

What a Pandemic Reveals about the Implementation of High Quality Primary Care

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Summary

Pandemics expose vulnerabilities and uncover possibilities.

The COVID-19 pandemic exposes vulnerabilities from:

- Reductionist, commodified misunderstanding of what is most valuable about primary care
- A fragmented system that venerates vertical over horizontal and whole systems integration
- Payment and administrative burden divorced from value.

The pandemic uncovers possibilities to:

- Understand and support primary care as a force for integration:
 - A first contact point of connection for being known as a whole person and community member
 - A vehicle for prioritizing, personalizing, providing and coordinating care
 - Part of a larger evolution toward commonality, sustainability, and equity
- Systematically generate generalist knowledge
- Re-purpose administrative overfunding toward primary health care and public health
 - Invest in infrastructure for integrated primary health care and public health
 - Implement technology in the context of relationships
 - Prospectively paying primary care to support relationships, capability, and flexibility
 - Implementing high value primary care as a commons for the collective good

The current moment is ripe with loosened connection to a fragmented and commodified health care system that is past its time. Long-term investment in primary health care will prepare us for ongoing and future pandemics, and add much-needed resilience, equity, and personal connectedness to a currently brittle, depersonalized, fragmented system.

Introduction

Pandemics expose vulnerabilities. They also bring to light what is possible if we allow ourselves to become unstuck.

We are living through a time of many pandemics: The slow burn of obesity,¹⁻³ diabetes,⁴
⁷ and multimorbidity.⁸⁻¹⁰ The multigenerational momentum of the rich getting richer, and the poor getting poorer, as structures and deeply-ingrained individual and societal conditioning create inequitable opportunity.¹¹⁻¹³ The torrid pace of COVID-19 and the repercussions of our ever-changing attempts to stem its surge.¹⁴⁻¹⁸ The cynically fanned flames of greed, anger and fear that — like selfless love¹⁹⁻²² — are even more contagious than coronavirus.

All these crises meet the pandemic criterion of occurring over a wide geographic area and affecting an exceptionally high proportion of the population. But we view them with very different senses of urgency. The degree to which we feel personally affected, or have gotten used to them — just as we have accommodated to such long-standing crises as climate change,²³ classism,²⁴ and racism,²⁵⁻²⁷ — creates very different senses of urgency. This chapter focuses on the COVID-19 pandemic as an urgent and crystallizing lens for revealing important and actionable truths about what is needed to implement high-quality primary care.

Thirty-two years ago, I finished patient care late on a Friday afternoon. Rushing toward the back hallway door, trying for once to be on time for dinner with my family, I was halted by the distant look on the face of the social worker who did behavioral counseling for our family practice.

I said, “Eileen, you’re standing there with a faraway look in your eyes.”

She replied, “I think I just figured out what I want to do with the rest of my life.”

A statement like that is as good a reason to be late for dinner as any patient urgency. I stopped and waited. She continued, “I’m going to work for people whose lives have been touched by cancer.”

I shuddered, “Why would you want to do that?”

“I spend most of my days trying to get people unstuck. They hold on so tightly to things that give them a small short-term sense of security. But in the long run, these attachments hold people back.” She paused and stared me against the wall, “People who just got a cancer diagnosis are unstuck from everything.”

It took Eileen Saffran more than a year to interactively refine her vision, fundraise, and implement it, but The Gathering Place now is a community for people whose lives have been touched by cancer.²⁸

The cancer that is COVID-19, and our rupturing response, spreading through our society has many people and institutions unsettled, but also potentially unstuck. Living in a world that few of us ever imagined is allowing our imaginations to consider and action on possibilities that only months ago seemed fanciful. But the need for a sense of security, even one that ultimately holds us back, is strong, and the moment for change is fleeting.²⁹

Carpe diem. Respice ad futurum. It is time to seize the day, with an eye on the future.

Vulnerabilities exposed by the pandemic

The pandemic reveals vulnerabilities to which we otherwise are inured during the illusion of stable times.

Reductionist misunderstanding of what is most valuable about primary care

Jessica grew up in a working class family but found that she and her husband each needed to work two jobs to keep their three children in shoes and backpacks and (later) cellphones. She became depressed and anxious after he died. She developed obesity, hypertension, type 2 diabetes, arthritis, and then chronic low back pain. For each problem, she got optimized evidence-based care from a different specialist (except for her obesity and sense of despair, which no one seemed to want to address). She struggled to pay for and take the nine medications prescribed by 5 non-communicating regular doctors and the occasional urgent care or emergency clinician. When pain finally made her lose her housekeeping job and her health

care insurance, she decided to invest \$120/month for a family subscription to a direct primary care doctor.

Jessica and her new doctor spent their first hour together looking behind the surface symptoms and diagnoses. She later described feeling a growing sense of safety during that initial and subsequent visits. Together, she and her primary care doctor began to unpack her health and illness journey in the context of her life story, moving beyond treating her diseases and symptoms at face value. The immediate result was reducing her medications from nine to four — none were the first line treatment for any disease, but each provided some possible help across her multiple problems. Over many in-person and remote visits for herself and her children, Jessica and her doctor realized how grief and loneliness had changed her life. Based on a suggestion by the doctor, she decided to join a volunteer group with her children.

At her next visit she was off her pain medication, and looked transformed, saying how good she felt helping others and spending time with her children. Over the course of the next 6 months, she made friends and rediscovered her old passion for dancing. She connected with her new friends, lost weight and gained fitness. Her blood pressure and diabetes improved, as did the pain. Her depression abated as meaning returned. In Jessica's own words, she got her life back.

When “the COVID” started hitting her friends (colleagues and residents) at the group home where she now worked, Jessica’s anxiety flared back. Information from her doctor reduced the anxiety and helped keep her and her charges safer. But knowing she could call her personal physician helped even more. Her sense of safety returned, and her doctor was surprised and reassured by the order he saw in her home during telehealth encounters that felt like mini-home-visits.

Our medico-industrial complex has made tremendous progress by dividing complicated problems into their component parts.³⁰⁻³² But, as Jessica’s story illustrates, complex health and health care problems are not solved by optimizing their component parts.³³⁻³⁶ Solving complex problems requires discernment across multiple levels, working with openness and humility, focusing effort on the apparently most fruitful endeavor, observing, learning, refocusing,

connecting, integrating, iterating between the parts and the whole — in short, the generalist approach epitomized in high quality primary care that is set up to take time with people.³⁷⁻⁴⁰

At the start of the pandemic, the health system problems of fragmentation,³⁵ inequity,^{13,41} and low value⁴² were hidden or lacked salience for many. But the pandemic reveals how chronic under-investment in health care as a relationship, and over-investment in healthcare as a commodity,⁴³⁻⁴⁸ cause illness through compromised ongoing health care,⁴⁹ and by exacerbating inequities^{50,51} in social and environmental determinants of health that include unfair access to educational opportunity, living wage jobs, and safe and advantageous environments.⁵²⁻⁵⁵ Generalist knowledge and ways of knowing are needed now to iteratively prioritize attention and bring together different ways of knowing particulars to create an integrated whole.^{56,57} The fragmented, impersonal, often inaccessible response to the pandemic brings to light the need for primary care to contextualize acute, chronic, preventive and mental health care by knowing the person in their family and community context.⁵⁸

The same predominant mental model that values narrow expertise over expansive wisdom^{59,60} has led to misunderstanding what is important about primary care.^{39,61,62} Yes — primary care provides the first line of evidence-based care of chronic illness⁶³⁻⁷⁰ — often multiple chronic illnesses⁶⁸⁻⁷¹ — that are commonly seen in primary care,⁷² as well as preventive services,⁷³ acute problems,⁷⁴ mental health,^{75,76} and problems of living.^{75,77} But measuring and rewarding quality for each of these parts individually⁷⁸ misses what is uniquely valuable about the whole of primary care and its relationships.^{61,62}

Primary care, if executed correctly, is a source of integration within an otherwise fragmented system³⁵ — finding one drug and a behavior change that works for three illnesses;³⁷ using an acute concern as a teachable moment for an apparently intractable preventive health behavior change;^{79,80} addressing family issues during half of new patient visits and a quarter of visits by established patients;⁸¹ providing care for a family member other than the identified patient during 18% of visits;⁸² prioritizing and personalizing care based on evolving information for the 25 problems that come up during apparently simple diabetes follow up visits by patients from vulnerable populations.⁸³

This craft of generalism^{37,84-86} has coherence, as evidenced by the single factor emerging from a factor analysis of 11 domains* of care that primary care patients and their clinicians say are what matters about primary care.⁸⁷ Yet, the complex interrelationships between these primary care mechanisms, and how they work together with each other and with other sectors to foster population health, equity, quality, and sustainability are not widely understood, even among those practicing and advocating for primary care.^{41,58,88-95}

Primary care is designed to prevent health crises by promoting health on an ongoing basis. And yet, our fragmented health care system structurally separates mental and physical health care,⁹⁶⁻⁹⁹ crams the most complex functions — integrating, personalizing and prioritizing care for whole people — into 10 minutes,^{74,100} whereas specialists caring for a single disease are allotted three times as much time. Current systems foster fragmentation and minimize the ability of primary care by considering it mostly a vehicle to manage already diagnosed diseases^{101,102} and feed hungry hospitals, rather than a means to scan the entirety of a person's health needs, continually refine what is most useful, and promote healing, health and connection.¹⁰³

For integrated, personalized, accessible, sustainable and effective health care, being known as a person,^{47,104} not just as a disease or a consumer of a service line, matters.^{105,106} There are tremendous benefits to having a first connection with health care that knows the person and that does not pre-specify what the person must be, or have, to show up.¹⁰⁷⁻¹¹¹ Being known by a primary care clinician and practice — a place, person or team of first contact and a comprehensive frame and connection to other resources — is a precious and under-appreciated space in health care that is being squeezed out by commodified views and support and payment systems.¹¹² Being known — as a person, a family, a member of a community — also is an important step toward fairness,^{113,114} and systems based on primary care exhibit less inequity between the advantaged and disadvantaged.^{88,93,115-118}

The COVID-19 pandemic brings to the fore the importance of health care as a relationship, not just a commodity. A COVID-era survey of primary care patients found that the vast majority valued being known, feeling connected, feeling safe to ask anything, being helped

* Accessibility, advocacy, community context, comprehensiveness, continuity, coordination, family context, goal-oriented care, health promotion, integration, and relationship.

to make sense of what's going on.¹¹⁹ A recent study found dozens of ways to invest in relationship, even during remote telehealth visits — physical distancing with social connectedness.¹²⁰

Being known is not just a vital process of primary care. It is an outcome of healing relationships, along with hope and trust.⁴⁷ Healing is fostered in primary care by: abiding (being accessible, being present for major health events, caring actions, commitment to not give up), appreciating power differences (partnering, educating, exhorting), and valuing (a non-judgmental stance, connecting, and presence through full attention, attending to the person's illness as well as the disease, and by suffering with the patient).^{47,121,122} When primary care focuses first on the person, and then does whatever is most needed based on that, healing connections are forged. But the current organization and understanding of health care, exposed by the COVID-19 pandemic, is blind to these healing connections.

In a recent national survey,¹¹⁹ patients said:

I am very happy that my doctor has a personal relationship with me, knows about my life, my current issues (non-medical), and cares about how I am doing.

I greatly appreciated my doc proactively sending out an email to all his patients at the beginning and twice since letting us know the concerns with our specific chronic illness and what we need to do to protect ourselves. This has a lot to do with why I trust him so much.

I can call any time. That's important. Especially during COVID.

I have a greater sense of well-being and safety by having a PCP.

During the COVID-19 pandemic, one physician contrasted his ongoing experience in seeing patients in the rural practice he started more than two decades ago, with his more recent experience in developing standalone telehealth services for a large integrated healthcare system.

He said, "I had one patient in my practice who got really sick with COVID-19. It was at the earliest stage of the pandemic locally. I know him well and ended up treating him entirely remotely. We did a virtual visit, and he had suggestive symptoms. But at that point, local testing was restricted only to inpatients and highly selected outpatients. He didn't meet the criteria – he had mild symptoms and was less than 60 years old. We started a telephone contact system. My staff or I call patients on a regular basis that we are concerned about. We called this patient

daily. He worsened, and I sent him to the emergency department where he was admitted and eventually put onto a ventilator. His wife decompensated with stress and anxiety. I did virtual visits with her, doing brief counseling and adjusting her depression and anxiety medicines, treating her as the ‘hidden patient’¹²³ to her sick husband in the hospital. He recovered, and I’ve been following both of them as outpatients virtually. I haven’t seen either in the office since it started. Both are improved.”

This same physician described another patient he talked to in a one-off virtual visit that patients pay his system to provide with a rotating bank of clinicians. In this remote urgent care visit he saw a 16-year-old whose family had no relationship with a primary care clinician. He referred this patient to his system’s hotline to be considered for COVID-19 testing. The patient had multiple symptoms, but was not deemed to be high risk, and so not tested. But the physician noted that he lives with his elderly grandmother, and his mother has diabetes and hypertension. In the face of a shortage of testing, and a lack of follow-up, the doctor saw that the family needed ongoing monitoring. He had his practice add the family to their daily call list, and have shepherded them through the illness and risk.

A fragmented system that venerates vertical over horizontal and whole systems integration

A fragmented, each to their own health system diminishes everyone, even those who can buy care that is considered “the best.”³⁵ But a crumbled part of a disintegrated whole is not the best.¹²⁴ Buying the best commodity of health care, devoid of the contextualizing relationship of being known as a person and a member of a family and a community, often is dangerous and low value for the individual and for the collective of which the individual is a part.^{35,125}

In response, health systems try various schemes to foster integration.

Vertical integration organizes multiple levels of care, often along disease-based service lines, within one system. A prominent economist called “Vertical integration of health care delivery and financing — the most effective model for ‘owning the whole patient.’”¹²⁶

In contrast, horizontal integration organizes cross-sectoral collaboration to improve overall health of people and populations. Horizontal integration has another name — primary health care — and as defined by the World Health Organization, it involves comprehensive care;

addressing social, economic, and environmental health determinants; and empowering individuals, families, and communities.¹²⁷

When a vaccine is ready for the new SARS-CoV-2 coronavirus, a command and control vertically integrated system may be the easiest way to deliver it to those who already are connected, just as the well-connected were the first to have access to COVID-19 testing and personal protective equipment early in the pandemic.¹²⁸ But how will we reach those who are not well-connected? How will we bridge rural/urban, racial/ethnic/class and other divides, or reach the disadvantaged who will be further disadvantaged as yet another innovation appears not meant for them?^{50-52,54,55,129} How will we integrate behavioral health care, during a pandemic during which the mental health effects are at least an order of magnitude more common than the infectious disease effects?¹²⁹⁻¹³¹

This is where horizontal integration — particularly primary health care^{116,132,133} that already has invested in relationships with individuals, families and communities — is needed. For pandemic response and for high value health systems, what is needed is a whole system approach in which vertical and horizontal integration develop in tune with each other.^{134,135} But unless we make a priority of conceptualizing and implementing a comprehensive integrated health care system, horizontal and bottom-up aspects will continue to get short shrift, resulting in fragmented care, unfair and ineffective allocation of resources, and a continued unnatural schism between caring for mind and body.^{96-99,136-138}

The implementation of the 1978 Alma Ata declaration is instructive in how the desire for simple solutions and quick wins can thwart attempts at whole system approaches.^{139,140} Signed by 134 countries and 67 international organizations, the Alma Ata declaration presented a grand vision for primary health care as a central and universally accessible function of health systems — essential to social and economic development as well as to health. That vision was not achieved because its implementation focused on vertically-integrated approaches to narrowly-defined problems with short-term, measurable outcomes, and a reductionist mindset that required top-down organization.^{135,141-145} A renewed vision, established in Astana in October, 2018, espoused empowered communities, working across all sectors, to build sustainable primary health care.^{146,147} But implementation will require building a sense of the commons — resources accessible to all members of society held in common for the good of individuals and the

collective —^{125,148} that currently has been lacking in the US response to the pandemic,¹⁴⁹ and in our societal approach to health and health care.^{125,148,150}

In contrast to the fragmented and divisive US response to COVID-19,^{15,17,151-153} Germany used an aggressive public health (testing and tracing) approach to identify positive cases and their contacts, and sent all positives to the general practices that make up 48% of the health care workforce.¹⁵⁴ General practice physicians treated infected patients with an integrated approach based on knowing the person and their context, dramatically reduced hospitalizations and resulted in a lower death rate than the US.¹⁵⁵ This is the beauty of whole system integration: horizontal integration at the appropriate level, and the ability to ramp up vertically-integrated programs with the contextualizing foundation of strong horizontal systems.^{136,156} In addition, the German response was framed as a call to solidarity,¹⁵⁷ rather than as an opportunity to divide and conquer.¹⁵⁸ Imagine how the COVID-19 pandemic might have unfolded differently if almost everyone know the answer to the question ‘Who is my primary doctor,’ and local, state, and national governments could reliably start executive orders with ‘Contact your primary physician about...’

