Research summary November 2018

## Improving access and continuity in general practice Practical and policy lessons

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### About the report

This summarises our key findings and provides a series of recommendations for commissioners and policy-makers on the impact of improved access upon continuity of care.

It sets out the evidence on continuity of care, its impact on clinical outcomes and wider health services, its importance to patients and GPs, and the relationship between improved access initiatives and continuity of care within general practice. It aims to help providers, commissioners and policy-makers maximise the opportunities to improve continuity provided by the additional investment in primary care to support improved access.

The methods we've used are described in more detail – along with an in-depth discussion of the findings and a full set of references – in the accompanying *Evidence review*.

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## Introduction

As the *Improving Access to General Practice* programme rolls out across England – with additional investment intended to deliver 100% coverage of the population by October 2018 – NHS England commissioned the Nuffield Trust to conduct a project to investigate the impact of improved access upon continuity of care.

This report summarises our key findings and provides a series of recommendations for commissioners and policy-makers (page 17). It sets out the evidence on continuity of care, its impact on clinical outcomes and wider health services, its importance to patients and GPs, and the relationship between improved access initiatives and continuity of care within general practice. The report aims to help providers, commissioners and policy-makers maximise the opportunities to improve continuity provided by the additional investment in primary care to support improved access. It examines how to achieve the optimal balance between these two dimensions of care when redesigning services for local populations.

We set out to address four key questions:

- 1 What is the evidence that continuity within general practice benefits patients, or is important to health professionals?
- 2 Which primary care patients are more likely to want continuity of care, and how likely are they to report receiving it?
- **3** How might policy initiatives to improve access affect continuity of care, and to what extent is there evidence of this?
- 4 What factors might best support continuity of care in the context of improved access?

The study combined:

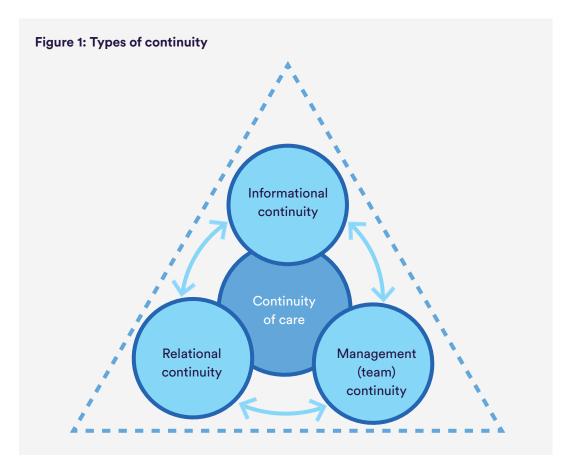
- a rapid literature review
- interviews with nine providers, one commissioner of services, and site visits to two services that are seeking to combine access and continuity
- analysis of data from the GP Patient Survey
- two expert meetings involving clinicians, managers, academics and policy-makers.

The methods are described in more detail – along with an in-depth discussion of the findings and a full set of references – in the accompanying *Evidence review*.

## Definitions

Continuity of care most commonly refers to the ongoing, therapeutic relationship between an individual clinician and patient (relational continuity), although the term can also describe the coherence and consistency of care within and between teams (management continuity), and knowledge of patients' care and situation (informational continuity) (Freeman and Hughes, 2010; Haggerty and others, 2003). These three types of continuity are interdependent (Figure 1). Our research suggests that for some patients and clinicians these types of continuity can, at times, be substituted, and together contribute to a patient's experience of continuity; as a result there is a need for further work to explore the impact of management and informational continuity, and the relationship between all three.

'Access' does not lend itself easily to definition either, but can cover physical access, timely access, convenience, and includes choice of practice and professional (Boyle and others, 2010).



## **Policy context**

Successive policies have promoted improved access to general practice. In October 2013 the Prime Minister's Challenge Fund was launched, with an initial £50 million to invest in initiatives to improve access to general practice. This was later renamed the General Practice Access Fund (GPAF) and a further £100 million was added in 2015/16. The programme aimed to improve access to GP services, with the intention that everyone in the country should have easier and more convenient access, including appointments at evenings and weekends (NHS England, 2017). Implementation of the GPAF was intended to contribute to wider transformational change, with general practice playing a stronger role as part of a wider set of integrated services, leading to improved public and patient satisfaction in access to general practice services.

Through the GPAF and the new models of care vanguard programme, NHS England has sought to test different ways of delivering primary and secondary care services to better meet the needs of patients. GPAF schemes included innovative approaches to improving access to general practice services, such as technology-enabled access through online appointments and apps; direct access to services such as physiotherapists and pharmacists; and care navigation to support patients to get the right service for their needs (NHS England, 2015; NHS England, 2016a). Vanguards have sought to build upon GPAF approaches, including new models of primary care working with secondary care.

