

Advisory Committee on Primary Care

November 21, 2022

Advisory Committee on Primary Care Meeting Materials

November 21, 2022
9:30 a.m. – 11:00 a.m.

(Zoom Attendance Only)

Meeting materials

Meeting agenda	1
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Agenda

TAB 1

Advisory Committee on Primary Care

November 21, 2022
9:30 am – 11:00 a.m.
Zoom Meeting

AGENDA

Committee Members:

<input type="checkbox"/>	Judy Zerzan-Thul, Chair				
<input type="checkbox"/>	Kristal Albrecht	<input type="checkbox"/>	Gregory Marchand	<input type="checkbox"/>	Jonathan Staloff
<input type="checkbox"/>	Sharon Brown	<input type="checkbox"/>	Chandra Hicks	<input type="checkbox"/>	Sarah Stokes
<input type="checkbox"/>	Tony Butruille	<input type="checkbox"/>	Meg Jones	<input type="checkbox"/>	Linda Van Hoff
<input type="checkbox"/>	Michele Causley	<input type="checkbox"/>	Sheryll Morelli	<input type="checkbox"/>	Shawn West
<input type="checkbox"/>	Nancy Connolly	<input type="checkbox"/>	Lan H. Nguyen	<input type="checkbox"/>	Staici West
<input type="checkbox"/>	Tracy Corgiat	<input type="checkbox"/>	Kevin Phelan	<input type="checkbox"/>	Ginny Weir
<input type="checkbox"/>	David DiGiuseppe	<input type="checkbox"/>	Eileen Ravella	<input type="checkbox"/>	Maddy Wiley
<input type="checkbox"/>	DC Dugdale	<input type="checkbox"/>	Katina Rue		
<input type="checkbox"/>	Sharon Eloranta	<input type="checkbox"/>	Mandy Stahre		

Time	Agenda Items	Tab	Lead
9:30-9:40 (10 min)	Welcome, roll call, and agenda review	1	Dr. Judy Zerzan-Thul, Chair, Medical Director Washington State Health Care Authority
9:40-9:45 (5 min)	Approval of October meeting minutes	2	Jean Marie Dreyer, Committee Facilitator Health Care Authority
9:45-10:00 (15 min)	Discussion of Drafted Primary Care Definition	3	Dr. Judy Zerzan-Thul, Chair, Medical Director Washington State Health Care Authority
10:00-10:10 (10 min)	Public comment		Dr. Judy Zerzan-Thul, Chair, Medical Director Washington State Health Care Authority
10:10-10:55 (45 min)	Presentation on Claims-Based Measurement	4	Dr. Ashok Reddy and Dr. Josh Liao University of Washington Medicine
10:55-11:00 (5 min)	Wrap-up and adjournment		Jean Marie Dreyer, Committee Facilitator

Subject to Section 5 of the Laws of 2022, Chapter 115, also known as HB 1329, the Board has agreed this meeting will be held via Zoom without a physical location.

Approval of October meeting minutes

TAB 2

Advisory Committee on Primary Care meeting minutes

October 25, 2022
Health Care Authority
Meeting held electronically (Zoom) and telephonically
1:00 p.m. – 2:30 p.m.

Note: this meeting was video recorded in its entirety. The recording and all materials provided to and considered by the board is available on the [Health Care Cost Transparency Board webpage](#).

Members present

Judy Zerzan-Thul
Kristal Albrecht
Sharon Brown
Michele Causley
Nancy Connolly
Tracy Corgiat
David DiGiuseppe
Sharon Eloranta
Chandra Hicks
Meg Jones
Sheryl Morelli
Lan H. Nguyen
Kevin Phelan
Katina Rue
Mandy Stahre
Jonathan Staloff
Linda Van Hoff
Shawn West
Staici West
Ginny Weir
Maddy Wiley

Members absent

Tony Butruille
DC Dugdale
Gregory Marchand
Eileen Ravella
Sarah Stokes

Agenda items

Welcome, roll call, and agenda review

Dr. Judy Zerzan-Thul, the committee chair, called the meeting to order at 1: p.m.

Advisory Committee on Primary Care meeting summary
11/16/22



Topics for today

The topics were listed as charter review; presentation on primary care work from other states; and discussion of recommendation 1 – defining primary care.

Approval of September meeting minutes

The committee approved the September meeting minutes.

Charter review

Dr. Judy Zerzan-Thul, HCA

Dr. Judy Zerzan-Thul reviewed the committee charter. There were no questions or comments.

Presentation on primary care work from other states

Larry McNeely, Policy Director, Primary Care Collaborative

The committee heard a presentation on other states' efforts to increase investments in primary care, including an overview of the Primary Care Collaborative (PCC), an introduction to the primary care investment landscape, a deep dive into California and Virginia's primary care investment efforts, and examples of how to measure primary care spending.

The PCC is a not-for-profit multistakeholder organization with over 67 members which advocates for policy changes with public and private policymakers through the dissemination of evidence-based data on primary care. Larry turned to an introduction to the primary care spending landscape across the U.S. In 2018, Oregon and Rhode Island were the main state leaders dedicated to reporting primary care spending. By 2022, at least 18 states have committed to reporting on primary care spending. Six states have committed via legislation to achieving targets in primary care spending without growing total cost of care: Rhode Island, Oregon, Colorado, Connecticut, Delaware, and Washington.

Larry detailed California and Virginia's recent primary care investment efforts. In California, the California Quality Collaborative (CQC) developed shared standards and attributes around Advanced Primary Care (APC). California has obtained multi-payer commitments to strengthen primary care across six organizations: Aetna, Aledade, Blue Shield of California, Health Net, Oscar, and United Healthcare. California recently passed legislation to establish a statewide Office of Health Care Affordability (OHCA) which will be focused on transparency and goal setting for: a statewide cost growth target, growing alternative payment models (APM), strengthening primary care, providing workforce support, monitoring quality of care, and monitoring care consolidation and market power.

Sharon Eloranta asked who is penalized in California as part of the accountability process: Providers? Payers? It is unclear who is penalized but they have rate review processes.

Virginia's Task Force on Primary Care was established in July 2020 by the Virginia Center for Health Innovation to address urgent primary care needs and to consider new models of allocation and accountability by emphasizing higher quality, lower costs, and greater equity across populations. Like California, the Virginia Task Force used similar criteria to define primary care services, i.e., accessible, integrated, equitable, convenient, and affordable. The Task Force consists of health plans, primary care clinicians and public and private employers.

Sharon asked whether if to participate, a practice needs to accept multiple types of insurance, and it was clarified that a review of the Memorandum of Understanding (MOU) would yield more information and that a link to the MOU would be shared.

Nancy Connolly asked if committee members could have access to the specific metrics associated with Virginia's patient-centered primary care measure and what matters index. Larry offered to obtain and send the original



slides for review. Lisa Watkins also included a link to an article on the index

<https://www.annfamned.org/content/17/3/221>.

Finally, Larry reviewed three examples of how to measure primary care spending. The first example, from the PCC's 2020 evidence report on primary care spending, used both broad and narrow definitions of primary care spending, not including non-claims-based spending. There was an overall decline in primary care spending between 2017 and 2019. Primary care services included services delivered in office (not inpatient), evaluation and management visits, preventive visits, care transition/coordination services, screening, and counseling. The second example of primary care spending came from the New England States' All-Payer Report on Primary Care Payments produced by the New England States Consortium Systems Organization (NESCSO). The report included data on primary care payments from 7.2 million commercial, Medicare Advantage, Medicare Fee-for-Service (FFS), and Medicaid members. Payments were combined as a percentage of total medical payments using both narrow and broad definitions of services. The range of primary care payments fell between 5.5 and 8.2 percent, within range of other published studies on primary care payments. Information on non-claims-based payments was collected directly from payers. The third example of primary care spending, from Oregon's 2020 primary care taxonomy, recognized primary care providers included physicians from a variety of specialties, physicians' assistants, naturopathic medicine providers, nurses, primary care clinics, Federally Qualified Health Centers (FQHCs), and rural health clinics. Primary care services included office or home visits, routine medical and child health exams, preventive medicine evaluation, routine obstetric care excluding delivery, and other preventive medicine.


Chandra Hicks asked about the decline in primary care spending and whether spending has gone down, or that it's a smaller share? Larry clarified it's a smaller share. Chandra asked if there is a risk measuring primary care as a percent of total spending. It was clarified that this increases primary care's vulnerability but that other industrialized nations are investing more in primary care than the U.S. Lisa added that measuring primary care as a portion of total spending is the standard convention. Larry mentioned PCC's annual evidence report comes out on November 16 and will show that a substantial number of patients aren't reporting a usual source of care.

Sharon asked what areas went up or stood out if primary care is a percent of total spend. PCC's analysis was with regard to primary care spend as a percentage of the total, not focused on the drivers, and looked at a commercially insured population. Sharon noted that low reporting of a usual source of care could indicate a decline in specialists. Michele Causley asked about excluding pharmacy in the denominator. Pharmacy should be excluded due to the volatility and the costs. Judy asked Larry and Lisa to comment on the pharmacy portion. Meg Jones asked if PCC's analysis included pharmacy spending as part of total spending. Lisa noted that pharmacy was not included and offered to do more research to see what states have or haven't done. The 2020 PCC report did not include pharmacy data but there was some form of imputed spend included.

Nancy asked about how the committee would capture claims versus non-claims-based spending. The committee will develop a recommendation for non-claims-based spending. Lisa referred Nancy to Michael Bailit's report on non-claims-based spending noting that there is no standard methodology though there are examples from other states. Oregon calculated a substantial portion of primary care spending from non-claims-based payments.

