The Role of Pharmacy in managing CVD

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Disclosures

- HW has received speaker honoraria and/or attended advisory boards for Bayer, Astra-Zeneca, Vifor, BMS/Pfizer.
- HW has received sponsorship from Bayer and Daiichi-Sankyo to attend international conferences.
Why pharmacy?

- NHS frontline **services struggling** to cope with increasing demand
  - GP numbers falling, HCPs leaving the NHS, funding cuts....
- Pharmacy is the only healthcare profession with **predicted oversupply** by 2025
- No cap on training places – increasing numbers of pharmacy schools and pharmacists in training
- Extended roles embedded in acute care – **opportunity** to utilise skills in new settings
- Medicines optimisation will deliver **improve outcomes, reduce demand, save £££**
Why Community Pharmacy?

- Most adults in the UK use pharmacies
- 84% of adults visit pharmacy at least once per year, 75% have visited within the last 6 months; most visit for health-related reasons
- 1.6 million visits to UK pharmacies daily
- = an average of 16 visits per user per year
- In London alone there are 1,800 community pharmacies

- Available on the high street & in supermarkets
  - 99% of patients can access a pharmacy within 20 minutes by car and 96% by walking or public transport
- Longer opening hours, evenings and weekends
- Usually no appointments necessary – this may have to change!
Community Pharmacy Opportunities

- **DETECTION:**
  - NHS Health checks: Hypertension, diabetes, high CV risk
  - AF case-finding using new technologies

- **MANAGEMENT:**
  - Health Living Pharmacies, smoking cessation, weight management programmes, lifestyle advice & signposting
  - Pharmacist prescribers managing LTCs
  - Disease monitoring – BP, HbA1c, INRs
  - Adherence support – NMS / MUR
New Medicine Service (NMS)

Referral to community pharmacist for NMS

Engagement

Patient identified by community pharmacist for NMS

7-14 days

Intervention

Patient agrees to adhere to new medicine or pharmacist to resolve medicines-related issues

14-21 days

Follow-up

Refer to GP to resolve medicines-related issues

Refer to GP to resolve medicines-related issues

Improve adherence 10%
Clinical pharmacists in General Practice Pilot

- Launched in November 2015
- Investment of £31.5 million over three years
- In February 2017: >490 pharmacists in >650 practices across 90 pilot sites
- Deadline for practice involvement in pilot has ended.
- Evaluation
The role of pharmacists in general practice

**Clinical patient facing roles**
- Long term conditions
- Clinical Medication Reviews
- Home visits/care homes
- Others: common ailments, care plans, triage

**Medicines optimisation**
- Repeat prescribing
- Medicines queries/requests
- Liaising with others
- Patient safety
- Reducing admissions
- Signing prescriptions

**Medicine support**
- Telephone
- Medicines related issues
- Discharge/reconciliation
- Medicines information
- Clinical effective audits
- CQC
- Education for staff

**Clinical Post/Pathology**
- Checking and reviewing
- Action
- Signposting/ triage

**Productivity and access**
- Leadership/ Management Research
- Health and social care
- Vulnerable population
- QOF/DES/LES
- Extended hours
- OOH

**Integration**
- Further integration of GP with primary and secondary care
- Community Pharmacy
- Hospital pharmacy
Specialist pharmacist support to improve BP management
### Table 1: Ranking of selected risk factors: 10 leading risk factor causes of death by income group, 2004

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Deaths (millions)</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 High blood pressure</td>
<td>7.5</td>
<td>12.7</td>
</tr>
<tr>
<td>2 Tobacco use</td>
<td>5.1</td>
<td>8.7</td>
</tr>
<tr>
<td>3 High blood glucose</td>
<td>3.4</td>
<td>5.8</td>
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<td>4 Physical inactivity</td>
<td>3.2</td>
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</tr>
<tr>
<td>5 Overweight and obesity</td>
<td>2.8</td>
<td>4.8</td>
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<td>6 High cholesterol</td>
<td>2.6</td>
<td>4.5</td>
</tr>
<tr>
<td>7 Unsafe sex</td>
<td>2.4</td>
<td>4.0</td>
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<td>8 Alcohol use</td>
<td>2.3</td>
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<td>9 Childhood underweight</td>
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<tr>
<td>10 Indoor smoke from solid fuels</td>
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#### Low-income countries