The *NHS Operational Planning and Contracting Guidance 2017–19* (NHS England, 2016b) included the ambition that 100% of the country should have extended access to GP appointments at evenings and weekends by March 2019. The refreshed guidance published in February 2018 brought delivery of this forward to October 2018 (NHS England, 2018).

Although continuity of care has been recognised as being important by policymakers, it has not received the same attention or prominence as initiatives around extended access. Several policy documents have stated the importance of continuity, most recently the *General Practice Forward View* (NHS England, 2016c). However, few have set out specific targets, and initiatives have not been accompanied by significant additional funding. Proactive care planning was incentivised as part of the Enhanced Services Avoiding Unplanned Admissions policy in 2016 but, one year after implementation, the sum was included in the global sum received by practices. The inclusion in the GP contract in 2014/15 of the 'named GP' for patients over 75 was rolled out to all patients from April 2015 (NHS England, 2014). However, an evaluation of its impact on the use of the wider health service suggested no effect upon either the numbers of referrals to specialist care or the numbers of common diagnostic tests (Barker and others, 2016).

Alongside these, other policies have been driving change, including initiatives to promote integration, urgent care, self-care and the use of pharmacists, as well as better use of the wider workforce and the uptake of technology, such as online consultations.

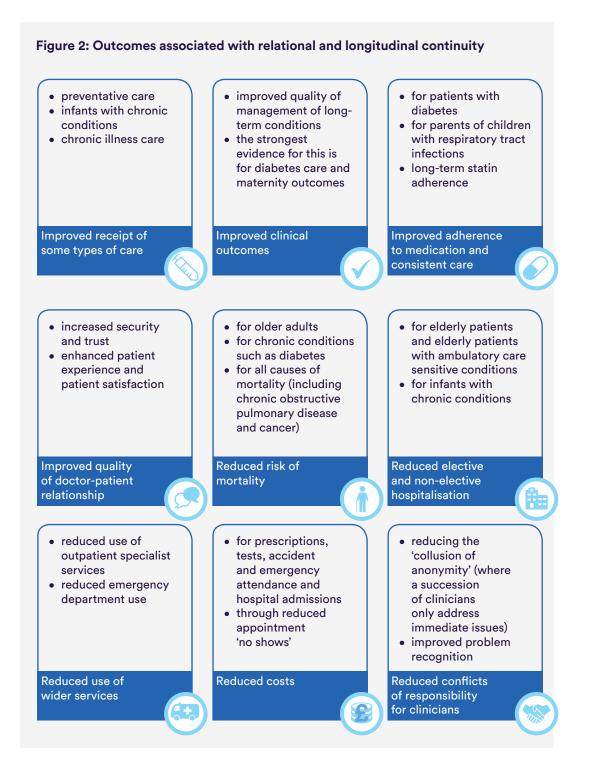
## Key findings

There is a large body of evidence to demonstrate that continuity of care delivers significant benefits to patients and staff. There is, as yet, little evidence to help us understand the impact that improved access has had on continuity of care, or the precise inter-relationship between continuity and access. However, as we show in this report, there are a considerable number of strategies that can be adopted to promote continuity of care, while improving access.

# What is the evidence that continuity within general practice benefits patients, or is important to health professionals?

Relational continuity of care in general practice is associated with a significant number of benefits to individuals and wider health systems, including: better clinical outcomes for an array of conditions; reduced mortality; better uptake of preventative services; better adherence to medication; reduced avoidable hospital admissions; and better overall experience of care among patients who prefer continuity and are able to obtain it (see Figure 2).

Patients may not see continuity as an end in itself, but may value, for instance, the trust, recognition and deep understanding of their situation that such a relationship enables. Analysis of the 2017 GP Patient Survey shows a strong positive relationship between level of trust in a GP and likelihood of both having, and managing to see, a preferred GP. However, the causal relationship is unclear. High-trust patient-doctor relationships support shared decision-making, improve adherence to treatment, and enhance patient satisfaction. Patients who are vulnerable and have complex needs particularly benefit from a known and trusted health professional to coordinate care on their behalf.



Sources: Enlow and others, 2017; Saultz and Lochner, 2005; Cowie and others, 2009; Baird and others, 2018; Alazri and others, 2006; Brookes-Howell and others, 2014; Warren and others, 2015; Tarrant and others, 2010; Levene and others, 2018; Cabana and Jee, 2004; Nutting and others, 2003; Adler and others, 2010; Maarsingh and others, 2016; Leleu and Minvielle, 2013; Worrall and Knight, 2011; Wolinsky and others, 2010; Lustman and others, 2016; Pereira Gray and others, 2018; Tammes and others, 2017; Bankart and others, 2011; Barker and others, 2016; Nyweide and others, 2013; Hansen and others, 2013; Katz and others, 2015; Freeman and Hughes, 2010.

Relational continuity is seen by many GPs as a core element of their professional role. It generates a sense of professional responsibility towards patients and builds deep knowledge to support efficient consultations about complex problems (Hjortdahl, 1992; Hjortdahl and Borchgrevink, 1991). Providing relational continuity can be valuable for patients with unresolved problems, but may also prevent patients from having a 'fresh pair of eyes' to interpret persistent symptoms. We have identified options for addressing this issue (see the *Evidence review* for details).

