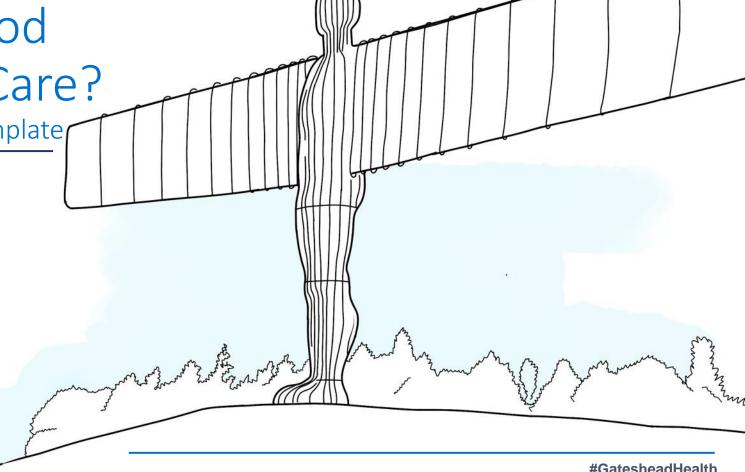


QI initiative with an electronic referral template

Dr Su Ann Tee, Consultant Endocrinologist Gateshead Lipid Clinic

20th September 2023





A tweet from a primary care colleague...

If you unilaterally think a GP referral is terrible, don't reject the referral.

Reach out & collaborate to explore why to improve the referral and pathways.

Otherwise, it delays patient care - unsafe.

It's inefficient & costly to the #NHS incl your service and #TeamGP.

13 **8**2 | 1 8,950 1





First things first

- There is no such thing as a "bad" referral to secondary care...
- As a primary care practitioner, you are seeking specialist input for your patient
 - I respect every such request from my local colleagues
- There are however, some very good referrals to the lipid clinic
- Lipid clinic also sadly does not have capacity to see all referrals hence need for triage
- Standardisation of the referral process could help make all referrals = good

Gateshead Health NHS Foundation Trust



Who should be referred to lipid clinic?

NEELI

Section Description	Primary & Secondary prevention	Statin Intolerance	Severe Hypercholesterolaemia or ? Familial Hypercholesterolaemia	Assessment of Hypertriglyceridaemia	Pregnancy	FH in Children and Young People	Supplementary information
Section Guideline			Simon Broome criteria for diagnosis of Familial Hypercholesterolaemia		Lipid management and medication issues in pregnancy		Erailty Guidelines Common drug interactions Lipid Clinic referral criteria Lipoprotein (a) Regional Lipid clinics Inclisiran FAQs
Flow charts	National Guidance for lipid management Secondary prevention treatment beyond standard therapy	Statin intolerance flow chart	Assessment pathway	Assessment pathway		Assessment pathway	
	UFS upon Tyne Hospitals North of Tyne, Ga	oria Healthcare NHS Foundation Trust South Tyneside Area Prescu NHS south Tyneside Area Prescu Area Prescu Area Prescu Area Prescu Area Prescu	ribing Committee	NHS Academic Hea	South Tyneside and Sur NHS Foun lith ork Gateshead He	nderland dition limit NHS Foundation	Care

Lipid Clinic Referral Criteria



Lipid Clinic referral criteria

All lipid clinics within the region offer Advice & Guidance and Electronic Booking System referrals.

For more general enquiries about Familial Hypercholesterolaemia (FH) Advice & Guidance can be accessed from the Familial Hypercholesterolaemia Specialist Nurses.