Ironically, public health and primary care, despite their horizontally-integrative and whole systems ethos and missions, suffer from siloed organizational structures. Public health is organized in rigidly-administered categorical programs, and primary care professional and certifying organizations are separate and competing rather than collaborating on a common mission that includes but transcended their discipline-specific competitive interests. Further, as currently organized, public health and primary care lack common ground from which to work. Public health has under-funded but organized local, state, and national structures, whereas primary care has limited geographic infrastructure but has direct relationships with the people and communities they serve. The 2013 Institute of Medicine report *Primary Care and Public Health – Exploring Integration to Improve Population Health*,¹⁵⁹ identified opportunities that have not been met because of narrow, unconnected leadership and a reactive, shortage mentality. It is time for public and health care organizational leadership and ways of working together to focus on the larger good that people need from us.

The over-valuing of vertical over horizontal integration belies a reactive approach that waits until a crisis forces action — a time when possibilities are limited, costs are high, and the

advantaged become more advantaged and the disadvantaged more disadvantaged.¹⁶⁰⁻¹⁶⁴ Rather than investing in relationships and other infrastructure for upstream preventive and early care on an ongoing basis, we spend on huge bailouts for hospitals doing the downstream disaster work,¹⁶⁵ and smaller short-term stopgaps for primary care and public health during a crisis,^{166,167} after long-term under-investment in public health and integrated primary care has damped their ability to respond to the pandemic.^{159,168}

Contrast the US response to the pandemic with that of South Korea and Hong Kong. Those countries paid attention to lessons learned from the SARS pandemic,¹⁶⁹ and invested in health care systems that were ready to respond to new threats. During the COVID-19 pandemic, they engaged in aggressive public health case finding and quarantine and primary care triage, with only selective referral of the sickest cases to secondary and tertiary hospitals.¹⁷⁰⁻¹⁷³

South Australia responded to the early pandemic with even greater integration of primary care and public health.,¹⁷⁴ General practitioners, their professional organizations and Primary Health Networks worked alongside public health officials to rapidly ramp up testing, care for the large majority of patients remotely and at home, and only very selectively engage emergency departments and hospitals, thus saving resources and reducing community and health care worker spread. Three-quarters of all COVID-19 patients were cared for by GPs.¹⁷⁴ Prior collaboration in respiratory infection work between South Australian Pathology and the Australian Sentinel Practices Research Network [ASPREN]¹⁷⁵ facilitated rapid ramp-up of testing. This integrated, multilevel approach is how apparently intractable multifactorial problems are effectively addressed.^{78,128,176}

Being trapped in payment divorced from value

An instrumental result of over-valuing vertical over horizontal integration is under-investment in public health, and integrated primary care.^{76,159,168,177-179} Whereas countries with higher value health systems, as evidenced by better population health and equity at lower cost, spend a higher percentage of their budget on primary care, the US, with the highest per capita health care spending in the world¹⁸⁰ spends less than 6% of its health care budget on primary care.¹⁸¹ Within the US, and across all fifty states, recent research found an inverse association

between the percent of health care spending on primary care, and total hospitalizations, hospitalizations for ambulatory care sensitive conditions, and emergency department visits.¹⁸¹

In addition, the US spends markedly more than other high-income countries on health care administrative costs of care — 8% in the US compared to 1% to 3% in the other countries that spend substantially less on health care than the US.¹⁸² This waste provides an opportunity for reinvestment toward a greater good than greed.

Payment for primary care is addressed in detail elsewhere in this report. Recent reports highlight the brittleness of a system largely based on fee-for-service in its limited ability to respond to COVID-19,¹⁶⁷ and the vulnerable state of primary care practice piecework financing.^{183,184}

According to a weekly national survey,¹¹⁹ in order to protect patients, staff, and to comply with stay-at-home orders, primary care practices stopped or greatly diminished in-person services while trying to dramatically ramp up remote services. Within three weeks of President Trump's March 13, 2020 declaration of a national emergency, half of primary care practices reported a severe impact on their practices; 90% were limiting chronic and acute care visits, and the large majority were switching to predominantly telehealth visits, despite a largely deficient infrastructure beyond basic telephone services.¹¹⁹

By the second week in April, nearly half of practices were unsure if they had enough cash to keep their practices open, 42% laid off or furloughed staff, and 85% reported dramatic decreases in patient volume and corresponding income. Connected and concerned for their patients, they prioritized work that was largely unpaid, including triaging and referring potentially infected patients in the face of largely unavailable testing and personal protective equipment, calling patients at home for check-in and monitoring, and outreach to high-risk subgroups and individuals. By mid-April, 57% identified less than half their work as reimbursable. They noted, and responded to high rates of COVID impact on patients' physical, psychological and financial well-being, and on particular vulnerable subgroups.¹¹⁹

By the end of April, 45% of practices (like many other small businesses across the country) were unsure if they had enough cash to stay open for the next four weeks. By mid-May, 42% had sought and received some relief from government or private sources, but 21% found themselves ineligible for existing programs and without other options. Over 80% indicated

payment based on volume, extensive documentation, and measure-driven incentive programs that were not favorable to practice resilience during the pandemic. Half felt that predictable payments in exchange for transparent reporting on a small set of meaningful measures was key to current and future practice sustainability.¹¹⁹

While grateful for growing opportunities to be paid for telehealth visits, and recognizing the potential utility of such visits even after the end of the pandemic,¹⁸⁵ the disjointed disarray of hoops to jump through to possibly get paid for telehealth was yet another marker of the fragmentation of the US health care system.¹⁸⁶ Telehealth payment also serves as an indicator of how every attempt to help primary care with different payment and organizational structures over the past several decades and accelerating in recent years, has come with a concomitant increase in administrative burden that has become stifling and a major source of burnout as energy and resources are spent on box ticking and trying to get paid.¹⁸⁷⁻¹⁹⁰ The degree of administrative burden has become intolerable, even for the most zealous practitioners of primary care reform.¹⁹¹

In one example, reflected through the lens of the COVID-19 crisis, the adjacent table was put together by a local health care system to try to help its affiliated primary care clinicians get paid for their telehealth visits. As the footnotes indicate, payment for telehealth is full of exceptions and rules requiring careful administrative attention. This is one small example of the cacophony of things that primary care

What telehealth services are covered by each Payor?

See the grid below for telehealth coverage as of 5/4/2020.

Please note: these are temporary changes in Payors Prior Authorization/Precertification and Admissions Protocols. The information below includes only those payors that have communicated a modified process.

| | ^{1 2} TELEHEALTH - VIDEO | ^{1 3} TELEHEALTH – AUDIO ONLY/ TELEPHONE | ¹ TELEPHONIC 98966-98968 99441-99443 | ¹ e-VISIT 99421-99423 | ¹ VIRTUAL CHECK-IN G2010-G2012 | ¹ COST SHARE WAIVED |
|----------------------|--------------------------------------|--|---|-------------------------------------|---|--------------------------------------|
| Insurance company 1 | Yes | No | Yes | Yes | Yes | Yes |
| Insurance company 2 | Yes | No | Yes | Yes ⁶ | Yes ⁶ | Yes |
| Insurance company 3 | Yes | Yes ⁴ | No | Yes ⁶ | Yes ⁶ | Yes ⁷ |
| Insurance company 4 | Yes | Yes | Yes | Yes | Yes | Yes |
| Insurance company 5 | Yes | Yes | Yes | Yes | Yes | Yes |
| Insurance company 6 | Yes | Yes | No | Yes ⁵ | No | Yes |
| Insurance company 7 | Yes | Yes | Yes | Yes ⁶ | Yes ⁶ | Yes |
| Insurance company 8 | Yes | Yes | Yes | No | Yes ⁶ | Yes ⁷ |
| Insurance company 9 | Yes | Yes | Yes | Yes ⁶ | Yes ⁶ | Yes |
| Insurance company 10 | Yes | Yes | Yes | Yes ⁶ | Yes ⁶ | Yes |
| Insurance company 11 | Yes | Yes | Yes | Yes | Yes | No |
| Insurance company 12 | Yes | Yes | Yes | Yes | Yes | Yes |

¹Some self-insured employers may not cover these services.

²Generally and unless otherwise noted the services covered are those approved for telehealth delivery by CMS and the ODM Emergency Rule and include but are not limited to Office Visits, Consults, Psychotherapy, some PT/OT/SP.

³Services covered are same as those covered via Telehealth video excluding services not possible to deliver via Telephone such as PT/OT/SP therapy.

⁴Insurance company 3 only covers 99202 thru 99215 when provided via Audio only / Telephone.

⁵Insurance company 6 covers eVisit when service is related to a COVID19 diagnoses or exposure.

⁶Medicare only

⁷Cost share waived for telehealth only when service is related to COVID testing or treatment. Insurance company 3 – waived for COVID testing only.

clinicians do to get paid, sapping huge amounts of energy and attention from actual care of patients, and feeding a huge health insurance company and health care system bureaucracy of low-added-value administrivia. The alternative — doing what the patient needs without attention to their insurance — risks financial ruin. It is no wonder that physician burnout is being re-labelled as moral injury.¹⁹²⁻¹⁹⁴

So many well-meaning changes in health care have explicitly tried to advance and even support primary care. But as the acronym soup of deprofessionalizing¹⁹⁵ fractional initiatives have come and gone, each has left a residual of administrative burden and fragmentation that often outweighs the benefits — RBRVS,¹⁹⁶⁻¹⁹⁸ Managed Care,¹⁹⁹⁻²¹⁰ P4P,²¹¹⁻²¹⁴ PCMH,²¹⁵⁻²¹⁷ ACOs,²¹⁸⁻²²⁶ Meaningful Use,^{203,227-233} MACRA,²³⁴⁻²³⁷ CPC+,²³⁸⁻²⁴² MIPS,^{234,236,243,244} etc. The cumulative burden is now an intolerable load of low-value administrative churning that takes up an overwhelming amount of the attention, energy and resources of those on the frontlines trying to integrate and personalize care for whole people and families and communities. The overall effect is to diminish the higher-order integrating, personalizing, prioritizing functions of primary care that are so desperately needed by patients and by a fragmented, costly and too ineffective system, and to make untenable independent or small practice that could be a much-needed source of innovation and personalization of care.^{187,191,245} Similar well-intentioned but ultimately harmful attempts at centralized control and personal accountability have had similar effects on frontline workers in education²⁴⁶ and other fields.

Autonomy appears to be protective from burnout among primary care practice clinicians and staff,²⁴⁷⁻²⁴⁹ and yet, in the face of health system and payer restrictions, autonomy can be hard to find. The disempowerment of the frontline primary care workforce also has diminished its ability to nimbly innovate and to adapt to local patient needs as primary care becomes a feeder for hungry hospital-managed health care systems. Accountable Care Organizations, an attempt to raise the gaze of health care toward advancing the health of people and populations rather than filling the coffers through fee-for-service disease care, are primarily run by hospitals, since their scale and over-investment in techno-services gives them the capital to take on the necessary financial risk.^{226,250} However, the Accountable Care Organizations that show value are those independent primary care groups and physician groups, not run by hospitals.^{219,251} And it is the small and independent practices — those most grounded in their local communities and patient populations, that are most vulnerable during the pandemic.^{167,184} In the end, the price of

autonomy seems to have been set up as vulnerability to being snuffed out by administrative burden and the financial challenges of the pandemic.^{184,186} Reinvigorating professionalism as a belief system about the best way to organize health care that promises to place the community's interest about the provider's interest,^{86,195,252-260} is more likely to be fruitful than continued efforts to externalize the intrinsic motivations of healers.^{193,247,261,262}

Possibilities revealed by the pandemic

From the pandemic, we learn that many small changes across multiple levels of a system, together, can make a big difference.^{51,52,152,153,160,170,172,184,263-268} Where there is prior investment in flexible systems and in trustworthy relationships, there is capacity to rapidly and effectively respond to emerging challenges.^{132,152,156,170,171,263,266-270}

In a rapidly changing environment, the generalist organism is more adaptive than the specialist customized to a narrow ecological niche.^{29,271} But by not understanding and supporting the generalist, horizontally-integrating value of public health and primary care, we have boxed primary care practices into inflexible niches and narrowed scopes of activity,^{64,109,111,272-278} that diminish their adaptability and capability to flexibility innovate to meet local patient and community needs.^{46,279-283} Generalist care makes specialty care more effective, and vice versa.^{89,95,134,284-290} High quality primary care complements specialist expertise by starting with a focus on the whole (person, family, community, population) and then iteratively identifying and working on the most important part in that moment, while keeping the whole in view.^{33,291,292} That fundamental, essential integrating, personalizing, prioritizing role is not widely understood, and has largely been beaten out of the US health care system.^{61,260,293,294}

Implementing high quality deeply-understood primary care can help us deal with the fast and slow pandemics that are crippling our society, if we: 1) understand and support primary care as a force for integration, 2) systematically generate generalist knowledge, 3) re-purpose administrative overfunding toward primary health care and public health.

Understanding and supporting primary care as a force for integration

The pandemic exposes, in disheartening and deadly display,^{14,15,17,129,152,153,160,161,184,265,295,296} the fragmentation, depersonalization, and ineffectiveness of US health care.^{35,36}

In contrast, properly understood, supported and implemented primary care is a force for integration amidst fragmentation.^{35,297} It is a point of connection to being known as a whole person rather than a commodity.¹¹² It is a vehicle for prioritizing, personalizing, providing and coordinating care for people and populations.⁶¹ It is a vehicle for healing the false schism between mind-body^{76,177,298,299} and public-personal health.^{159,300,301} It is not just cheaper specialty care for each disease added together.⁷⁸ It is based on the wisdom of the generalist approach.³⁸ We must stop conceptualizing, measuring, and paying for primary care as the sum of its parts.³³ Misunderstanding what is important about primary care is killing it, burning out the current workforces and deterring the much-needed next generation of innovators ready to re-invent core generalist principles in the information age.^{302,303} Misunderstanding primary care has shattered it into its most reductive disintegrated commodified parts,^{112,304} just when we most need it to be a force for integration within health care and society.¹¹²

In properly understood and well-grounded, well-supported, well-implemented primary care — people are primary. Not disease. Not payment. Not management of bits and pieces. People and the knowledge gained through relationships that generate wisdom about how health is won and lost.³⁸

To avoid doing more harm than good, efforts to implement high quality primary care must begin with understanding, and then supporting what is valuable about generalism.^{45,305} Supporting time and development of relationships are a cornerstone.^{40,83,105,120,306,307} Re-empowering frontline clinicians and patients, and reducing administrative burden and fragmenting methods of measurement are essential.^{187,188,306}

This can be accomplished by focusing measurement, resources, and the clinical focus of generalism on what matters⁸⁷ — on the higher-order integrating, personalizing, functions that are accomplished with time, and in the course of providing a broad range of care and coordinating care received elsewhere.^{61,308,309} This requires a sufficient primary care workforce, and organization of care and payment that supports the investment of time needed to develop the relationships that are the basis for much of the value of primary care.^{43,86,117,255,310-314}

One of the fundamental tenets of primary care is accessibility as a first contact⁵⁸ with a powerful and dangerous system.³¹⁵ For the patient, having that first contact happen with a focus on the whole person in their family and community context maximizes the options for promoting health, healing and meaning, and minimizes the possibilities for doing harm and causing waste. The pandemic reveals how far we are from understanding what matters about primary care.^{186,316} To be effective for people and populations, and to save a fragmented system from itself, primary care must be made accessible by having sufficient numbers, time with patients, support of their person-centered role, and a health care system that provides accessibility for everyone to relationship-centered care.^{58,105,161,317-320}

Systematically generating generalist knowledge

How did German GPs reduce hospitalizations and deaths from COVID-19 when there is no specific treatment?^{154,155,321-323} How does healing happen, as it so often does, outside of the realm of treatment of individual diseases?^{47,48,121,122,324,325} How can we explain the paradox of primary care, that despite apparently poorer care of individual diseases, systems based on primary care have healthier populations, less inequity, better quality of care, at a more sustainable cost?^{93,94} What are the mechanisms by which integrated, personalized, prioritized care of whole people lead to healing and health at the level of the individual, value at the level of the health care system, and health and equity at the level of the community and population?^{61,87,326,327}

Both basic and applied generalist research are needed, and there is no home for the generation of fundamental generalist knowledge in current research support mechanisms. Dividing up the generalist and primary care enterprises into their component parts for research does not yield understanding of the whole, and the reductionist, fragmented knowledge that results is harmful in fostering further misunderstanding of the whole of primary care and its potential to advance healing, health and equity.^{88,89,91,328-331}

One of the reasons that it is so difficult to understand high quality primary care and to implement it, is that scientific knowledge is dominated by reductionist framing and methods that systematically divorce the phenomena of health and health care from the contextual factors that primary care uses to integrate, personalize and prioritize care.^{56,57,71} A recent RAND report,

sponsored by the Agency for Health Care Research and Quality, makes the important distinction between health services and primary care research.³³² Abbreviating primary care research as PCR, the report calls out “the lack of targeted funding for a lead agency to coordinate PCR.”