Informational and management continuity may be sufficient for some patients with straightforward physical conditions, and for patients with ongoing conditions it mitigates the need for them to repeat their story. Turner and colleagues (2007) report that individuals with minor, familiar symptoms are willing to wait an extra 0.9 days for relational continuity and an extra 1.6 days for informational continuity, and that patients attending a routine check-up are willing to wait 4.2 days for relational continuity and 7.8 days for informational continuity.

### Which primary care patients are more likely to want continuity of care, and how likely are they to report receiving it?

Patients vary in their desire for continuity and the trade-offs they make between speed of access, convenience and continuity. This varies according to their personal characteristics, the acuity of their health problem, and the nature of their conditions (Figure 3).

Relational continuity is the form of continuity most valued by patients – as it is linked to trust and quality of communication. However, some patients don't know how to get continuity, some do not want it, and some clinicians consider informational continuity to be sufficient in certain cases; particularly for those with minor, familiar problems.

There is evidence that relational continuity is more highly valued by people with chronic physical and psychological conditions, older people, women, and those with poorer health status (Figure 4, page 11) (Aboulghate and others, 2012; Nutting and others, 2003). There is also evidence that children, the elderly and those with long-term conditions are particularly likely to benefit



from receiving relational continuity (Cowie and others, 2009; Enlow and others, 2017; Brookes-Howell and others, 2014).

There appear to be inequalities in who receives continuity. Our analysis of the GP Patient Survey suggests that some, including marginalised groups, may benefit from continuity more than other groups and may find getting continuity more difficult. For example:

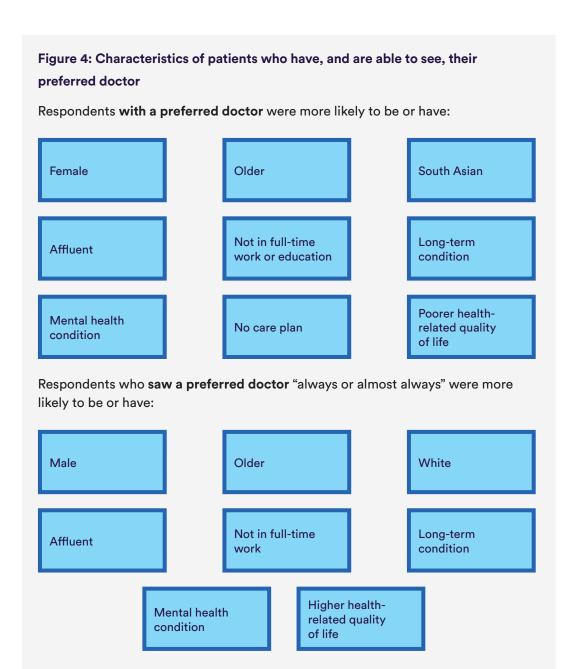
• those from Indian, Pakistani and Bangladeshi ethnic groups are more likely to have a preferred GP compared with British and Northern Irish

respondents (54–55% versus 51%), but are less likely to see a preferred GP (17–25% versus 38%)

• patients registered to practices in major urban conurbations are significantly less likely to see their preferred GP than those from rural villages. This significant variation persists even after adjusting for practice size and a range of other practice characteristics.

Methods to identify patients who would benefit from continuity have traditionally involved risk stratification using data on hospital admissions, although this approach has rarely been used on data held by general practices. There is not yet a sufficiently comprehensive understanding – either from existing published evidence or through practices' patient profiling – of which patients and groups are likely to experience better outcomes from continuity in general practice but currently find getting continuity more difficult. Further research in this area may enable commissioners and practices to target continuity to those people who are most likely to benefit from it.

At the individual practice level, there is wide variation in reported continuity even after adjusting for a range of demographic factors. Results of the 2017 GP Patient Survey show that for some practices, almost all their respondents stated that they saw or spoke to their preferred GP when they wanted to; while in others, no respondents did. This demonstrates the powerful influence that practice-based factors can have on this dimension of care and indicates current inequalities in continuity. Policy-makers are hopeful that working at scale may provide the opportunity to reduce this variation and improve patient experience of continuity.



NB. indicators within the GP Patient Survey are used as proxy measures for relational continuity.

Source: 2017 GP Patient Survey.

### How might policy initiatives to improve access affect continuity of care, and to what extent is there evidence of this?

The evidence about the relationship between initiatives to improve access and continuity of care is limited. Recent evaluations of initiatives to improve access, including the GP Access Fund, have not explicitly evaluated their impact on continuity (NHS England, 2015; NHS England, 2016a).