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<td>4 Unsafe water, sanitation, hygiene</td>
<td>1.6</td>
<td>6.1</td>
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<tr>
<td>5 High blood glucose</td>
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<td>4.9</td>
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<td>9 Suboptimal breastfeeding</td>
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#### Middle-income countries

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*Countries grouped by gross national income per capita: low income (US$ 825 or less), high income (US$ 10,066 or more).*

**Source:** Global health risks: mortality and burden of disease attributable to selected major risks. WHO 2009
...still over 1.6 million people with known hypertension and BP > 150/90mmHg

...still over 3.4 million people with known hypertension and BP > 140/90mmHg
PHARMACIST-LED HYPERTENSION CLINICS

• Data were collected from 7 clinics across South London from October 2011 to March 2012
  • 336 patients were seen over the course of the 6 month data collection period.
    • 229 had uncontrolled BP (68%)
    • 44 had unmonitored BP within the last 9 months (13%)
    • 63 were referred with BP already controlled to <140/90mmHg

• Pharmacist-led community hypertension service commissioned as a result
Pharmacists just as 'effective' as GPs at prescribing, says new Cochrane review

29 November 2016 | By Sally Nash

Pharmacists and nurses with varying levels of training are 'comparable prescribing outcomes to GPs', according to the new gold-standard review.

The 'Prescribing roles for health professionals other than doctors'

Published: 22 November 2016

Authors:
Weeks G, George J, Maclure K, Stewart D

Primary Review Group:
Effective Practice and Organisation of Care Group

What is the aim of this review?

The aim of this Cochrane review was to find out if prescribing by health professionals other than doctors delivers comparable outcomes to prescribing by doctors. Cochrane researchers collected and analysed all relevant studies to answer this question and found 46 studies.

Key messages

With appropriate training and support, nurses and pharmacists are able to prescribe medicines as part of managing a range of conditions to achieve comparable health outcomes to doctors.
At the end of 2013; QOF showed there were > 8,000 hypertensive people in Lambeth failing to achieve a BP target < 150/90mmHg
Clinical and audit targets are unattainable in a proportion of patients

Any reduction in BP = reduction in risk of CV events

Aim to address BP control in a cohort of hypertensive patients with sustained BP $\geq 160/100$mmHg

Focus on high risk cohort and move BP towards target, even if target itself not achieved

Longitudinal study Apr 2014-Mar 2015
Interventions

§ Distribution of local hypertension guidelines

§ Review at a virtual clinic with specialist cardiovascular disease pharmacists

§ GP Practices to identify all patients with BP≥160/100mmHg

§ Review management and select 20-30 patients for discussion at virtual clinic

§ Virtual Clinic led by Specialist Cardiac pharmacist

§ GP Practice to implement recommendations

§ Referral of selected patients to a pharmacist-led community hypertension service or a secondary care hypertension service

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<th>Action suggested at virtual clinic</th>
<th>% of people suggested for</th>
</tr>
</thead>
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<tr>
<td>Titration of current meds</td>
<td>21.3</td>
</tr>
<tr>
<td>Within class change in meds</td>
<td>2.3</td>
</tr>
<tr>
<td>Initiation of new medication</td>
<td>32.7</td>
</tr>
<tr>
<td>Review concordance</td>
<td>21.6</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>9.7</td>
</tr>
<tr>
<td>24 hour monitoring</td>
<td>5.6</td>
</tr>
<tr>
<td>Community hypertension clinic referral</td>
<td>4.0</td>
</tr>
<tr>
<td>Secondary care referral</td>
<td>4.5</td>
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<td>Any referral</td>
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Blood pressure reductions

45 practices submitted data for 1,982 patients. 1,526 patients were successfully followed up.

