Supplementary File 1: Adaptation of the FH KAP Questionnaire

Adaptation of the FH KAP Questionnaire for Knowledge Domain

Item	Area	Original Question and Answer	Modification/ Addition
No.			
3	Description of FH	Question:	Question: Rephrased
		Which one description below best	Which one of the following descriptions best
		describes FH?	describes FH?
		Answer:	
			Answer: No change
		- The presence of family members	
		with diagnosed high cholesterol	
		- A genetic disorder that is	
		characterized by very high cholesterol	
		and a family history of premature	
		heart disease	
		- The presence of multiple lipid	
		abnormalities that may be genetic in	
		nature	
		- An ultra-rare, potentially fatal	
		condition caused by cholesterol levels	
		that can be up to six times the normal	
		level	
		- Don`t know	
		- Others (please specify)	
4	Lipid profile of FH	Question:	Question: No change
	VI I I I	Which one of the following lipid	
		profiles is most consistent with the	
		diagnosis of FH? (Reference intervals:	
		Total cholesterol < 5.5mmol/L;	
		Triglyceride < 1.7mmol/L; HDL-	
		cholesterol >1.0mmol/L; LDL-	
		cholesterol < 3.5mmol/L)	

		Answer:	Answer: Rephrased
		- Total cholesterol 6.0mmol/L;	
		Triglyceride 3.4mmol/L; HDL-	
		cholesterol 0.8mmol/L; LDL-	
		cholesterol 3.8mmol/L	
		- Total cholesterol 6.3mmol/L;	- Total cholesterol 6.3mmol/L; Triglyceride
		Triglyceride 12.2mmol/L; HDL-	12.2mmol/L; HDL-cholesterol 1.0mmol/L;
		cholesterol 1.0mmol/L; LDL mmol/L	LDL-cholesterol not reported
		- Total cholesterol 8.0mmol/L;	
		Triglyceride 1.1mmol/L; HDL-	
		cholesterol 1.0mmol/L; LDL-	
		cholesterol 6.5mmol/L	
		- Total cholesterol 5.4mmol/L;	
		Triglyceride 1.3mmol/L; HDL-	
		cholesterol 1.7mmol/L; LDL-	
		cholesterol 3.1mmol/L	
		- Total cholesterol 7.1mmol/L;	
		Triglyceride 1.0mmol/L; HDL-	
		cholesterol 3.5mmol/L; LDL-	
		cholesterol 3.2mmol/L	
6	Prevalence of	Question:	Question: Modified
	FH		
		What is the prevalence of FH in	What is the prevalence of FH globally?
		Australia?	
			Answer: No change
		Answer:	
		- 1 in 100 persons	
		- 1 in 500 persons	
		- 1 in 1000 persons	
		- 1 in 2000 persons	
		- 1 in 5000 persons	
		- Don`t know	

7	Inheritance of	Question:	Question: No change
	FH		
		What is the likelihood that first-degree	
		relatives (i.e. parents, siblings and	
		children) of someone who has FH will	
		also have the condition themselves?	
		Answer:	
			Answer: No change
		- 0%	
		- 25%	
		- 50%	
		- 75%	
		- 100%	
		- Don`t know	
8	CAD risk in	Question	Question: No change
	FH		
		How much greater is the risk of	
		premature coronary artery disease	
		(CAD) in untreated FH patients	
		compared to the general population?	
		Answer:	Answer: No change
		- 2 times greater	
		- 5 times greater	
		- 10 times greater	
		- 20 times greater	
		- 50 times greater	
		- Don`t know	
9	Premature	Question:	Question: Rephrased
	CAD age		
		When you are assessing a patient's	When you are assessing a patient's family
		family history, at what age for males	history, at what cut-off age for males and
		and females do you consider CAD to	females do you consider CAD to be
		be 'premature'? Leave blank if you	'premature'? Leave blank if you wish to answe
		wish to answer 'Don't know'	'Don't know'