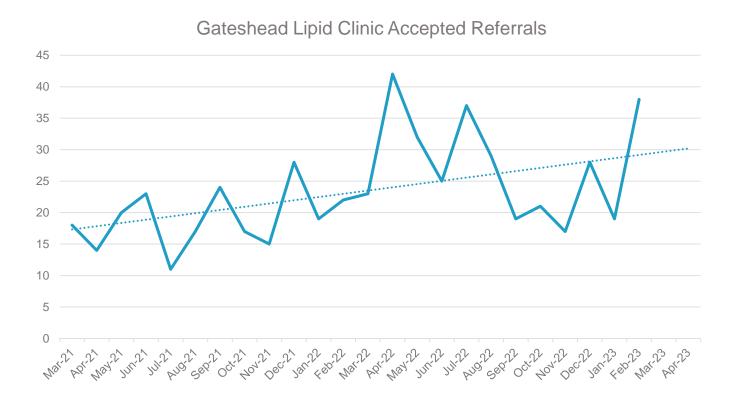
Refer to lipid clinic if:

- Clinical diagnosis of Familial Hypercholesterolaemia according to Simon Broome criteria.
- Relatives of patients with FH who may require genetic screening (FH Specialist nurses).
- Children with FH (Paediatric Clinic).
- Total cholesterol > 9 mmol/L or non-HDL-C > 7.5 mmol/L even if absence of first degree family history of premature heart disease.
- Triglycerides > 10 mmol/L (unless this can be explained by alcohol or poor glycaemic control)
 refer urgently if triglycerides > 20 mmol/L
- Patients with other inherited disorders of lipid metabolism including Familial Combined Hyperlipidaemia (FCH), Familial Hypertriglyceridaemia and Remnant Dyslipidaemia.
- Patients who fulfil NICE TA 393 / 394 criteria for PCSK9i therapy (See table for thresholds in green section under '<u>Treatment beyond standard therapy</u>')



Why bother making referrals "good"?

- Referrals increasing, staffing and allocated clinic slots are not (yet)
- Waiting times are long hence need to ensure the right patients get to clinic





What would you perceive as a "good" referral?

- Specific reason for referral
- •Appropriate reason for referral (i.e. something lipid clinic can/should help with)
- Supporting information to accompany referral

Good Referrals?

• Specific reason for referral

Gateshead Health

- Appropriate reason for referral
- Supporting information to accompany referral

I would be grateful if you might be able to see this 51 year old lady who has recently been found to have a very high cholesterol on blood tests. Her total cholesterol was 8.9 on 3 August. She came in requesting a blood test due to the family history of high cholesterol and a cousin the same age as her having recently had a heart attack.

Repeat fasting lipids have shown a cholesterol of 7.9 with non HDL of 6.5 and triglycerides of 4.8. She does not have any xanthelasma or tendon xanthomas.

I have clarified her family history with her. Her mum and all of her mum's siblings have high cholesterol and her mum has been recently referred to the Lipid Clinic. Three of her mum's siblings have had heart attacks, though she is not sure of the age. Her maternal cousin recently had a heart attacked aged 51.

Given her raised cholesterol and family history I would be grateful if she can be seen to see whether she needs further investigations for familial hypercholesterolaemia.

Yours Sincerely







- Appropriate reason for referral
- Supporting information to accompany referral?

Thank you for seeing this 64y year old patient, with the following problem:

Problem: After recent MI, LFTs were abnormal and statin was stopped - cardiology advised repeat lipid profile and referral to lipid clinic if cholesterol was >4

Problem Serum cholesterol raised (First)

History Telephone consultation during Covid-19 pandemic

Recent GGT has improved

Still hasn't had USS yet

Most recent cholesterol has gone up again to 8.3

Taking regular exercise

Good diet - only very rarely eats cheese

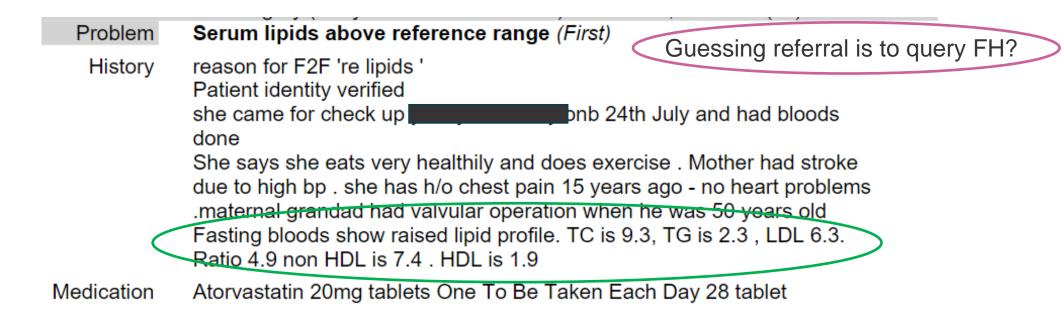
Comment PLAN: For referral to lipid clinic, as advised by cardiology





Good Referrals?