Sheryll Morelli asked how measurement would be different for the pediatric population. Pediatric is a very different population with the services provided but there are ways to measure it in a way that is consistent with primary care measurement overall. Kids are medically healthy, but not in areas outside of health care spending, e.g., childcare, schools, juvenile justice. There are huge resource discrepancies for kids. Larry clarified that it depends how the definition is constructed, and that the committee may want to ensure that collaborative care claims flow into primary care spend. A few states have looked at how primary care spending and behavioral health interact. California's crosswalk of claims shows some of the choices that can be made.

Jonathan Staloff asked whether any of the methodologies considered how to count telemedicine services from providers who have a brick-and-mortar site, and whether to count services from providers that only offer telemedicine services (e.g. teledoc). Teledoc can possibly be included in a narrow definition by specialty and by provider and services.



Michele asked about looking at cost by line of business. The NESCO report evaluated claims from a line of business perspective. Michele asked whether to use a standard cost. Lisa suggested getting in touch with the OnPoint consultants who helped conduct the NESCO analysis.

The PCC is partnering with Milbank to develop a web tool that allows for analysis of states' current primary care legislation and legal precedent for measuring primary care.

Kristal Albrecht asked which of the available studies captured a larger, or the largest group and if the PCC website have this. Larry pulled up the PCC website to show to the group examples of other states' published reports.

David DiGiuseppe mentioned the HCCTB data request which outlined primary care based on taxonomy and CPT codes. How did that definition come to be? Is it temporary for data reporting? HCA has been measuring claims and non-claims-based spending (not made public) using the 2018 Office of Financial Management (OFM) template. This committee is focused on a legislatively directed, broader stakeholder approach. The decision is whether to keep the OFM definition and whether to tweak it. OFM didn't report non-claims-based, HCA created measurement for that on their own. Judy asked Larry how often states revisit their definition? Larry said he didn't know but could investigate it.

Public comment

Justin Montoya, Pacific Source Health Plans, noted that the questions being asked were prudent and important. The moving denominator is an issue. Aiming for 12 percent is difficult, especially when pharmacy is increasing dramatically. The group should continue to evaluate the denominator and recognize that as that increases, whether pharmacy or specialty care, that will be an ongoing challenge. Getting to the definition of primary care is particularly challenging when different states have different approaches. Oregon included behavioral health.

Discussion of recommendation 1 – defining primary care

Dr. Judy Zerzan-Thul, Committee Chair, HCA

Judy reviewed and compared core principles from multiple definitions of primary care, including Washington's statutory (RCW 74.09.010) and regulatory (Insurance Code 48.150.010) definitions; OFM's 2019 definition; the Bree Collaborative definition from 2021, and National Academy of Science, Engineering, and Medicine's (NASEM's) definition. Judy would like the group to compare the Bree and NASEM definitions to come up with a final definition which will be discussed and decided at future meetings.

Adjournment

Meeting adjourned at 2:25 p.m.

Next meeting

Monday November 21, 2022

Meeting to be held on Zoom

9:30 a.m. – 11:00 a.m.

Discussion of drafted primary care definition

TAB 3

Discussion of Drafted Primary Care Definition

Dr. Judy Zerzan-Thul
Committee Chair, Advisory Committee on Primary
Care

Proposed Definition

“**Team-based** care led by an **accountable** provider that serves as a person’s source of **first contact** with the larger healthcare system and coordinator of services that the person receives. Primary care includes a **comprehensive** array of **equitable, evidence-informed** services to foster a **continuous** relationship over time. This array of services is **coordinated** by the accountable primary care provider but may exist in multiple care settings or be delivered in a variety of modes.”

Feedback on Definition

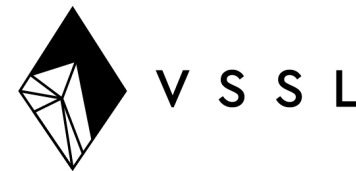
- ▶ Consider substituting the word “primary” in place of “first”.
- ▶ Might be able to remove “and coordinator of services that the person receives” in the first sentence.
- ▶ Keep “comprehensive, continuous, and coordinated.”
- ▶ WSMA is working to not use the term provider for MD/DOs.
- ▶ Add “primary care” after accountable in first sentence.
- ▶ More emphasis/strengthening of “continuous relationship over time.”

Updated Definition

“**Team-based** care led by an **accountable primary care clinician** that serves as a person’s source of **primary contact** with the larger healthcare system. Primary care includes a **comprehensive** array of **equitable, evidence-informed** services to **create and maintain** a **continuous** relationship over time. This array of services is **coordinated** by the accountable primary care **clinician** but may exist in multiple care settings or be delivered in a variety of modes.”

Presentation on claims-based measurement

TAB 4

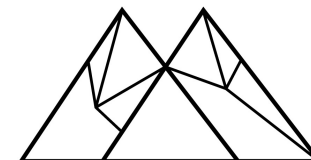


Operationalizing a Claims-Based Definition of Primary Care for Washington State

Proof of Concept Medicaid Analysis

Advisory Committee on Primary Care
11.21.2022

Value & Systems Science Lab
Health Systems Collective
Department of Medicine
University of Washington School of Medicine
1959 NE Pacific Street, Seattle, WA 98195



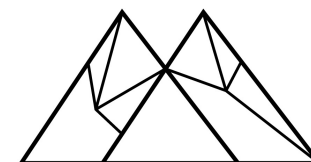
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Outline

Claims-Based Definition of Primary Care

Medicaid Claims as Proof of Concept

Future Work



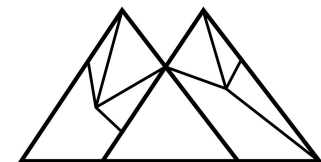
Outline

Claims-Based Definition of Primary Care

Medicaid Claims as Proof of Concept

Future Work

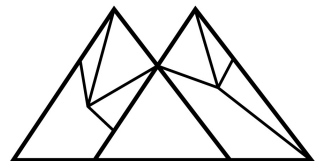
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Claims-Based Definition of Primary Care

Bree Collaborative: "Team-based care led by an accountable provider that serves as a person's source of first contact with the larger healthcare system and coordinator of services that the person receives. Primary care includes a comprehensive array of appropriate, evidence-informed services to foster a continuous relationship over time."

Despite agreement on underlying principles, no consensus on how to define primary care using claims



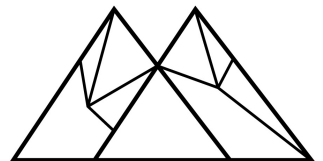
Claims-Based Definition of Primary Care

Such definitions are needed to track primary care utilization and expenditures data

Initial work encompassed in the 2019 Office of Financial Management (OFM) Primary Care Expenditures Report¹

- Primary care defined using a specific set of **services**, provided by a specific set of **providers** or in specific **care settings**

1. <https://www.ofm.wa.gov/sites/default/files/public/publications/PrimaryCareExpendituresReport.pdf>

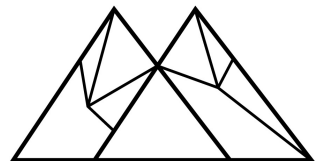


Claims-Based Definition of Primary Care

VSSL began working with this OFM definition

Identified issues that would benefit from additional assessment

- Defining specific types of providers
- Defining combinations of groups and locations



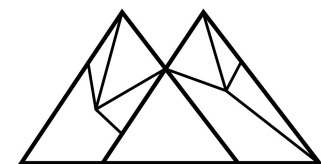
Outline

Claims-Based Definition of Primary Care

Medicaid Claims as Proof of Concept

Future Work

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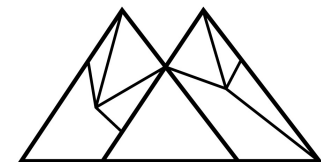
Data

Source: WA Medicaid claims data

Years: 2019, 2020

Files:

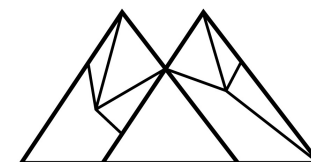
- Eligibility Demographic data
- Outpatient/Inpatient Claims data
- Provider data



Beneficiary Sample

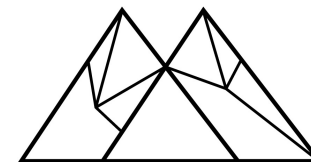
Overall Sample: 328,315 Medicaid beneficiaries

- Adult (18+ years old)
- Managed Care
- Residence in WA
- Enrolled for 11+mos in both 2019 and 2020



Initial Set of Outpatient Medical Services

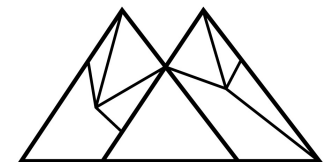
1. Began with all claims for all enrolled beneficiaries in 2019-2020
2. Narrowed to claims with Place-of-Service in FQHC, RHC, Office, hospital outpatient, public health clinic (excluded claims with modifier ER)
3. Filtered for CPT codes (with modifiers) for common outpatient tele- and in-person services



Initial Set of Outpatient Medical Services

1. New problem-focused visits (CPT 99201-99205)
2. Return problem-focused visits (CPT 99211-99215)
3. Office or Other Outpatient Consultation Services (CPT 99241-99245)
4. Audio-only visits (CPT 99441-99443)

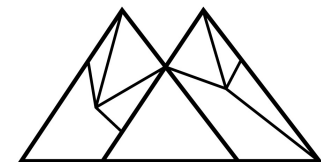
(in above, tele-services identified via modifiers CR, GT, GQ, G0, 95) and place-of-service 2)



Primary Care Providers

1. Started with provider taxonomy codes for clinicians, groups, and facilities used in 2019 OFM Primary Care Expenditures Report¹
2. Adapted eligible taxonomy codes for certain clinician and facility types
3. Generated all potential combinations of billing and servicing provider taxonomies and then conducted quality checks for empty or inaccurate codes

