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Adapting CVD care to the 'new norm' of the COVID-19 era: same standard, different delivery

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Foreword

Key words

Cardiovascular disease, COVID-19, home monitoring, integration, primary care, secondary care, self-management, telemedicine

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The past year has been challenging for all of us in the NHS.

When looking at the impact of the pandemic on the field of cardiovascular disease (CVD), reduced screening opportunities and cancelled clinics and procedures have caused widespread disruption.

However, there is a positive side. The pandemic has provided a unique opportunity for restructuring CVD services in England.

Telemedicine, home monitoring and integration of primary and secondary care are not new concepts in CVD care, yet their increased use over the recent months has served us and our patients well. In fact, the increased uptake of these systems and processes during lockdown have been effective, more convenient and appropriate for the digitally connected age in which we live.

With the persistence of the virus, social distancing restrictions still in place, a stretched health service and possibly long-lasting changes in patient behaviour, we must embrace these changes to our practice moving forward. It is important that we do what we can amidst the disruption caused by the pandemic to maintain good CVD care. Despite the seriousness of our current situation, CVD

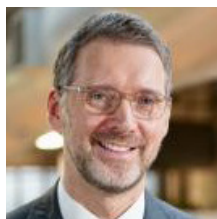
still remains the single biggest area where the NHS can save lives over the next 10 years as identified by the NHS Long Term Plan.

In May 2020, alongside fellow clinicians and advocates for CVD care, we discussed our beliefs of how best to adapt CVD services to the 'new norm', without changing the level of care provided. Whilst there is a focus on primary and secondary care and the patient, in line with the make-up of the committee, these recommendations will require engagement from all parties; patients, healthcare professionals (HCPs) and payers.

Fundamentally, we can all do our part to keep CVD care on the political agenda and keep saving lives ●

Professor Martin Cowie

Introduction to the steering committee



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Conflicts of interest

The steering committee received speaking and consultation fees from Bayer plc. MRC provides consultancy advice to Abbott, AstraZeneca, Bayer, Boston Scientific, Medtronic, Novartis, Roche Diagnostics and Servier. MF has received speaker honoraria, conference sponsorship, unrestricted educational grants, and/or attended meetings sponsored by AstraZeneca,

Bayer, Boehringer Ingelheim, Bristol Myers Squibb, Medtronic, Novartis, Pfizer, Roche, Sanofi-Aventis, and Servier.

JJ is CEO of Thrombosis UK, which has received unrestricted educational grants from Bayer plc and other pharmaceutical companies for educational meetings.

AJ: none declared.

JM has received honoraria from Amgen, AstraZeneca, Bayer, Boehringer Ingelheim and Novartis for various

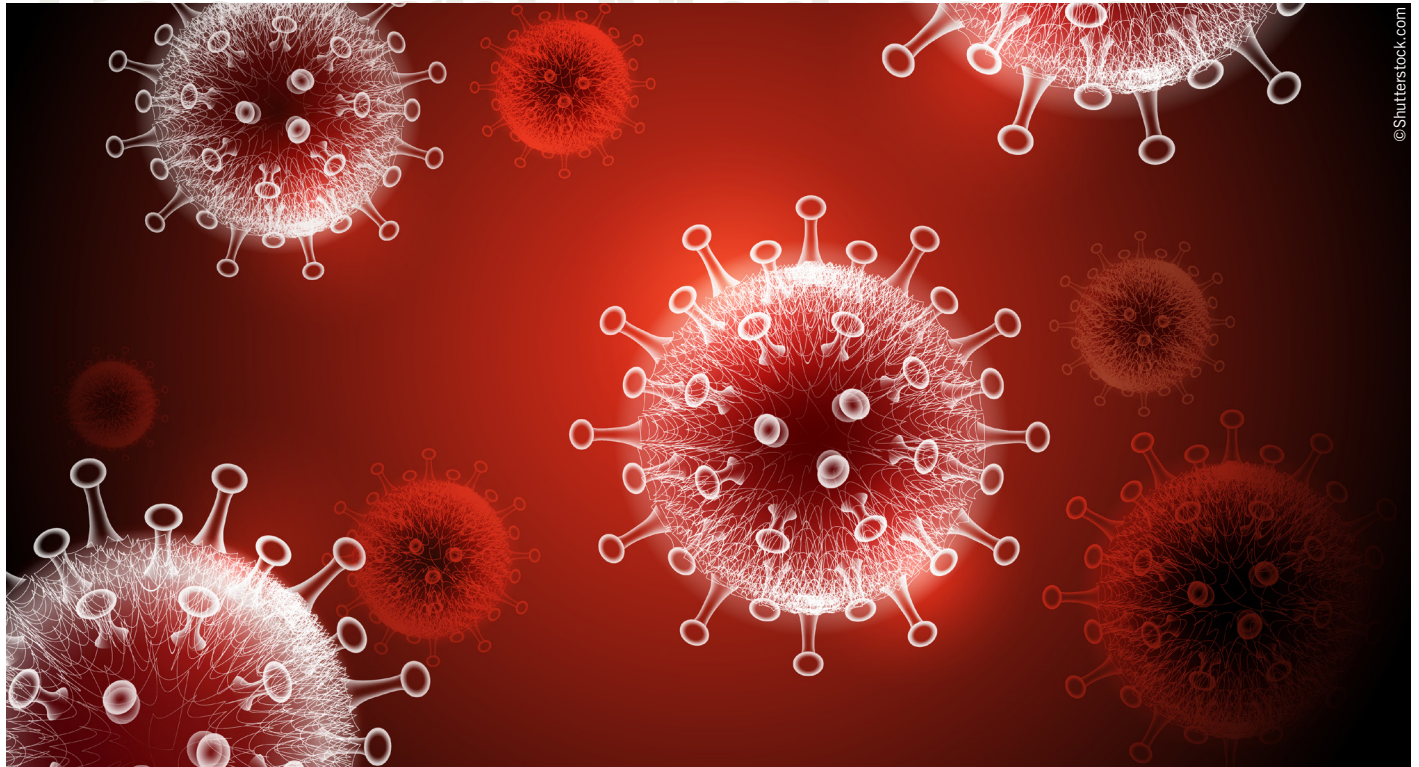
activities including attending and participating in educational events and advisory boards. HW has received speaker fees and / or attended advisory boards for Amgen, AstraZeneca, Bayer, Boehringer Ingelheim, BMS / Pfizer, Daiichi-Sankyo and Novartis.