Within practices, for patients who have a preferred GP, the percentage who get to see that GP declined from 42% in 2012 to 33% in 2017. However, analysis of the GP Patient Survey suggests there is no consistent, clear association between opening hours (and uptake of initiatives to increase opening hours) and continuity, as measured by patients' ability to see their preferred GP. It is difficult to disentangle the effect of wider factors and policy initiatives from any effect on continuity of initiatives to improve access. Wider factors that are likely to be influencing continuity of care include changes in: levels of funding; GP workload (Jeffers and Baker, 2016; Gibson and others, 2017); practice skill mix (Hill and Freeman, 2011; Ridd, 2006); and contractual terms (e.g. locum, salaried and part-time working) (Robinson and others, 2014; Panattoni and others, 2014; Aboulghate and others, 2012).

Initiatives to improve access may be enabled by working at scale. However, the impact of working at scale on continuity, and the interplay between access, scale and continuity, is unclear. Patients at larger practices are significantly less likely to see their preferred GP, but less is known about the impact of practices working within larger federations or networks. Our case studies (see the accompanying *Evidence Review*) suggest that when commissioning services across larger populations, commissioners should be mindful that the local knowledge and operational systems that have been developed across small groups of practices – to support continuity in the context of improved access – may be lost if the services are scaled up too far.

Based on the current evidence, it is not possible to give a definitive recommendation on the scale at which primary care should be organised to best support the delivery of both improved access and relational continuity. However, commissioners should ensure that services (such as access hubs) are delivered in ways that maximise the opportunity to secure continuity of care. For example, it may be possible to commission for larger populations of 200,000 or more patients through careful design with providers on the location and number of access hubs.

There is a particular challenge when different types of primary care services are integrated. Some urgent care services may prioritise access, but our research suggests that some of the practical challenges that disrupt continuity can be overcome – at least for management and informational continuity – if methods to maintain continuity are 'designed into' the delivery of improved access.

## What factors might best support continuity of care in the context of improved access?

We identified three areas of the design and organisation of general practice that have the potential to support the delivery of continuity in the context of improved access (a more detailed list of potential interventions is in Figure 6 on page 16):

- Service and organisational design. Services are most likely to succeed at delivering both convenient access and continuity for selected patients when they are organised in a way that enables them to:
  - take advantage of scale, for example employing a broad skill mix, building a range of different care pathways, and investing in relevant technology
  - develop in a way that does not lose detailed knowledge of complex patients; that maintains clinicians' skills; that takes local policies and pathways into account; and that ensures wider local services are available to meet patient needs.

Our case studies suggest that current policy to develop primary care networks would result in organisations at a scale that could include the above characteristics, and would accommodate the relationships and local knowledge we identified as being particularly useful for supporting continuity. As clinical commissioning groups (CCGs) commission extended access services, they could consider encouraging providers to develop access hubs at the scale of primary care networks in order to combine improved access with characteristics that support continuity.

Whatever the size, the way in which clinics and appointments are arranged will influence the ability to provide continuity. Practices can also support continuity by analysing who currently has difficulty obtaining continuity and who may benefit from continuity, and using booking systems (Barker and others, 2016; Alazri and others, 2007) and care navigators (NHS England, 2016c) to ensure continuity is prioritised where appropriate.

- Workforce redesign and professional behaviours. Practices or groups of practices can broaden their skill mix and introduce micro-teams (small groups of clinicians) to promote continuity. To do this, they will need support for training, role development, and operational systems and processes to support continuity. The use of micro-teams to take responsibility for an allocated list of patients, and of receptionists to appropriately direct patients and manage clinicians' appointments, are widely suggested to have the potential to support continuity (Primary Care Foundation, 2018; Ware and Mawby, 2015; Freeman, 2013; Jeffers and Baker, 2016).
- Digital and health care technologies. GPs generally recognise that electronic medical records are an essential clinical tool and enabler of continuity of care (Bouamrane and Mair, 2013). The use of email (Moyer and others, 2002; Patt and others, 2003; Car and others, 2004), video (Jeffers and Baker, 2016) and telephone (Locatelli and others, 2014; Ohl and others, 2013) consultations has the potential to improve access (Atherton and others, 2018), better supporting the whole pathway of care and helping to maintain the relationship between patient and clinician. However, the effect of these technologies on continuity in practice has yet to be sufficiently well researched (Atherton and others, 2012; Jeffers and Baker, 2016) and may result in duplication and some additional workload (Newbould and others, 2017). To maximise the potential of new digital technology, continuity of care will need to be an explicit goal of implementation.

Most initiatives – whether covering service design, the workforce or technology – may support different types of continuity, as shown in Figure 5, which demonstrates how electronic patient records can potentially benefit relational, management and informational continuity.

#### Figure 5: How electronic patient records can support continuity

Relational

An ongoing therapeutic relationship between a patient and one or more providers

- Analysis: Software that analyses clinical data and patterns of service use can help to identify who will benefit most from continuity and help plan services accordingly.
- **Prompts**: Electronic records can be 'tagged' so that booking systems and receptionists ensure that those that will benefit most from continuity do receive it.