1. <https://www.ofm.wa.gov/sites/default/files/public/publications/PrimaryCareExpendituresReport.pdf>



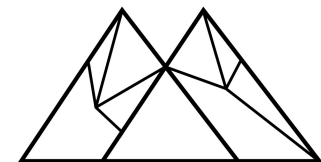
Primary Care Providers

Claim for eligible outpatient services contain information about:

billing provider (denoted by a *billing provider taxonomy*, which may reflect individual, location, site or group)

- Example: Billing provider could be FQHC – but have several different codes for different locations

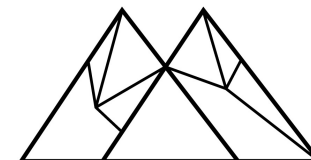
servicing provider (type denoted by a *servicing provider taxonomy*), which refers to individual clinicians)



Primary Care Providers

There were 49 potential billing provider-servicing provider combinations

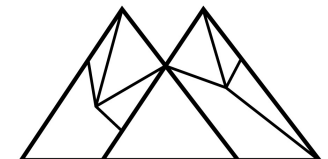
- 3 provider types (clinicians, groups, and facilities)
- 2 Outpatient service types (primary care, non-primary care)
- Potential for missing values in either taxonomy position



Primary Care Providers

Taxonomy Code	Description
261Q00000X	Ambulatory Health Care Facilities - Clinic/Center
261QC1500X	Ambulatory Health Care Facilities - Clinic/Center - Community Health
261QM1300X	Ambulatory Health Care Facilities - Clinic/Center - Multi-Specialty
282NC0060X	Hospitals - General Acute Care Hospital - Critical Access
363L00000X	Nurse Practitioner
363LA2100X	Nurse Practitioner, Acute Care
363LA2200X	Nurse Practitioner, Adult Health
363LC1500X	Nurse Practitioner, Community Health
363LC0200X	Nurse Practitioner, Critical Care Medicine
363LF0000X	Nurse Practitioner, Family
363LG0600X	Nurse Practitioner, Gerontology
363LN0000X	Nurse Practitioner, Neonatal
363LN0005X	Nurse Practitioner, Neonatal, Critical Care
363LX0001X	Nurse Practitioner, Obstetrics & Gynecology
363LX0106X	Nurse Practitioner, Occupational Health
363LP0200X	Nurse Practitioner, Pediatrics
363LP0222X	Nurse Practitioner, Pediatrics, Critical Care
363LP1700X	Nurse Practitioner, Perinatal
363LP2300X	Nurse Practitioner, Primary Care
363LP0808X	Nurse Practitioner, Psychiatric/Mental Health
363LS0200X	Nurse Practitioner, School
363LW0102X	Nurse Practitioner, Women's Health
363A00000X	Physician Assistant
363AM0700X	Physician Assistant, Medical
363AS0400X	Physician Assistant, Surgical

Taxonomy Code	Description
207Q00000X	Family Medicine
207QA0000X	Family Medicine, Adolescent Medicine
207QA0505X	Family Medicine, Adult Medicine
207QG0300X	Family Medicine, Geriatric Medicine
261QF0400X	Federally Qualified Health Center
208D00000X	General Practice
207R00000X	Internal Medicine
207RG0300X	Internal Medicine, Geriatric Medicine
175F00000X	Naturopath
208000000X	Pediatrics
183500000X	Pharmacy Service Providers - Pharmacist
2080A0000X	Pediatrics, Adolescent Medicine
2083P0500X	Preventive Medicine, Preventive Medicine/Occupational Environmental Medicine
261QP2300X	Primary care clinic
261QR1300X	Rural health clinic
390200000X	Student, Health Care - Student in an Organized Health Care Education/Training Program



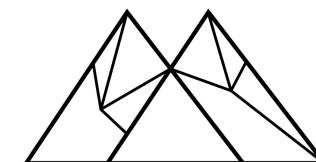
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Primary Care Providers

DRAFT

Taxonomy Code	Description
261Q00000X	Ambulatory Health Care Facilities - Clinic/Center
261QC1500X	Ambulatory Health Care Facilities - Clinic/Center - Community Health
261QM1300X	Ambulatory Health Care Facilities - Clinic/Center - Multi-Specialty
282NC0060X	Hospitals - General Acute Care Hospital - Critical Access
363L00000X	Nurse Practitioner
363LA2100X	Nurse Practitioner, Acute Care
363LA2200X	Nurse Practitioner, Adult Health
363LC1500X	Nurse Practitioner, Community Health
363LC0200X	Nurse Practitioner, Critical Care Medicine
363LF0000X	Nurse Practitioner, Family
363LG0600X	Nurse Practitioner, Gerontology
363LN0000X	Nurse Practitioner, Neonatal
363LN0005X	Nurse Practitioner, Neonatal, Critical Care
363LX0001X	Nurse Practitioner, Obstetrics & Gynecology
363LX0106X	Nurse Practitioner, Occupational Health
363LP0200X	Nurse Practitioner, Pediatrics
363LP0222X	Nurse Practitioner, Pediatrics, Critical Care
363LP1700X	Nurse Practitioner, Perinatal
363LP2300X	Nurse Practitioner, Primary Care
363LP0808X	Nurse Practitioner, Psychiatric/Mental Health
363LS0200X	Nurse Practitioner, School
363LW0102X	Nurse Practitioner, Women's Health
363A00000X	Physician Assistant
363AM0700X	Physician Assistant, Medical
363AS0400X	Physician Assistant, Surgical

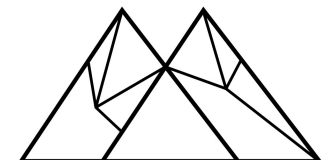
Taxonomy Code	Description
207Q00000X	Family Medicine
207QA0000X	Family Medicine, Adolescent Medicine
207QA0505X	Family Medicine, Adult Medicine
207QG0300X	Family Medicine, Geriatric Medicine
261QF0400X	Federally Qualified Health Center
208D00000X	General Practice
207R00000X	Internal Medicine
207RG0300X	Internal Medicine, Geriatric Medicine
175F00000X	Naturopath
208000000X	Pediatrics
183500000X	Pharmacy Service Providers - Pharmacist
2080A0000X	Pediatrics, Adolescent Medicine
2083P0500X	Preventive Medicine, Preventive Medicine/Occupational Environmental Medicine
261QP2300X	Primary care clinic
261QR1300X	Rural health clinic
390200000X	Student, Health Care - Student in an Organized Health Care Education/Training Program



Primary Care Providers

Taxonomy Code	Description
261QF0400X	Federally Qualified Health Center
261QM1300X	Multi-Specialty Clinic/Center
261QR1300X	Rural Health Clinic
261QP2300X	Primary Care Clinic
261Q00000X	Ambulatory Health Clinic/Center
261QC1500X	Community Health Clinic/Center
282NC0060X	Critical Access Hospital

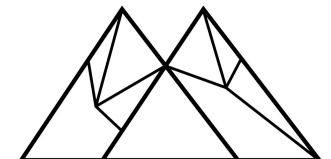
Three facility types (261QF0400X, 261QR1300X, 261QP2300X) were included in the 2019 Office of Financial Management Primary Care Expenditures Report. To this list, the highlighted facilities were added based on conversations with HCA leadership about facilities that may be providing primary care outpatient services. Lists may undergo additional refinement.



Primary Care Providers

Billing Taxonomy	Servicing Taxonomy
PC Clinician	PC Clinician
PC Clinician	Non-PC Clinician
(empty)	PC Clinician
Non-PC Clinician	Non-PC Clinician
Multi-Specialty Group	PC Clinician
Multi-Specialty Group	(empty)
Single Specialty Group	PC Clinician
Single Specialty Group	Non-PC Clinician
PC Facility	PC Clinician
PC Facility	Non-PC Clinician
Non-PC Facility	PC Clinician
(empty)	(empty)
...	...

A sample of the 49 potential billing and servicing provider taxonomy code combinations

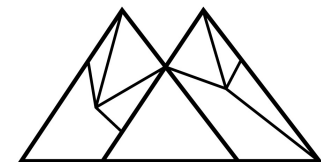

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Primary Care Providers

Applied primary taxonomy codes from the NPPES (National Plan & Provider Enumeration System) to facilities and physician groups– but not individual clinicians – appearing in Medicaid claims data, thereby creating taxonomical consistency across claims for these entities

Prioritized combinations that:

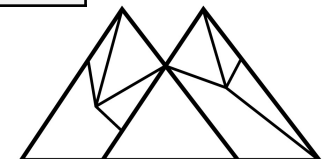
- (a) were most likely to reflect primary care vs non-primary care outpatient services, and
- (b) collectively represented the majority of claims (>95%)



Primary Care Outpatient Medical Services

Billing and Servicing Provider Combinations	# of Claims	% of Claims	PC vs Non-PC
PC Facility & PC Individual	419,997	31.7%	PC
Multi-Specialty & PC-Individual	315,796	23.8%	PC
Multi-Specialty & Not-PC Individual	202,362	15.3%	Non-PC
Non-PC Facility & PC Individual	77,351	5.8%	Non-PC
Single Specialty & PC Individual	76,019	5.7%	PC
PC Facility & Non-PC Individual	64,650	4.9%	Non-PC
Single Specialty & Non-PC Individual	55,483	4.2%	Non-PC
Not-PC Facility & Non-PC Individual	44,256	3.3%	Non-PC
PC Individual & PC Individual	5,475	0.4%	PC
Non-PC Individual & Non-PC Individual	4,436	0.3%	Non-PC
Total	1,265,825	95.4%	

