

Setting up an Amiodarone pathway in Eastbourne District General Hospital

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Background

Amiodarone is an important medication used by cardiologists for severe cardiac rhythm abnormalities. However, it is well recognised that Amiodarone has potential serious side-effects and therefore requires regular monitoring. Amiodarone has previously been initiated in primary care under specialist advice, and Sussex has some of the highest use of amiodarone in the UK.

Given the safety concerns, NHS England and NHS Clinical Commissioners' advise that amiodarone should be initiated by a specialist, and not in primary care. It should then be continued under a shared care arrangement in line with NICE guidance as part of the new National Shared Care protocol. Implementing this new guidance will invariably lead to an increased workload for our staff

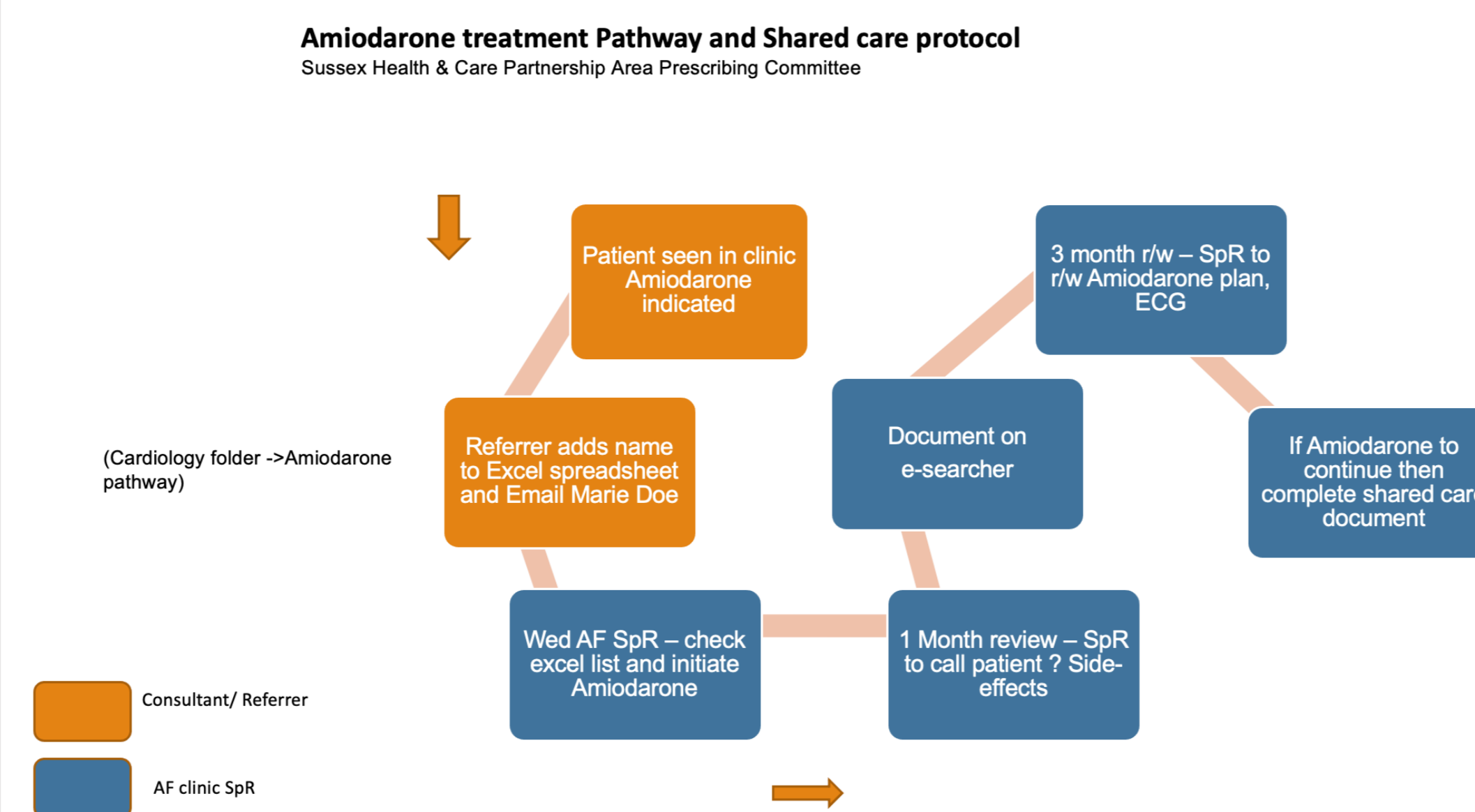
OBJECTIVE

To implement an amiodarone pathway at Eastbourne District General Hospital, incorporating the new shared care protocol for best service provision to our patients and support GP colleagues in community.



