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We write as two academic general practitioners with a combined 68 years of experience in a general practice in Exeter, with a research wing, the Leonard's Research General Practice, a dedicated research room, and a practice-employed postdoctoral research fellow. We have both spent over 25 years working as staff in the University of Exeter but now write from general practice. One of us (DPG) is a former Chairman of the Academy of Medical Royal Colleges. We coined the term 'personal lists', have written 26 publications on continuity, including the first systematic review of the relationship between doctor continuity and mortality.¹

SUMMARY

We recommend that the Select Committee focuses attention on continuity of GP care which, we believe is the single most important neglected feature of the NHS. We have researched it for 40 years. We report evidence and make recommendations about its importance and its potential to reform general practice and improve efficiency across the NHS.

1. Research on continuity of care

There is extensive research on continuity which we summarise. First, the great majority of the published research is observational. This means that the outcomes are statistical associations so that proof of causation has not been formally established. There is one randomised controlled trial² in medicine and several randomised controlled trials and a Cochrane review³ on continuity of midwife care which are strongly positive for continuity in that particular health profession (including a reduction of 16% in fetal loss). Many of the outcomes found to be associated with continuity in observational studies with doctors are similar to the outcomes from the randomised trials in midwifery, adding weight to the conclusions.

The sophistication of the research has improved with several big cohort studies where confounding factors have been controlled for systematically and where different time sequences for the continuity and the outcome have been achieved, improving the scientific quality. Recently, a big study from Norway⁴ showed continuity of GP care is associated with significantly less use of out-of-hours services, fewer hospital admissions, and a lower rate of mortality with a dose-response effect adding scientific weight.

Studies on lost continuity are less susceptible to the academic problem of reverse causality. Discontinuity studies partly reduce this problem and their results fit well with continuity studies.⁵ Sir Austin Bradford Hill⁶ the doyen of British statisticians, stated that when the same finding is replicated in many different settings it adds to the likelihood of causation. Positive outcomes on continuity of doctor care have been reported from five continents. We recommend randomised controlled trials on improving GP continuity as a high priority.

An interesting analogy arose at the beginning of the COVID-19 epidemic when leading epidemiologists argued against the use of masks because there were not enough controlled trials to

support wearing them. However, wider considerations of probability took over and masks were introduced.

In the meanwhile, in 2021, we recommend that intellectual judgements should be made on the civil standard of legal proof i.e. on the balance of probabilities. Applying this standard, continuity of GP care becomes important in the NHS for the following 12 reasons:

1. Better patient satisfaction

Several studies show that more continuity of doctor care is significantly associated with better patient satisfaction. Satisfaction is a basic feature of quality in all service industries and with over 250 million GP consultations pa is particularly important to the NHS.^{7,8}

2. Adherence to medical advice

Patients follow medical advice significantly more when they have continuity with their GP. The trust that develops through a good GP- patient relationship ensures more effective treatment and less waste⁹

3. Adherence to prescribed medication

The NHS spends £1 billion a year on GP prescribed medicines some of which are not taken and wasted. Continuity of GP care is associated with significantly better adherence by patients.¹⁰

4. Developing trust between patients and their GPs

Continuity of care GP care is associated with patients developing trust in a doctor they get to know. This reduces anxiety and provides a sense of security¹¹ and links with several of the favourable adherence outcomes we describe.¹²

5. Uptake of personal preventive medicine

Personal preventive medicine includes immunisations for children and the elderly, cervical smears and mammography for women. There are many others. The UK has a problem that uptake of cervical smears is low. Continuity of GP care is associated with significantly better uptake of personal preventive medical advice.^{13,14}

6. Better quality of GP care

GPs provide better care for patients whom they know as individual people and whom they understand. When prescribing statins for patients at risk of cardiovascular disease. GPs with continuity identified more patients who needed them.⁹ GPs reported that they made better life-saving decisions with suspected meningitis when they knew the child and family.¹⁵

7. Patients forgiving GPs after moderate mistakes

All human beings make mistakes. Lings *et al.*¹⁶ found that patients who have received good continuity of care previously will forgive GPs who make moderate mistakes, with implications for time spent on complaints and litigation costs.

8. Benefits of GP continuity for patients with dementia

Patients with dementia benefit particularly from GP continuity of care which is associated with a significant reduction in incidence of both delirium of and incontinence. Both conditions are unpleasant for patients and generate extra work for staff. Patients with dementia getting GP continuity receive higher quality prescribing and are significantly less likely to be admitted to hospital.¹⁷

9. Lower rate of attendances at emergency departments

Numerous studies have shown the patients receiving GP continuity of care are significantly less likely to attend accident and emergency departments.^{18,19} Attendance at such departments costs the NHS more than consultations in general practice.