Notes: PC=primary care. Data from 2019 (data from 2020 not shown but show similar combinations with >95% of claims accounted for)

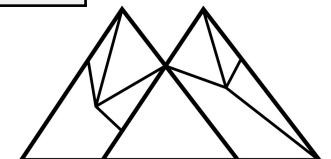


D R A F T

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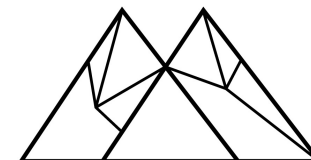
D R A F T

Summary and Caveats

Used detail about billing versus servicing providers, and their combinations, to address accuracy to primary care provider definitions

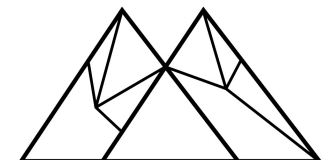
Nonetheless, accuracy depends on the accuracy of underlying taxonomies

These steps may need additional refinement in work to incorporate primary care HCPCS/procedure codes into claims-based definitions

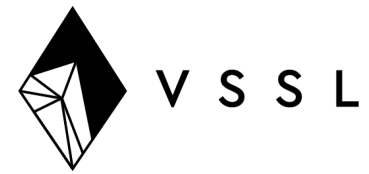


Outpatient Service Utilization-2020

Characteristics	Overall	Outpatient Medical Service Utilization	
		Yes	No
Beneficiaries, n	372,565	237,468	135,097
Claims, n	597,770	597,770	NA
Age, Mean (SD) years	9.6(4.4)	9.3(4.5)	10.1(4.2)
Female, %	48.7	49.6	47.1
Black, %	8.9	7.8	10.8
White, %	52.7	53.5	51.1
Hispanic, %	33.0	35.1	29.2

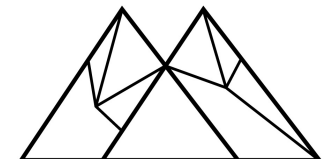


Primary Care Outpatient Service Utilization-2020



D R A F T

Characteristics	Overall	Service Utilization	
		Primary Care	Non-Primary Care
Beneficiaries, n	234,108	217,075	56,674
Claims, n	569,360	450,021	119,339
Age, Mean (SD) years	9.3 (4.5)	9.2 (4.5)	9.7 (4.6)
Female, %	49.6	49.7	48.9
Black, %	7.8	7.7	8.2
White, %	53.5	53.6	55.4
Hispanic, %	35.1	35.4	31.2



Primary Care Outpatient Service Utilization by Group and Organizational Facilities-2019 and 2020

2019	% of Primary Care Outpatient Services**
Multi Specialty Group (N=236)	34.1%
Single Specialty Group (N=278)	17.8%
Primary Care Facilities (N=441)	
Federally Qualified Health Center sites (N=171)	28.1%
Multi Specialty Clinic/Center (N=24)	9.4%
Rural Health Clinic (N=107)	6.0%
Primary Care Clinic (N=48)	1.7%
Other* (n=91)	1.5%

2020	% of Primary Care Outpatient Services**
Multi Specialty Group (N=204)	36.6%
Single Specialty Group (N=238)	16.2%
Primary Care Facilities (N=441)	
Federally Qualified Health Center sites (N=169)	27.0%
Multi Specialty Clinic/Center (N=27)	6.9%
Rural Health Clinic (N=101)	8.9%
Primary Care Clinic (N=42)	1.9%
Other* (n=72)	1.3%

Notes:

*includes Ambulatory Health Clinic/Center, Community Health Clinic/Center, and Critical Access Hospital.

** Percentages add to about 99% due to exclusion of PC clinicians

DRAFT

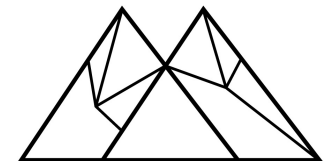
Summary

1/3 of adult beneficiaries in our sample did not receive any outpatient medical services

There were twice as many primary care vs non-primary care outpatient medical services

Most primary care outpatient medical services were provided through locations or sites associated with FQHCs and multispecialty groups

In 2019 and 2020, >5000 clinicians provided primary care outpatient medical services to adult beneficiaries in our sample



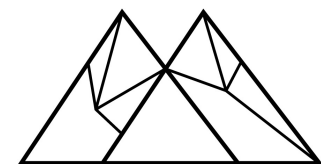
Outline

Claims-Based Definition of Primary Care

Medicaid Claims as Proof of Concept

Future Work

D
R
A
F
T



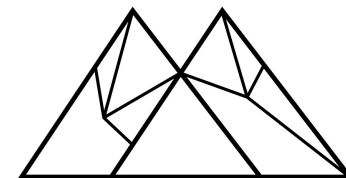
Future Work

Incorporation of procedure codes into claims-based definitions

Validation methodology

Application to claims datasets with different data structures

Use in supporting applications of claims-based definitions of primary care (e.g., payment and delivery innovations)



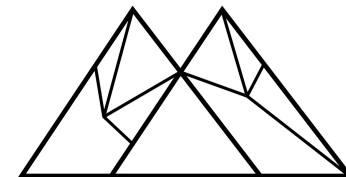
Future Work

Identifying procedures under the purview of primary care and variation by provider type

HCPCs or CPT codes	Procedure Category	Procedure Long Description
11719	Minor Procedures and Tests	TRIMMING NONDYSTROPHIC NAILS ANY NUMBER
11720	Minor Procedures and Tests	DEBRIDEMENT NAIL ANY METHOD 1-5
11721	Minor Procedures and Tests	DEBRIDEMENT NAIL ANY METHOD 6/>
11740	Minor Procedures and Tests	EVACUATION SUBUNGUAL HEMATOMA
11900	Minor Procedures and Tests	INJECTION INTRALESIONAL UP TO & INCLUD 7 LESIONS
11901	Minor Procedures and Tests	INJECTION INTRALESIONAL >7 LESIONS
15851	Minor Procedures and Tests	REMOVAL SUTURES UNDER ANESTHESIA OTHER SURGEON
16020	Minor Procedures and Tests	DRS&/DBRDMT PRTL-THKNS BURNS 1ST/SBSQ SMALL
17110	Minor Procedures and Tests	DESTRUCTION BENIGN LESIONS UP TO 14
17111	Minor Procedures and Tests	DESTRUCTION BENIGN LESIONS 15/>
24640	Minor Procedures and Tests	CLTX RDL HEAD SUBLXTJ CHLD NURSEMAID ELBW W/MANJ
30300	Minor Procedures and Tests	REMOVAL FOREIGN BODY INTRANASAL OFFICE PROCEDURE
36415	Minor Procedures and Tests	COLLECTION VENOUS BLOOD VENIPUNCTURE
36416	Minor Procedures and Tests	COLLECTION CAPILLARY BLOOD SPECIMEN
43760	Minor Procedures and Tests	CHANGE GASTROSTOMY TUBE PERCUTANEOUS W/O GDNCE
51702	Minor Procedures and Tests	INSJ TEMP NDWELLG BLADDER CATHETER SIMPLE
54150	Minor Procedures and Tests	CIRCUMCISION W/CLAMP/OTH DEV W/BLOCK
57170	Minor Procedures and Tests	DIAPHRAGM/CERVICAL CAP FITTING W/INSTRUCTIONS
69200	Minor Procedures and Tests	RMVL FB XTRNL AUDITORY CANAL W/O ANES
69210	Minor Procedures and Tests	REMOVAL IMPACTED CERUMEN INSTRUMENTATION UNILAT

HCPCs or CPT codes	Procedure Category	Procedure Long Description
99402	Preventive Medicine Services	PREVENT MED COUNSEL&/RISK FACTOR REDJ SPX 30 MIN
99403	Preventive Medicine Services	PREVENT MED COUNSEL&/RISK FACTOR REDJ SPX 45 MIN
99404	Preventive Medicine Services	PREVENT MED COUNSEL&/RISK FACTOR REDJ SPX 60 MIN
99406	Preventive Medicine Services	TOBACCO USE CESSATION INTERMEDIATE 3-10 MINUTES
99407	Preventive Medicine Services	TOBACCO USE CESSATION INTENSIVE >10 MINUTES
99408	Preventive Medicine Services	ALCOHOL/SUBSTANCE SCREEN & INTERVEN 15-30 MIN
99409	Preventive Medicine Services	ALCOHOL/SUBSTANCE SCREEN & INTERVENTION >30 MIN
99411	Preventive Medicine Services	PREV MED COUNSEL & RISK FACTOR REDJ GRP SPX 30 M
99412	Preventive Medicine Services	PREV MED COUNSEL & RISK FACTOR REDJ GRP SPX 60 M
99420	Preventive Medicine Services	ADMN & INTERPJ HEALTH RISK ASSESSMENT INSTRUMENT
99429	Preventive Medicine Services	UNLISTED PREVENTIVE MEDICINE SERVICE
G0101	Preventive Medicine Services	CERV/VAGINAL CANCER SCR; PELV&CLIN BREAST EXAM
G0102	Preventive Medicine Services	PROS CANCER SCREENING; DIGTL RECTAL EXAMINATION
G0436	Preventive Medicine Services	SMOKE TOB CESSATION CNSL AS PT; INTRMED 3-10 MIN
G0437	Preventive Medicine Services	SMOKING & TOB CESS CNSL AS PT; INTENSIVE >10 MIN
J1050	Preventive Medicine Services	INJECTION MEDROXYPROGESTERONE ACETATE 1 MG

1. <https://www.ofm.wa.gov/sites/default/files/public/publications/PrimaryCareExpendituresReport.pdf>



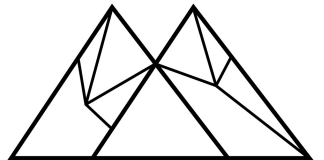
Summary

There is both need and challenge in operationalization a claims-based definition of primary care for use in policy and practice change

A step-wise approach building on prior work can help address misclassification

This approach can be expanded in future work to include procedures, validated, and applied to different claims datasets

Questions?