The report further notes:

- “A coordinating center for PCR is needed to adequately support research on core functions of primary care and coordinate and prioritize PCR across HHS.
- AHRQ is the only federal agency with the statutory authority to be the home for PCR, but is currently not funded to carry out PCR.”

The report goes on to suggest that the Department of Health and Human Services:

“Provide targeted funding to create a hub for federal PCR. Study participants emphasized that the most expeditious way to create a funded hub to support research on core PCR needs and adequately coordinate federal PCR efforts would be to provide targeted funding for this mission to AHRQ, which already has the statutory authorization for this role. Despite not having received targeted funding for this mission, the agency has been able to sponsor key studies on primary care systems and innovation to help fill this gap. In addition, it operates the National Center for Excellence in Primary Care Research that has expertise in disseminating evidence, practical tools, and other resources to improve primary care.”

The integrated use of quantitative and qualitative methods for generating primary care knowledge are well-known,^{280,333-336} as are the laboratories of practice-based research networks,³³⁷⁻³⁴³ but neither is systematically supported, and the current disease- and age-group organization of the NIH furthers the fragmentation. To complement the AHRQ role in health services research, a home for fundamental generalist research within NIH, such as an Institute for Generalist Knowledge, is vitally needed to generate knowledge on how health and healing emerges and can be generated for whole people, families and communities.

Also needed are training programs that develop investigators adept at the mixed methods needed for primary care research, and that are grounded in the real world of practice and community.³⁴³ Federal training mechanisms that allow a 50% commitment to research to allow continued grounding in practice, rather than the traditional 75% research commitment, could create the needed workforces.¹⁹⁵ Models exist in the now defunct Robert Wood Johnson Foundation Generalist Physician Faculty Scholars Program³⁴⁴ (which could be extended to primary care investigators who are not physicians), and the American Cancer Society’s Cancer

Control Career Development Award for Primary Care Physicians, although the latter award's focus on a single disease class limited the scope of such training.

Re-purpose administrative over-funding toward primary health care and public health

The pandemic highlights the incapacity and waste of the US health care system — that despite the world's highest health care expenditure,³⁴⁵ we have been unable to provide an effective response to an acute health threat compared to countries that spend far less.¹⁷ The pandemic highlights the need for reinvestment of the unconscionable and ineffective bloating of administrative overhead in US health care.^{156,182,187,190} The post-pandemic era is likely to be unstuck for public and public/private options that, once they work their way through the political process, will invest in the shared need of all Americans for a strong public health and primary care infrastructure, and for supportive systems that reduce administrative burden on citizens and providers alike. Some principles and immediately actionable options are described below.

INVEST IN INFRASTRUCTURE FOR INTEGRATED PRIMARY HEALTH CARE AND PUBLIC HEALTH

There is growing recognition of the need to increase the horizontally-integrating connections between primary care, public health, behavioral and social services, and the communities they serve.^{76,98,138,159,178,299-301,346-351} This will require consistent investment in information and relationship infrastructure that is not driven by the latest crisis, but that recognizes that this investment is fundamental to the effectiveness, fairness, and sustainability of efforts to improve the health of the population.

The COVID-19 pandemic has made apparent the need to actualize the principles outlined in the 2013 Institute of Medicine report on integrating primary care and public health.¹⁵⁹ These principles are: working toward a common goal of improving population health; involving the community in defining and addressing its needs; strong leadership that works to bridge disciplines, programs, and jurisdictions; a focus on sustainability; collaborative use of data and analysis. The report notes the permissive infrastructure (still in place) from the Affordable Care Act. Providing funding for provisions such as the authorization of the Primary Care Extension Program,³⁵²⁻³⁵⁴ and interoperable public health, social service, behavioral health and primary health care information systems are within reach and likely to have large long-term benefits to

combat the current fragmented systems.^{348,350,355-369} The response of South Australia in the pandemic is an example of what is possible with investment guided by a long-term vision.¹⁷⁴

Primary care is a vital part of the solution to our society's problems of unfair and inadequate access to health, but it is only part of the solution.^{88,116,310} Primary care's professional organizations need to go beyond the current tribalism to partner with each other, with their patients, and with other sectors affecting health and health care, if they are to make a difference. Scaling up the partnerships with community members and organizations that happens in well-grounded primary care practice could advance the needed focus on the whole person and on the needs of disadvantaged communities for which trusting and trustworthy connection is so strongly needed.^{115,370-376}

Informatics tailored to the generalist task is needed to support primary health care.^{346,355,360,363,364,377-382} Current systems have been built largely to support the cacophonous and fragmented payment system, and are divorced from public health, mental health, and social services systems that dwarf health care in their potential to improve the health and equity of the population.^{363,383-385} The CMS Accountable Health Communities initiative³⁸⁶ is a small fledgling step towards integrating the medical, social and environmental determinants of health, but it depends too heavily on the current fragmented, fragmenting systems and incentives.²²⁴

In order to support horizontal integration and personalization of health care for people and populations it is vital to measure what matters. The recent National Academy of Medicine Vital Signs report³⁸⁷ and the Person-Centered Primary Care Measure, based on what patients, clinicians and payers say is important in health care,⁸⁷ are excellent starts.

IMPLEMENTING TECHNOLOGY IN THE CONTEXT OF RELATIONSHIPS

In response to the natural experiment of the pandemic and the resulting stay-at-home orders, many primary care practices largely shut down their in-person operations and variably began telehealth.^{18,186,388,389} Types of visits and staffing continued to change rapidly,³⁹⁰ along with surprisingly rapid changes by governmental and private insurance payers.¹⁶⁷

For example, one community health center cancelled all patient visits beginning Tuesday, March 10, in advance of their state governor's stay-at-home order. They furloughed three physicians, multiple nurse practitioners and midwives, and 40 staff members, shut down

operations and began building new workflows. On Monday, March 16, they began telephone or video telehealth visits, and within two weeks had resumed their prior weekly number of visits, adjusting for the furloughed clinicians. More than 90% of these visits were remote visits, with only a highly-selected 10% in-person — a dramatic change from the previous practice of nearly all visits happening in person. They recalled their furloughed staff and began conducting targeted outreach to individual patients known to be vulnerable because of their social, mental, or physical conditions, and also to patient populations at high risk because of chronic illnesses, refugee or minority status, or age. They are beginning additional patient-home monitoring interventions. Other clinics, however, have not been able to resume anything close to normal numbers of visits,³⁹⁰ and early studies are showing adverse effects on chronic illness and preventive care.^{49,390}

Clinicians at this practice estimate that with these new telehealth tools to make virtual home visits, and with interventions to supplement these tools to make them more accessible across the digital divide,^{18,390} that even after the pandemic, 20-70% of their visits will be remote, in order to best meet patient needs for accessibility. They worry about being paid for these visits and what administrative burden will be involved in that payment, and they are anxious for further research and system support to advance the beneficial^{120,391-394} and reduce the negative^{388,395-398} effects of telehealth on care and on equity of access.^{362,399}

The COVID-19 pandemic has unleashed innovation in telehealth and in payment.^{18,388,389,400} It is unlikely that this genie will be put back into the bottle, unless it becomes buried in burdensome payment structures.¹⁶⁷ In order to avoid exacerbating care fragmentation and disparities, it is vital that this and other innovative technology, such as personal monitoring systems, are implemented in the context of personalizing, integrating relationships that value personal and collective narratives, and that they be paid for and made available to independent practices, which are a potential source of innovation, and to vulnerable individuals and communities for which they could be most helpful in improving the accessibility and quality of care^{18,270,361-363,381,390,401-407}

In order to be effective, the decision on when to use these new remote technologies or to interact face-to-face needs to be liberated from decisions about onerous documentation for billing. That will allow electronic health records to focus on providing information to support

integrating, personalizing and prioritizing care based on knowing the person not just the science of what works on average, and the business of how to get paid for delivering commodities of care. Billing must be separated from documentation so that the electronic health record can become a clinical, behavioral, and population health information system and fully integrated into the multiple encounter modalities.⁴⁰⁸ In order to empower relationships between patients, clinicians and communities, the records systems must be in the bottom up control of the generalist healer-patient partnership and not a top-down implementing system.⁴⁰⁸ Systems can use their top-down power and information to support care personalization, prioritization, and integration; these functions can be effectively supported from the top, but their control from the top is profoundly disempowering to frontline workers, patients and communities whose engagement is vital.

COVID-19 has created a tipping point. Either we will convert these new platforms into better access, continuity, more tightly connected teamwork, richer relationships and connections OR they will be taken over by systems, marketing, tech industry, and algorithms creating a perfect storm of greed-driven fragmentation that finally destroys primary care, leading to loss of health, rising costs, worsening disparities, and rising aimless despair.

PROSPECTIVELY PAYING PRIMARY CARE TO SUPPORT RELATIONSHIPS, CAPABILITY AND FLEXIBILITY

One family physician with a Direct Primary Care practice noticed during the pandemic that, “While everyone else was spending incredible amounts of energy sorting out how to get paid for caring for patients in non-standard ways, we’ve been able to just focus on what to do to provide the best care for our patients.” Rather than billing insurance, patients at this practice pay \$41 per adult and \$21 per child per month as a subscription that pays for their primary medical care. This practice never closed during the pandemic, but shifted to doing a higher percentage of visits by phone, and they quickly launched a telehealth platform. They saw no change in revenue and had no need to furlough or lay off staff members. At a time of shortage, they were able to acquire a small number of COVID-19 testing supplies, and used them selectively based on how they would change particular patients’ medical care or life or work circumstance.

The practice team focused on how to keep the office and patients safe, and how to care for patients. Because of the large need for general information, and a large amount of misinformation in their community they started posting a twice a week newsletter for their

patients and the larger public, and then they provided individual responses to patients' calls in response. In addition to providing care for acute illnesses and for patients' anxiety and information needs, they pulled lists of patients with chronic care, preventive, and mental health needs, and worked to meet as many of these needs as possible remotely, while using their limited personal protective equipment to selectively see people in person. Patients were able to have help in managing the pandemic in the context of their own individual needs, while being known as individuals, and members of families and communities.

The COVID-19 pandemic provides a moment to nurture malnourished primary health care.¹⁶⁷ Health systems that are more high value in population health, fairness and sustainable cost invest more than the US in primary care.^{409,410} The percent of US health care spending on primary care should be more than doubled, with a resulting increase in the effectiveness, connectedness and sustainability of the system.^{252,411} Payment mechanisms are needed that reduce administrative burden, support on-the-ground innovation, time and relationship development with individuals, families & communities, and that provide primary care with the autonomy to connect to competing specialty services. Grounding population health platforms in primary care, rather than in hospital care, is likely to increase their effectiveness and affordability, as has been shown in comparisons of hospital and physician-owned accountable care organizations.²⁵¹

Further, primary care needs to be paid differently. For many years, reformers have called for a blended payment structure^{412,413} that would support the higher level integrating, personalizing, prioritizing, abiding functions⁶¹ of primary care that fall between the cracks of fee-for-service commodity-focused payment, but that are vital for a high-functioning health system. There is growing consensus among the practice, policy and payer communities that it no longer makes sense to pay fee-for-service for primary care.^{167,177,412,414-421} Rather than paying piecemeal for each visit and procedure, and expecting primary care practices to piece together a cacophony of funding sources to integrate care for whole people, it makes much more sense to prospectively pay for primary care on a per-patient, per-month rate. Such an approach would stabilize vulnerable primary care finances, support local innovation to meet patient and community needs, and provide flexibility to fully address the needs of individual patients for an

integrated approach to caring for acute concerns, managing multiple chronic illnesses, and advancing prevention and mental health.^{422,423}

IMPLEMENTING HIGH VALUE PRIMARY CARE AS A COMMONS FOR THE COLLECTIVE GOOD

When family practice was being rebirthed from the ashes of declining general practice, Gayle Stephens reminded the field of primary care to wear the cloak of humility that comes from recognizing that whatever ability we possess as generalists comes from being part of a larger whole.⁴²⁴ Generalism is about being a vital cog in the wheel of time evolving upstream toward wholeness.

Stephens reminded us that the generalist healer was rebirthed as part of a larger countercultural movement⁴²⁵ of which we were a vital part, but only a part. Perhaps the COVID-19 pandemic is revealing a larger still-emerging countercultural movement around fairness, inclusiveness, and commonality, of which primary care is a part, but only a part.^{426,427} Perhaps the civil rights wave of the 1960's upon which family practice rode into existence, and the backlash²⁴ and tsunamic foment of the current era's recognition that Black Lives Matter³⁷⁰⁻³⁷³ and that unfair systems that disadvantage the working class of all races and ethnicities²⁴ create a multigenerational moment for sea change.¹¹⁷

With the coronavirus pandemic as our forefront, and the backdrop of ongoing pandemics of racism,²⁵⁻²⁷ classism^{24,428} and fragmentation, we have the opportunity to make radical change for the better. The yearnings ebb and flow between returning to the false refuge of the old traps or venturing into the new path whose first steps are only dimly-seen, but whose direction is clear.

The new direction for implementing high value primary care is to be a commons for the collective good.^{125,148,378,429} A place, a relationship, a system, where differences can come together. Where the unclear big picture can be made purposeful at the scale of the inter-personal. Where fragmentation can be integrated. Where impersonal can be made personal. Where the ten thousand things can become one by focusing on the most helpful next step on the ground, while periodically raising the gaze toward the emerging whole.^{37,430-433}

To become such a commons, primary care needs to be its generalist self. It needs to get over its tribal self. It needs to be a base and a bridge between medical and behavioral care, public and community health, and work humbly across the many sectors that influence health. It

needs to ask what it can give toward a larger good. Primary care deserves to be understood, implemented, and supported as a force for integration.