10. Fewer admissions to hospital

In Canada²⁰ and in the UK²¹ and many studies have shown that patients with good continuity of GP care are significantly less likely to be admitted to hospital. This applies particularly to older patients with ambulatory care sensitive conditions. Hospital admissions are one of the most expensive NHS costs.

11. Lower costs in whole health systems

Good continuity of GP care was associated with lower costs across the whole health system.^{22,23} This research may interest HM Treasury as interventions which both improve quality and lower costs are rare.

12. Lower death rate in patients

A significant recent discovery has been the finding that better continuity of GP care is associated with a lower death rate in patients.^{1, 4, 24}

Simultaneous effects

For clarity we have reported these 12 continuity effects separately but they occur simultaneously and interact and reinforce each other.²⁵ Our conclusion is that GP continuity is of profound importance to the whole of the NHS.

2. Internal systems of practice organisation

There has been a striking absence of research on arrangements within different practices. However, the internal system of organisation inside general practices varies considerably and greatly affects how much continuity of care patients receive. There are two main systems:

Pooled list system

The pooled list system means all the registered patients are managed as one group and patients may see any doctor in the practice. Staff focus on getting a patient to see any GP. Continuity is not prioritised and is left to patients. Individual GPs do not take long-term responsibility for patients and may not know when seeing a patient if they will see them again. Continuity is usually low as the chance of seeing any one GP depends on the number of GPs in the practice. In a six GP practice, a patient has a one in six chance of seeing any one GP. Patients may remark that: "They never see the same GP twice". Pooled lists are the commonest system of practice organisation in England.

Personal list system

The second system is personal lists.²⁶ The practice list is divided into several separate lists each of which has a GP responsible for the patients' overall care. The staff seek to help the patient see their personal GP when possible. With part-time GPs this is not always possible. This system implements the named doctor requirement. Personal list practices focus on continuity of GP care and foster GPs' sense of responsibility (care), the patient's greatest protection. Both patients and GPs expect to see each other again. Personal lists are used by a minority of general practices.

Whilst personal lists maximise GP continuity no internal system of practice organisation can compensate for a serious shortage of GPs which the DH needs to correct urgently. The US has about 1500 patients per GP and Norway 1200 patients per WTE GP, with good public satisfaction ⁴ whilst we are seeing British GPs working 8 sessions per week having to provide care for more than 2,500 patients.

3. Named GP

The NHS contract requires GPs to give all their registered patients, including children, a named GP who takes overall medical responsibility for them. This is one of the most important initiatives of the Department of Health and Social Care in promoting continuity of GP care and countering the unfortunate 2003 decision which removed personal lists from the NHS GP contract. The contract also requires GPs to inform patients, through their practice website, that they use the named GP system. However, many general practices allocate a named GP but ignore this when arranging consultations.

4. Falling continuity of GP care in the NHS

Sadly, there is strong evidence that patient perceived GP continuity is steadily falling.^{27,28} The NHS patient survey reports that for the first time since 1948 less than half the population thought they had regular GP.²⁹

5. Measuring continuity of GP care inside a general practice

We believe that improving continuity depends on continuity of GP care being measured. We recommend the SLICC (The **S**t **L**eonard's **I**ndex of **C**ontinuity of **C**are). We declare an interest as one of us (DPG) invented it in 1974. The SLICC is the percentage of consultations from all of a GP's list of patients which are with the named GP. It is GP-friendly, intuitive to use, has been used for over 40 years, and is sensitive to changes within weeks. Although much is measured in the NHS, GP continuity is not, except in interested general practices. The SLICC is the only inclusive measurement instrument which uses, every consultation, with every GP, by every patient.

SLICC, readings of over 50% over a year are "good" meaning that the average registered patient is more likely than not to have a consultation with their personal (named) GP whenever they consult around the year. A SLICC score of 75% or more over time is "excellent". We give examples below:

6. How much continuity of GP care is possible in 2021?

As the NHS does not measure GP continuity. We can report only from those general practices volunteering to measure continuity of GP care whom we know. These practices are not a representative sample.

We can report that we now know of general practices valuing and promoting GP continuity in many different parts of the country including for example from the North of England, the South-East and the South- West. The practices vary also in being both big, inner city group practices and rural dispensing practices. Their size varies too between 7,000 and 32,000 and registered patients. Some practices serve affluent populations other socially deprived ones (Socially deprived patients may benefit particularly from the support and co-ordination of care that GP continuity can provide). We

have been privileged to be in touch with general practices interested in GP continuity with populations of about 200,000 and are currently advising several about measuring GP continuity.

Interest in continuity alone is not enough to deliver it. There needs to be a named GP system with the practice staff supporting continuity. Measuring the amount of GP continuity is a strong stimulus to improving it. "If you don't measure it, you can't manage it."³⁰

The amount of GP continuity which we have measured or seen measured using the SLICC varies between 18% and 85%. This means that a patient has either an 82% chance of not consulting with their named GP or an 85% chance of doing so. We usually report whole-practice SLICCs, but the individual GP's SLICCs are highly educational within the practice. All these practices have part-time GPs.