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Adapting CVD care to the 'new norm' of the COVID-19 era: same standard, different delivery



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Following the disruption of the COVID-19 pandemic to CVD services in England, Bayer plc brought together a multidisciplinary steering committee of primary and secondary care HCPs and a patient representative in May 2020 to discuss their frontline perspective on how services could adapt to the 'new norm'. Challenges for CVD care moving forward include reorganising CVD services, dealing with the backlog of CVD patients, and reduction of patient traffic into surgeries and hospitals. The steering committee highlighted three critical areas where services have been impacted by COVID-19 and therefore must adapt to operate in the 'new norm'. As identified within this piece, they are:

- Re-engineering the CVD patient experience
- Detecting new or undiagnosed patients and
- Supporting patients and physicians in the new era.

The steering committee provided several recommendations for each of these areas based on their clinical expertise

and within the time limit, concentrating on long-term management of CVD and prevention of cardiovascular events, rather than emergency care. There was a focus on appropriate use of virtual technologies, activation and education around self-management and home monitoring and the integration of primary and secondary care. Health inequality was a key concern, and HCPs should consider this when expanding the use of digital tools and home monitoring equipment. The patient should remain at the centre of planning. The committee did not cover in detail the specific logistical, resourcing and policy challenges with implementing some of the recommendations but urged decision makers and relevant stakeholders to consider the allocation of resources when reviewing these comments.

CVD remains the single biggest condition where lives can be saved in England, as identified by the NHS Long Term Plan. With the fresh set of challenges caused by the pandemic, it is critical that CVD is kept on the political agenda moving forward.

How COVID-19 changed cardiovascular disease care

The COVID-19 pandemic has significantly affected CVD care in England and created exceptional challenges for the NHS, clinical community and patients.¹ The scale of the pandemic's impact and the threat of further national and local spikes in infection rates suggest that it is unlikely that CVD services will return to pre-pandemic levels for some time.

Exceptional times require exceptional measures. The first national lockdown prevented access to primary care for some, with subsequent delays in the identification of disease and out-patient referrals.¹ Hospitals and emergency departments have been almost closed to non-COVID-19 patients for many months, resulting in a backlog of thousands of CVD patients and cancelled procedures.^{1,2} The knock-on impact of these provisions is sobering, with estimations of non-COVID-19 excess deaths during the height of the

pandemic at almost 9,000 (**figure 1**),³ of which over 2,000 were acute cardiovascular deaths.⁴

We are now in the next phase – the so-called 'new norm'. However, there are several challenges that we must overcome first.

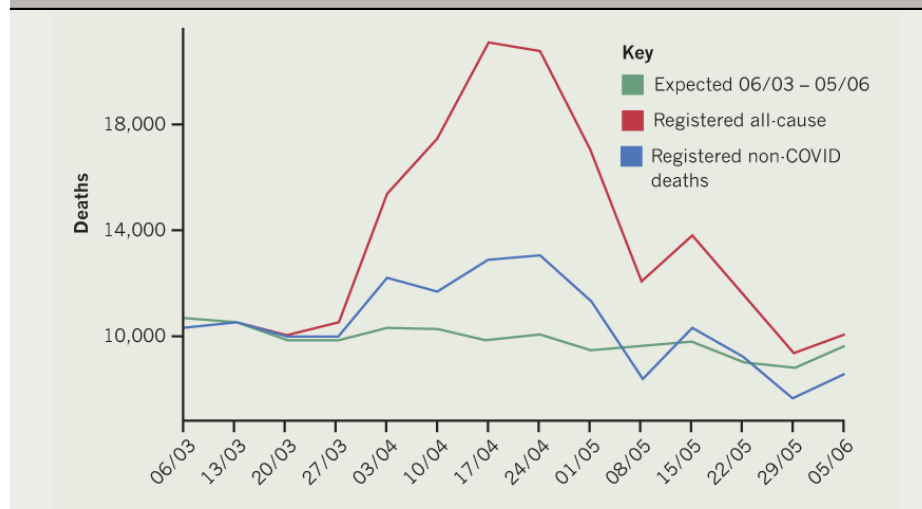
Services must return with social distancing in place to minimise the risk of further COVID-19 outbreaks,⁵ subsequently reducing important physical interaction between doctor and patient. In parallel, the NHS and ancillary workforces are exhausted, and resources are stretched. Recent figures place the 'hidden NHS waiting list' for follow ups of any health condition at 15.3 million, which will undoubtedly put considerable strain across all healthcare services.⁶