METHOD

An amiodarone pathway algorithm was designed highlighting key clinical information and steps involved in the pathway.



An amiodarone pathway folder on the Shared Cardiology Drive was created with the following:

- Excel spreadsheet to record new patients to be started on amiodarone
- Amiodarone pathway algorithm
- Patient leaflet on amiodarone
- Shared Care letter to GP

This information was circulated to staff within the department and a questionnaire was used to assess their knowledge of amiodarone and the new Shared Care guidance.

A designated Cardiology Registrar (SpR who covers Atrial Fibrillation clinic on Wednesdays) was assigned the task of contacting new patients to be initiated on amiodarone. Tasks below:

Check excel spreadsheet, counsel patient, provide leaflet, baseline investigations, and provide initial prescription and log date for follow-up.

Patient pathway: Amiodarone

East Sussex Healthcare NHS Trust

Clinical Indication

1. AF - rhythm control
 - Short-term strategy (e.g. Amiodarone-guided DCCV, bridge to ablation)
 - Long term strategy (if alternative approaches not appropriate)
2. VT

Contraindications

- Bradycardia
- Significant conduction disease
- Thyroid disease (relative)
- Allergy to iodine
- Prolonged QT interval
- Pregnancy/ breastfeeding (relative)

Counselling Patient on Side Effects*

- **Thyroid**- hyper or hypothyroidism
- **Hepatotoxicity** (abnormal LFTs +/- hepatic injury)
- **Lung** - pneumonitis, pulmonary fibrosis
- **Skin** - rash, photosensitivity (sun block etc), skin discoloration
- **Eye** - corneal deposits, optic neuritis
- **Nerve damage**- tremor, ataxia, peripheral neuropathy

****Patient leaflet online at AF association website**

***Refer to Marie Doe for counselling/initiation if for DCCV for AF**

Initiation by Cardiologist*

- Prescribe first 3 months:
 - 1st week 200mg TDS
 - 2nd week 200mg BD
 - 3rd week onwards 200mg OD
- Baseline Ix- TFTs, U&Es, LFTs, CXR, ECG

Follow-up

- 12 weeks after initiation
 - ECG, Assess improvement, side-effects
 - Plan to stop/continue
 - Shared care letter to GP
 - 6 monthly - TFTs, LFTs, U&Es
 - 12 monthly - ECG (rhythm, QTc)

Drug Interactions

Amiodarone increases levels of

- Warfarin
- Digoxin
- Phenytoin
- Statin
- Colchicine

QT prolonging medications
Rate limiting medications
Increased levels of amiodarone
Some antivirals, grapefruit juice