11	Genetic test in FH	Question:	Question: No change
		Is the following statement true or	
		false? An accurate diagnosis of FH	
		can only be made via genetic test.	
		Answer:	
			Answer: No change
		- True	
		- False	
		- Don`t know	
22	Target LDL-c in FH	*Nil	New Question:
			What is the target LDL-c following maximum
			tolerated dose of high intensity statin for
			patients diagnosed with FH?
			Answer:
			- < 1.8 mmol/L
			- < 2.6 mmol/L
			- < 3.4 mmol/L
			- > 50% reduction from baseline LDL-c
			concentration
			- > 30% reduction from baseline LDL-c
			concentration
			- Don`t know
23	Family	*Nil	New Question:
	history in FH		
			Which of the following options are important to
			obtain from family history in patients with FH?
			(Please select all that apply)
			Answer:
			- Consanguinity
			- Family history of premature CAD (age of

		onset)
		- Family history of hypercholesterolaemia (TC
		and/ or LDL-c)
		- Family history of tendon xanthomata
		- Family history of unexplained childhood
		death
		- Three-generation pedigree chart
		- None of the above
		- Don`t know
24	Exclusion of *Nil	New Question:
	FH diagnosis	
		Which of the following options would exclude
		the diagnosis of FH? (Please select all that
		apply)
		Answer:
		- Normal LDL-c concentration before puberty
		- Absence of clinical signs (e.g. tendon
		xanthomata)
		- Absence of mutation on genetic testing
		- Absence of ultrasound finding of tendon
		xanthomata
		- None of the above
		- Don`t know
25	Management *Nil	New Question:
	options in FH	Which of the following are the management
		options for FH patients? (Please select all that
		apply)
		Answer:
		- Lifestyle modification is a substitute for lipid
		lowering medication
		- Ezetimibe co-administered with statin therapy

Total items: 7	Total items: 11
	- Don`t know
	- None of the above
	should be recorded
	- Progress of cascade screening in FH patients
	during pregnancy
	- Lipid modifying therapy should be continued
	the age of 10 years
	- Lipid lowering drug therapy is considered by
	heterozygous FH
	is recommended as an option for adult
	is recommended as an option for adult

Adaptation of the FH KAP Questionnaire for Awareness Domain

Item	Area	Original Question and Answer	Modification/ Addition
No.			
1	Familiarity with FH	Question:	Question: No change
		On a scale of 1 to 7; how familiar are you	
		with FH? (1-Never heard about it to 7-very	
		familiar)	
		Answer:	Answer: No change
		7-point Likert scale (score of 5,6,7 is	
		considered familiar)	
2	Awareness	Question:	Question: Modified
	of FH		
	guideline	Are you aware of the National Heart	Are you aware of the National Institute for
		Foundation/ Cardiac Society of Australian	Health and Care Excellence (NICE) on
		and New Zealand guidelines on the	Identification and Management of Familial
		detection and management of Familial	Hypercholesterolaemia (2008)?
		Hypercholesterolaemia?	
		Answer:	Answer: No change
		- Yes	
		- No	
16	Awareness	Question:	Question: No change
	of lipid		
	specialist	Are you aware of any specialist-clinical	
		services for lipid disorders to whom you	
		can refer patients?	
		Answer:	Answer: No change except for question number
		- Yes	- Yes
		- No (Go to question 18)	- No (Go to question 17)

		*This item was re-numbered to 15
19	Awareness *Nil	New Question:
	of other	
	international	Which of the following FH clinical guidelines
	FH	that you are aware of? (Please select all that
	guideline	apply)
		Answer:
		- Integrated Guidance on the Care of Familial
		Hypercholesterolaemia by the International FF
		Foundation (2014)
		- Homozygous Familial
		Hypercholesterolaemia: New Insight and
		Guidance for Clinicians to Improve Detection
		and Clinical Management. A Position Paper
		from the Consensus Panel on Familial
		Hypercholesterolaemia of the European
		Atherosclerosis Society (EAS) (2014)
		- Guidelines for the Management of Familial
		Hypercholesterolemia (Harada-Shiba, 2012)
		- Clinical Guidance by the National Lipid
		Association (NLA) Expert Panel on Familial
		Hypercholesterolaemia (2011)
		- None
		- Others (please specify)
20	Awareness *Nil of FH	New Question:
	diagnostic	Which of the following FH diagnostic criteria
	criteria	that you are aware of? (Please select all that
		apply)
		Answer:
		- Dutch Lipid Clinic Network Criteria
		- Simon Broome Register Criteria
		- US MED-PED Criteria

	- Japanese Criteria
	- None
	- Others (please specify)
Total items: 3	Total items: 5