Patient factors are also a key priority. Patients' behaviour has changed – anxieties towards the virus remain.² During February and March, there was a 40% reduction in hospital admissions for acute coronary syndrome when compared to the same period in 2019, which is likely to lead to an increase in out-of-hospital deaths and long-term complications of myocardial infarction (**figure 2**).⁷ Further, messaging around COVID-19 has been confusing and unclear, particularly for CVD patients who are unsure whether they are at greater risk of infection or worse outcomes. Many people have been told to self-manage and monitor their conditions without instruction. Importantly, people are unsure when to seek help from their doctor.

While 'good care' for CVD should not change, the NHS will continue to deliver its Long Term Plan. Launched in 2019, the Long Term Plan identifies CVD as a clinical priority and the single biggest area where the NHS can save lives with the goal to prevent over 150,000 heart attacks, strokes and vascular dementia cases in the next decade.⁸ However, we now live in a different world. As the world shifts in response to the virus, the way CVD care is delivered should be adapted.

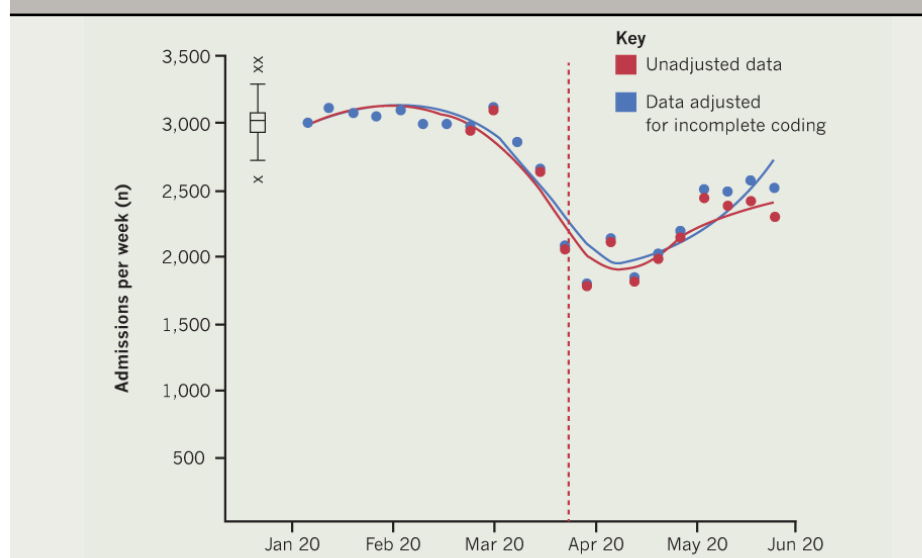
This thought piece identifies three critical areas where CVD services have been impacted by COVID-19 and therefore must adapt to operate in the 'new norm'. The steering committee offer recommendations for how primary and secondary care can support these changes, while keeping the patient at the centre of planning (see **figure 3**).

Figure 1. Non-COVID-19-related excess deaths in England 6th March – 5th June 2020