References

1. National Academies of Sciences, Engineering and Medicine. *The Challenge of Treating Obesity and Overweight: Proceedings of a Workshop—in Brief*. Washington, DC: The National Academies Press; 2017.
2. Dietz WH, Belay B, Bradley D, et al. A model framework that integrates community and clinical systems for the prevention and management of obesity and other chronic diseases. Discussion Paper. In: Washington, D.C.: National Academy of Medicine; 2017: <https://nam.edu/wp-content/uploads/2017/01/A-Model-Framework-That-Integrates-Community-and-Clinical-Systems-for-the-Prevention-and-Management-of-Obesity-and-Other-Chronic-Diseases.pdf>. Accessed July 12, 2020.
3. Olson S, Roundtable on Obesity Solutions, Food and Nutrition Board, et al. *Obesity in the Early Childhood Years: State of the Science and Implementation of Promising Solutions—Workshop in Brief*. Washington, D.C.: National Academy of Sciences; Oct 6, 2015 2016.
4. Hessler D, Bowyer V, Gold R, Shields-Zeeman L, Cottrell E, Gottlieb LM. Bringing Social Context into Diabetes Care: Intervening on Social Risks versus Providing Contextualized Care. *Curr Diab Rep*. 2019;19(6):30.
5. Cole SA, Laviada-Molina HA, Serres-Perales JM, Rodriguez-Ayala E, Bastarrachea RA. The COVID-19 Pandemic during the Time of the Diabetes Pandemic: Likely Fraternal Twins? *Pathogens*. 2020;9(5).
6. Arsand E. The COVID-19 Pandemic Revealed the Importance and Shortcomings of Technologies for Diabetes Support. *J Diabetes Sci Technol*. 2020;1932296820929721.
7. Ali MK, Siegel KR, Chandrasekar E, et al. Diabetes: An Update on the Pandemic and Potential Solutions. In: rd, Prabhakaran D, Anand S, et al., eds. *Cardiovascular, Respiratory, and Related Disorders*. Washington (DC)2017.
8. U.S. Department of Health and Human Services. Multiple Chronic Conditions—A Strategic Framework: Optimum Health and Quality of Life for Individuals with Multiple Chronic Conditions. In: Washington, DC. December 2010.
9. Hajat C, Stein E. The global burden of multiple chronic conditions: A narrative review. *Prev Med Rep*. 2018;12:284-293.
10. Mercer SW, Zhou Y, Humphris GM, et al. Multimorbidity and Socioeconomic Deprivation in Primary Care Consultations. *Ann Fam Med*. 2018;16(2):127-131.
11. Woolf SH. Progress in achieving health equity requires attention to root causes. *Health Aff (Millwood)*. 2017;36(6):984-991.
12. National Academies of Sciences, Engineering and Medicine. *Communities in Action: Pathways to Healthy Equity*. Washington, D.C.: The National Academies Press; 2017.
13. Smedley BD, Stith AY, Nelson AR, Institute of Medicine. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. Washington, D.C.: National Academy Press; 2002.
14. COVID-19 Health Systems Response Monitor. What are countries doing to give providers flexibility to respond to the COVID-19 outbreak? <https://analysis.covid19healthsystem.org/index.php/2020/04/27/what-are-countries-doing-to-give-providers-flexibility-to-respond-to-the-covid-19-outbreak/>. Published April 27, 2020. Accessed May 24, 2020.
15. IBISWorld. Effects of COVID-19 on global healthcare systems. <https://www.ibisworld.com/industry-insider/coronavirus-insights/effects-of-covid-19-on-global-healthcare-systems/>. Published April 16, 2020. Accessed May 24, 2020.
16. Igoe M, Chadwick V. After the pandemic: How will COVID-19 transform global health and development? *Devex* <https://www.devex.com/news/after-the-pandemic-how-will-covid-19-transform-global-health-and-development-96936>. Published April 13, 2020. Accessed May 24, 2020.

17. Tikkanen R, Aboulafia GN, Williams RD. How the U.S. Compares to other countries in responding to COVID-19: Populations at risk, health system capacity, and affordability of care. *To the Point* (blog), Commonwealth Fund. <https://www.commonwealthfund.org/blog/2020/how-us-compares-other-countries-responding-covid-19-populations-risk-health-system>. Published April 7, 2020. Accessed May 24, 2020.
18. Greenhalgh T, Koh GCH, Car J. Covid-19: a remote assessment in primary care. *BMJ*. 2020;368:m1182.
19. Solnit R. *A Paradise Built in Hell: The Extraordinary Communities that Arise in Disaster*. New York: Viking; 2009.
20. Easwaran E. *Gandhi the Man*. 3rd ed. Petaluma, California: Nilgiri Press; 1997.
21. Easwaran E. *Your Life is Your Message. Finding Harmony with Yourself, Others, and the Earth*. Petaluma, California: Nilgiri Press; 1992.
22. Easwaran E. *Conquest of Mind*. Tomales, California: Nilgiri Press; 1988.
23. IPCC. The Intergovernmental Panel on Climate Change. <https://www.ipcc.ch/>. Accessed July 4, 2020.
24. Williams JC. *White Working Class: Overcoming Class Cluelessness in America*. Brighton, Massachusetts: Harvard Business Review Press; 2017.
25. Williams DR, Lawrence JA, Davis BA. Racism and health: Evidence and needed research. *Annual Review of Public Health*. 2019;40(1):105-125.
26. Hardeman RR, Medina EM, Kozhimannil KB. Structural Racism and Supporting Black Lives - The Role of Health Professionals. *N Engl J Med*. 2016;375(22):2113-2115.
27. Brondolo E, Gallo LC, Myers HF. Race, racism and health: disparities, mechanisms, and interventions. *J Behav Med*. 2009;32(1):1-8.
28. The Gathering Place. Welcome to the Gathering Place. <https://touchedbycancer.org/>. Accessed June 1, 2020.
29. Stange KC, Ferrer RL, Miller WL. Making Sense of Health Care Transformation as Adaptive-Renewal Cycles. *Annals of Family Medicine*. 2009;7(6):484-487.
30. Greene JA, Loscalzo J. Putting the Patient Back Together - Social Medicine, Network Medicine, and the Limits of Reductionism. *N Engl J Med*. 2017;377(25):2493-2499.
31. Bulger RJ. Reductionist biology and population medicine - strange bedfellows or a marriage made in heaven? *JAMA*. 1990;264(4):508 - 509.
32. Koestler A, Smythies JR, eds. *Beyond Reductionism: New Perspectives on the Life Sciences*. Boston: Houghton Mifflin Co; 1971.
33. Stange KC. The paradox of the parts and the whole in understanding and improving general practice. *Int J Qual Health Care*. 2002;14(4):267-268.
34. Kaplan GA, Diez Roux AV, Simon CP, Galea S. *Growing Inequality: Bridging Complex Systems, Population Health, and Health Disparities*. Washington, DC: Westphalia Press; 2017.
35. Stange KC. The problem of fragmentation and the need for integrative solutions. *Ann Fam Med*. 2009;7(2):100-103.
36. Cebul RD, Rebitzer JB, Taylor LJ, Votruba ME. Organizational fragmentation and care quality in the U.S healthcare system. *J Econ Perspect*. 2008;22(4):93-113.
37. Stange KC. The Generalist Approach. *Annals of Family Medicine*. 2009;7(3):198-203.
38. Gunn JM, Palmer VJ, Naccarella L, et al. The promise and pitfalls of generalism in achieving the Alma-Ata vision of health for all. *Med J Aust*. 2008;189(2):110-112.
39. Palmer VJ, Naccarella L, Gunn JM. Are you my generalist or the specialist of my care? *N Z Fam Physician*. 2007;34(6).
40. Mercer SW, Howie JG. CQI-2--a new measure of holistic interpersonal care in primary care consultations. *Br J Gen Pract*. 2006;56(525):262-268.
41. Starfield B. The hidden inequity in health care. *Int J Equity Health*. 2011;10(1):15.

42. Institute of Medicine: Committee on Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academy Press; 2001.
43. Olaisen RH, Schluchter MD, Flocke SA, Smyth KA, Koroukian SM, Stange KC. Influence of changes in the patient-physician relationship on functional health. *Ann Fam Med*. 2020;18(4):(in press).
44. Stange KC. In this issue: continuity, relationships, and the illusion of a steady state. *Ann Fam Med*. 2018;16(6):486-487.
45. Bolen SD, Stange KC. Investing in relationships and teams to support managing complexity. *J Gen Intern Med*. 2017;32(3):241-242.
46. Lanham HJ, McDaniel RR, Jr., Crabtree BF, et al. How improving practice relationships among clinicians and nonclinicians can improve quality in primary care. *Jt Comm J Qual Patient Saf*. 2009;35(9):457-466.
47. Scott JG, Cohen D, Dicicco-Bloom B, Miller WL, Stange KC, Crabtree BF. Understanding healing relationships in primary care. *Annals of Family Medicine*. 2008;6(4):315-322.
48. Miller WL, Crabtree BF, Duffy MB, Epstein RM, Stange KC. Research guidelines for assessing the impact of healing relationships in clinical medicine. *Altern Ther Health Med*. 2003;9(3 Suppl):A80-95.
49. Santoli JM, Lindley MC, DeSilva MB, et al. Effects of the COVID-19 Pandemic on Routine Pediatric Vaccine Ordering and Administration - United States, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(19):591-593.
50. Wang Z, Tang K. Combating COVID-19: health equity matters. *Nat Med*. 2020;26(4):458.
51. Souch JM, Cossman JS. A Commentary on Rural-Urban Disparities in COVID-19 Testing Rates per 100,000 and Risk Factors. *J Rural Health*. 2020.
52. Shah M, Sachdeva M, Dodiuk-Gad RP. COVID-19 and Racial Disparities. *J Am Acad Dermatol*. 2020.
53. Khunti K, Singh AK, Pareek M, Hanif W. Is ethnicity linked to incidence or outcomes of covid-19? *BMJ*. 2020;369:m1548.
54. Julia C, Saynac Y, Le Joubiou C, Cailhol J, Lombrail P, Bouchaud O. Organising community primary care in the age of COVID-19: challenges in disadvantaged areas. *Lancet Public Health*. 2020.
55. Chung RY, Dong D, Li MM. Socioeconomic gradient in health and the covid-19 outbreak. *BMJ*. 2020;369:m1329.
56. Stange KC, Miller WL, McWhinney I. Developing the knowledge base of family practice. *Fam Med*. 2001;33(4):286-297.
57. Stange KC. Ways of knowing, learning, and developing. *Ann Fam Med*. 2010;8(1):4-10.
58. Donaldson MS, Yordy KD, Lohr KN, Vanselow NA, eds. *Primary Care: America's Health in a New Era*. Washington D.C.: National Academy Press; 1996.
59. Jeste DV, Lee EE, Cassidy C, et al. The new science of practical wisdom. *Perspect Biol Med*. 2019;62(2):216-236.
60. Bellinger G, Castro D, Mills A. Data, Information, Knowledge, and Wisdom. <http://www.systems-thinking.org/dikw/dikw.htm>. Published 2004. Accessed July 4, 2020.
61. Stange KC. A science of connectedness. *Ann Fam Med*. 2009;7(5):387-395.
62. Loxterkamp D. A vow of connectedness: views from the road to Beaver's farm. *Fam Med*. 2001;33(4):244-247.
63. Coleman K, Austin BT, Brach C, Wagner EH. Evidence on the Chronic Care Model in the new millennium. *Health Aff (Millwood)*. 2009;28(1):75-85.
64. Rothman AA, Wagner EH. Chronic illness management: what is the role of primary care? *Ann Intern Med*. 2003;138(3):256 - 261.

65. Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. *Health Affair*. 2001;20(6):64-78.
66. Wagner EH. Organizing care for patients with chronic illness revisited. The Milbank Quarterly. <https://www.milbank.org/quarterly/articles/organizing-care-for-patients-with-chronic-illness-revisited/>. Published 2019. Accessed 12 September 2019.
67. Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. *Milbank Q*. 1996;74(4):511-544.
68. Loeb DF, Binswanger IA, Candrian C, Bayliss EA. Primary care physician insights into a typology of the complex patient in primary care. *Ann Fam Med*. 2015;13(5):451-455.
69. Smith SM, Soubhi H, Fortin M, Hudon C, O'Dowd T. Managing patients with multimorbidity: systematic review of interventions in primary care and community settings. *BMJ*. 2012;345:e5205.
70. Valderas JM, Starfield B, Sibbald B, Salisbury C, Roland M. Defining comorbidity: implications for understanding health and health services. *Ann Fam Med*. 2009;7(4):357-363.
71. Bayliss EA, Bonds DE, Boyd CM, et al. Understanding the context of health for persons with multiple chronic conditions: moving from what is the matter to what matters. *Ann Fam Med*. 2014;12(3):260-269.
72. Fortin M, Bravo G, Hudon C, Vanasse A, Lapointe L. Prevalence of multimorbidity among adults seen in family practice. *Ann Fam Med*. 2005;3(3):223-228.
73. Stange KC, Flocke SA, Goodwin MA, Kelly RB, Zyzanski SJ. Direct observation of rates of preventive service delivery in community family practice. *Prev Med*. 2000;31(2 Pt 1):167-176.
74. Stange KC, Zyzanski SJ, Jaen CR, et al. Illuminating the black box: A description of 4454 patient visits to 138 family doctors. *J Fam Pract*. 1998;46(5):377 - 389.
75. Gupta S, Jenkins R, Spicer J, et al. How primary care can contribute to good mental health in adults. *London J Prim Care (Abingdon)*. 2018;10(1):3-7.
76. Cohen DJ, Davis M, Balasubramanian BA, et al. Integrating behavioral health and primary care: consulting, coordinating and collaborating among professionals. *J Am Board Fam Med*. 2015;28(Suppl 1):S21-31.
77. Thomas S, Jenkins R, Burch T, et al. Promoting Mental Health and Preventing Mental Illness in General Practice. *London Journal of Primary Care*. 2016;8(1):3-9.
78. Heath I, Rubenstein A, Stange KC, van Driel M. Quality in primary health care: a multidimensional approach to complexity. *BMJ*. 2009;338:b1242.
79. Flocke SA, Clark E, Antognoli E, et al. Teachable moments for health behavior change and intermediate patient outcomes. *Patient Educ Couns*. 2014;96(1):43-49.
80. Cohen DJ, Clark EC, Lawson PJ, Casucci BA, Flocke SA. Identifying teachable moments for health behavior counseling in primary care. *Patient Educ Couns*. 2011;85(2):e8-15.
81. Medalie JH, Zyzanski SJ, Langa D, Stange KC. The family in family practice: is it a reality? *Journal of Family Practice*. 1998;46(5):390-396.
82. Orzano AJ, Gregory PM, Nutting PA, Werner JJ, Flocke SA, Stange KC. Care of the secondary patient in family practice. A report from the Ambulatory Sentinel Practice Network. *Journal of Family Practice*. 2001;50(2):113-116.
83. Bolen SD, Sage P, Perzynski AT, Stange KC. No moment wasted: the primary-care visit for adults with diabetes and low socio-economic status. *Primary Health Care Research & Development*. 2016;17(1):18-32.
84. Donner-Banzhoff N. Solving the diagnostic challenge: A patient-centered approach. *Ann Fam Med*. 2018;16(4):353-358.
85. Donner-Banzhoff N, Hertwig R. Inductive foraging: Improving the diagnostic yield of primary care consultations. *European Journal of General Practice*. 2014;20(1):69-73.
86. Miller WL. Unfilled hunger: Seeking relationships in primary care-A perspective from the Keystone IV Conference. *J Am Board Fam Med*. 2016;29 Suppl 1:S19-23.