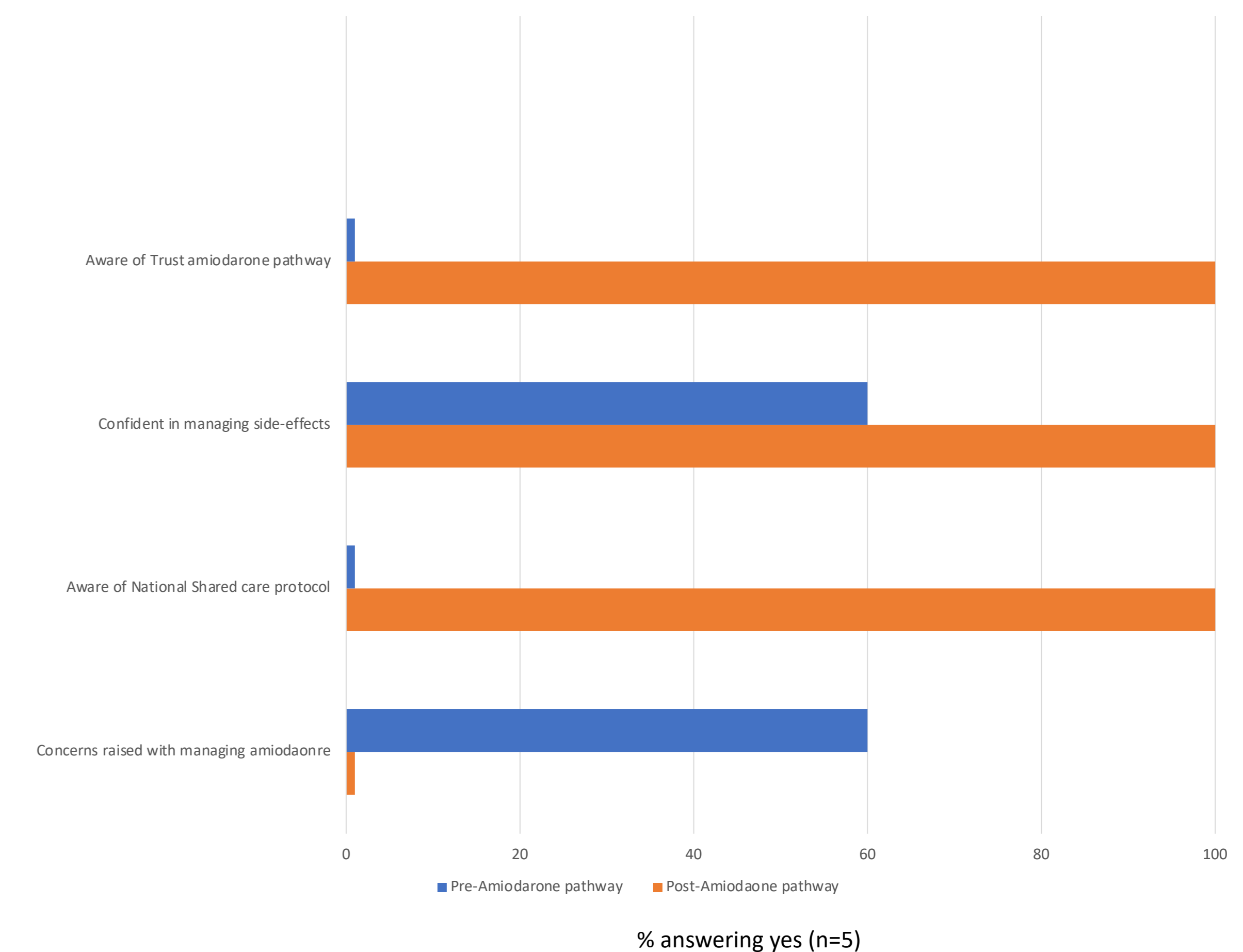
SE	Management (Half life approx. 50 days (20-100 days))
Thyrotoxicosis	Stop drug. Endocrine review
Hypothyroid	Continue drug. Consider levothyroxine
Deranged LFTs	If AST/ALT >5 x ULN, stop. Gastro input. If >3x ULN and no Sx/injury, continue. Repeat 2 wks
Pulm toxicity	Stop drug. Urgent Cardio/resp review
SJS/TEN	Stop drug. Urgent dermat review
Photosensitivity	Continue, self care advice

RESULTS

Following implementation of the pathway, the following benefits were noted:

- Excel spreadsheet regularly being used and we now have a database of new patients started on amiodarone
- Cardiologists are now aware of Amiodarone pathway and new Shared care guidance, which was previously not the case
- Some Cardiologists felt more confident in managing side-effects of amiodarone
- Concerns relating to time to initiate in clinic and monitoring of patients on amiodarone longer term have been addressed

Questionnaire results pre & post Implementation of Amiodarone pathway



CONCLUSION

- The introduction of New National Shared Care guidance for Amiodarone use led to the development of an amiodarone pathway
- This addressed concerns regarding an increase in workload for clinicians and also allowed for patients to be appropriately monitored and for the new guidance to be implemented in an efficient manner.
- Clinicians also felt more confident in managing side effects related to amiodarone and became aware of the National Shared Care protocol for Amiodarone as a result of this project.

REFERENCES

- *NHSE guidance – National Shared Care Protocol: Amiodarone for patients within adult services. July 2022.* https://www.england.nhs.uk/wp-content/uploads/2022/07/B1612_i_amiodarone-for-patients-within-adult-services.docx
- *NHSE guidance – Responsibility for prescribing between primary & secondary/tertiary care. Available from* <https://www.england.nhs.uk/publication/responsibility-for-prescribing-between-primary-and-secondary-tertiary-care/>
- *NHS England and NHS Clinical Commissioners. Aug 2019. NHS England » Items which should not be routinely prescribed in primary care: Guidance for CCGs* Accessed 30/01/2020