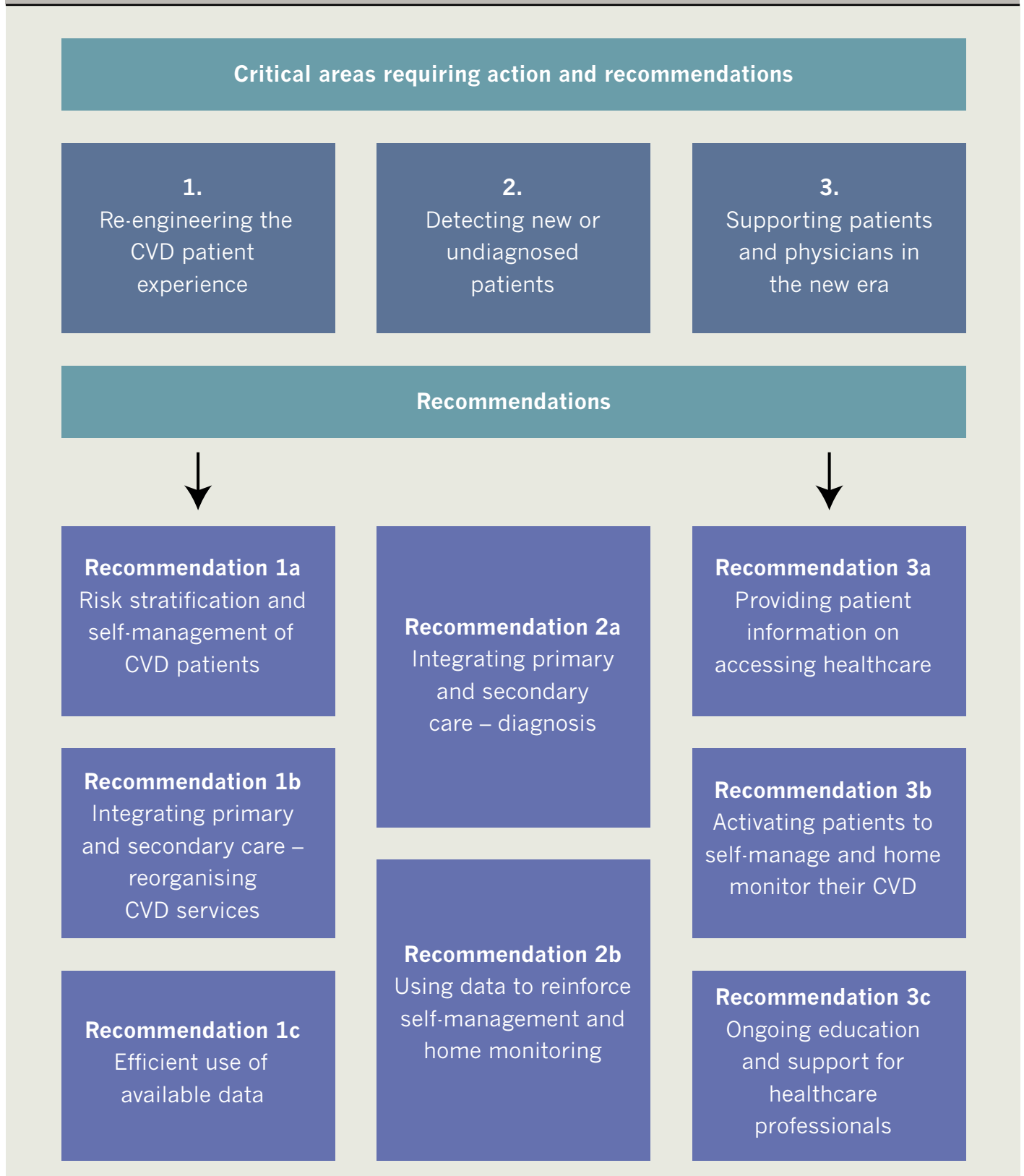
Redrawn from Forchini G et al,³ with permission under Creative Commons licence

Figure 2. Hospital admissions for acute coronary syndrome January – June 2020



Redrawn from Mafham M et al,⁷ with permission under Creative Commons licence

Figure 3. Summary of the steering committee recommendations for adapting cardiovascular (CVD) disease care to the 'new norm' of the COVID-19 era and beyond



1. Re-engineering the CVD patient experience – providing optimal care for established CVD patients

Remote consultations have played a vital role during the pandemic. However, they are not necessarily new. Some primary and secondary care clinicians were already regularly using virtual appointments pre-pandemic.^{1,9} Further, the [NHS Topol report](#),¹⁰ published in February 2019, called for digital healthcare technologies to be ‘a new means of addressing the big healthcare challenges of the 21st century’.¹⁰ Clearly, the accelerated implementation of these

systems are driving innovation in care, rather than being a temporary solution. There is now an opportunity in England to embed the successful services, and redesign those that were flagging.

With non-COVID-19 care on pause for months, the NHS must catch up. A lower estimate of 28,000 heart procedures have been delayed during the pandemic.² This presents a significant bottleneck for secondary care, who must focus on procedures that only they can perform. Primary care may need to take more responsibility in dealing with CVD cases to ease the strain on their cardiologist colleagues.

While the benefit and efficiency of

telemedicine are clear, human factors remain important. NHS staff are tired because of the pandemic, and remote consultations present unique challenges. Without visual cues and a physical presence in the room, telephone triage can be fatiguing and prevent fostering of trust and empathy.⁹ Moreover, there are fears that expanding digital health technologies may widen health inequality gaps for those with a lower digital literacy, without access to a smart phone or broadband internet⁹ or even for certain demographics and cultures.

More detail on recommendations made by the steering committee for ‘Re-engineering the CVD patient experience’ are outlined in algorithms, case studies and key messages **1a–c**.



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1st case study 1a: In practice example of self-management – the blood pressure monitoring revolution

Provided by Dr Jim Moore, General Practitioner with a Special Interest

This patient case study discusses the use of home blood pressure monitoring (HBPM) for monitoring hypertension, as outlined in the National Institute for Health and Care Excellence (NICE) 2019 guideline 'Hypertension in adults',¹² and deployed during the COVID-19 pandemic.

A 45-year-old male patient with type 2 diabetes was discharged from hospital, following treatment for a myocardial infarction and newly diagnosed hypertension, shortly before the pandemic began. He was due for a review appointment at his local primary care practice, which lockdown prevented. The practice was aware of the importance of having this patient's blood pressure well controlled and without delay. They needed up-to-date blood pressure data and had a virtual discussion with him around HBPM.

