Bradford Cardiovascular Formulary

Diuretics

Bendrofluazide 2.5mg

Frusemide

Beta Blockers

Atenolol

Bisoprolol - reserved for heart failure

Nitrates

Isosorbide mononitrate - not modified release or long acting

ACE Inhibitors

Lisinopril

Ramipril

Calcium channel blockers

Diltiazem (Tildiem, Tildiem LA)

LA nifedipine (Coracten)

Verapamil

Angiotensin II Receptor Antagonists (ARBs)

Valsartan

Statins

Atorvastatin 10mg

Rationale for Cardiovascular Formulary and Drug Choice

- Tackling CHD is a national priority for the government as set out in the NSF. In order to achieve CHD targets a co-ordinated effort must be put in to treatment and organisation of services, which will involve planning and funding. The simple aim of this "formulary" is to have a preferred list of drugs, which, if prescribed within both secondary and primary care, would generate savings.
- This formulary is mainly intended for initiation of therapy in new patients. Existing patients on stable medication are to be continued on their current regime where appropriate.
- This is not a compulsory formulary and will be subject to change dependent upon evidence and financial considerations. In addition, individual patient circumstances may determine the choice of a different agent. However, it is expected that the vast majority of patients would be treated as per the guideline outlined here.
- The principle of undertaking this formulary between primary and secondary care has the backing of the Chief Executives of three Bradford PCTs and the BHT. The formulary is endorsed by Dr Steven Lindsay, Consultant Cardiologist at BHT on behalf of the Hospital Trust and Simon Grant, Senior Pharmaceutical Adviser representing the Bradford PCTs perspective.
- In drawing up the formulary, there has been no drug company involvement, no tendering for prices, and no contract agreements reached between any parties involved, as this would have had undue influence on the decisions made.
- The expectation is that adherence to the formulary in both secondary and primary care will lead to savings which are to be **ear marked for re-investment in cardiovascular treatments** across secondary/primary care.

- **Diuretics** - Bendrofluazide in low dose 2.5mg and frusemide remain the thiazide and loop of choice respectively in the modern day formulary.
- **Beta blockers** - Atenolol is the drug of choice with bisoprolol being reserved for heart failure only, because of low dose titration and licensed use.

  Bisoprolol, has no other use in the cardiovascular formulary apart from occasionally when a patient is intolerant of another beta-blocker, the consultants have anecdotal reports of some patients benefiting. However, if no benefit from bisoprolol, patient is then taken off beta-blocker or put on atenolol and other agent added in if appropriate.
- **Nitrates** - Asymmetric dosing with plain nitrate has been agreed e.g. isosrbide mononitrate 20 mg bd means 20mg at 8a.m. and 20mg at 4p.m.

  LA nitrate will occasionally be used for nocturnal problems.
- **ACE Inhibitors** - Ramipril and lisinopril were chosen as both can be used post MI treatment.

  In heart failure, the maximum expected doses are ramipril 10mg and lisinopril 20mg.

  The cost savings accrue

  1. if both are given once a day and
  2. when doubling the dose, only one high strength tablet, not two low strength tablets are prescribed.
- **Calcium Channel Blockers** - For angina a rate limiting CCB such as diltiazem is preferred. For hypertension an alternative would be LA nifedipine (note for new patients only). Verapamil is for patients with AF (note for secondary care initiation only).
- **Angiotensin II Receptor Antagonists (ARBs)** - Valsartan is the drug of choice.

  Hypertension, stepped approach would be

  1. Bendrofluazide
  2. Atenolol
  3. Lisinopril or ramipril - (Possibly calcium channel blocker in the elderly - LA nifedipine)
  4. ACEI to be substituted by an ARB if patient intolerant of ACEI.

  ARBs to be added 4th line if other drugs ineffective.

  In heart failure valsartan is unlicensed and clinical trial data supports its use only in patients intolerant to ACEIs.
- **Statins** - Atorvastatin 10mg to be considered for new and existing patients on other lipid lowering agents not achieving target levels **after** dose titration.