Adaptation of the FH KAP Questionnaire for Practice Domain

Item	Area	Original Question and Answer	Modification/Addition
No.			
5	Assistance in FH	Question:	Question: No change
	detection		
		Which one of the following options	
		could usefully assist you in	
		detection of FH in your practice?	
		Answer:	Answer: No change
		- Laboratory report on a lipid profile	
		alerting possible FH	
		- Alert by the clinical software	
		system in your practice	
		- Direct telephone call from the	
		laboratory	
		- All of the above	
		- None of the above	
		- Don`t know	
		- Others (please specify)	
10	Family screening of FH	Question:	Question: Rephrased
		In patients with documented	In patients with documented premature CAD,
		premature CAD, which of the	which of the following options do you
		following do you routinely carry out? (Please tick all that apply)	routinely carry out? (Please tick all that apply)
		Answer:	Answer: No change
		- Look for arcus cornealis	
		- Look for tendon xanthomata	
		- Take a detailed family history of	
		CAD	
		- Screen close relatives for	
		hypercholesterolaemia	
		- All of the above	

		- None of the above	
12	Number of FH patients under	Question:	Moved to demography
	care	How many patients currently under	
		your care, if any, have been	
		formally diagnosed with FH?	
		*Fill in answer	
13	Screening of relatives in FH	Question:	Question: No change
		If you have patients with FH under	
		your care, do you routinely screen	
		close relatives for this condition	
		with a lipid profile?	
		Answer:	Answer: No change
		- Yes, patient's children only	
		- Yes, patient's children and other	
		close relatives	
		- No	*This item was re-numbered to 12
		- Not applicable	
14	Effective	Question:	Question: No change
	healthcare		
	provider in FH	In your view, which healthcare	
		providers would be most effective at	
		early detection of FH and screening	
		first-degree relatives? (Please tick	
		up to two options)	
		Answer:	Answer: No change
		- Lipid specialists	
		- General practitioners	
		- Cardiologists	
		- Nurses with experience in cardiac	

		risk prevention	
		- Paediatricians	
		- Obstetricians/ Gynaecologists	
		- Endocrinologists	*This item was re-numbered to 13
		- Others (please specify)	
15	Age for FH	Question:	Question: No change
	screening in		
	young person	At what age would you test young	
		individuals for	
		hypercholesterolaemia in a family	
		with premature CAD?	
		Answer:	Answer: No change
		- 0 - 6 years	
		- 7 - 12 years	
		- 13 - 18 years	
		- None of the above	*This items was re-numbered to 14
		- Don`t know	
17	Referral to lipid	Question:	Question: No change except for question
	specialist		number
		If yes to question 16, have you	
		referred patients with FH to this	If yes to question 15, have you referred
		service?	patients with FH to this service?
		Answer:	Answer: No change
		- Yes	
		- No	*This item was re-numbered to 16
		- Don`t know	
18	Pharmacotherapy	Question:	Question: Rephrased
	used in		
	hypercholest-	Which drugs do you use to treat	Which pharmacological agent(s) do you
	пурегеногев		
	erolaemia	hypercholesterolaemia? (Please	commonly used to treat
		hypercholesterolaemia? (Please select all that apply)	commonly used to treat hypercholesterolaemia? (Please select all that
			·

		- Exchange resins / bile acid	
		sequestrants	
		- Ezetimibe	Answer: No change
		- Statins	
		- Fibrates	
		- Nicotinic acid	
		- None of the above	
		- Others (please specify)	
			*This item was re-numbered to 17
19	Combined	Question:	Question: Rephrased
	pharmacotherapy		
	used in severe	Which drug combinations do you	Which pharmacological combination(s) do
	hypercholest-	use to treat severe	you use to treat severe hypercholesterolaemia?
	erolaemia (FH)	hypercholesterolaemia? (Please	(Please select all that apply)
		select all that apply)	
		Answer:	
		- Statin + exchange resins / bile acid	Answer: No change
		sequestrants	
		- Statin + nicotinic acid	
		- Statin + ezetimibe	
		- Statin + ezetimibe + nicotinic acid	
		- Statin + ezetimibe + exchange	
		resins / bile acid sequestrants	
		- None of the above	
		- Others (please specify)	
		• •	*This item was re-numbered to 18
21	CAD risk	*Nil	New Question:
	stratification in		
	FH		How would you risk stratify patients
			diagnosed with FH clinically?
			Answer:

- Don`t know
- Determine serum hsCRP concentration
scan
- Calculate calcium score using cardiac CT
other risk factors
- Classify patients as high risk irrespective of
Framingham Risk Score
- Perform coronary risk scoring e.g.