The patient purchased a validated blood pressure machine online after reading guidance from the British and Irish Hypertension Society website. The practice signposted online HBPM educational resources, and the patient downloaded an HBPM form from the practice website which he subsequently completed with one week's readings. The form was then emailed back to the practice for review and action.

HBPM facilitated virtual discussion between the patient and his GP, who was able to alter his management appropriately in the middle of a pandemic, all without a face-to-face consultation. Dr Moore commented: "One of the benefits of newer technologies is that they frequently increase the patient's involvement in and responsibility for managing their own healthcare".

Recommendation 1a algorithm. Risk stratification and self-management of patients with cardiovascular disease (CVD)

"We must move to the philosophy that people living with CVD should have access to the best possible advice and treatment, and less focus on primary versus secondary care. It's about pulling in what needs to be done at the correct time"

Professor Martin Cowie, Consultant Cardiologist

Rationale

- The NHS has been greatly impacted by the pandemic and efficient resource management is needed
- Mobile application technology offers a practical solution to monitoring low-risk CVD patients at home, considering that 78% of the UK own a smartphone¹¹



Details

Current CVD patients should be stratified by their primary care clinic as either low or high-risk using primary care data. Although self-management is key for both patient cohorts, those with a lower CVD risk in particular can be monitored remotely

Low-risk CVD patients would become responsible for regularly monitoring their risk factors (blood pressure, body weight etc.) at home. This can be recorded and shared with the GP via text, email or even post ('e-consultations'). Alternatively, a patient-operated digital application could be used

The application could provide targeted messaging and education, which activates the patient to make lifestyle changes and reinforces home monitoring. The application may also allow real-time instruction and comments from the GP based on the patient's risk factor readings

Healthcare assistants (HCAs) should be used more imaginatively, such as in helping low-risk patients with primary prevention in the community



Intended benefit

This allows practice staff to focus their face-to-face time on higher risk patients who need more aggressive and proactive management



Requisites

- Seamless data transfer from the community to the GP – either an integrated app or 'e-consultation' data directly inputted into electronic health records (EHR)
- Access options for those who cannot engage with digital solutions
- Certain tests must continue face-to-face (i.e. phlebotomy)

Key messages 1a

- Cardiovascular disease patients should be risk stratified, with a focus on remote monitoring for low-risk patients
- Home monitoring equipment and data entry could allow GPs to supervise their patients remotely
- This may allow greater focus of resources on high-risk patients

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2nd case study 1a: In practice example of risk stratification – UCLPartners

Provided by Helen Williams, Consultant Pharmacist

Adaptation of pathways is an integral part of the NHS's response to the COVID-19 pandemic. UCLPartners have designed support packages to help primary care "build new ways to provide proactive care and prevent exacerbations of long-term conditions". [The hypertension support package](#) provides a guide for clinicians (GPs, nurses and clinical pharmacists) when reviewing patients with suboptimal blood pressure control, augmented by healthcare assistants (HCAs) and non-clinical staff in low-risk cases. Reviews are virtual by default and home blood pressure monitoring (HBPM) is recommended where possible.

Patients should be risk stratified based on their already available clinic blood pressure results and verified using home blood pressure results.

For example, a person under 80-years-old with a clinic blood pressure <140/90 mmHg/ home blood pressure <135/85 mmHg could be managed by an appropriately trained HCA or other staff role. The HCA / staff role, using protocol, would remotely support self-management and any necessary behaviour changes; check medication and refer for pharmacist support if issues are identified, such as adherence, side effects or patient concerns; advise when to submit home blood pressure readings / when to seek further help and refer to GP if needed.

In contrast, high priority cases i.e. clinic blood pressure ≥180/120 mmHg / home blood pressure ≥170/115 mmHg should be

Recommendation 1b algorithm. Integrating primary and secondary care – reorganising cardiovascular disease (CVD) services

"I think many will welcome integration as a positive action, as opposed to bouncing between different doctors and clinics. Plus, the time saving for individuals would be a real positive"
 Jo Jerome, Thrombosis UK

Rationale

- Some CVD patients may not require a face-to-face consultation in primary care before referral (those with obvious change in symptoms or disease)
- As a result of the lockdown, secondary care will need to focus on the backlog of procedures that only they can perform



Details

'Total triage' could direct certain CVD patients directly to secondary care

Following referral, primary and secondary care could meet virtually as a multidisciplinary team (MDT) to discuss patient cases. This can be done for single or multi-morbidity to further streamline the process. The aim would be that primary care is predominantly responsible for the development and implementation of individualised management plans, with *ad hoc* support from secondary care

Telemedicine provides a unique opportunity to bring the patient into these MDTs, connect them to the expertise and allow them to take part in the decision-making process



Intended benefit

This may reduce the need for numerous visits to practices and hospitals. Further, the patient could be brought into the decision-making process through virtual MDTs



Requisites

- A virtually involved GP to guide patients correctly during total triage
- Aggressive but simple protocols in primary care to manage patients

reviewed by the prescribing primary care clinician, which includes investigation of clinical parameters, medication review and gaining specialist advice from secondary care if appropriate. In appropriate cases, follow-up reviews can be conducted by an HCA or staff role.