87. Etz RS, Zyzanski SJ, Gonzalez MM, Reves SR, O'Neal JP, Stange KC. A new comprehensive measure of high-value aspects of primary care. *The Annals of Family Medicine*. 2019;17(3):221-230.
88. Starfield B. Primary care and equity in health: the importance to effectiveness and equity of responsiveness to people's needs. *Humanity and Society*. 2009;33(1/2):56-73.
89. Starfield B, Shi LY, Macinko J. Contribution of primary care to health systems and health. *Milbank Q*. 2005;83(3):457-502.
90. Shi L, Macinko J, Starfield B, Wulu J, Regan J, Politzer R. The relationship between primary care, income inequality, and mortality in US States, 1980-1995. *J Am Board Fam Pract*. 2003;16(5):412-422.
91. Starfield B. *Primary Care: Balancing Health Needs, Services, and Technology*. Rev. ed. ed. New York, NY: Oxford University Press; 1998.
92. Baicker K, Chandra A. Medicare spending, the physician workforce, and beneficiaries' quality of care. *Health Aff (Millwood)*. 2004;Suppl Web Exclusives:W184-197.
93. Homa L, Rose J, Hovmand PS, et al. A participatory model of the paradox of primary care. *Ann Fam Med*. 2015;13(5):456-465.
94. Stange KC, Ferrer RL. The paradox of primary care. *Ann Fam Med*. 2009;7(4):293-299.
95. Stange KC, Cherng ST, Riolo RL, et al. No longer looking just under the lamp post: modeling the complexity of primary health care. In: Kaplan GA, Diez Roux AV, Simon CP, Galea S, eds. *Growing Inequality: Bridging Complex Systems, Population Health, and Health Disparities*. Washington, DC: Westphalia Press; 2017:81-107.
96. Yonek J, Lee CM, Harrison A, Mangurian C, Tolou-Shams M. Key Components of Effective Pediatric Integrated Mental Health Care Models: A Systematic Review. *JAMA Pediatr*. 2020.
97. Hu J, Wu T, Damodaran S, Tabb KM, Bauer A, Huang H. The Effectiveness of Collaborative Care on Depression Outcomes for Racial/Ethnic Minority Populations in Primary Care: A Systematic Review. *Psychosomatics*. 2020.
98. Cubillos L, Bartels SM, Torrey WC, et al. The effectiveness and cost-effectiveness of integrating mental health services in primary care in low- and middle-income countries: systematic review. *BJPsych Bull*. 2020;1-13.
99. Wakida EK, Talib ZM, Akena D, et al. Barriers and facilitators to the integration of mental health services into primary health care: a systematic review. *Syst Rev*. 2018;7(1):211.
100. Gilchrist VJ, Stange KC, McCord G, Bourget CC, Flocke SA. A comparison of the National Ambulatory Medical Care Survey (NAMCS) measurement approach with direct observation of outpatient visits. *Med Care*. 2004;42(3):276-280.
101. Martin C, Sturmberg J. Complex adaptive chronic care. *J Eval Clin Pract*. 2009;15(3):571-577.
102. Minkman M, Ahaus K, Huijsman R. Performance improvement based on integrated quality management models: what evidence do we have? A systematic literature review. *Int J Qual Health Care*. 2007;19(2):90-104.
103. Etz RS, Miller WL, Stange KC. Three simple rules from which the complexity of primary care emerges. 2020;(under review).
104. Peabody FW. The care of the patient. *JAMA*. 1927;88:877-882.
105. Beach MC, Inui T. Relationship-centered care. A constructive reframing. *J Gen Intern Med*. 2006;21 Suppl 1:S3-8.
106. Epstein RM, Fiscella K, Lesser CS, Stange KC. Why the nation needs a policy push on patient-centered health care. *Health Aff (Millwood)*. 2010;29(8):1489-1495.
107. Sturmberg JP, Schattner P. Personal doctoring. Its impact on continuity of care as measured by the comprehensiveness of care score. *Australian Family Physician*. 2001;30(5):513-518.
108. Jerant A, Fenton JJ, Franks P. Primary care attributes and mortality: a national person-level study. *Ann Fam Med*. 2012;10(1):34-41.
109. Kringos DS, Boerma WG, Hutchinson A, van der Zee J, Groenewegen PP. The breadth of primary care: a systematic literature review of its core dimensions. *BMC Health Serv Res*. 2010;10:65.

110. Henry TL, Petterson S, Phillips RS, Phillips RL, Jr., Bazemore A. Comparing Comprehensiveness in Primary Care Specialties and Their Effects on Healthcare Costs and Hospitalizations in Medicare Beneficiaries. *J Gen Intern Med.* 2019;34(12):2708-2710.
111. Bazemore A, Petterson S, Peterson LE, Phillips RL, Jr. More Comprehensive Care Among Family Physicians is Associated with Lower Costs and Fewer Hospitalizations. *Ann Fam Med.* 2015;13(3):206-213.
112. Heath I. Patients are not commodities. *BMJ.* 2006;332(7545):846-847.
113. Beach MC, Price EG, Gary TL, et al. Cultural competence: a systematic review of health care provider educational interventions. *Med Care.* 2005;43(4):356-373.
114. Williams RL, Flocke SA, Stange KC. Race and preventive services delivery among black patients and white patients seen in primary care. *Med Care.* 2001;39(11):1260-1267.
115. Park B, Coutinho AJ, Doohan N, et al. Revisiting primary care's critical role in achieving health equity: Pisacano Scholars' reflections from Starfield Summit II. *J Am Board Fam Med.* 2018;31(2):292-302.
116. Ford-Gilboe M, Wathen CN, Varcoe C, et al. How Equity-Oriented Health Care Affects Health: Key Mechanisms and Implications for Primary Health Care Practice and Policy. *Milbank Q.* 2018;96(4):635-671.
117. Waters RC, Stoltzenberg M, Hughes LS. A countercultural heritage: Rediscovering the relationship-centered and social justice roots of Family Medicine-A perspective from the Keystone IV Conference. *J Am Board Fam Med.* 2016;29 Suppl 1:S45-48.
118. Ferrer RL. Pursuing equity: contact with primary care and specialist clinicians by demographics, insurance, and health status. *Ann Fam Med.* 2007;5(6):492-502.
119. The Larry A. Green Center. Quick COVID-19 Primary Care Patient Survey. <https://www.green-center.org/covid-patient-survey/>. Published 2020. Accessed May 28, 2020.
120. Bergman D, Bethell C, Gombojav N, Hassink S, Stange KC. Physical Distancing With Social Connectedness. *Ann Fam Med.* 2020;18(3):272-277.
121. Scott JG, Warber SL, Dieppe P, Jones D, Stange KC. Healing journey: a qualitative analysis of the healing experiences of Americans suffering from trauma and illness. *BMJ Open.* 2017;0:e016771.
122. Scott JG, Scott RG, Miller WL, Stange KC, Crabtree BF. Healing relationships and the existential philosophy of Martin Buber. *Philos Ethics Humanit Med.* 2009;4:11.
123. Medalie JH. *Family Medicine: Principles and Applications.* Baltimore: The Williams & Wilkins Company; 1978.
124. Witt CM, Chiaramonte D, Berman S, et al. Defining health in a comprehensive context: a new definition of integrative health. *American Journal of Preventive Medicine.* 2017;53(1):134-137.
125. Woolf SH, Stange KC. A sense of priorities for the health care commons. *Am J Prev Med.* 2006;31(1):99-102.
126. Orszag P, Rekhi R. The Economic Case for Vertical Integration in Health Care. *NEJM Catalyst Innovations in Care Delivery.* 2020;1(3).
127. Health WCoSDo. Primary Health Care. <https://www.who.int/news-room/fact-sheets/detail/primary-health-care>. Accessed May 30 , 2020.
128. Young RA, Nelson MJ, Castellon RE, Martin CM. Improving quality in a complex primary care system-An example of refugee care and literature review. *J Eval Clin Pract.* 2020:e13430.
129. Laurencin CT, McClinton A. The COVID-19 Pandemic: a Call to Action to Identify and Address Racial and Ethnic Disparities. *J Racial Ethn Health Disparities.* 2020.
130. Westfall J, Coffman M, Hughes L, Jabbarpour Y. Implementing COVID-19 Mental Health Tracing Requires A Multidisciplinary Effort. In:2020.
131. Richardson S, Hirsch JS, Narasimhan M, et al. Presenting Characteristics, Comorbidities, and Outcomes Among 5700 Patients Hospitalized With COVID-19 in the New York City Area. *JAMA.* 2020:E1-E8.

132. Sarti TD, Lazarini WS, Fontenelle LF, Almeida A. What is the role of Primary Health Care in the COVID-19 pandemic? *Epidemiol Serv Saude*. 2020;29(2):e2020166.
133. Chan M. Primary health care as a route to health security. *Lancet*. 2009;373(9675):1586-1587.
134. Thomas P, Meads G, Moustafa A, Nazareth I, Stange KC. Combined horizontal and vertical integration of care: a goal of practice-based commissioning. *Qual Prim Care*. 2008;16(6):425-432.
135. Lawn JE, Rohde J, Rifkin S, Were M, Paul VK, Chopra M. Alma-Ata 30 years on: revolutionary, relevant, and time to revitalise. *Lancet*. 2008;372(9642):917-927.
136. De Maeseneer J, van Weel C, Egilman D, Mfenyana K, Kaufman A, Sewankambo N. Strengthening primary care: addressing the disparity between vertical and horizontal investment. *Br J Gen Pract*. 2008;58(546):3-4.
137. Bruce ML, Sirey JA. Integrated Care for Depression in Older Primary Care Patients. *Can J Psychiatry*. 2018;63(7):439-446.
138. Cohen DJ, Balasubramanian BA, Davis M, et al. Understanding care integration from the ground up: five organizing constructs that shape integrated practices. *J Am Board Fam Med*. 2015;28(Suppl 1):S7-S20.
139. Passmore R. The declaration of Alma-Ata and the future of primary care. *Lancet*. 1979;2(8150):1005-1008.
140. The Alma-Ata conference on primary health care. *WHO Chron*. 1978;32(11):409-430.
141. Bhutta ZA, Atun R, Ladhak N, Abbasi K. Alma Ata and primary healthcare: back to the future. *BMJ*. 2018;363:k4433.
142. Watkins DA, Yamey G, Schaferhoff M, et al. Alma-Ata at 40 years: reflections from the Lancet Commission on Investing in Health. *Lancet*. 2018;392(10156):1434-1460.
143. Birn AE. Back to Alma-Ata, From 1978 to 2018 and Beyond. *Am J Public Health*. 2018;108(9):1153-1155.
144. Gillam S. Is the declaration of Alma Ata still relevant to primary health care? *BMJ*. 2008;336(7643):536-538.
145. Chan M. Return to Alma-Ata. *Lancet*. 2008;372(9642):865-866.
146. World Health Organization, United Nations Children's Fund (UNICEF). Declaration of Astana. Global Conference on Primary Health Care, from Alma-Ata towards universal health coverage and the sustainable development goals; Oct 25-26, 2018; Astana, Kazakhstan.
147. World Health Organization, Ministry of Healthcare Republic of Kazakhstan. Global Conference on Primary Health Care. 25-26 October 2018 - Astana, Kazakhstan. World Health Organization. <https://www.who.int/news-room/events/detail/2018/10/25/default-calendar/global-conference-on-primary-health-care>. Published 2018. Accessed May 24, 2020.
148. Bollier D. Reclaiming The Commons. Boston Review. <https://portside.org/2019-07-27/reclaiming-commons>. Published 2019. Accessed July 31, 2019.
149. Camacho AE, Glicksman RL. The Trump Administration's Pandemic Response Is Structured to Fail. The Regulatory Review Web site. <https://www.theregreview.org/2020/05/19/camacho-glicksman-trump-administration-pandemic-response-structured-fail/>. Updated May 19, 2020. Accessed.
150. Lin K. How about ranking how well hospitals serve their communities? Common Sense Family Doctor Blog. http://commonsensemd.blogspot.com/2017/08/how-about-ranking-how-well-hospitals.html?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+CommonSenseFamilyDoctor+%28Common+Sense+Family+Doctor%29. Published 2017. Accessed May 15, 2019.
151. Maani N, Galea S. COVID-19 and underinvestment in the health of the US population. *Milbank Q*. 2020;00:1-11.
152. Penn Program on Regulation. Comparing nations' responses to COVID-19: Series of essays. *The Regulatory Review*. <https://www.theregreview.org/2020/04/20/comparing-nations-responses-covid-19/>. Published 2020. Accessed May 24, 2020.

153. Haffajee RL, Mello MM. Thinking Globally, Acting Locally - The U.S. Response to Covid-19. *N Engl J Med.* 2020.
154. CNN. Why Germany has been so successful in dealing with the coronavirus. <https://www.cnbc.com/video/2020/04/13/why-germany-has-been-so-successful-in-dealing-with-the-coronavirus.html> Updated April 13, 2020. Accessed June 1, 2020.
155. Bennhold K. A German exception? Why the country's coronavirus death rate is low. *New York Times.* 2020;6(4):2020.
156. Saurer J. COVID-19 and cooperative administrative federalism in Germany. *The Regulatory Review.* <https://www.theregreview.org/2020/05/13/saurer-covid-19-cooperative-administrative-federalism-germany/>. Published May 13, 2020. Accessed May 24, 2020.
157. Miller S. The Secret to Germany's COVID-19 Success: Angela Merkel Is a Scientist. In. *The Atlantic.*
158. Analysis by Stephen Collinson - CNN. Trump sows division and confusion as anxious country edges toward opening. <https://www.cnn.com/2020/05/20/politics/trump-coronavirus-response/index.html>. Published May 20, 2020. Accessed June 1, 2020.
159. Institute of Medicine. *Primary Care and Public Health: Exploring Integration to Improve Population Health.* Washington, DC: National Academies Press; 2012.
160. Isaacs-Thomas I. How health care inequity could make the COVID-19 crisis worse. *PBS News Hour.* <https://www.pbs.org/newshour/health/how-health-care-inequity-could-make-the-covid-19-crisis-worse>. Published March 13, 2020. Accessed May 24, 2020.
161. Scott D. Coronavirus has created a crisis for primary care doctors and their patients: How the coronavirus is making America's health care access problems even worse. *Vox.* <https://www.vox.com/2020/4/27/21231528/coronavirus-covid-19-primary-care-doctors-crisis>. Published 2020. Accessed April 28, 2020.
162. National Academies of Sciences, Engineering and Medicine. *Crisis Standards of Care: Ten Years of Successes and Challenges: Proceedings of a Workshop.* Washington, DC: The National Academies Press; 2020.
163. Institute of Medicine. *America's Uninsured Crisis: Consequences for Health and Health Care.* Washington, DC: The National Academies Press; 2009.
164. Woolf SH. The big answer: rediscovering prevention at a time of crisis in health care. *Harv Health Policy Rev.* 2006;7(2).
165. Drucker J, Silver-Greenberg J, Kliff S. Wealthiest hospitals got billions in bailout for struggling health providers. *New York Times* <https://www.nytimes.com/2020/05/25/business/coronavirus-hospitals-bailout.html?referringSource=articleShare>. Published May 25, 2020. Accessed May 26, 2020.
166. American Academy of Family Physicians. AAFP gives administration formula for saving primary care. https://www.aafp.org/news/government-medicine/20200511sustainpractices.html?cmpid=em_FFFM_20200512. Published May 11, 2020. Accessed May 20, 2020.
167. Gold SB, Green LA, Westfall JM. *How payment reform could enable primary care to respond to COVID-19.* New York, NY: Milbank Memorial Fund;2020.
168. Institute of Medicine. *For the Public's Health: Investing in a Healthier Future.* Washington, DC: The National Academies Press; 2012.
169. Cherry JD, Krogstad P. SARS: the first pandemic of the 21st century. *Pediatr Res.* 2004;56(1):1-5.
170. Oh J, Lee JK, Schwarz D, Ratcliffe HL, Markuns JF, Hirschhorn LR. National response to COVID-19 in the Republic of Korea and lessons learned for other countries. *Health Syst Reform.* 2020;6(1):e1753464.
171. Oh S. South Korea's success against COVID-19. *The Regulatory Review* <https://www.theregreview.org/2020/05/14/oh-south-korea-success-against-covid-19/>. Published May 14, 2020. Accessed May 24, 2020.