#### Management

A consistent and coherent approach to the management of a health condition that is responsive to a patient's changing needs

• **Consistent care**: Electronic transfer of records between services can ensure consistent care - this may be particularly important in reducing the effects of a more fragmented primary care landscape.

Informational

The use of information on past events and personal circumstances to make current care appropriate for each individual

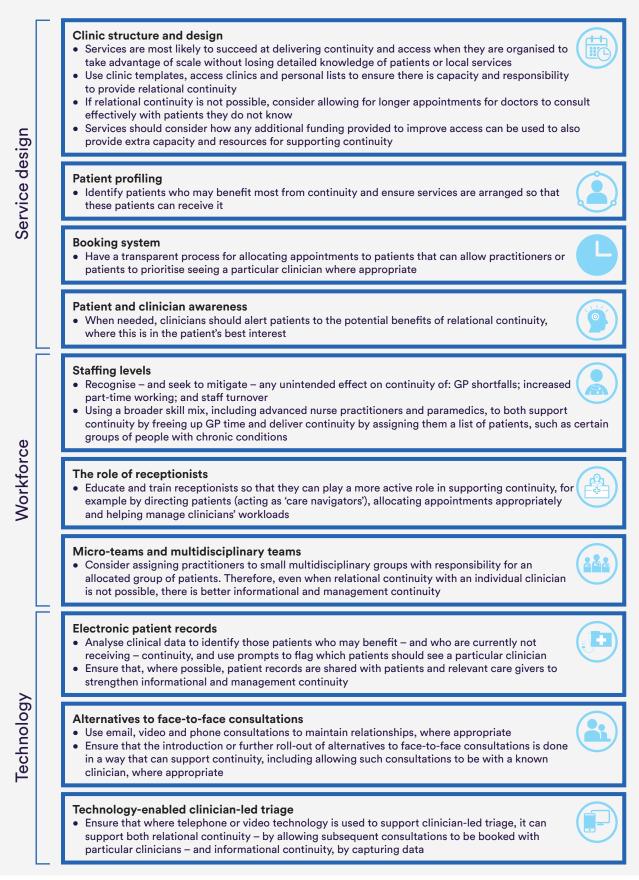
- **Shared records**: Shared records can allow a clinician to have a better understanding of a patient who they have never met before (i.e. partly mitigate where relational continuity is not possible).
- **Patient access:** Giving patients access to their own record can help in sharing medical and care history between services and settings, and contribute to more consistent, joined-up care.

Source: Freeman, 2013; Baker and others, 2014; NHS England, 2016c; Rosen, 2018

The effect on continuity of any initiative is likely to be largely determined by the way it is designed and implemented. A common theme from our research is that any local initiative is most likely to support continuity if it:

- has considered implications for continuity from the outset
- includes arrangements to identify patients who need continuity
- is sufficiently flexible to allow for different patient needs and preferences
- has clinician and patient buy-in
- is transparent and explicit about its purpose.

#### Figure 6: Summary of initiatives that can support continuity and improved access



## Recommendations

This study has identified some compelling reasons for an increased focus on continuity by policy-makers, commissioners and service providers. Central to them are: the wide range of improved outcomes associated with continuity; apparent inequalities in who receives continuity; and the added value to professionals of delivering continuity of care.

Opportunities exist to support continuity while delivering improved access through service design, reshaping the workforce, and technology. Patients and professionals will need to help shape these initiatives and determine the appropriate balance between access and continuity.

Improving access to general practice services has begun to transform the way patients access these services, and has encouraged GPs to group together and deliver care at scale. As extended access services continue to roll out over the forthcoming months, there are multiple opportunities for commissioners and policy-makers to embed continuity of care as a core feature of all modes of access. Below are recommendations and suggested actions for commissioners and policy-makers. We also include suggested topics for future research, as this report has demonstrated that this is an area with significant gaps in the evidence base.

#### For commissioners

- **Build local knowledge**. As well as the risk and disease profile of their population, commissioners need a detailed understanding of the patient experience. This should include the level of continuity within their area and the populations most at risk from not receiving continuity. This analysis could be fed back to CCGs and their practices with targets for improvement.
- **Support providers to design services that include continuity**. Provide practical support to practices to implement the approaches described in Figure 6, including:

- ensuring the design of service provision including hubs, local care pathways and policy objectives – can support continuity of care for those patients who would benefit from receiving it
- supporting workforce initiatives to broaden skill mix and developing skills in team-based working in order to provide continuity in the context of improved access
- supporting the introduction of digital technology to enable continuity where it is wanted by patients or needed for better outcomes.