For practical purposes we categorise the whole-practice SLICC score as "good" if it is 50% or more around the year, as this means that a patient has a better than even chance of seeing their named GP every time they consult around the year. If the whole-practice SLICC is 75% or more we categorise it as excellent and have seen figures for group practices in Bristol and Tyneside achieving this. Despite the unrepresentative nature, these practices show that good GP measured continuity is feasible in 2021.

The CQC awards the grade of outstanding to only 4% of general practices, so none are to be expected in a group as small as six. It is interesting, but not significant, that of these six, three have CQC 'outstanding' ratings.

7. The nature of general medical practice

General medical practice is fundamentally different from all the forms of specialist medical practice whilst sharing patients with all of them. It is fundamentally a human rather than technical service. General practice alone accepts all medical problems and takes a whole- person perspective over many years and decades and often within a family context.

One principle is generalism i.e. not dividing patients into categories by the disease group, part of the body, or by their age. Policymakers or specialists sometimes think of generalism through a specialist lens as providing specialist care at a lower level of skill (hospital care outside hospital). The problems patients bring to primary care are much influenced by their previous experiences, lifestyles, and social circumstances. Seeing patients with different problems over time is important in enabling GPs to get to understand patients as people- the life-course theory of an individual patient's life and understanding the patient as a person. The biographical model of consulting is as important as the biomedical and need to be integrated. Understanding behaviour is as important as understanding pathology. All this enables personalised medical care. Without such understanding transactional (superficial) consultations are more likely.

Longitudinal care changes expectations and incentives. Why should a patient divulge an embarrassing confidence to a doctor they do not expect to see again? Why should a GP invest time and energy in a patient for whom they are not responsible and whom they may not know if they will see them again? Caring for a limited number of known patients over time creates important professional incentives for both higher quality care and increases GP job satisfaction.

Caring for a family of patients over time adds interest and understanding and builds relationships. At clinical retirement one of us (DPG) had 7% of all the patients on his personal list in a four-

generational relationship with him. Apart from the many diseases which are familial, knowledge of the family enables some earlier diagnoses and better understanding of the implications of illness in a family.

A GP's sense of responsibility for an individual patient fosters interest and better-quality care.³¹ In the front line of any health service, human relationships matter. We hear stories from GPs in pooled list practices regretting the job is "undoable" and GPs regretting losing the follow up of patients and seeing so many patients who are strangers. The current low morale in general practice is exacerbated by lost GP continuity since GPs in personal list practices have higher job satisfaction. The pooled list system reduces continuity and GP responsibility: the personal list system fosters GP continuity and responsibility.

Every general practice we know which has reported 'good' or 'excellent' GP continuity has used the SLICC within a partnership model, where GP partners, as leaders, both see patients and integrate the understanding of their patients' needs into practice management.

8. Ways of improving GP continuity of care

Personal lists are not used more because many practices do not know about them and unknowingly continue using pooled lists. They are not taught systematically in GP training. There are myths that they mean doctors being perpetually on call or cannot work with part-time GPs. Many GPs believe that NHS policy-makers do not value GP continuity and several NHS initiatives have reduced GP continuity.

How best to improve GP continuity? In Norway the national GP contract has been based on GP personal lists since 2001 with high patient and GP satisfaction.^{32,33,34}

After 40 years studying continuity of GP care, we believe that personal lists are the best system. They do not cost more to run and should be systematically encouraged. We are currently advising several group practices how to use them.

RECOMMENDATIONS TO THE SELECT COMMITTEE ON HEALTH AND SOCIAL CARE

That the Select Committee should advise the DHSC to:

RECRUITMENT/RETENTION

- **Recruit/retain enough GPs to ensure an average list size of 1500 patients per WTE. [Norway provides enough GPs for 1200 patients per WTE GP].^{33 34}**

RESEARCH

- **Commission a randomised trial on improving GP continuity.**
- **Commission research on the advantages and disadvantages of personal and pooled lists.**
- **Commission research to establish the value of GP continuity to the whole NHS.**

INTERNATIONAL MODEL

- Explore why and how Norway introduced personal lists (RGPs) for all GPs.

OPERATIONALISE A POLICY SUPPORTING GP CONTINUITY

- Include statements in NHS policy valuing GP continuity, as for continuity of midwifery care, in the *NHS Long-term Plan*.
- Implement the existing NHS GP contract for the Named GP.
- Mandate the manufacturers of GP clinical systems to integrate measures of GP continuity and make them available to the practices.
- Include continuity of care in NHS statistics.
- Support the partnership model of general practice as an important form of leadership in the NHS.
- Incentivise the use of personal lists in general practice.

SITE VISIT

- That the Select Committee considers visiting the St Leonard's Research Practice, Exeter, where it will be most welcome.

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