A fundamental aspect of the pathway is HBPM. Where patients do not own HBPM equipment, they will be advised to buy endorsed machines or directed to local schemes where they may be available free of charge. Face-to-face blood pressure monitoring should be available in community settings to reduce health inequality.

Key messages 1b

- Patients are 'totally triaged' directly to secondary care without an unnecessary primary care consultation
- Virtual multidisciplinary team meetings with primary and secondary care and the patient are held to decide on a management plan to be conducted in primary care
- Patients are kept at home and potentially brought into the decision-making process

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Case study 1b: A patient case study of MDTs – ‘we were all singing from the same hymn sheet’

Provided by Jo Jerrome, Thrombosis UK

A 60-year-old woman, Carol, with multiple co-morbidities requiring regular monitoring shielded through much of the lockdown. Before the pandemic, she would regularly attend her GP and multiple clinics at the local hospital. In July 2020, a virtual meeting was organised so she could talk with her multi-disciplinary healthcare team.

“It was a joy, it felt so much better. Everyone spoke to each other in one meeting and not only did I not have to repeat myself many times – or travel repeatedly for appointments and then wait – but I could correct any gaps or misunderstandings about my medical history and medication. All four health professionals also said how good it was. Even the GP called me the next day and said it was the most useful half-hour spent on my care in 10 years. I felt really good when I left that meeting – we were all singing from the same hymn sheet!”

Key messages 1c

- Pre-pandemic cardiovascular disease (CVD) referral data could be used to estimate the amount and type of CVD patients in the community
- This could help to efficiently reshape CVD services in secondary care

Recommendation 1c algorithm. Efficient use of available data

“Bart’s ICU quadrupled in size, which inevitably prevented almost all elective cardiac procedures. We will need insight from our CCGs on what the virtual waiting room looks like before we can reorganise”

Dr Abhishek Joshi, Cardiology Registrar

Rationale

- Referral data from before the pandemic could be used to help estimate cardiovascular disease (CVD) patients in the community



Details

Pre-pandemic referral data could be used to estimate the proportion of patients in the ‘virtual waiting room’

These data are already available to commissioners – with further analysis they could determine the types of CVD, outcomes of referrals and management plans that they should expect to see

When reorganising CVD services in secondary care, these data may be used to appropriately staff clinics or to redesign the spread of specialists throughout hospitals to reduce queuing and busy waiting rooms



Intended benefit

These data may help the NHS in planning how to resume ‘normal’ services as hospitals manage the backlog of CVD patients

Requisites

- Greater sharing of referral data, as it is mostly secured within Clinical Commissioning Groups (CCGs) and organisations like NHS Digital



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2. Detecting new or undiagnosed patients – ensuring opportunities for CVD detection are not missed

In-clinic primary care appointments dropped from 70% to 23% within weeks of pandemic provisions being actioned.⁹ Patient mentality has changed – concerns of COVID-19 cross-infection in a healthcare environment and unnecessary usage of NHS resources have kept people at home, sometimes inappropriately.² Although the proportion of face-to-face appointments in primary care may increase, they are unlikely to return to previous levels.⁹ This reduction in tangible contact between primary care and patients is likely to limit opportunities to screen those at risk of CVD.

Conditions such as atrial fibrillation (AF) and hypertension are typically detected at routine health checks or during an unrelated appointment / clinic. Many of these appointments have been cancelled or postponed, and virtual consultations are not conducive to screening for certain CVD risk factors and conditions. However, the expansion of winter flu clinics¹³ may offer increased opportunities for pulse checks to support AF detection in at-risk groups, such as the elderly or those with other conditions,

Recommendation 2a algorithm. Integrating primary and secondary care - diagnosis

"It's an opportunity to integrate primary and secondary care, to have an NHS, rather than two distinct services"

Dr Matthew Fay, General Practitioner with a Special Interest

Rationale

- Primary care often cannot contact secondary care for advice on patient cases, resulting in inappropriate referrals and a lengthened time to diagnosis and treatment¹



Details

If a physical consultation in primary care is essential, diagnostic tests should be combined in fewer visits to streamline the process. Secondary care may provide virtual advice and guidance to primary care on individual cases without the need for appointments

Likewise, long-term condition reviews should continue, but multi-morbidities merged (i.e. cardio-respiratory-diabetes) and conducted virtually



Intended benefit

Time to diagnosis and treatment could be reduced, whilst also decreasing the need for multiple unnecessary hospital visits. Some new cardiovascular disease patients could be solely managed in primary care, allowing secondary care to focus on their patient backlog



Requisites

- Patients should be treated as consumers – they want a quick diagnosis, access to all available treatment options and an effective therapy
- Open communication channels between primary and secondary care

like diabetes or asthma.¹⁴

Home monitoring of CVD risk factors for new and undiagnosed patients will be an essential requirement in the 'new norm' of CVD care. Remote monitoring and the digital solutions to facilitate monitoring is a rapidly growing landscape – many devices and applications are available at varying costs.⁹ It is essential that patients are guided to reliable tools, correctly educated on how to use them and that the expansion of home monitoring does not widen health inequality gaps.

