine / eGFR at required intervals, Monitor patients LFT's, U&E's, blood pressure, blood glucose and lipids as required.	UHNM renal repatriation should be complete, any issues for **UHNM** email nstccg.staffsmedicineoptimisationqueries@nhs.net. For Out of Area Provider transplant patients in the first year following transplant should be prioritised for monitoring. Seek specialist advice for individual patient information on monitoring.

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Trifluoperazine	**Antipsychotic 1st Gen**	**AMBER- NO ESCA**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.
Valproate / Sodium Valproate	**Antiepileptic**	**AMBER- NO ESCA**	Patient specific	LFTs, FBC and BMI after 6 months and then annually. Regular blood level test monitoring is not recommended as routine, and should be done only if clinically indicated (eg evidence of ineffectiveness, poor adherence, toxicity or clotting studies before surgery). As part of annual physical monitoring for patients with bipolar disorder Trust led (see lithium). Risk of abnormal pregnancy outcomes: follow Pregnancy Prevention Programme advice for GPs.	No change from standard monitoring advice. Ref: https://www.sps.nhs.uk/wp-content/uploads/2017/12/Drug-monitoring_October-2017.pdf
Zuclopenthixol	**Antipsychotic 1st Gen**	**AMBER- NO ESCA**	C	Consultant led monitoring. In schizophrenia, psychosis or bipolar disorder NICE advises that the secondary care team should maintain responsibility for monitoring service users' physical health and the effects of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer. Specialist should agree a plan of care with the GP. Holistic annual check comprises of: Response to treatment, side effects, movement disorders, adherence Weight or BMI, waist circumference, nutrition and physical activity CVS status- pulse & BP Metabolic status: FBG, HbA1c, blood lipid profile Annual physical health monitoring (Trust)	Physical health checks by NSCHT to continue. Where a patient is self isolating, home sampling shall be arranged by the Trust.