172. Wong SYS, Kin On K, Chan FKL. What can countries learn from Hong Kong's response to the COVID-19 pandemic? *CMAJ*. 2020.
173. Chan PF, Lai KPL, Chao DVK, Fung SCK. Enhancing the triage and cohort of patients in public primary care clinics in response to the coronavirus disease 2019 (COVID-19) in Hong Kong: an experience from a hospital cluster. *BJGP Open*. 2020.
174. Hendrie D. GPs at the forefront of South Australia's successful efforts to tackle coronavirus. News GP. https://www1.racgp.org.au/newsgrp/clinical/gps-at-the-forefront-of-south-australia-s-success?utm_source=racgpnewsgrpnewsletter&utm_campaign=newsgpedm&utm_medium=email. Published May 25, 2020. Accessed June 20, 2020.
175. ASPREN. The Australian Sentinel Practices Research Network. <https://aspren.dmac.adelaide.edu.au/>. Accessed July 4, 2020.
176. Sweeney K. *Complexity in primary Care*. Oxon, UK: Radcliffe Publishing Ltd; 2006.
177. Ross KM, Gilchrist EC, Melek SP, Gordon PD, Ruland SL, Miller BF. Cost savings associated with an alternative payment model for integrating behavioral health in primary care. *Transl Behav Med*. 2019;9(2):274-281.
178. Black DR. Preparing the workforce for integrated healthcare: A systematic review. *Soc Work Health Care*. 2017;56(10):914-942.
179. Asarnow JR, Kolko DJ, Miranda J, Kazak AE. The Pediatric Patient-Centered Medical Home: Innovative models for improving behavioral health. *American Psychologist*. 2017;72(1):13-27.
180. OECD Data. Health spending. <https://data.oecd.org/healthres/health-spending.htm>. Accessed May 30, 2020.
181. Jabbarpour Y, Greiner A, Jetty A, et al. *Investing in Primary Care. A State-Level Analysis*. 2019.
182. Papanicolas I, Woskie LR, Jha AK. Health care spending in the United States and other high-income countries. *JAMA*. 2018;319(10):1024-1039.
183. Horn D, Altman W, Song Zgd-nL. Primary care is being devastated by Covid-19. It must be saved. *STAT First Opinion* <https://www.statnews.com/2020/04/29/save-primary-care-devastation-covid-19/>. Published April 29, 2020. Accessed May 24, 2020.
184. Phillips RL, Bazemore A, Baum A. The COVID-19 Tsunami: The Tide Goes Out Before It Comes In. *Health Affairs*. <https://www.healthaffairs.org/do/10.1377/hblog20200415.293535/full/>. Published 2020. Accessed April 4, 2020.
185. Cochrane Library. Coronavirus (COVID-19): remote care through telehealth. *Cochrane Special Collections*. <https://www.cochranelibrary.com/collections/doi/SC000043/full>. Published 2020. Updated May 6, 2020. Accessed May 24, 2020.
186. Westfall JM. Coronavirus: Family physicians provide telehealth care at risk of bankruptcy. *USA Today*. <https://www.usatoday.com/story/opinion/2020/04/07/coronavirus-family-physicians-provide-telehealth-care-risk-bankruptcy-column/2942535001/>. Published 2020. Accessed April 7, 2020, 2020.
187. Marker JE, Davis KN, Etz R, et al. Report From the FMAHealth Practice Core Team: Achieving the Quadruple Aim Through Practice Transformation. *Fam Med*. 2019;51(2):193-197.
188. Martin S. Reducing Administrative Burden A Must. American Academy of Family Physicians. https://www.aafp.org/news/blogs/intthetrenches/entry/reducing_administrative_burden_a_must.html?cmpid=em_57773779_B1. Published 2017. Accessed May 17, 2020.
189. Adams WL, McIlvain HE, Lacy NL, et al. Primary care for elderly people: why do doctors find it so hard? *Gerontologist*. 2002;42(6):835-842.
190. Woolhandler S, Himmelstein DU. The deteriorating administrative efficiency of the U.S. health care system. *N Engl J Med*. 1991;324(18):1253-1258.
191. Bujold E. The impending death of the Patient-Centered Medical Home. *JAMA Intern Med*. 2017;177(11):1559-1560.
192. Heston TF, Pahang JA. Moral Injury or Burnout? *South Med J*. 2019;112(9):483.
193. Frezza Md E. Moral Injury: The Pandemic for Physicians. *Tex Med*. 2019;115(3):4-6.

194. Ford EW. Stress, Burnout, and Moral Injury: The State of the Healthcare Workforce. *J Healthc Manag.* 2019;64(3):125-127.
195. Colwill JM, Frey JJ, Baird MA, Kirk JW, Rosser WW. Patient relationships and the personal physician in tomorrow's health system: A perspective from the Keystone IV Conference. *J Am Board Fam Med.* 2016;29 Suppl 1:S54-59.
196. Hsiao WC, Braun P, Dunn D, Becker ER, DeNicola M, Ketcham TR. Results and policy implications of the resource-based relative-value study. *N Engl J Med.* 1988;319(13):881-888.
197. Hsiao WC, Braun P, Dunn D, Becker ER. Resource-based relative values. An overview. *JAMA.* 1988;260(16):2347-2353.
198. Hsiao WC, Braun P, Becker ER, Thomas SR. The Resource-Based Relative Value Scale. Toward the development of an alternative physician payment system. *JAMA.* 1987;258(6):799-802.
199. Kikano GE, Snyder CW, Callahan EJ, Goodwin MA, Stange KC. A comparison of ambulatory services for patients with managed care and fee-for-service insurance. *American Journal of Managed Care.* 2002;8(2):181-186.
200. Flocke SA, Orzano AJ, Selinger HA, et al. Does managed care restrictiveness affect the perceived quality of primary care? A report from ASPN. Ambulatory Sentinel Practice Network. *Journal of Family Practice.* 1999;48(10):762-768.
201. Starfield B, Cassady C, Nanda J, Forrest CB, Berk R. Consumer experiences and provider perceptions of the quality of primary care: implications for managed care. *J Fam Pract.* 1998;46(3):216-226.
202. Barr DA. The effects of organizational structure on primary care outcomes under managed care. *Ann Intern Med.* 1995;122(5):353-359.
203. White PJ. Managed care has useful role in promoting 'meaningful use'. *Managed care (Langhorne, Pa.)*. 2010;19(2):41-45.
204. Collins KS, Schoen C, Sandman DR. *The Commonwealth Fund Survey of Physician Experiences with Managed Care.* New York, NY: The Commonwealth Fund; March, 1997 1997.
205. Gold MR, Hurley R, Lake T, Ensor T, Berenson R. A national survey of the arrangements managed care plans make with physicians. *N Engl J Med.* 1995;333(25):1678-1683.
206. Emanuel EJ, Dubler NN. Preserving the physician-patient relationship in the era of managed care. *JAMA.* 1995;273(4):323-329.
207. Clancy CM, Brody H. Managed care. Jekyll or Hyde? *JAMA.* 1995;273(4):338-339.
208. Miller RH, Luft HS. Managed care plan performance since 1980: a literature analysis. *JAMA.* 1994;271(19):1512-1519.
209. Freberg GW. Managed care: 'the hassle factor,' by choice or coercion. *Conn Med.* 1992;56(4):203-206.
210. Koroukian SM, Basu J, Schiltz NK, et al. Changes in Case-Mix and Health Outcomes of Medicare Fee-for-Service Beneficiaries and Managed Care Enrollees During the Years 1992-2011. *Med Care.* 2018;56(1):39-46.
211. Roland M, Campbell S. Successes and failures of pay for performance in the United Kingdom. *N Engl J Med.* 2014;370(20):1944-1949.
212. McDonald R, Roland M. Pay for performance in primary care in England and California: comparison of unintended consequences. *Ann Fam Med.* 2009;7(2):121-127.
213. Augustine S, Litaker D. Pay for performance and medical education: strategies for preparing physicians of the future. *Qual Manag Health Care.* 2008;17(2):94-101.
214. Fisher ES. The paradox of plenty: implications for performance measurement and pay for performance. *Managed care (Langhorne, Pa.)*. 2006;15(10 Suppl 8):3-8.
215. Nielsen M, Buelt L, Patel K, Nichols LM. *The Patient-Centered Medical Home's Impact on Cost and Quality, Review of Evidence, 2014-2015.* Washington, D.C.: The Patient-Centered Primary Care Collaborative, with the support of the Milbank Memorial Fund;2016.

216. Sia C, Tonniges TF, Osterhus E, Taba S. History of the medical home concept. *Pediatrics*. 2004;113(5 Suppl):1473-1478.
217. Sinaiko AD, Landrum MB, Meyers DJ, et al. Synthesis of research on Patient-Centered Medical Homes brings systematic differences into relief. *Health Aff (Millwood)*. 2017;36(3):500-508.
218. Berenson RA, Burton RA, McGrath M. Do accountable care organizations (ACOs) help or hinder primary care physicians' ability to deliver high-quality care? *Healthcare*. 2016 [epub].
219. McWilliams JM, Hatfield LA, Chernew ME, Landon BE, Schwartz AL. Early Performance of Accountable Care Organizations in Medicare. *N Engl J Med*. 2016;374(24):2357-2366.
220. McWilliams JM, Chernew ME, Landon BE, Schwartz AL. Performance differences in year 1 of pioneer accountable care organizations. *N Engl J Med*. 2015;372(20):1927-1936.
221. Hacker K, Walker DK. Achieving population health in accountable care organizations. *Am J Public Health*. 2013;103(7):1163-1167.
222. Accountable Care Organizations and Public Health (ASTHO). *Accountable Care Organizations and Public Health*. Arlington, VA: Accountable Care Organizations and Public Health (ASTHO);2013.
223. Berwick DM. Launching accountable care organizations--the proposed rule for the Medicare Shared Savings Program. *N Engl J Med*. 2011;364(16):e32.
224. Fisher ES, Corrigan J. Accountable health communities: getting there from here. *JAMA*. 2014;312(20):2093-2094.
225. Weeks WB, Gottlieb DJ, Nyweide DE, et al. Higher health care quality and bigger savings found at large multispecialty medical groups. *Health Affair*. 2010;29(5):991-997.
226. McClellan M, McKethan AN, Lewis JL, Roski J, Fisher ES. A national strategy to put accountable care into practice. *Health Affairs*. 2010;29(5):982-990.
227. Crosson JC, Etz RS, Wu S, Straus SG, Eisenman D, Bell DS. Meaningful use of electronic prescribing in 5 exemplar primary care practices. *Ann Fam Med*. 2011;9(5):392-397.
228. Conn J. 'Age of meaningful use'. HIMSS convention delivers with hot IT topics. *Modern Healthcare*. 2011;41(9):12-13.
229. Robeznieks A, Lubell J. 'Meaningful use' at last. Regs aim to boost quality, safety and efficiency. *Modern Healthcare*. 2010;40(1):4.
230. Porter S. AAFP would like to see significant modifications in 'meaningful use' rule. *Annals of Family Medicine*. 2010;8(3):273-274.
231. Brennan RD, Jr. Make 'meaningful use' of health information technology meaningful. *Caring*. 2010;29(7):24-26.
232. CMS defines 'meaningful use'. Proposed rule outlines requirements for EHR incentive payments. *MGMA Connex*. 2010;10(3):10-13.
233. Government takes first step in defining 'meaningful use' requirement for EHR incentives. *MGMA Connex*. 2009;9(7):12-14.
234. Rathi VK, McWilliams JM. First-Year Report Cards From the Merit-Based Incentive Payment System (MIPS): What Will Be Learned and What Next? *JAMA*. 2019;321(12):1157-1158.
235. Gondi S, Ferris TG, Patel KK, Song Z. Physician-initiated payment reform: a new path toward value. *Am J Manag Care*. 2019;25(9):431-437.
236. Ahmad FS, Rasmussen LV, Persell SD, et al. Challenges to electronic clinical quality measurement using third-party platforms in primary care practices: the healthy hearts in the heartland experience. *JAMIA Open*. 2019;2(4):423-428.
237. Mutter JB, Liaw W, Moore MA, Etz RS, Howe A, Bazemore A. Core Principles to Improve Primary Care Quality Management. *J Am Board Fam Med*. 2018;31(6):931-940.
238. Swankoski KE, Peikes DN, Palakal M, Duda N, Day TJ. Primary Care Practice Transformation Introduces Different Staff Roles. *Ann Fam Med*. 2020;18(3):227-234.
239. Peikes DN, Swankoski K, Hoag SD, et al. The Effects of a Primary Care Transformation Initiative on Primary Care Physician Burnout and Workplace Experience. *J Gen Intern Med*. 2019;34(1):49-57.

240. Swankoski KE, Peikes DN, Morrison N, et al. Patient experience during a large primary care practice transformation initiative. *Am J Manag Care*. 2018;24(12):607-613.
241. Swankoski KE, Peikes DN, Dale SB, et al. Patient experience midway through a large primary care practice transformation initiative. *Am J Manag Care*. 2017;23(3):178-184.
242. Singh P, Orzol S, Peikes D, Oh EG, Dale S. Participation in the Comprehensive Primary Care Plus Initiative. *Ann Fam Med*. 2020;14(4).
243. Berdahl CT, Easterlin MC, Ryan G, Needleman J, Nuckols TK. Primary Care Physicians in the Merit-Based Incentive Payment System (MIPS): a Qualitative Investigation of Participants' Experiences, Self-Reported Practice Changes, and Suggestions for Program Administrators. *J Gen Intern Med*. 2019;34(10):2275-2281.
244. Phillips R. The PRIME Registry Helps Thousands of Primary Care Clinicians Liberate EHR Data and Prepare for MIPS. *The Journal of the American Board of Family Medicine*. 2017;30(4):559.
245. Bujold E. When practice transformation impedes practice improvement. *Ann Fam Med*. 2015;13(3):273-275.
246. Saultz A, Saultz JW. Measuring Outcomes: Lessons From the World of Public Education. *Ann Fam Med*. 2017;15(1):71-76.
247. Edwards ST, Marino M, Balasubramanian BA, et al. Burnout among physicians, advanced practice clinicians and staff in smaller primary care practices. *J Gen Intern Med*. 2018.
248. Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. *Ann Fam Med*. 2014;12(6):573-576.
249. Sinsky CA, Willard-Grace R, Schutzbach AM, Sinsky TA, Margolius D, Bodenheimer T. In search of joy in practice: a report of 23 high-functioning primary care practices. *Ann Fam Med*. 2013;11(3):272-278.
250. Fisher ES, McClellan MB, Bertko J, et al. Fostering accountable health care: moving forward in Medicare. *Health Aff (Millwood)*. 2009;28(2):w219-231.
251. McWilliams JM, Hatfield LA, Landon BE, Hamed P, Chernew ME. Medicare spending after 3 years of the Medicare Shared Savings Program. *N Engl J Med*. 2018;379(12):1139-1149.
252. Martin S, Phillips RL, Jr., Petterson S, Levin Z, Bazemore AW. Primary Care Spending in the United States, 2002-2016. *JAMA Intern Med*. 2020.
253. Egener BE, Mason DJ, McDonald WJ, et al. The charter on professionalism for health care organizations. *Acad Med*. 2017;92(8):1091-1099.
254. Griswold KS. Changing places: Where will we be with our patients? A perspective from the Keystone IV Conference. *J Am Board Fam Med*. 2016;29 Suppl 1:S24-27.
255. Green LA, Puffer JC. Reimagining Our relationships with patients: A perspective from the Keystone IV Conference. *J Am Board Fam Med*. 2016;29 Suppl 1:S1-S11.
256. Wynia MK, Papadakis MA, Sullivan WM, Hafferty FW. More than a list of values and desired behaviors: a foundational understanding of medical professionalism. *Acad Med*. 2014;89(5):712-714.
257. Lesser CS, Lucey CR, Egener B, Braddock CH, Linas SL, Levinson W. A behavioral and systems view of professionalism. *JAMA*. 2010;304(24):2732-2737.
258. Coulehan J. On humility. *Ann Intern Med*. 2010;153(3):200-201.
259. Hafferty FW. Professionalism--the next wave. *N Engl J Med*. 2006;355(20):2151-2152.
260. Montgomery L, Loue S, Stange KC. Linking the heart and the head: humanism and professionalism in medical education and practice. *Family Medicine*. 2017;49(5):378-383.
261. Lagarde M, Huicho L, Papanicolas I. Motivating provision of high quality care: it is not all about the money. *BMJ*. 2019;366:l5210.
262. National Academy of Medicine, National Academies of Sciences, Engineering and Medicine. *Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being*. Washington, DC: The National Academies Press; 2019.