Index – Revitalizing primary care, Part 1

Revitalizing Primary Care, Part 1: Root Causes of Primary Care's Problems

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ABSTRACT

This 2-part essay offers a discussion of the health of primary care in the United States. Part 1 argues that the root causes of primary care's problems are (1) the low percent of national health expenditures dedicated to primary care (primary care spending) and (2) overly large patient panels that clinicians without a team are unable to manage, leading to widespread burnout and poor patient access.

Information used in this essay comes from my personal clinical and policy experience bolstered by summaries of evidence. The analysis leans heavily on my visits to dozens of practices and interviews with hundreds of clinicians, practice leaders, and practice staff.

In 2016, the United States spent approximately 5.4% of total health expenditures on primary care, compared with an average among 22 Organization for Economic Co-operation and Development (OECD) countries of 7.8%. With average US primary care panel size around 2,000, it would take a clinician without an effective team 17 hours per day to provide good care to that panel. Low primary care spending and excessive panel sizes are related because most medical students avoid careers featuring underfunded practices with unsustainable work-life balance.

Over the past 20 years, many initiatives—explored in Part 2 of this essay—have attempted to address these problems. Part 2 argues that to revitalize primary care, 2 fundamental changes are needed: (1) increased spending dedicated to primary care and (2) creating powerful teams that add capacity to care for large panels.

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INTRODUCTION

During the first 20 years of the current millennium, primary care appeared to be entering its golden age. Evidence-based prevention is widely accepted. Patients are accessing care through electronic portals. The Chronic Care Model has been implemented to address care gaps in essential services. Nurse practitioners and physician assistants are becoming trusted clinicians. Moving from the “I” of the lone physician to the “we” of the team is catching hold. Some practices—bright spots—are inching toward true transformation.

But casting a gloom over these rays of light is an inexorable logic of decline. For decades, the United States has undervalued and underfinanced primary care. For most aspiring young clinicians, primary care is viewed as too much work for too little reward, with orthopedics and gastroenterology looking more attractive. Not enough primary care clinicians means too many patients for each clinician to manage. Vulnerable populations with greater health needs live in areas with fewer primary care clinicians, creating a double dose of inequity.

As too much work is heaped upon too few clinicians, exhaustion and cynicism—burnout—is pervasive in primary care. The quantum advance of electronic records has turned into its opposite as clinicians spend up to 5 hours each day on electronic medical record (EMR) documentation,¹ in part designed to generate revenue through a perverse fee-for-service juggernaut. The long-awaited 2021 National Academies of Sciences, Engineering and Medicine report on primary care warned that “primary care in the United States is slowly dying.”² COVID may have accelerated this trajectory. Some wonder if primary care is actually doable.

As someone who spent 32 years in full-time community practice and 18 more years in academic observation and study, primary care is my life. The patients I was honored to care for were sometimes inspiring, sometimes frustrating, and often very

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sick. I had the privilege to visit many “bright spot” practices with hardworking, empathetic, selfless professionals and cohesive teams, searching for joy in practice. Bright spots are rare. Self-sacrifice is not sufficient motivation to build a solid and lasting foundation for our health care system.

The 2-part essay presented here welcomes debate. The arguments advanced are not primarily about the health of patients, but address the health of primary care. The 2 are closely related: a greater supply of primary care physicians per 10,000 people has been linked to lower mortality rates, longer life expectancy, better self-reported health, and reduced rates of low birth weight.³

Throughout the essay, I focus on 4 issues, each of which has a profound impact on the health of primary care. These are (1) financial neglect: the small proportion of total health expenditures going to primary care; (2) excessive panel size: too many patients for a clinician to adequately care for; (3) access for patients, and (4) burnout. The first 2 are viewed as root causes of primary care’s problems and profoundly impact access and burnout. A national survey found that average wait times for new family medicine appointments increased from 20 to 29 days between 2014 and 2017.⁴ Poor patient access also creates more burnout, as I learned during my clinical years. On days when patients were unable to get the appointments or phone advice they needed, they kept calling or showing up to be squeezed into my schedule, intensifying the usual daily stress. Excessively large panels without strong teams create too much work, which exacerbates burnout. Part of that work is the 49% of clinician time spent on EMR documentation and administrative work.⁵ Revitalizing primary care requires a reduction in total work and especially the hours of frustrating documentation.

The 2-part essay proceeds in 3 sections: (1) root causes of primary care’s problems, (2) limited improvement initiatives, and (3) hopes for the future.

METHODS

The thrust of the essay comes from my clinical and policy experience, bolstered by nonsystematic summaries of evidence. The evidence summaries were prepared by searching in Google, Google Scholar, PubMed, and the reference lists of articles. I tried to base the evidence on systematic reviews that others have done. The analysis leans heavily on my visits to dozens of practices and interviews with hundreds of clinicians, practice leaders, and practice staff.

ROOT CAUSES OF PRIMARY CARE’S PROBLEMS

Why is primary care in trouble? Many hypotheses have been offered. Confronting thousands of symptoms, diagnoses, and treatments to sort out, primary care is too complicated. The nation lacks a universal system of empanelment, linking each person to a primary care clinician. Medical students prefer specialist rather than generalist careers. All are correct.

Part 1 of this essay makes a more specific argument: primary care’s maladies are rooted in 2 interrelated realities: financial neglect and excessively large panels without teams. Financial neglect—insufficient funding—leads to large panels by discouraging medical students from choosing primary care careers. Even adding the growing nurse practitioner and physician assistant workforce, the shortage of primary care clinicians results in each clinician caring for too many patients. Financial neglect also means insufficient funds to create powerful teams that share the care of large panels.

Financial Neglect

The 2021 National Academies of Sciences, Engineering and Medicine report on primary care states that in 2016, the United States spent approximately 5.4% percent of total health expenditures on primary care, compared with an average of 7.8% among 22 Organization for Economic Co-operation and Development (OECD) countries.² Other estimates place the US-OECD gap as wider, with the OECD average at 12%.⁶ Primary care spending has been dropping, accounting for 6.5% of total expenditures in 2002 and 4.67% in 2019. During these years, procedural specialist and prescription drug costs rose as a percent of total health expenditures.^{7,8} Low primary care spending particularly affects low-income elderly and minority populations who have a higher burden of disease and need primary care the most. For fee-for-service Medicare beneficiaries in 2015, primary care received a mere 2.12% to 4.88% of total medical and prescription spending.⁹ Primary care spending varies depending on (1) how total medical expenses is calculated, and (2) narrow vs broad description of primary care.¹⁰

Consider the primary care spending gap of 7.8% for OECD nations vs 5.4% for the United States. In 2020, US health expenditures reached \$4 trillion. Increasing primary spending from 5.4% to 7.8% would provide primary care with an additional \$96 billion each year, or \$480,000 per primary care physician.

Financial Neglect Discourages Primary Care Careers

In 2015, 8,000 new primary care physicians entered the workforce, a number projected to remain the same through 2022 and into the future. In 2022, an estimated 8,500 will retire, a number projected to increase over time.¹¹ With retirements exceeding entrants, the shortage of primary care physicians is projected to reach between 17,800 and 48,000 by 2034.¹² Persons living in counties with fewer primary care physicians per capita have lower life expectancy than those in counties with more primary care physicians.¹³

Why do only 30% of US physicians work in primary care compared with 50% in many European nations? One-quarter of non-primary care medical students indicated that they would switch to a primary care career if primary care income increased and/or work hours decreased.¹⁴ Medical students are influenced by the burnout their primary care residents and faculty experience.¹⁵ Primary care student rotations

may feature stress, disorganization, and lack of continuity of care—discouraging primary care career choice.¹⁶ When medical students rotated into my community practice, I worried that the daily chaos would channel them straight into radiology or pathology.

Racial and ethnic minority medical students are more likely to choose primary care careers and practice in underserved communities.^{17,18} Yet, although underrepresented minorities constitute 34% of the population, they make up only 11% of physicians and 13% of medical students.

Increasing primary care spending could reduce the primary care-specialty income gap and thereby increase entrants into primary care. Rather than a downward spiral, with fewer primary care physicians meaning larger panel sizes, the stress of which leads to even fewer primary care physicians, one could envision an upward trajectory with more primary care physicians allowing panel size to drop which—by improving work-life balance—would attract even more physicians.

What about nurse practitioners (NPs) and physician assistants (PAs)? In 2019-2020, 228,700 office-based, patient-care primary care physicians were joined by 94,000 NPs and 42,000 PAs working in primary care.¹⁹ Many of these practice in urgent care or retail clinics, however, rather than full-scope primary care. NPs/PAs reduce the primary care clinician shortage, but not enough. Even counting NPs/PAs, a significant primary care clinician shortage will continue, perpetuating excessive panel sizes.¹²

Community health centers delivered primary care to 27.2 million minority and low-income people in 2017. Yet in 2018, 66% of health centers reported unfilled positions for primary care physicians, up from 56% in 2013. The COVID-19 pandemic made it more difficult to recruit and retain clinicians and staff.²⁰ Community health centers are especially vulnerable to low primary care spending.

In summary, the United States spends a very low proportion of total health expenditures on primary care, a policy choice—that could be changed—with major implications for primary care's viability. In contrast to other nations, the United States has no health care policy aligning workforce production with social needs.