#### For policy-makers

- **Balance priorities**. National bodies need to ensure they give an appropriate level of prominence to continuity in the development, communication and monitoring of policies and planning guidance.
- **Monitor continuity**. To supplement insights from the GP Patient Survey, NHS England should support the development of systematic methods to identify patients who need continuity and to better measure the extent of the continuity they receive.
- **Support improvements in the delivery of continuity**. Draw on the good practice examples in this report to inform initiatives to improve continuity. Methods used by the NHS England improvement team to raise awareness of the '10 high impact actions for general practice' may also be effective at supporting practices to combine access, continuity, workforce innovation, technology and scale.
- Workforce. Health Education England, NHS England and the Royal Colleges should support the development of a broader skill mix within general practice so it has the capacity and capability to deliver both access and continuity. Moving towards competency-based, rather than rolebased, planning of staff, and developing skills in multi-professional teams, may support this objective.
- **Policy coherence**. National bodies should implement policies such as the General Practice Forward View, Integrated Urgent Care initiative and

general practice being increasingly delivered 'at scale' – in ways that are conducive to supporting both access and continuity.

- **Regulation**. The Care Quality Commission should include questions during practice visits about how the practice, multidisciplinary team or clinic provides continuity.
- **Public awareness**. NHS England should consider how it can help practices promote an increased awareness of the benefits of, and how to achieve, continuity.

#### Potential topics for future research

- **Patient profiling**. Further research is needed in this area to enable commissioners and practices to target continuity to individuals who are most likely to benefit from it. Future research should test and evaluate, in terms of feasibility and outcomes, different approaches to identifying patients who will achieve better outcomes if they receive continuity of care and who currently miss out.
- **Understanding continuity**. Future studies should seek to understand the relative impact and interdependence of relational, management and informational continuity on outcomes.
- **Team working**. More work is needed to understand the impact of team working within general practice, including multidisciplinary and micro-team models, on experience of continuity and clinical outcomes.
- Non-medical staff. More should be done to explore the impact on job satisfaction for non-medical staff of delivering continuity of care to patients.
- **Receptionists**. Future work should seek to support, where appropriate, the opportunities to develop the role of receptionists in supporting continuity.
- Working at scale. With general practice increasingly being delivered at larger scale, both through increased practice sizes and federation and network models, future research should evaluate the longer-term impacts of working at scale on continuity, patient experience and wider outcomes.

## References

Aboulghate A, Abel G, Elliott M, Parker R, Campbell J, Lyratzopoulos G and Roland M (2012) 'Do English patients want continuity of care, and do they receive it?', *British Journal of General Practice* 62(601), 567–75.

Adler R, Vasiliadis A and Bickell N (2010) 'The relationship between continuity and patient satisfaction: a systematic review', *Family Practice* 27(2), 171–8.

Alazri M, Heywood P, and Leese B (2007) 'How do receptionists view continuity of care and access in general practice?', *The European Journal of General Practice* 13(2), 75–82.

Alazri M, Neal R, Heywood P and Leese B (2006) 'Patients' experiences of continuity in the care of type 2 diabetes: a focus group study in primary care', *British Journal of General Practice* 56(528), 488–95.

Atherton H, Brant H, Ziebland S, Bikker A, Campbell J, Gibson A, McKinstry B, Porqueddu T and Salisbury C (2018) 'Alternatives to the face-to-face consultation in general practice: focused ethnographic case study', *British Journal of General Practice* 68(669), e293–300.

Atherton H, Sawmynaden P, Sheikh A, Majeed A and Car J (2012) 'Email for clinical communication between patients/caregivers and healthcare professionals', *Cochrane Database of Systematic Reviews* 11, CD007978.

Baird B, Reeve H, Ross S, Honeyman M, Nosa-Ehima M, Sahib B and Omojomolo D (2018) *Innovative Models of General Practice*. The King's Fund.

Baker M, Thomas M and Mawby R (2014) *The Future of GP Out of Hours Care. Part one: an RCGP position statement*. Royal College of General Practitioners. www.rcgp.org.uk/policy/rcgp-policy-areas/out-of-hours.aspx.

Bankart M, Baker R, Rashid A, Habiba M, Banerjee J, Hsu R, Conroy S, Agarwal S and Wilson A (2011) 'Characteristics of general practices associated with emergency admission rates to hospital: a cross-sectional study', *Emergency Medicine Journal* 28, e558-63.

Barker I, Lloyd T and Steventon A (2016) 'Effect of a national requirement to introduce named accountable general practitioners for patients aged 75 or older in England: regression discontinuity analysis of general practice utilisation and continuity of care', *BMJ* Open 6(9). Bouamrane MM and Mair FS (2013) 'A study of general practitioners' perspectives on electronic medical records systems in NHSScotland', *BMC Medical Informatics and Decision Making* 21(13), 58.

Boyle S, Appleby J and Harrison A (2010) *A Rapid View of Access to Care*. The King's Fund.

Brookes-Howell L, Fiona Wood F, Verheij T, Prout H, Cooper L, Hood K, Hasse M, Torres A, Godycki-Cwirko M, Fernandez-Vandellos P, Fjørtoft Ystgaard M, Falk Taksdal T, Krawczyk J and Butler C (2014) 'Trust, openness and continuity of care influence acceptance of antibiotics for children with respiratory tract infections: a four country qualitative study', *Family Practice* 31(1), 102–10.