More detail on recommendations made by the steering committee for 'Detecting new or undiagnosed patients' are outlined in algorithms, and key messages **2a–b**.

Key messages 2a

- Patients should be treated as consumers – a quick diagnosis, access to treatment options and an effective therapy
- Diagnostic tests could be combined to streamline the process. Secondary care can provide advice to GPs without a physical appointment
- Time to diagnosis and treatment could be reduced, and more new CVD patients managed in primary care

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Recommendation 2b algorithm. Using data to reinforce home monitoring and self-management

"Technologies are being developed. Some will be successful. Some will not. But the direction of travel is to try and collect more patient information with less face-to-face contact"
 Professor Martin Cowie, Consultant Cardiologist

Rationale

- Important screening opportunities in primary care have and will continue to be missed in the 'new norm'



Details

Patients who are known to the surgery and fit into at-risk categories (age, diabetes, overweight, high blood pressure and dyslipidaemia) should be identified using primary care data and risk stratified based on their results, i.e. blood pressure $\geq 140/90$ mmHg

Identified patients should be contacted by their GP and encouraged to monitor risk factors at home. Information should be uplifting with education on how to use home monitoring equipment and links to reliable devices. Health status information can then be shared via a digital app or 'e-consultations', and the GP can supervise and act accordingly

With sharing of electronic health records (EHR) between primary and secondary care, such as already seen in the East London Health and Care Partnership, secondary care can make prevention recommendations e.g. a cardiologist can see previously failed statin therapies and recommend a PCSK9 inhibitor, for example, if appropriate



Intended benefit

Primary prevention may be boosted as patients take more responsibility of their own health. Further, patients can continue to monitor their risk factors without needing to access their GP surgery



Requisites

- Linking of EHR between primary and secondary care
- Platforms to submit cardiovascular health status information, which are integrated within EHR
- Reinforcement from patient organisations, such as Thrombosis UK
- Unbiased representation of affordable devices



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Key messages 2b

- 'Pre-ill' patients are identified and targeted with self-management and home monitoring messaging
- Secondary care can provide input through access to primary care data
- Primary prevention and home monitoring are boosted, while keeping people out of the clinic

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3. Supporting patients and physicians in the new era

The COVID-19 pandemic has changed the healthcare landscape. Therefore, it is important that channels of communication are open to continually reassure patients that they will be safe and receive the same standard of care as before the pandemic.

The move to virtual consultations should help to streamline healthcare access by supporting the ‘worried but well’ patients with home monitoring and HCP supervision, and allow resources to be focused on the ‘unaware and unwell’ patients that are hidden in the community. However, HCPs should accept that telemedicine does not work for every patient. The less digitally literate and those without digital technology may be further marginalised.⁹ There should be a balance between face-to-face and virtual consultations so that no patient is left behind, and this must be underpinned by clear dialogue between the patient and HCP.

There are also concerns that important patient-HCP conversations have been delayed or confused during the pandemic. For example, [professional guidance](#) recommended the transition of eligible non-valvular AF and venous thromboembolism (VTE) patients from vitamin K antagonists (VKA) to direct oral anticoagulants (DOACs).¹⁵ Some patients were concerned by this change of protocol as there was little time for discussion, particularly for those who were previously told they were not suitable for a DOAC. Further, the capacity of community international normalised ratio (INR) testing was uncertain for those who were unsuitable for an anticoagulation switch.

It is equally important that HCPs are supported, especially those who do not have a CVD specialism. There may be cultural resistance to the increased use of telemedicine. Research suggests that telephone triage actually increases workload,¹⁶ and the loss of visual cues with the patient can be frustrating. HCPs need to be assured that current and ongoing changes are to adapt the delivery of care, not to change care itself.

More detail on recommendations made by the steering committee for ‘Supporting patients and physicians in the new era’ are outlined in algorithms, case studies and key messages **3a–c**.

Recommendation 3a algorithm. Providing patient information on accessing healthcare

“In a time of change it is important and reassuring to hear from your GP practice, a letter, email, text or whatever, explaining how your care will continue”

Jo Jerome, Thrombosis UK

Rationale

- As delivery of healthcare has changed significantly, there is a clear need for information to reassure and inform patients
- Some patients are reluctant to access healthcare services because of COVID-19, and they need assurance^{2,9}



Details

Primary care practices should provide clear information to their patients on how accessing care has changed, individualised to the locality, the patient and their risk profile. Virtual consultations, total triage, and when face-to-face consultations will be necessary should be explained. Importantly, the follow-up process should be made evident. This information should be reinforced by home monitoring encouragement

Patients and healthcare professionals (HCPs) should continue to have discussions around the safety and suitability of treatment. For example, patient-HCP dialogue helped to alleviate concerns of many patients with non-valvular atrial fibrillation (NVAF) taking a vitamin K antagonist (VKA), who were advised to switch to a direct oral anticoagulant (DOAC) during the pandemic if appropriate. These anticoagulation reviews including the transitioning from a VKA to a DOAC, should happen annually, regardless of the pandemic