263. Sittig DF, Singh H. COVID-19 and the need for a national health information technology infrastructure. *JAMA*. 2020;323(23):2373-2374.
264. Ng Y, Li Z, Chua YX, et al. Evaluation of the Effectiveness of Surveillance and Containment Measures for the First 100 Patients with COVID-19 in Singapore - January 2-February 29, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(11):307-311.
265. Maani N, Galea S. COVID-19 and underinvestment in the health of the US population. *Milbank Q*. 2020;98(2):239-249.
266. Lim WH, Wong WM. COVID-19: Notes From the Front Line, Singapore's Primary Health Care Perspective. *Ann Fam Med*. 2020;18(3):259-261.
267. Kidd M. Australia's primary care COVID-19 response. *Aust J Gen Pract*. 2020;49.
268. Chang BB, Chiu TY. Ready for a long fight against the COVID-19 outbreak: an innovative model of tiered primary health care in Taiwan. *BJGP Open*. 2020.
269. Hsu LY, Tan M. What Singapore can teach the U.S. about responding to Covid-19. *STAT First Opinion* <https://www.statnews.com/2020/03/23/singapore-teach-united-states-about-covid-19-response/>. Published March 23, 2020. Accessed May 24, 2020.
270. Miliard M. Epic, OCHIN launch COVID-19 app for front-line care coordination. HealthcareITNews. <https://www.healthcareitnews.com/news/epic-ochin-launch-covid-19-app-frontline-care-coordination>. Published 2020. Accessed April 15, 2020.
271. Townsend C, Bergon M, Harper J. *Essentials of Ecology*. 2nd ed. New York: Blackwell; 2003.
272. Rao A, Shi Z, Ray KN, Mehrotra A, Ganguli I. National trends in primary care visit use and practice capabilities, 2008-2015. *Ann Fam Med*. 2019;17(6):538-544.
273. Hansen J, Groenewegen PP, Boerma WG, Kringos DS. Living In A Country With A Strong Primary Care System Is Beneficial To People With Chronic Conditions. *Health Aff (Millwood)*. 2015;34(9):1531-1537.
274. Haggerty JL, Beaulieu MD, Pineault R, et al. Comprehensiveness of care from the patient perspective: comparison of primary healthcare evaluation instruments. *Healthc Policy*. 2011;7(Spec Issue):154-166.
275. Crabtree BF, Chase SM, Wise CG, et al. Evaluation of patient centered medical home practice transformation initiatives. *Med Care*. 2011;49(1):10-16.
276. Stange KC, Nutting PA, Miller WL, et al. Defining and measuring the patient-centered medical home. *J Gen Intern Med*. 2010;25(6):601-612.
277. Boult C, Wieland GD. Comprehensive primary care for older patients with multiple chronic conditions: "Nobody rushes you through". *JAMA*. 2010;304(17):1936-1943.
278. Martin JC, Avant RF, Bowman MA, et al. The Future of Family Medicine: a collaborative project of the family medicine community. *Annals of Family Medicine*. 2004;2 Suppl 1:S3-32.
279. Ferrer RL, Carrasco AV. Capability and clinical success. *Ann Fam Med*. 2010;8(5):454-460.
280. Balasubramanian B, Cohen D, Davis M, et al. Learning Evaluation: blending quality improvement and implementation research methods to study healthcare innovations. *Implementation Science*. 2015;10(1):31.
281. Etz RS, Hahn KA, Gonzalez MM, Crabtree BF, Stange KC. Practice-based innovations: More relevant and transportable than NIH-funded studies. *J Am Board Fam Med*. 2014;27(6):738-739.
282. Ruhe MC, Weyer SM, Zronek S, Wilkinson A, Wilkinson PS, Stange KC. Facilitating practice change: lessons from the STEP-UP clinical trial. *Preventive Medicine*. 2005;40(6):729-734.
283. Miller WL, McDaniel RR, Jr., Crabtree BF, Stange KC. Practice jazz: understanding variation in family practices using complexity science. *Journal of Family Practice*. 2001;50(10):872-878.
284. Forrest CB, Nutting PA, von Schrader S, Rohde C, Starfield B. Primary care physician specialty referral decision making: patient, physician, and health care system determinants. *Med Decis Making*. 2006;26(1):76-85.
285. Starfield B, Shi L, Grover A, Macinko J. The effects of specialist supply on populations' health: assessing the evidence. *Health Aff (Millwood)*. 2005;Suppl Web Exclusives:W5-97-W95-107.

286. Starfield B, Lemke KW, Herbert R, Pavlovich WD, Anderson G. Comorbidity and the use of primary care and specialist care in the elderly. *Ann Fam Med.* 2005;3(3):215-222.
287. Starfield B. The Medical Home Index applies primarily to children with special health care needs. *Ambul Pediatr.* 2004;4(2):192; author reply 192-193.
288. Starfield B. Primary care and specialty care: a role reversal? *Med Educ.* 2003;37(9):756-757.
289. Starfield B. William Pickles Lecture. Primary and specialty care interfaces: the imperative of disease continuity. *Br J Gen Pract.* 2003;53(494):723-729.
290. Stange K, Katerndahl D, Etz R. Who actually integrates care for complex patients? Comment to Tonelli et al., Comparison of the complexity of patients seen by different medical subspecialists in a universal health care system. *JAMA Network Open.* 2018;1(7):e184852.
291. McWhinney IR. 'An acquaintance with particulars...'. *Fam Med.* 1989;21(4):296-298.
292. O'Connor PJ, Sperl-Hillen JM, Margolis KL, Kottke TE. Strategies to Prioritize Clinical Options in Primary Care. *The Annals of Family Medicine.* 2017;15(1):10-13.
293. Loxterkamp D. Doctors' work: eulogy for my vocation. *Ann Fam Med.* 2009;7(3):267-268.
294. Loxterkamp D. Being there: on the place of the family physician. *J Am Board Fam Pract.* 1991;4(5):354-360.
295. Tufekci Z. It Wasn't Just Trump Who Got It Wrong. America's coronavirus response failed because we didn't understand the complexity of the problem. In: *The Atlantic* March 24, 2020.
296. Science News Staff. The United States leads in coronavirus cases, but not pandemic response. *Science.* Apr. 1, 2020.
297. Hughes G, Shaw SE, Greenhalgh T. Rethinking integrated care: A systematic hermeneutic review of the literature on integrated care strategies and concepts. *Milbank Q.* 2020;98(2):446-492.
298. deGruy F. Mental health care in the primary care setting. In: Donaldson MS, Yordy KD, Lohr KN, Vanselow NA, eds. *Primary Care: America's Health in a New Era.* Washington, DC: National Academy Press; 1996:285-311.
299. Miller BF, Ross KM, Davis MM, Melek SP, Kathol R, Gordon P. Payment reform in the patient-centered medical home: Enabling and sustaining integrated behavioral health care. *Am Psychol.* 2017;72(1):55-68.
300. Westfall JM. Cold-spotting: linking primary care and public health to create communities of solution. *J Am Board Fam Med.* 2013;26(3):239-240.
301. Plochg T, van den Broeke JR, Kringos DS, Stronks K. Integrating primary care and public health. *Am J Public Health.* 2012;102(10):e1; author reply e1-2.
302. Stange KC. Holding on and letting go: a perspective from the Keystone IV conference. *The Journal of the American Board of Family Medicine.* 2016;29(Supplement 1):S32-S39.
303. Saba GW, Villela TJ, Chen E, Hammer H, Bodenheimer T. The myth of the lone physician: toward a collaborative alternative. *Ann Fam Med.* 2012;10(2):169-173.
304. Heath I, Nessa J. Objectification of physicians and loss of therapeutic power. *Lancet.* 2007;369(9565):886-888.
305. Charney E. *Report of the ad hoc Committee on Generalism to the Executive Committee of the Accreditation Council for Graduate Medical Education (ACGME).* Worcester, MA: University of Massachusetts Medical Center; September 20, 1994 1994.
306. Stange KC, Etz RS, Gullett H, et al. Metrics for assessing improvements in primary health care. *Annu Rev Public Health.* 2014;35:423-442.
307. Bitton A, Schwartz GR, Stewart EE, et al. Off the hamster wheel? Qualitative evaluation of a payment-linked patient-centered medical home (PCMH) pilot. *Milbank Q.* 2012;90(3):484-515.
308. Kringos DS, Boerma WGW, Hutchinson A, van der Zee J, Groenewegen PP. The breadth of primary care: a systematic literature review of its core dimensions. *BMC Health Services Research.* 2010;10(1):65.
309. Beasley JW, Hankey TH, Erickson R, et al. How many problems do family physicians manage at each encounter? A WReN study. *Annals of Family Medicine.* 2004;2(5):405-410.

310. Bazemore A, Petterson S, Peterson LE, Bruno R, Chung Y, Phillips RL. Higher Primary Care Physician Continuity is Associated With Lower Costs and Hospitalizations. *Ann Fam Med.* 2018;16(6):492-497.
311. Brown JD, King MA, Wissow LS. The central role of relationships with trauma-informed integrated care for children and youth. *Acad Pediatr.* 2017;17(7S):S94-S101.
312. Pelone F, Kringos DS, Spreeuwenberg P, De Belvis AG, Groenewegen PP. How to achieve optimal organization of primary care service delivery at system level: lessons from Europe. *International Journal for Quality in Health Care.* 2013;25(4):381-393.
313. Saultz JW, Lochner J. Interpersonal continuity of care and care outcomes: a critical review. *Ann Fam Med.* 2005;3(2):159-166.
314. Saultz JW, Albedaiwi W. Interpersonal continuity of care and patient satisfaction: a critical review. *Ann Fam Med.* 2004;2(5):445-451.
315. Franks P, Clancy CM, Nutting PA. Gatekeeping revisited--protecting patients from overtreatment. *N Engl J Med.* 1992;327(6):424-429.
316. Lewis C, Seervai S, Shah T, Abrams MK, Zephyrin L. Primary care and the COVID-19 pandemic. *To the Point (Blog), Commonwealth Fund.* <https://doi.org/10.26099/73k0-a831>. Published April 22, 2020. Accessed May 24, 2020.
317. Greenhalgh T. *Primary Health Care: Theory and Practice.* Malden, MA: Blackwell/BMJ Books; 2007.
318. Safran DG, Miller W, Beckman H. Organizational dimensions of relationship-centered care. Theory, evidence, and practice. *J Gen Intern Med.* 2006;21 Suppl 1:S9-15.
319. Frankel RM. Relationship-centered care and the patient-physician relationship. *J Gen Intern Med.* 2004;19(11):1163-1165.
320. Epstein RM. Mindful practice in action (I): technical competence, evidence-based medicine and relationship-centered care. *Fam Sys Health.* 2003;21(1):1-10.
321. Ofri D. The Conversation Placebo. The New York Times.
<https://www.nytimes.com/2017/01/19/opinion/sunday/the-conversation-placebo.html?smprod=nytcore-iphone&smid=nytcore-iphone-share>. Published 2017. Accessed June 5, 2019.
322. Brody H. *The Placebo Response: How You Can Release the Body's Inner Pharmacy for Better Health.* New York, NY: HarperCollins Publishers; 2000.
323. Brody H. *Placebos and the Philosophy of Medicine.* Chicago, IL: University of Chicago Press; 1980.
324. Egnew TR. Suffering, meaning, and healing: challenges of contemporary medicine. *Ann Fam Med.* 2009;7(2):170-175.
325. Egnew TR. The meaning of healing: transcending suffering. *Ann Fam Med.* 2005;3(3):255-262.
326. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *The Milbank Quarterly.* 2005;83(3):457-502.
327. Etz RS, Stange KC. Synthesis of the Starfield Summit III: Meaningful Measures for Primary Care. <https://static1.squarespace.com/static/56bb9997746fb9d2b5c70970/t/5ab1731a03ce64e295a79b94/1521578778331/StarfieldIIISynthesisRev.pdf>. Published 2018. Accessed January 18, 2019.
328. Sandy LG, Bodenheimer T, Pawlson LG, Starfield B. The political economy of U.S. primary care. *Health Aff (Millwood).* 2009;28(4):1136-1145.
329. Shi L, Macinko J, Starfield B, Politzer R, Xu J. Primary care, race, and mortality in US states. *Soc Sci Med.* 2005;61(1):65-75.
330. Starfield B. Promoting equity in health through research and understanding. *Dev World Bioeth.* 2004;4(1):76-95.
331. Shi L, Starfield B, Politzer R, Regan J. Primary care, self-rated health, and reductions in social disparities in health. *Health Serv Res.* 2002;37(3):529-550.
332. Mendel P, Gidengil CA, Tomoaia-Cotisel A, et al. *Health Services and Primary Care Research Study: Comprehensive Report.* Santa Monica, California: RAND Corporation;2020.

333. Katerndahl D, Crabtree B. Creating innovative research designs: the 10-year Methodological Think Tank case study. *Ann Fam Med.* 2006;4(5):443-449.
334. Norton PG, Stewart M, Tudiver F, Bass MJ, Dunn EV, eds. *Primary care research: traditional and innovative approaches*. Newbury Park, California: Sage Publications; 1991. Research Methods for Primary Care; No. 1.
335. Creswell JW, Klassen AC, Plano Clark VL, Clegg Smith K, Meissner HI, National Institutes of Health (U.S.). Office of Behavioral and Social Sciences Research. Best practices for mixed methods research in the health sciences. In: Bethesda, MD?: The Office; 2011: http://obssr.od.nih.gov/scientific_areas/methodology/mixed_methods_research/index.aspx.
336. Bass MJ, Dunn EV, Norton PG, Stewart M, Tudiver F, eds. *Conducting Research in the Practice Setting*. Newbury Park, CA: Sage Publications; 1993.
337. Carey TS, Halladay JR, Donahue KE, Cykert S. Practice-based Research Networks (PBRNs) in the Era of Integrated Delivery Systems. *J Am Board Fam Med.* 2015;28(5):658-662.
338. Werner JJ, Stange KC. Praxis-based research networks: An emerging paradigm for research that is rigorous, relevant, and inclusive. *J Am Board Fam Med.* 2014;27(6):730-735.
339. Westfall JM, VanVorts RF, Main DS, Herbert C. Community-based participatory research in practice-based research networks. *Ann Fam Med.* 2006;4(1):8-14.
340. Pace WD, Staton EW. Electronic data collection options for practice-based research networks. *Ann Fam Med.* 2005;3 Suppl 1:S21-29.
341. Green LA, White LL, Barry HC, Nease DE, Jr, Hudson BL. Infrastructure requirements for practice-based research networks. *Ann Fam Med.* 2005;3 Suppl 1:S5-11.
342. Nutting PA, Beasley JW, Werner JJ. Practice-based research networks answer primary care questions. *JAMA.* 1999;281(8):686-688.
343. DeVoe JE, Likumahuwa-Ackman S, Shannon J, Steiner Hayward E. Creating 21st-century laboratories and classrooms for improving population health: A call to action for academic medical centers. *Acad Med.* 2017;92(4):475-482.
344. Robert Wood Johnson Foundation. Generalist Physician Faculty Scholars Program. <https://www.rwjf.org/en/library/research/2009/07/generalist-physician-faculty-scholars-program.html>. Accessed July 5, 2020.
345. Papanicolas I, R. WL, K. JA. Health care spending in the United States and other high-income countries. *JAMA.* 2018;319(10):1024-1039.
346. Gruss I, Bunce A, Davis J, Dambrun K, Cottrell E, Gold R. Initiating and Implementing Social Determinants of Health Data Collection in Community Health Centers. *Popul Health Manag.* 2020.
347. The Commonwealth Fund. *Guide to Evidence on the Health Care Impacts of Interventions to Address the Social Determinants of Health*. 2019.
348. Gold R, Bunce A, Cowburn S, et al. Adoption of Social Determinants of Health EHR Tools by Community Health Centers. *Ann Fam Med.* 2018;16(5):399-407.
349. Griswold KS, Lesko SE, Westfall JM. Communities of solution: partnerships for population health. *J Am Board Fam Med.* 2013;26(3):232-238.
350. American Board of Family Medicine Young Leaders Advisory Group. Communities of solution: the Folsom Report revisited. *Ann Fam Med.* 2012;10(3):250-260.
351. McIntosh D, Startsman LF, Perraud S. Mini Review of Integrated Care and Implications for Advanced Practice Nurse Role. *Open Nurs J.* 2016;10:78-89.
352. Grumbach K, Mold JW. A health care cooperative extension service: transforming primary care and community health. *JAMA.* 2009;301(24):2589-2591.
353. Rasmussen WD. *Taking the University to the People: Seventy-Five Years of Cooperative Extension*. Ames, IA: Iowa State University Press; 1989.
354. Ono SS, Crabtree BF, Hemler JR, et al. Taking Innovation To Scale In Primary Care Practices: The Functions Of Health Care Extension. *Health Aff (Millwood).* 2018;37(2):222-230.