Cabana MD and Jee SH (2004) 'Does continuity of care improve patient outcomes?' *The Journal of Family Practice* 53(12), 974–80.

Car J and Sheikh A (2004) 'Email consultations in health care: 1. scope and effectiveness', *BMJ* 329, 435.

Cowie L, Morgan M, White P and Gulliford M (2009) 'Experience of continuity of care of patients with multiple long-term conditions in England' *Journal of Health Services Research and Policy* 14(2), 82–7.

Enlow E, Passarella M and Lorch SA (2017) 'Continuity of care in infancy and early childhood health outcomes', *Pediatrics* 140(1), e20170339.

Freeman G (2013) 'Continuity of Care Toolkit'. Royal College of General Practitioners. www.rcgp.org.uk/policy/rcgp-policy-areas/continuity-of-care.aspx.

Freeman G and Hughes J (2010) *Continuity of Care and the Patient Experience*. The King's Fund.

Gibson J, Sutton M, Spooner S and Checkland K (2017) 'Ninth GP Worklife survey', Policy Research Unit in Commissioning and the Healthcare System. http://blogs.lshtm.ac.uk/prucomm/files/2018/05/Ninth-National-GP-Worklife-Survey.pdf.

Haggerty JL, Reid RJ, Freeman GK, Starfield BH, Adair CE and McKendry R (2003) 'Continuity of care: a multidisciplinary review', *BMJ* 327, 1219.

Hansen AH, Halvorsen PA, Aaraas IJ and Førde OH (2013) 'Continuity of GP care is related to reduced specialist healthcare use: a cross-sectional survey', *British Journal of General Practice* 63(612), 482–9.

Hill A and Freeman G (2011) *Promoting Continuity of Care in General Practice*. Royal College of General Practitioners. www.rcgp.org.uk/policy/rcgp-policyareas/continuity-of-care.aspx.

Hjortdahl P (1992) 'Continuity of care: general practitioners' knowledge about, and sense of responsibility toward their patients', *Family Practice* 9(1), 3–8.

Hjortdahl P and Borchgrevink CF (1991) 'Continuity of care: influence of general practitioners' knowledge about their patients on use of resources in consultations', *BMJ* 303(6811), 1181–4.

Jeffers H and Baker M (2016) *Continuity of Care: Still important in modern-day general practice*. Royal College of General Practitioners. www.rcgp.org.uk/policy/rcgp-policy-areas/continuity-of-care.aspx.

Katz DA, McCoy KD and Vaughan-Sarrazin MS (2015) 'Does greater continuity of Veterans Administration primary care reduce emergency department visits and hospitalization in older veterans?', *Journal of the American Geriatrics Society* 63(12), 2510–8.

Leleu H and Minvielle E (2013) 'Relationship between longitudinal continuity of primary care and likelihood of death: analysis of National Insurance data', *PLOS One* 8(8), e71669.

Levene LS, Baker R, Walker N, Williams C, Wilson A and Bankart J (2018) 'Predicting declines in perceived relationship continuity using practice deprivation scores: a longitudinal study in primary care', *British Journal of General Practice* 68(671), e420–6.

Locatelli S, Hill J, Talbot M, Schectman G and LaVela SL (2014) 'Relational continuity or rapid accessibility in primary care?: A mixed-methods study of veteran preferences', *Quality Management in Health Care* 23(2), 76–85.

Lustman A, Comaneshter D and Vinker S (2016) 'Interpersonal continuity of care and type two diabetes', *Primary Care Diabetes* 10(3), 165–70.

Maarsingh OR, Henry Y, van de Ven PM and Deeg DJ (2016) 'Continuity of care in primary care and association with survival in older people: a 17-year prospective cohort study', *British Journal of General Practice* 66(649), e531–9.

Moyer CA, Stern DT, Dobias KS, Cox DT and Katz SJ (2002) 'Bridging the electronic divide: patient and provider perspectives on e-mail communication in primary care', *The American Journal of Managed Care* 8(5), 427–33.

Newbould J, Abel G, Sarah Ball S, Corbett J, Elliott M, Exley J, Martin A, Saunders C, Wilson E, Winpenny E, Yang M and Roland M (2017) 'Evaluation of telephone first approach to demand management in English general practice: observational study', *BMJ* 358, j4197.

NHS England (2013) *GP Access Fund*. www.england.nhs.uk/gp/gpfv/ redesign/improving-access/gp-access-fund.

NHS England (2014) *Standard General Medical Services Contract*. www.england.nhs.uk/gp/gpfv/investment/gp-contract/2014-2015.

NHS England (2015) *Prime Minister's Challenge Fund: Improving access to general practice. First evaluation report: October 2015.* www.england.nhs.uk/wp-content/uploads/2015/10/pmcf-wv-one-eval-report.pdf.