Intended benefit

Patients are reassured that healthcare services are still operating, albeit differently, and may be more comfortable in seeking medical care when they need it



Requisites

- Patient friendly information developed by patient organisations which is accessible to all
- Patient choice remains key, even during exceptional periods

Key messages 3a

- Patients should be clearly informed by their GP on how they can access healthcare in the ‘new norm’
- Patient choice is important in any treatment / management discussions
- Patients may feel better equipped and more comfortable to seek medical assistance when they need it

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Case study 3a: In practice example of frequent patient concerns at consultation

Provided by Jo Jerrome, Thrombosis UK

Before a consultation: The patient should be encouraged to think about any important changes, symptoms and concerns since their previous appointment:

- It can be useful for the patient to collate these in a diary or written summary, with key questions included.

During a consultation: The patient should know there are no irrelevant questions. Key questions include:

- What can I expect in terms of recovery/ treatment?
- What can I do to help?

After a consultation: It should become routine to include:

- Who to contact if you have any problems
- What will happen next?
- In what time frame you should expect to hear back from us

Key messages 3b

- Linking risk factors for cardiovascular disease (CVD) and COVID-19 outcomes could help frame primary prevention and home monitoring
- Patients must receive education to home monitor correctly
- Raising awareness of CVD risk factors and reinforcing home monitoring could boost primary prevention

Recommendation 3b algorithm. Activating patients to self-manage and home monitor their cardiovascular disease

"One way to resolve some health inequality is home monitoring equipment on prescription"
Helen Williams, Consultant Pharmacist

Rationale

- As well as a recommendation from the authors, it has become Government and Public Health England policy¹⁷ to urge people to 'lose weight to beat coronavirus'
- There is growing evidence that other risk factors for cardiovascular disease (CVD) (e.g.hypertension) are associated with worse COVID-19 outcomes¹⁸



Details

With a strong media focus on COVID-19 for the foreseeable future, the link between CVD risk factors and poorer COVID-19 outcomes should be used to frame the importance of CVD self-management. Education should also cover how to correctly home monitor risk factors to prevent an influx of concerned patients into the clinic



Intended benefit

Appropriately linking COVID-19 outcomes and cardiovascular health could help to raise awareness of CVD risk factors to boost primary prevention. Furthermore, education around how to monitor at home could increase the reliability of readings and reduce unnecessary primary care appointments



Requisites

- Messaging based on the latest evidence
- Inspiring information, rather than frightening



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Recommendation 3c algorithm. Ongoing education and support for healthcare professionals (HCPs)

"At the end of the day, it will be for local CVD champions once again to drive progress"
 Professor Martin Cowie, Consultant Cardiologist

Rationale

- The Direct Enhanced Services for cardiovascular disease (CVD) prevention and diagnosis, delivered by Primary Care Networks, will be implemented in April 2021



Details

Primary care CVD leads should be appointed as local champions to drive education and share best practice regionally and nationally. They will also be responsible for advocating new technologies and the use of data

Frontline generalist HCPs should be targeted with CVD awareness and education pieces. Popular GP (*PULSE Today*, *GP online*) and nurse (*Nursing Times*) media outlets may be a valuable communication channel

In secondary care, community cardiology should become an integral part of the cardiologist training curriculum. Soon, community cardiologists may take more of an active role in primary care in the absence of a general practitioner with a special interest



Intended benefit

A wider workforce that is prepared to overcome the CVD challenges of the 'new norm'



Requisites

- Ancillary staff – receptionists, nurses, healthcare assistants – should be included in educational initiatives

Key messages 3c

- Cardiovascular disease (CVD) education should be reinforced by local CVD champions and targeted messaging in generalist media
- Community cardiology should become a central aspect of the cardiologist training curriculum
- CVD education should encompass all frontline staff, not just clinicians



SPONSORED SUPPLEMENT

A call to action: now, more than ever, we need to keep CVD on the political agenda

The disruption caused by the COVID-19 pandemic has had a significant impact on CVD patient care. Clinics and procedures have been cancelled or delayed and screening opportunities missed. As the NHS deals with the huge backlog of patients, there is an urgent requirement to focus resources on two cohorts of patient – those with established disease who are already at risk of poor COVID-19 outcomes and those with undetected disease and risk factors. Their cardiovascular experience should

not be further affected by a lack of access to care and available treatments.

CVD remains one of the leading causes of death in England. With the challenges posed by the pandemic and the possibility of further outbreaks, it is more important than ever to keep CVD on the political agenda. In order to do so, everyone has a role to play. Patients, HCPs and policy makers on a national basis must be aware and educated on the importance of detection, prevention and management of

CVD. HCPs in particular must help to drive the innovation and implementation of CVD services.

We now have a unique opportunity to use the disruption of COVID-19 to accelerate the modernisation of our healthcare system. However, it is key that the new ways of delivering CVD care do not widen the already present health and digital inequality gaps. The fundamental aim is to update services, maintain high quality care and ultimately, reduce CV-related morbidity and mortality in England in the 'new norm' ●

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Further useful resources

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