Fig 7: Reduction in incidence of coronary heart disease (CHD) events and stroke in relation to reduction in systolic blood pressure according to dose and combination of drugs, pretreatment systolic blood pressure, and age. Blood pressure reductions are more uncertain and hence also reductions in disease incidence.
Specialist Pharmacist intervention to improve anticoagulation rates in AF
Of 22 stroke patients with known AF and not anticoagulated in 2014 – 41% died and 37% were left with moderate to severe disability.
What can be done to reduce atrial fibrillation related strokes?

**DETECT**
1662 people potentially have undiagnosed AF

**PROTECT**
444 people diagnosed with AF are **not being treated** with anticoagulants

**PERFECT**
83% of stroke patients with known AF had **prior inadequate anticoagulation control**, a recent London study found

Find more!
Treat more!
Treat better!
Lambeth / Southwark CCGs AF Project

- Project proposal developed
  - Virtual clinic model to review all AF patients not anticoagulated
- Funding for a/c specialist pharmacist support secured from industry (Bayer, BI, Pfizer/BMS)
- GP engagement secured through embedding programme in GP Delivery scheme / Prescribing Improvement Scheme (£)
- Agreed service specification with local acute trust
- Provided resources to GP practices – audit data collection, virtual clinic guide, prescribing guidance
The ‘Virtual clinic’ model

- Bring specialist skills into general practice
  - Anticoagulation pharmacists, nurses, haematologists
- Practice to identify all patients on AF register not currently anticoagulated and collate relevant data:
  - CHA\textsubscript{2}DS\textsubscript{2}-VASc and HASBLED
  - Treatment to date (why not currently anticoagulated)
  - Any other relevant info
- Virtual clinic with GPs to discuss anticoagulant options and develop patient management plans
- GP practice to implement patient management plans and report outcomes
Virtual clinic discussions covered:

- Confirming a correct AF diagnosis
- Correct coding of AF on the GP system
- Cleaning the AF register
- Correct use of stroke and bleeding risk scores
- Assessing benefits and risks of anticoagulation
- Explain benefits and risks of anticoagulation to patients
- Dispelling myths and misconceptions
- Explaining the role of left atrial occlusion devices where anticoagulation is contraindicated
Outcomes?

- Across 91 GP practices, 1,574 patients with AF not currently receiving anticoagulation were reviewed over 5 months.

- 1,292 additional patients were anticoagulated
  - Lambeth: 567 additional patients have been anticoagulated which will prevent up to 20 strokes per annum
  - Southwark: 725 additional patients have been anticoagulated which will prevent up to 25 strokes per annum.

- It is expected that this increase in anticoagulation will prevent up to 45 AF-related strokes per annum
Outcomes?

Anticoagulation for High Risk AF patients 2014-2017

- Lambeth virtual clinics delivered
- Southwark virtual clinics delivered

Stroke Rates in Lambeth and Southwark CCGs 2013 to 2016

- 2013/14: 80
- 2014/15: 74
- 2015/16: 68
Other advantages

- Updated / educated primary care workforce – myths and misconceptions addressed
- In-depth data on untreated population to guide further service developments
- Strengthened relationships between specialist a/c services and primary care
  - Redesign of anticoagulant referral form across all three tertiary centres to ensure all necessary info on referral
  - Supported DOAC initiation in primary care for housebound and nursing home patients
In Summary

- Opportunities to utilise pharmacists:
  - On the frontline in community pharmacy
    - Detection, prevention, prescribing, monitoring, lifestyle, adherence
  - As generalists in GP practices
    - Medication review, meds opt, adherence, LTC clinics
  - As specialists in CVD management
    - Specialist clinics, medicines optimisation, guidelines development, training, audit, strategy, commissioning
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