355. Jetelina KK, Woodson TT, Gunn R, et al. Evaluation of an Electronic Health Record (EHR) Tool for Integrated Behavioral Health in Primary Care. *J Am Board Fam Med.* 2018;31(5):712-723.
356. McClellan M, Kent J, Beales SJ, et al. Accountable care around the world: a framework to guide reform strategies. *Health Aff (Millwood).* 2014;33(9):1507-1515.
357. Marchibroda JM. The impact of health information technology on collaborative chronic care management. *J Manag Care Pharm.* 2008;14(2 Suppl):S3-11.
358. Heintzman J, Marino M. Race and Ethnicity Data in Research. *JAMA.* 2019;321(12):1217-1218.
359. Cottrell EK, Dambrun K, Cowburn S, et al. Variation in electronic health record documentation of social determinants of health across a national network of community health centers. *Am J Prev Med.* 2019;57(6 Suppl 1):S65-S73.
360. Cottrell EK, Gold R, Likumahuwa S, et al. Using health information technology to bring social determinants of health into primary care: A conceptual framework to guide research. *J Health Care Poor Underserved.* 2018;29(3):949-963.
361. Bunce AE, Gold R, Davis JV, et al. "Salt in the wound": Safety net clinician perspectives on performance feedback derived from EHR data. *J Ambul Care Manage.* 2017;40(1):26-35.
362. Wallace LS, Angier H, Huguet N, et al. Patterns of Electronic Portal Use among Vulnerable Patients in a Nationwide Practice-based Research Network: From the OCHIN Practice-based Research Network (PBRN). *J Am Board Fam Med.* 2016;29(5):592-603.
363. Krist AH, Beasley JW, Crosson JC, et al. Electronic health record functionality needed to better support primary care. *J Am Med Inform Assoc.* 2014;21(5):764-771.
364. Bazemore A, Phillips RL, Miyoshi T. Harnessing Geographic Information Systems (GIS) to enable community-oriented primary care. *J Am Board Fam Med.* 2010;23(1):22-31.
365. Mullan F, Epstein L. Community-oriented primary care: new relevance in a changing world. *Am J Public Health.* 2002;92(11):1748-1755.
366. Williams RL, Jaén CR. Tools for community-oriented primary care: use of key informant trees in eleven practices. *J Natl Med Assoc.* 2000;92(4):157-162.
367. Rhyne R, Bogue R, Kukulka G, Fulmer H, eds. *Community-Oriented Primary Care: Health Care for the 21st Century.* Washington, DC: American Public Health Association; 1998.
368. Mettee TM, Martin KB, Williams RL. Tools for community-oriented primary care: a process for linking practice and community data. *J Am Board Fam Pract.* 1998;11(1):28-33.
369. Nutting PA. *Community-Oriented Primary Care: From Principle to Practice.* Washington, DC: U.S. Government Printing Office;1987. DHHS Publication No. HRS-A-PE 86-1 (Now available from the University of New Mexico Press).
370. Black Lives Matter. BLM's #WhatMatters2020. <https://blacklivesmatter.com/what-matters-2020/>. Accessed.
371. Seaton EK, Yellow Horse AJ, Yoo HC, Vargas E. Health Implications of Black Lives Matter Among Black Adults. *J Racial Ethn Health Disparities.* 2020.
372. Sawyer J, Gampa A. Implicit and Explicit Racial Attitudes Changed During Black Lives Matter. *Pers Soc Psychol Bull.* 2018;44(7):1039-1059.
373. Krieger N. Public Health, Embodied History, and Social Justice: Looking Forward. *Int J Health Serv.* 2015;45(4):587-600.
374. Schensul JJ. Community, culture and sustainability in multilevel dynamic systems intervention science. *Am J Community Psychol.* 2009;43(3-4):241-256.
375. Miller PM. Examining the work of boundary spanning leaders in community contexts. *International Journal of Leadership in Education: Theory and Practice.* 2008;11(4):353-377.
376. National Academies of Sciences, Engineering and Medicine. *Multisector Community Health Partnerships: Potential Opportunities and Challenges: Proceedings of a Workshop—in Brief*. Washington, DC: The National Academies Press; 2017.
377. Grant RW, Middleton B. Improving primary care for patients with complex chronic diseases: can health information technology play a role? *CMAJ.* 2009;181(1-2):17-18.

378. DeVoe JE, Barnes K, Morris C, et al. The Personal Doctoring Manifesto: A Perspective from the Keystone IV Conference. *The Journal of the American Board of Family Medicine*. 2016;29(Supplement 1):S64-S68.
379. Casalino LP, Chen MA, Staub CT, et al. Large Independent Primary Care Medical Groups. *Ann Fam Med*. 2016;14(1):16-25.
380. Higgins TC, Crosson J, Peikes D, McNellis R, Genevro J, Myers D. *Using health information technology to support quality improvement in primary care*. Princeton, NJ: Mathematica Policy Research;2015.
381. Wasson JH, Anders SG, Moore LG, et al. Clinical microsystems, part 2. Learning from micro practices about providing patients the care they want and need. *Jt Comm J Qual Patient Saf*. 2008;34(8):445-452.
382. de Lusignan S, Williams J. To monitor the COVID-19 pandemic we need better quality primary care data. *BJGP Open*. 2020.
383. Moerenhout T, Fischer GS, Saelaert M, De Sutter A, Provoost V, Devisch I. Primary Care Physicians' Perspectives on the Ethical Impact of the Electronic Medical Record. *J Am Board Fam Med*. 2020;33(1):106-117.
384. Rahal RM, Mercer J, Kuziemsky C, Yaya S. Primary Care Physicians' Experience Using Advanced Electronic Medical Record Features to Support Chronic Disease Prevention and Management: Qualitative Study. *JMIR Med Inform*. 2019;7(4):e13318.
385. Nemeth LS, Feifer C, Stuart GW, Ornstein SM. Implementing change in primary care practices using electronic medical records: a conceptual framework. *Implement Sci*. 2008;3:3.
386. CMS. Accountable Health Communities Model. <https://innovation.cms.gov/innovation-models/ahcm>. Accessed June 1, 2020.
387. Institute of Medicine (IOM). *Vital Signs: core metrics for health and health care progress*. Washington, DC: Institute of Medicine (IOM);;2015 (in press).
388. Vidal-Alaball J, Acosta-Roja R, Pastor Hernandez N, et al. Telemedicine in the face of the COVID-19 pandemic. *Aten Primaria*. 2020.
389. Gold S, Green LA, Westfall JM. *How Payment Reform Could Enable Primary Care to Respond to COVID-19*. Milbank Memorial Fund: Milbank Memorial Fund;2020.
390. Larry A. Green, MD Center for the Advancement of Primary Care for the Public Good. Quick COVID-19 Survey. <https://www.green-center.org/covid-survey>. Published 2020. Accessed May 14, 2020.
391. Darkins A, Ryan P, Kobb R, et al. Care Coordination/Home Telehealth: The Systematic Implementation of Health Informatics, Home Telehealth, and Disease Management to Support the Care of Veteran Patients with Chronic Conditions. *Telemedicine and e-Health*. 2008;14(10):1118-1126.
392. Chumbler NR, Vogel WB, Garel M, Qin H, Kobb R, Ryan P. Health services utilization of a care coordination/home-telehealth program for veterans with diabetes: a matched-cohort study. *J Ambul Care Manage*. 2005;28(3):230-240.
393. Chumbler NR, Neugaard B, Kobb R, Ryan P, Qin H, Joo Y. Evaluation of a care coordination/home-telehealth program for veterans with diabetes: health services utilization and health-related quality of life. *Eval Health Prof*. 2005;28(4):464-478.
394. Rollman BL, Belnap BH, Mazumdar S, et al. A randomized trial to improve the quality of treatment for panic and generalized anxiety disorders in primary care. *Arch Gen Psychiatry*. 2005;62(12):1332-1341.
395. Walters B, Barnard D, Paris S. "Patient Portals" and "E-Visits". *J Ambul Care Manage*. 2006;29(3):222-224.
396. Timpel P, Oswald S, Schwarz PEH, Harst L. Mapping the Evidence on the Effectiveness of Telemedicine Interventions in Diabetes, Dyslipidemia, and Hypertension: An Umbrella Review of Systematic Reviews and Meta-Analyses. *J Med Internet Res*. 2020;22(3):e16791.

397. Bunnell BE, Sprague G, Qanungo S, et al. An Exploration of Useful Telemedicine-Based Resources for Clinical Research. *Telemed J E Health*. 2020;26(1):51-65.
398. Liu S, Edson B, Gianforcaro R, Saif K. Multivariate Analysis of Physicians' Practicing Behaviors in an Urgent Care Telemedicine Intervention. *AMIA Annu Symp Proc*. 2019;2019:1139-1148.
399. Hendy J, Chrysanthaki T, Barlow J, et al. An organisational analysis of the implementation of telecare and telehealth: the whole systems demonstrator. *BMC Health Serv Res*. 2012;12:403.
400. Bodenheimer T, Becerra I, Kong M. Primary care clinician attitudes about the telehealth revolution. Family Medicine Case Notes from the COVID-19 Frontlines. <https://medium.com/case-notes-from-the-covid-19-front-lines/primary-care-clinician-attitudes-about-the-telehealth-revolution-fe405cd0434b>. Published 2020. Accessed May 22, 2020.
401. Howard J, Clark EC, Friedman A, et al. Electronic health record impact on work burden in small, unaffiliated, community-based primary care practices. *J Gen Intern Med*. 2013;28(1):107-113.
402. Robinson JC, Casalino LP, Gillies RR, Rittenhouse DR, Shortell SS, Fernandes-Taylor S. Financial incentives, quality improvement programs, and the adoption of clinical information technology. *Med Care*. 2009;47(4):411-417.
403. Mostashari F. The Paradox of Size: How Small, Independent Practices Can Thrive in Value-Based Care. *Ann Fam Med*. 2016;14(1):5-7.
404. Rittenhouse DR, Grumbach K, O'Neil EH, Dower C, Bindman A. Physician organization and care management in California: from cottage to Kaiser. *Health Aff (Millwood)*. 2004;23(6):51-62.
405. Casalino LP, Pesko MF, Ryan AM, et al. Small primary care physician practices have low rates of preventable hospital admissions. *Health Aff (Millwood)*. 2014;33(9):1680-1688.
406. Cohen DJ, Wyte-Lake T, Dorr DA, et al. Unmet information needs of clinical teams delivering care to complex patients and design strategies to address those needs. *J Am Med Inform Assoc*. 2020.
407. Gold R, Cottrell E, Bunce A, et al. Developing Electronic Health Record (EHR) Strategies Related to Health Center Patients' Social Determinants of Health. *J Am Board Fam Med*. 2017;30(4):428-447.
408. Greenhalgh T, Potts HW, Wong G, Bark P, Swinglehurst D. Tensions and paradoxes in electronic patient record research: a systematic literature review using the meta-narrative method. *Milbank Q*. 2009;87(4):729-788.
409. Kringos DS, Boerma W, van der Zee J, Groenewegen P. Europe's strong primary care systems are linked to better population health but also to higher health spending. *Health Aff (Millwood)*. 2013;32(4):686-694.
410. Schäfer WLA, Boerma WGW, Kringos DS, et al. QUALICOPC, a multi-country study evaluating quality, costs and equity in primary care. *BMC Family Practice*. 2011;12(1):115.
411. Baillieu R, Kidd M, Phillips R, et al. The Primary Care Spend Model: a systems approach to measuring investment in primary care. *BMJ Glob Health*. 2019;4(4):e001601.
412. Goroll AH, Berenson RA, Schoenbaum SC, Gardner LB. Fundamental reform of payment for adult primary care: comprehensive payment for comprehensive care. *J Gen Intern Med*. 2007;22(3):410-415.
413. Landon BE. Structuring payments to patient-centered medical homes. *JAMA*. 2014;312(16):1633-1634.
414. Zabar S, Wallach A, Kalet A. The Future of Primary Care in the United States Depends on Payment Reform. *JAMA Intern Med*. 2019;179(4):515-516.
415. Navathe AS, Emanuel EJ, Bond A, et al. Association Between the Implementation of a Population-Based Primary Care Payment System and Achievement on Quality Measures in Hawaii. *JAMA*. 2019;322(1):57-68.
416. Bazemore A, Phillips RL, Jr., Glazier R, Tepper J. Advancing Primary Care Through Alternative Payment Models: Lessons from the United States & Canada. *J Am Board Fam Med*. 2018;31(3):322-327.

417. Gold SB, Park BJ. Effective Payment for Primary Care. An annotated bibliography. Starfield Summit; April 2016, 2016; Washington, DC.
418. Berenson RA, Rich EC. US approaches to physician payment: the deconstruction of primary care. *J Gen Intern Med.* 2010;25(6):613-618.
419. Goroll AH. The future of primary care: reforming physician payment. *N Engl J Med.* 2008;359(20):2087, 2090.
420. Ginsburg PB. Payment and the future of primary care. *Ann Intern Med.* 2003;138(3):233 - 234.
421. Goroll AH. Reforming Payment for Primary Care-It's Not Just the Money, It's the Payment System. *JAMA Intern Med.* 2018;178(8):1049-1050.
422. Mc CK. Investing in Primary Care and Dismantling Fee-For-Service. *Milbank Q.* 2019;97(3):636-640.
423. Magill MK. Time to Do the Right Thing: End Fee-for-Service for Primary Care. *Ann Fam Med.* 2016;14(5):400-401.
424. Karnieli-Miller O, Frankel RM, Inui TS. Cloak of compassion, or evidence of elitism? An empirical analysis of white coat ceremonies. *Med Educ.* 2013;47(1):97-108.
425. Stephens GG. Family medicine as counterculture. *Fam Med.* 1989;21(2):103-109.
426. Schroeder SA. Social Justice as the Moral Core of Family Medicine: A Perspective from the Keystone IV Conference. *The Journal of the American Board of Family Medicine.* 2016;29(Supplement 1):S69-S71.
427. Knai C, Petticrew M, Mays N, et al. Systems thinking as a framework for analyzing commercial determinants of health. *The Milbank Quarterly.* 2018;96(3):472-498.
428. Berry W. Health is membership. In: Wirzba N, ed. *The Art of the Commonplace: The Agrarian Essays of Wendell Berry.* Berkeley: Counterpoint : Distributed by Publishers Group West; 2002:144-158.
429. Vaida BL. Primary Care Where Everybody Knows Your Name. *Health Aff (Millwood).* 2019;38(1):8-13.
430. PHAB Staff and Writing Committee:, Aungst H, Ruhe M, et al. Boundary spanning and health: invitation to a learning community. *London Journal of Primary Care.* 2012;4(2):109-115.
431. Stange KC. Refocusing knowledge generation, application and education: Raising our gaze to promote health across boundaries. *Am J Prev Med.* 2011;41(4 Suppl 3):S164-S169.
432. Heath I, Sweeney K. Medical generalists: connecting the map and the territory. *BMJ.* 2005;331(7530):1462-1464.
433. Heath I. *The Mystery of General Practice.* London: Nuffield Provincial Hospitals Trust; 1995.