NHS England (2016a) *Prime Minister's Challenge Fund: Improving access to general practice: second evaluation report to September 2015.* www.england.nhs.uk/publication/ prime-ministers-challenge-fund-improving-access-to-general-practice.

NHS England (2016b) *NHS Operational Planning and Contracting Guidance 2017–19*. NHS England and NHS Improvement. www.england. nhs.uk/wp-content/uploads/2016/09/NHS-operational-planning-guidance-201617-201819.pdf.

NHS England (2016c) *General Practice Forward View*. www.england.nhs.uk/ wp-content/uploads/2016/04/gpfv.pdf.

NHS England (2017) *Improving Access to General Practice* - *National slide pack*. www.england.nhs.uk/publication/ improving-access-to-general-practice-national-slidepack.

NHS England (2018) *Refreshing NHS Plans for 2018/19*. www.england.nhs.uk/ publication/refreshing-nhs-plans-for-2018-19.

Nutting PA, Goodwin MA, Flocke SA, Zyzanski SJ and Stange KC (2003) 'Continuity of primary care: to whom does it matter and when?', *The Annals of Family Medicine* 1(3), 149–55.

Nyweide DJ, Anthony DL, Bynum JP, Strawderman RL, Weeks WB, Casalino LP and Fisher ES (2013) 'Continuity of care and the risk of preventable hospitalization in older adults', *JAMA Internal Medicine* 173(20), 1879–85.

Ohl M, Dillon D, Moeckli J, Ono S, Waterbury N, Sissel J, Yin J, Neil B, Wakefield B and Kaboli P (2013) 'Mixed-methods evaluation of a telehealth collaborative care program for persons with HIV infection in a rural setting', *Journal of General Internal Medicine* 28(9), 1165–73.

Panattoni L, Stone A, Chung S and Tai-Seale M (2014) 'Patients report better satisfaction with part-time primary care physicians, despite less continuity of care and access', *Journal of General Internal Medicine* 30(3), 327–33.

Patt MR, Houston TK, Jenckes MW, Sands DZ and Ford DE (2003) 'Doctors who are using e-mail with their patients: a qualitative exploration', *Journal of Medical Internet Research* 5(2), e9.

Pereira Gray DJ, Sidaway-Lee K, White E, Angus Thorne A and Evans PH (2018) 'Continuity of care with doctors – a matter of life and death? A systematic review of continuity of care and mortality', *BMJ Open* 8, e021161.

Primary Care Foundation (2018) *Potentially Avoidable Appointment Audit*. www.primarycarefoundation.co.uk/summary-of-results-so-far.html.

Ridd M, Shaw A and Salisbury C (2006) "Two sides of the coin' — the value of personal continuity to GPs: a qualitative interview study', *Family Practice* 23(4), 461–8.

Robinson C, Harrod M, Forman J, Rosland AM, Tremblay A and Kerr EA (2014) 'Challenges to increasing access and continuity in a large academic medical center implementing PCMH', *Journal of General Internal Medicine* 1.

Rosen R (2018) *Divided we fall: Getting the best out of general practice*. The Nuffield Trust. www.nuffieldtrust.org.uk/research/ divided-we-fall-getting-the-best-out-of-general-practice.

Saultz JW and Lochner J (2005) 'Interpersonal continuity of care and care outcomes: a critical review', *The Annals of Family Medicine* 3(2), 159–66.

Tammes P, Purdy S, Salisbury C, MacKichan F, Lasserson D and Morris RW (2017) 'Continuity of primary care and emergency hospital admissions among older patients in England', *The Annals of Family Medicine* 15(6), 515–22.

Tarrant C, Dixon-Woods M, Colman AM and Stokes T (2010) 'Continuity and trust in primary care: a qualitative study informed by game theory', *The Annals of Family Medicine* 8(5), 440–6.

Turner D, Tarrant C and Windridge K 2007) 'Do patients value continuity of care in general practice? An investigation using stated *preference discrete choice experiments', Journal* Health Services Research and Policy 12, 132–7.

Ware J and Mawby R (2015) *Patient Access to General Practice: Ideas and challenges from the front line*. Royal College of General Practitioners. www.rcgp.org.uk/policy/rcgp-policy-areas/access-to-general-practice. aspx.

Warren JR, Falster MO, Tran B and Jorm L (2015) 'Association of continuity of primary care and statin adherence', *PLoS One* 10(10), e0140008.

Wolinsky F, Bentler S, Liu L, Geweke J, Cook E, Obrizan M, Chrischilles E, Wright K, Jones M, Rosenthal G, Ohsfeldt R and Wallace R (2010) 'Continuity of care with a primary care physician and mortality in older adults', *The Journals of Gerontology: Series A: Biological Sciences & Medical Sciences* 65(4), 421–8.

Worrall G and Knight J (2011) 'Continuity of care is good for elderly people with diabetes: retrospective cohort study of mortality and hospitalization', *Canadian Family Physician* 57(1), e16–20.

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