- Appropriate reason for referral
- Supporting information to accompany referral?





Reasons for declining recent referrals to lipid clinic

• Data from Gateshead referrals to lipid clinic, June 2023-present

Reason	No. of referrals
1. ?FH but lipid profile not typical or does not fulfil Simon Broome criteria	9
2. Lipid profile not done fasting (for ?FH) or secondary factors present/not excluded	5
3. ?Injectable – not meeting PCSK9i criteria but could have Inclisiran	5
4. ?Injectable – does not meet criteria for any	3
5. Statin intolerance – but not explored pathway options yet	2
6. Misc queries addressed with quick advice	2
	26



Pros and Cons of "non-standard" referral formats

"Tells a story"	 Takes more time for referrer – need to type out situation/ attach results
	 Takes more time to triage – to read prose + information not always complete
	 Higher chance of referral being declined – incomplete information or unclear reasons for referral

What if there was a way to turn most (or all) referrals into good referrals?





Advantages:

- EMIS-based, no third party/additional software required
- Auto-populates available information from patient record
 - Provided it is there!
 - Not "clever" enough to auto-reject incomplete forms
- Gateshead primary care practitioners already familiar with similarly formatted forms
 - e.g. 2 week waits, diabetes, etc.

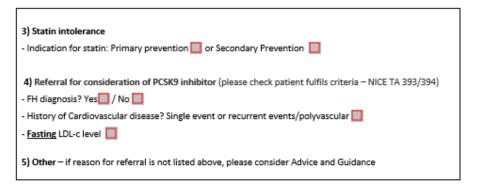
Gateshead Lipid Clinic Referral form Date of referral Short date letter merged Name: Full Name DOB: Date of Birth NHS No NHS Number Attach this form to the e-referral within 24 hours Gateshead Lipid Clinic referral Gateshead Health NHS Foundation trust QE Hospital, Sheriff Hill, Gateshead, Tyne and Wear, NE9 6SX Email Queries: Sylvia.Mcewen@nhs.net Telephone: 0191 445 2181 If the ERS not available, then send this form AND 'Referral header sheet' by secure email Please refer to NEELI guidelines for referral criteria and required investigations prior to referring Hyperlinks to: NEELI - NATIONAL GUIDANCE FOR LIPID MANAGEMENT INDICATION FOR REFERRAL Please tick one of the following: 1. Severe hypercholesterolaemia – referral for assessment for Familial Hypercholesterolaemia 2. Severe hypertriglyceridaemia 3. Statin intolerance 4. Referral for PCSK9 inhibitor 5. Other REASON FOR REFERRAL SUPPORTING INFORMATION Please fill in all domains relevant to the referral reason 1) Severe hypercholesterolaemia – referral for assessment for familial hypercholesterolaemia Fasting lipid profile within last 2 months (please refer to Biochemistry Results section) - Secondary causes excluded? Please ensure HbA1c, TSH, FT4 and eGFR results are attached in Biochemistry - Personal history of Coronary Heart Disease (CHD) <60 years? Yes 🔲 No 🔲 - Family history of CHD <60 years? (Details) - Family history of hypercholesterolaemia? (Details) - Known relative with diagnosis of familial hypercholesterolaemia (FH)? (Details) Secondary cause screen: HbA1c, TSH, FT4, eGFR

Fasting lipid profile within last 2 months (please refer to Biochemistry Results section)

Secondary causes excluded? Please ensure HbA1c results included; and weekly alcohol intake documented

2) Severe hypertriglyceridaemia





INVESTIGATIONS (PRE-REFERRAL BLOOD TESTS).