Large Patient Panels

Primary care has the calamity of too many patients per clinician: excessive panel size. In most practices, clinicians try to care for their panels with little help from under-resourced teams. In this essay, "panel size" refers to panels without effective teams—panels for which the great majority of care is performed by the clinician (Table 1).

Modern understanding of panel size starts with the work of family physician Mark Murray,²¹ who looks at primary care through the lens of demand and capacity. Demand is the number of appointment slots (in-person or virtual) desired by a clinician's panel of patients. Capacity is the number of appointment slots offered by a clinician. For primary care to be in equilibrium, with patients able to get prompt

appointments, demand equals capacity. For most practices, demand exceeds capacity (Table 2).

Average US Panel Size

Panel size is the number of patients for whom a clinician is responsible. Many clinicians do not know their panel size.²² During my years in practice, my panel size was a mystery; I only knew that I had too many patients and not enough time for each patient.

In 2015, average family physician panel size was estimated at 2,194.²³ A similar figure—2,271—comes from a 2019 survey, though only 42.5% of respondents could estimate their panel size.²⁴ Yarnall et al estimated that a primary care physician needs to work 21.7 hours per day to deliver recommended services to a standard panel of 2,500 patients.²⁵ Another study concluded that large panels place "unrealistic expectations on already overwhelmed providers and leaves patients at risk."²⁶ Clearly, panel size without teams is far too large—an effect of the clinician shortage and ultimately of low primary care spending.

Refining the Panel Size Metric

Panel size is a crude metric and requires refinement. Most important: who is caring for the panel. A lone clinician with no team? A clinician with a medical assistant scribe? A clinician with an RN care manager who independently manages most patients with diabetes? Yet panel size is rarely adjusted based on the composition and skill of the care team.^{27,28}

Second, how sick are the patients in the panel? A panel of 3,000 young healthy adults is easier to manage than a panel of 1,500 elderly patients with chronic disease. The Veterans Affairs (VA) system sets panel size at 1,200 because many patients are high-acuity veterans. Panel size may be adjusted on the basis of patient age, sex, clinical risk score, visit frequency, and such factors as social isolation.²⁹

A third refinement has to do with comprehensiveness: are most patients cared for in primary care or are many referred to specialists, urgent care, or emergency departments? Family physician scope of practice has declined over the last decade, suggesting that inability to manage large panels leads to

Table 1. The Impact of Large Panels

Stakeholders	Significance of Large Panels
Patients	I can't get an appointment when I want it and my visits are too short and too rushed
Clinicians	I am falling behind every day and there isn't enough time to take good care of my patients
Medical assistants	It's busy; I'm rooming and running all day
Practice manager	Large panels bring in plenty of revenue for both fee-for-service and capitation. But my clinicians are really burned out.
Health system leaders	Large panels for our clinicians means that we have a strong market share. But clinicians leaving is a big problem.

Table 2. Demand and Capacity

Let's do a thought experiment. A clinician, without an effective team, has a panel of 2,000 patients who seek care 3 times a year. Demand for that clinician's time is $2,000 \times 3$ or 6,000 visits per year. Let's assume the clinician sees 20 patients per day and works 200 days per year (4 days per week, 50 weeks a year). Capacity is 20×200 or 4,000 visits per year. The clinician has a demand-capacity gap of 6,000 – 4,000 or 2,000 visits. Ideal panel size for that clinician would be panel size \times 3 patient visits per year = 4,000, making ideal panel size 1,333.

frequent referrals.²⁴ In fact, physicians with large panels are more likely to refer to specialists. Larger panel sizes are correlated with fewer preventive services.³⁰ A variety of formulas for adjusting panels are used to equalize work among clinicians, estimate ideal panel size, and address disparities.^{31,32}

Altschuler and colleagues projected that a family physician could manage only 983 patients if she works alone. Delegating 77% of prevention and 47% of chronic care to team members allows a family physician to care for a panel of 1,947. Few primary care practices operate with that level of staffing support.³³ In fact, many practices offer little team assistance to their clinicians, making the average panel of 2,194 overwhelming.

Panel Size in Europe

The average 2015 European panel (list) size is estimated at 1,687 patients. List size varies among nations, with general practitioners (GPs) in the Netherlands caring for 2,322 patients compared with 800 in France.³⁴ Nations with larger panels tend to have extensive task shifting from physicians to practice nurses who handle many patient problems on their own.³⁵

Panel Size and Access

Overpanneled clinicians have difficulty providing access.^{30,36} At Mayo Clinic, increasing panel size is associated with longer wait times.³⁷ In Cleveland's MetroHealth system, adjusting for clinician time in clinic, appointment delays worsened with larger panels.³⁸ Increasing panel size is associated with lower patient satisfaction.³⁹ Poor access affects low-income and minority patients more because Medicaid patients face longer wait times than commercially insured patients.^{40,41}

Panel Size and Burnout

Veterans Health Administration primary care physicians reported higher burnout for physicians with panel overcapacity than for those at or under capacity.⁴² Physicians with large panels tend to shorten visit times to handle the relentless patient demand. In a study of 168 clinicians in 34 primary care practices, 67% and 53% needed more time for new patients and follow-ups respectively. Time pressure was associated with clinician stress, burnout, and intent to leave practice.^{43,44} Higher burnout leads clinicians to leave practice, reducing capacity and cutting the number of clinicians available to care for too-large panels.⁴⁵ Group Health, now Kaiser Washington,

reduced panel size from 2,300 to 1,800 in a pilot clinic. The emotional exhaustion component of burnout, equal in the pilot and control clinics at baseline, dropped to 10% in the pilot clinic compared with 30% in control clinics.^{46,47}

In addition to increasing patient demand for appointments, larger panels create more work in addressing in-box messages and EMR documentation. Clinicians who spend more EMR time and those with high in-box volume have higher rates of emotional exhaustion.⁴⁸

In summary, the best evidence suggests that average panel size for US family physicians is 2,194, a number too large to allow clinicians, without an effective team, to provide evidence-based care to the entire panel. The effects of large panels include poorer patient access to care and clinician burnout.

CONCLUSION

Part 1 of this essay argues that low primary care spending and large patient panels are powerful contributors to primary care's problems, in particular patient access and burnout. Part 2 suggests actions to solve or mitigate these problems. Part 2 argues that initiatives with the best chance of revitalizing primary care are those that increase the proportion of health care expenditures going to primary care and build powerful teams that assist clinicians to care for their panels.



[Read or post commentaries in response to this article.](#)

Key words: primary care issues; financial neglect; panel size; teams

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Index – Revitalizing primary care, Part 2

Revitalizing Primary Care, Part 2: Hopes for the Future

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ABSTRACT

Part 1 of this essay argued that the root causes of primary care's problems lie in (1) the low percent of national health expenditures dedicated to primary care and (2) overly large patient panels that clinicians without a team are unable to manage, leading to widespread burnout and poor patient access. Part 2 explores policies and practice changes that could solve or mitigate these primary care problems.

Initiatives attempting to improve primary care are discussed. Diffuse multi-component initiatives—patient-centered medical homes (PCMHs), accountable care organizations (ACOs), and Comprehensive Primary Care Plus (CPC+)—have had limited success in addressing primary care's core problems. More focused initiatives—care management, open access, and telehealth—offer more promise.

To truly revitalize primary care, 2 fundamental changes are needed: (1) a substantially greater percent of health expenditures dedicated to primary care, and (2) the building of powerful teams that add capacity to care for large panels while reducing burnout.

Part 2 of the essay reviews 3 approaches to increasing primary care spending: state-level legislation, eliminating Medicare's disparity between primary care and procedural specialty reimbursement, and efforts by health systems. The final section of Part 2 addresses the building of powerful core and interprofessional teams.

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INTRODUCTION

For decades, the United States has undervalued and seriously underfinanced primary care. For most aspiring young clinicians, primary care is viewed as too much work for too little reward. Too few primary care clinicians means too many patients for each clinician to manage. The 2021 National Academies of Sciences, Engineering and Medicine report on primary care sounded the warning that "primary care in the United States is slowly dying."¹

Part 1 of this essay argued that financial neglect (low primary care spending) and large patient panels are key factors causing primary care's problems. Part 2 explores practice and policy changes that can allow primary care to thrive. Part 2 begins by discussing improvement initiatives that have enjoyed limited success, but have failed to address low primary care spending and excessive panel size. The final lengthy section, "Hopes for the Future," proposes far-reaching measures that may revitalize primary care—increasing primary care spending and building powerful teams.

LIMITED IMPROVEMENT INITIATIVES

Improvement initiatives come in 2 flavors: (1) diffuse programs enhancing multiple components of primary care, and (2) focused efforts targeting 1 specific primary care function. The diffuse initiatives discussed here are patient-centered medical home (PCMH), accountable care organizations (ACOs), and Comprehensive Primary Care Plus (CPC+). Three focused initiatives explored are care management, open access, and telehealth. This essay does not consider Direct Primary Care, a model that dramatically reduces panel size; its widespread adoption would leave millions of people without primary care.² For each of these 6 initiatives, Tables 1 and 2 explore 4 key questions: (1) Is panel size greater or smaller? (2) Has access improved? (3) Has clinician burnout decreased? (4) Has primary care spending increased?