CORE MANDATORY INVESTIGATIONS AND TESTS FOR PATIENTS in the last two months,

ESSENTIAL to triage patients (Incomplete information may delay appropriate care of your patient).

A FAST

ING lipid profile done within last 2 months is mandatory for referral*

Blood Results	Result within 2 months REQUIRED	Date
Fasting Lipids (Mandatory)	Single Code Entry: Fasting blood lipids	Single Code Entry: Serum fasting total cholesterol level
Total Cholesterol	Single Code Entry: Serum total cholesterol level	Single Code Entry: Serum total cholesterol level
Triglycerides	Single Code Entry: Serum triglycerides level	Single Code Entry: Serum triglycerides level
HDL-cholesterol	Single Code Entry: Serum high density lipoprotein cholesterol level	Single Code Entry: Serum high density lipoprotein cholesterol level
TC: HDL ratio	Single Code Entry: Total cholesterol:HDL (high density lipoprotein) ratio	Single Code Entry: Total cholesterol:HDL (high density lipoprotein) ratio
LDL-cholesterol	Single Code Entry: Serum low density lipoprotein cholesterol level	Single Code Entry: Serum low density lipoprotein cholesterol level
NON-HDL cholesterol	Single Code Entry: Serum non HDL (high density lipoprotein) cholesterol level	Single Code Entry: Non high density lipoprotein cholesterol level

U&Es & HbA1c	Result within 2 months REQUIRED	Date
Sodium	Single Code Entry: Serum sodium level	Single Code Entry: Serum sodium level
Potassium	Single Code Entry: Serum potassium level	Single Code Entry: Serum potassium level
Urea Level	Single Code Entry: Serum urea level	Single Code Entry: Serum urea level
Creatinine	Single Code Entry: Serum creatinine level	Single Code Entry: Serum creatinine level
HbA1c	Single Code Entry: Haemoglobin A1c level - International Federation of Clinical Chemistry and Laboratory Medicine standardised	Single Code Entry: Haemoglobin A1c level - International Federation of Clinical Chemistry and Laboratory Medicine standardised
eGFR	Single Code Entry: eGFR (estimated glomerular filtration rate) using CKD-Epi (Chronic Kidney Disease Epidemiology Collaboration) formula per 1.73 square metres	Single Code Entry: eGFR (estimated glomerular filtration rate) using CKD-Epi (Chronic Kidney Disease Epidemiology Collaboration) formula per 1.73 square metres



LFTs	Result within 2 months REQUIRED	Date
Bilirubin/Total Bilirubin	Single Code Entry: Serum bilirubin level	Single Code Entry: Serum bilirubin level
Alkaline Phosphatase	Single Code Entry: Serum alkaline phosphatase	Single Code Entry: Serum alkaline phosphatase
	level	level
ALT	Single Code Entry: Serum alanine	Single Code Entry: Serum alanine
	aminotransferase level	aminotransferase level
AST	Single Code Entry: Serum aspartate	Single Code Entry: Serum aspartate
	aminotransferase level	aminotransferase level
Gamma GT Level	Single Code Entry: GGT (gamma-glutamyl	Single Code Entry: GGT (gamma-glutamyl
	transferase) level	transferase) level
Albumin	Single Code Entry: Serum albumin level	Single Code Entry: Serum albumin level
Total protein	Single Code Entry: Serum total protein	Single Code Entry: Serum total protein

TFTs	Result within 2 months REQUIRED	Date
Serum TSH	Single Code Entry: Serum TSH (thyroid	Single Code Entry: Serum TSH (thyroid
	stimulating hormone) level	stimulating hormone) level
Serum/plasma free T4	Single Code Entry: Serum free T4 level	Single Code Entry: Serum free T4 level

Clinical Examination Pre-Referral				
Any evidence of:				
Tendon xanthoma	Yes No			
Corneal arcus	Yes No No			
Xanthelasma	Yes No No			

Observations and Social History			
	Latest result	Date	
Blood pressure	Single Code Entry: O/E - blood pressure reading	Single Code Entry: O/E - blood pressure reading	
Height	Single Code Entry: Standing height	Single Code Entry: Standing height	
Weight	Weight	Weight	
BMI	Single Code Entry: Body mass index	Single Code Entry: Body mass index	
QRISK	Single Code Entry: QRISK2 cardiovascular disease 10 year risk score	Single Code Entry: QRISK2 cardiovascular disease 10 year risk score	
Smoking status	Single Code Entry: Current smoker	Single Code Entry: Current smoker	
Alcohol status	Single Code Entry: Alcohol consumption	Single Code Entry: Alcohol consumption	

Problems, Allergies, Acute / Repeat Medication

Problems

Allergies



Gateshead Health NHS Foundation Trust Page 3 of 4

PLEASE COMPLETE THE REST OF THIS FORM

Referrer details

Name of referrer: Referring User	Date of referral:	Short date letter merged	
Referring Organisation	GP details		
Organisation Name , Organisation Full Address (single line) Tel: Organisation Telephone Number Email: Organisation E-mail Address Fax: Organisation Fax Number	Usual GP Full Name Usual GP Organisation Name Usual GP Full Address (single line) Tel: Usual GP Phone Number		
	Fax: Usual GP Fax N	lumber	
Name of GP to address correspondence to, if different to accountable	e GP		

Patient details

Name:	Full Name		Address:		Home Full Address (stacked)	
Gender:	Gender(full)					
DOB & Age:	ge: Date of Birth Age: Age					
NHS number:	NHS Number					
	Home:	Patient Home Telephone		Mobile:		Patient Mobile Telephone
Patient	Work:	Patient Work Telepho	phone En		ail:	Patient E-mail Address
Contacts:	Carer/Advocate: The patient has confirmed the following person should be included in correspondence – Name: Contact Details:					person should be included in
Contact Consent:	Can leave message on answer mad Can contact by text Can contact by Email		chine	NB: Not all services use Texts or Emails as a method of communication.		
Ethnicity:	Ethnic Origin					
Interpreter:	Yes Language: Single Code Entry: Main spoken language English					
Accessibility Needs:	Wheelchair access Deaf Single Code Entry: Partial deafness Registered Blind Single Code Entry: Registered blind Learning Disability, Single Code Entry: On learning disability register Moderate learning disability Other disability needing consideration Accompanied by Carer					
Risks:	Vulnerable Adult (Details of any recording within last 3 yrs) Single Code Entry: Vulnerable adult Single Code Entry: No longer a vulnerable adult Single Code Entry: Difficult intubation Other:					
Other:	Other:					
Single Code Entry: Military veteran Single Code Entry: Left military service Single Code Entry: History relating to						
military service. Single Code Entry: History relating to Army service Single Code Entry: Has a carer. Single Code Entry: Is no longer a carer. Single Code Entry: Is a carer.				le Code Entry: Is a carer		

Accessible information

Communication support: Uses a legal advocate...

Contact method: Requires contact by telephone...

Information format: Requires information verbally...

Professional required: Interpreter needed - British Sign Language...

If you have any problem with this form or suggested changes, please email to clochealth.templates@nhs.net (NB: NOT TO BE USED FOR REFERRING A PATIENT)
Gateshead Lipids Clinic Referral October 2022 CBC / CDRC Snomed



Gateshead Lipid Clinic E-referral form: Work in progress...



 Majority of forms have all relevant blood results – no more trawling through GNCR! 	 Occasional glitch in pulling through lipid results – each case fed back to developer
 Less scrolling through lengthy text of GP consultation + guessing reason(s) for referral 	Some forms (not many) still incomplete
	 Not everyone using (yet)



In conclusion...

- There is no such thing as a bad referral to secondary care!
- Factors that have increased quality of local referrals in recent times include:
 - Increased awareness of guidelines/criteria for referral (TITO primary care talk)
 - Use of a standardised EMIS referral form



Thank you. Any questions?



- Suann.tee@nhs.net
 - @suanntee