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Table 1. The Impact of Diffuse Improvement Initiatives

	Panel Size	Access	Burnout	Primary Care Spending
PCMH	Studies are limited. ³ PCMH practices have a broader scope of practice than non-PCMH practices, meaning they do more work to care for their panels. ⁴	Waiting times for new patient appointments are similar for PCMH vs non-PCMH practices. ³	In VHA, burnout was slightly lower with greater PCMH implementation. ⁵ Clinician burnout in safety-net clinics increased with greater PCMH adoption, though staff morale improved. ⁶	While some insurers paid small incentive payments to PCMH practices, many did not.
ACO	No data was found on panel size in ACO vs non-ACO primary care practices. ⁷	Patient satisfaction (including timely access) was similar between ACO and non-ACO care except 1 study showing better access in ACOs. ⁸ Timely access was not different between commercial ACOs and non-ACO providers. ⁹	A 2020 review found little evidence on ACOs and clinician experience. ⁸	Shared savings coming to an ACO may go to hospitals, specialists, and ancillary services, rather than to primary care. ACO savings are unlikely to improve primary care spend.
CPC+	Many CPC+ practice leaders could not accurately report panel size. ¹⁰	90% of CPC+ physicians reported that their patients enjoyed after-hours access and electronic access compared with 80% of non-CPC+ physicians. Patients' experience of access was not reported. ¹¹	No difference was found between CPC+ and non-CPC+ practices on physician-reported burnout. ¹¹	Medicare made enhanced payments to CPC+ practices, which added to those practices' revenues and increased Medicare expenditures. ¹¹

ACO = accountable care organizations; CPC+ = Comprehensive Primary Care Plus; PCMH = patient-centered medical homes; VHA = Veterans Health Administration.

Diffuse Initiatives

PCMH

In 2007, primary care organizations adopted principles of the patient-centered medical home. In 2008 the National Committee for Quality Assurance (NCQA) created standards for practices to receive PCMH recognition.¹⁷ PCMH standards include such areas as team-based care, access, continuity, and knowing your patients. About 13,000 practices and clinics are recognized as PCMHs, with recognition common among community health centers.¹⁸

Many studies have evaluated the impact of PCMH recognition. A 2020 commentary cites limited evidence associating PCMH practices with most clinical and financial outcome improvements.¹⁹ Yet PCMHs have not reduced health disparities among vulnerable populations.¹⁷

Because PCMH is a diffuse collection of initiatives rather than a focused intervention, evaluation is difficult. "If you have seen one medical home, you have seen one medical home."²⁰ One PCMH commentator suggests, "Perhaps it is time to study interventions more focused in their content, target population, and desired outcomes."¹⁹ My community practice spent much effort getting PCMH recognition, but nothing changed for our patients.

Primary care practices could increase revenue by reducing hospital costs, if the savings were returned to primary care. But even with cost savings, no standard mechanism exists to return the savings back to primary care.

ACOs

Accountable care organizations are groups of doctors, hospitals, and other health care providers who come together to provide coordinated care to their patients. When an ACO

succeeds in delivering high-quality, lower-cost care, the payer shares the savings it achieves.

In 2012, the Centers for Medicare and Medicaid Services (CMS) launched ACOs for Medicare patients—the Medicare Shared Savings Program (MSSP). Medicare later added the Pioneer ACO and Next Generation ACO models. By 2018, over 600 ACOs were managing care for nearly 12 million Medicare beneficiaries. Similar programs function in the commercial, Medicare Advantage, and Medicaid markets.

In 2019, ACOs showed improving financial performance, generating small net savings relative to CMS's benchmarks.²¹ ACO savings may be overstated, however, because ACOs can "cherry pick" healthier patients, lowering their costs in order to benefit from shared savings.²² And even when savings are generated, they are not necessarily channeled to primary care.

Comprehensive Primary Care Plus (CPC+)

In 2017, CMS launched CPC+, a 5-year program to support over 3,000 primary care practices. CPC+ practices are required to address access and continuity; care management; comprehensiveness and coordination; patient and caregiver engagement; and planned care and population health. CMS pays CPC+ practices a care management fee (in some cases up to \$300,000 in 1 year) with additional incentive payments for reducing patients' utilization or costs. Although a goal of CPC+ is to stimulate alternative payment models, in 2018 most CPC+ revenue remained fee-for-service.¹¹ Geographic areas with CPC+ practices, compared with non-CPC+ areas, have higher median incomes, fewer households in poverty, higher mean educational level, fewer people on Medicaid or uninsured, and a healthier

Table 2. The Impact of Focused Improvement Initiatives

	Panel Size	Access	Burnout	Primary Care Spending
Care management	Care management does not change panel size but care managers (RNs, pharmacists, or behaviorists) assist clinicians in a major way to care for their panels.	Patient visits to care managers can add capacity and thereby improve access.	VHA physicians performing care management functions without help from a team is associated with increased burnout while RN care management eases the burden of burnout. ¹²	Medicare care management codes require too much documentation and too much time spent for inadequate payment. ¹³ Overall, reimbursement for additional personnel needed to perform care management is either absent or insufficient.
Open access		A systematic review found that average wait times drop. Elderly patients may be lost to follow-up. ¹⁴ Access gains may be lost over time if practice realities cause capacity to decline. ¹⁴		
Telehealth		It is unclear whether telehealth adds primary care capacity. Telephone and video visits including documentation may or may not be shorter than face-to-face encounters. ¹⁵	Because virtual visits may have fewer staff involved, more responsibility rests on clinicians.	Clinicians worry that telehealth will reduce primary care revenue. ¹⁶

RN = registered nurse; VHA = Veterans Health Administration

Medicare population, thereby raising questions about the validity of CPC+ evaluations.²³

Focused Initiatives

Care Management

In 1996, Ed Wagner published his first of many papers on the Chronic Care Model.²⁴ The model pioneered the concept that good care for patients with chronic illness is fundamentally different from acute care, and requires practice transformation with 2 central features: (1) chronic disease and preventive care registries, and (2) planned visits to provide patient education, medication management, and self-management support. These activities are now called “care management.” Much of the Chronic Care Model has been incorporated into high-performing primary care.²⁵⁻²⁷

Care management may be associated with reduced hospital utilization and costs for patients in PCMHs and ACOs.^{20,28} Patients with diabetes, asthma, or heart failure receiving care management have better outcomes, and sometimes lower costs, than patients without care management.²⁸ Care management can assist in the care of patients with the chronic “long-COVID.”²⁹ To reduce health care costs, care management works best for patients with multiple conditions and high costs.³⁰ Care management patients have lower medical expenses, fewer hospital admissions and bed days, and fewer specialist visits.³¹ Care management does tackle the problem of large panels by adding care managers to assist clinicians to care for their panels. I did not benefit from care management in my community practice, meaning that time-consuming patient education, self-management support, and care coordination were my responsibilities.

Open Access

In the early 1990s, family physician Mark Murray rearranged his schedule so that his patients could see him the same day they called for an appointment.³² The innovation came to be known as advanced access. Murray showed that good primary care access requires that capacity—number of appointment slots in a year—equals demand for those appointment slots.³³ Because reducing demand is difficult, adding capacity is the best option to improve access. When my community practice tried to implement advanced access, however, successes were short-lived and access deteriorated over time.

Murray’s innovation—same-day appointments for all patients—was watered down in a popular access improvement called open access: freeing up same- or next-day appointments for some but not all patients. In 2015, 79% of US family physicians reported that they used open-access scheduling.³⁴ If 20 patients request open-access slots, however, and only 10 slots are available, the other 10 patients are denied prompt care. Without increasing capacity, the total number of appointment slots is unchanged.

Telehealth

Telehealth includes telephone visits, video visits, and electronic patient portals. While telehealth has existed for decades, its uptake was slow before 2020. In 2014, an estimated 15% of family physicians utilized telehealth.³⁵ Kaiser Permanente of Northern California and the Veterans Health Administration were pioneers in telehealth, the latter providing services for rural and homebound disabled veterans.

The COVID-19 pandemic catalyzed an instantaneous shift to telehealth, which became a prominent feature of

primary care and is expected to continue as the substrate for many primary care encounters. The proportion of telehealth ambulatory encounters increased from 10% just before the pandemic to more than 90% during the pandemic's height.³⁶

E-visits through the patient portal have been associated with improved patient access and increased capacity. A study at Kaiser Permanente found that face-to-face visits fell 25% after instituting the patient portal.³⁷ A concern is that patient portal scheduling is used more heavily by younger, White, and commercially insured patients, which increases racial and economic inequities in access.^{38,39,40}

Health Care Consolidation and Primary Care

US health care is increasingly provided within large health systems. Health systems have the potential to improve quality and efficiency, but also erode clinician autonomy while making health care more expensive and less responsive to patients.⁴¹ Health care consolidation often means vertical integration—1 or more hospitals plus medical groups within a single ownership structure.⁴² From 2012 to 2018, the proportion of physicians employed by hospitals rose from 26% to 44%.⁴³ In 2020, 58% of family physicians were employed compared with fewer than 40% for surgical subspecialists.⁴⁴ From 2010 to 2016, market concentration increased almost 29% for primary care compared with 5% for hospitals and specialist physicians.⁴⁵ Consolidation spawns the relentless growth in practice size.⁴⁶

Consolidation has not increased primary care spending. The percent of national health care expenditures across commercial payers going to primary care decreased from 4.88% in 2017 to 4.67% in 2019.⁴⁷ Practices with 1-2 physicians have 33% fewer preventable admissions than practices with 10-19 physicians.⁴⁸

When primary care physicians move to a vertically integrated practice, they reduce their clinical output by 10% to 20%, seeing fewer patients, generating less revenue, and threatening patient access.⁴⁹ Clinicians owning their practices report less burnout compared with those in health system-owned practices.⁵⁰ In a survey of 17,000 patients cared for by 367 physician offices, patients preferred small practices to large ones and reported better access in small practices.⁵¹ Consolidation is not primary care nor patient-friendly.

HOPES FOR THE FUTURE

The limited initiatives reviewed here have not increased primary care spending nor reduced panel size. The final section of Part 2 examines far-reaching policy and practice changes to increase primary care spending and build powerful teams that can assist clinicians in caring for their panels.

Increasing Primary Care Spending

In 2016, the United States spent 5.4% of total health expenditures on primary care, compared with 7.8% (other studies estimate 12%) by 22 Organization for Economic

Co-operation and Development (OECD) countries.⁵² Ways to increase primary care spending include state legislation, federal action, and policies within health systems.

State Legislation

From 2009 to 2014, Rhode Island's Office of the Health Insurance Commissioner required commercial insurers to raise their primary care spending rate by 1 percentage point per year. Commercial insurer payment to primary care increased from 5.7% in 2008 to 12.3% in 2018, increasing primary care dollars from \$47 million to almost \$80 million. The increased payments were designed to improve care, for example, hiring nurse care managers, implementing components of the Chronic Care Model, and increasing after-hours care.⁵²⁻⁵⁴

In 2017, the Oregon legislature mandated that large commercial insurers, Medicaid coordinated-care organizations, Medicare Advantage plans, and health plans serving public employees spend at least 12% on primary care by 2023.⁵² In 2018, primary care spending percentages varied widely among different insurers, from 4.3% to 22.6%. Fee-for-service Medicare is not included because the state lacks jurisdiction over Medicare.⁵⁵

Overall, primary care spending legislation is challenging because more primary care financing does not reduce total health care costs, making it less attractive to policy makers and politicians.⁵⁶

Federal Action

Primary care spending could increase nationwide by changing how Medicare pays primary care. Changes in Medicare payment are generally copied by Medicaid and commercial insurers. To alter Medicare payment requires severing the tight bond between Medicare and the American Medical Association's (AMA's) Relative Value Scale Update Committee (RUC), a procedural-specialty controlled committee that recommends how physicians are paid. Medicare—rather than evaluating the RUC's recommendations—accepts them 90% of the time.⁵⁷

One analysis found that 30-minute primary care office visits for complex patients generated 40% of the fee for gastroenterologists performing 30-minute colonoscopies—emblematic of the vast disparity between payment for ambulatory visits vs procedures.⁵⁸ Given the staying power of fee-for-service,^{59,60} increasing primary care spending requires reducing the payment disparity between cognitive visits and procedures.

A major input into fee-for-service payment is the time required to deliver the service. The RUC surveys physicians—chiefly procedural specialists—asking them how much time each procedure requires. The surveyed specialists make more money if they overestimate the procedure time. A study using electronic medical record (EMR) time stamps for 293 procedures found that the objective procedure times were on average 20% lower than the specialists' estimates accepted by

the RUC. Another investigation found that the RUC overstated times by 18% to 61% depending on the procedure.^{57,61} Most RUC members are appointed by specialty societies, with only 5 of 32 from primary care specialties.¹

In 2015, the US Government Accountability Office (GAO) recommended that Medicare more thoroughly review RUC's payment recommendations, but changes did not occur.⁶² The National Academies of Sciences, Engineering and Medicine report on primary care concluded that the RUC could not be reformed and that Medicare should value physician services independently of the RUC.¹

Increasing Health Systems' Primary Care Spending

Primary care spending can be augmented by health systems or insurers without governmental action. Currently primary care spending rates vary widely among health systems and insurers. Previous data found that Geisinger spent 9% on primary care, Intermountain HealthCare 8%, and Group Health (now Kaiser Permanente Washington) 14%.⁵³ Most health systems have far lower primary care spending rates or do not track this metric at all. One caveat: the variation in how primary care spending is measured makes comparisons treacherous. Change in primary care spending over time is more reliable.

Value-Based Payment May Not Increase Primary Care Spend

Alternative payment models give primary care more flexibility to encourage team-based care.⁶³ Changing the payment model, however, may not bring primary care more revenue. For example, in my practice, insurers set capitation rates equal to, but not more than, their estimate of what they would have paid for those patients under fee-for-service.

Increasing primary care spending can be accomplished rapidly given political will. Primary care seems to be the only health care institution, however, that is expected to save money for the health system overall. In truth, primary care's value lies in providing care and improving health outcomes for tens of millions of people.⁶⁴

Powerful Teams

As shown in Part 1, primary care panel size is too large, and cannot decline due to the clinician shortage. To address panel size requires a powerful team sharing the care of the panel.⁶⁵ Although not all patients benefit from team care, the role of teams is to assist clinicians in caring for their panel. Powerful teams add capacity while reducing burnout, yet few teams have shown that they can accomplish these goals.⁶⁶

The team narratives described in this section rely on visits to "bright spot" practices—practices seeking to overcome the impact of large panels. The bright spots featured here are practices at which I have conducted site visits, and are thus only examples. Many bright spots exist throughout the country that are not featured here. Moreover, bright spots seldom shine forever. They can lose their luster if leadership changes, if the business case fails, or if key personnel leave. Some

bright spots described here have already dimmed. Yet evanescent bright spots continue to teach us ideas that work.

Primary care teams are often composed of a core team or teamlet (commonly a clinician working with a medical assistant) and an interprofessional team (for example, registered nurses [RNs], pharmacists, behaviorists, and physical therapists). The core team is responsible for its panel of patients. The interprofessional team assists several core teams for patients requiring more services.⁶⁵

Powerful Core Teams

Bellin Health, in Northeastern Wisconsin, initiated team-based care in 2014. By 2019, all 130 primary care clinicians were involved in team-based care.⁶⁷ The central innovation is the expansion of the core team to 2 upskilled medical assistants (renamed care team coordinators [CTCs]) per clinician. Table 3 describes how clinician visits have become team visits. Relieved of documentation tasks, clinicians see more patients each day, adding capacity while increasing clinician satisfaction.⁶⁷

By 2018, a core team model similar to Bellin Health's was up and running in several University of Colorado primary care clinics. Hypertension control, colorectal cancer screening, and most diabetic quality metrics improved. New patient appointments grew markedly, leading to increased revenue and better access. Clinician burnout dropped from 56% to 25% in one clinic and from 40% to 16% in another. Staff burnout in one clinic fell from 42% to 21%, perhaps because medical assistants—traditionally excluded from the clinician visit—have a more interesting job as participants in the "room where it happens."^{68,69}

Scribing is a core team innovation in which 1 core team member performs in-room documentation. 2018 data from 100 million patient encounters with 155,000 physicians shows that physicians spent an average of 16 minutes per encounter using the EMR, with primary care physicians on the high end of the specialty distribution.⁷⁰ Working with scribes is associated with reduced burnout, decreased charting time, and high physician and patient satisfaction.⁷¹⁻⁷⁵ In 1 study, visits per clinic session increased 29%, adding revenue that more than paid for the scribes. Physician time after hours went down by 38%.⁷⁵ Scribe use has been associated with a 60-minute daily time saving for clinicians.⁷⁶

Why have only a few practices adopted a powerful core team model? Trust among team members can dissipate quickly with one negative encounter. As much as clinicians dislike the EMR, giving up the keyboard and cursor to another person is a stretch. Patients may reject care by non-physicians.⁷⁷ In my community practice, patients initially refused appointments with our nurse practitioner (NP), but after one NP visit, they often switched to her care. The additional personnel and their training cost money and regulatory requirements can be tricky. Staff absences and turnover throw a wrench in the system. Lower burnout among clinicians can be associated with higher burnout among practice

Table 3. Contrasting Bellin Health's Team Model With the Traditional Model

	Traditional Model	Bellin Health Model
Composition of core team	1 clinician, 1 medical assistant	1 clinician, 2 medical assistants (CTCs)
Who is in the patient visit?	Patient and clinician	Patient, clinician, and CTC
How does the visit proceed?	MA rooms patient, performs a few functions such as medication reconciliation, and leaves	CTC spends 10-15 minutes with the patient before the clinician enters, setting the agenda, taking the history, reconciling medications, identifying and closing care gaps. When the clinician enters the CTC scribes. When the clinician leaves the CTC explains the after-visit summary, may do teachback and health coaching, and helps with navigation.
Who documents the visit?	Clinician does 90% of documentation	CTC does 90% of documentation, entering findings and pending orders. Clinician quickly checks the chart and sends off orders.
Who answers most in-box messages?	Clinician	CTC can answer many of the messages without taking clinician time because CTC was in the visit, knows the patients, and is trusted by the patients
Training	Standard medical assistant training	CTC training is intensive; poorly trained CTCs could sink the program
How is the additional team member paid for?		Doing little documentation, clinicians have time to see more patients, paying for the extra team member
Quality metrics		Cancer screening, immunizations, chronic disease metrics improved with team care
Is patient access affected?	Before the model was implemented, 71% of patients received a timely appointment	With the team model adding capacity, 97% of patients receive timely access.
How is clinician satisfaction affected?	Before the model was implemented, physician satisfaction was 70%	With the team model, physician satisfaction reached 90%

CTC = care team coordinator; MA = medical assistant.

staff.⁷⁸ To succeed, everyone needs to win: patients, clinician, staff, and the health system.⁷⁹

In summary, core teams are powerful if they add capacity and reduce burnout. To achieve these goals, they need to save clinician time, particularly EMR documentation and the heavy burden of in-box messages. The AMA STEPSforward Saving Time Playbook proposes a menu of time-saving and burnout-reducing activities core teams can perform.⁸⁰

Powerful Interprofessional Teams

Members of the interprofessional team vary from clinic to clinic; we focus on RNs, pharmacists, behaviorists, and physical therapists, all of whom can also offer in-person and telehealth encounters with good quality. On some occasions, interprofessional team members can manage a subpanel of patients within their expertise—for example patients with diabetes—with minimal clinician oversight. Too many team members for one patient are confusing for patients and team members alike. Facilitators and barriers regarding interprofessional teams are summarized in Table 4.

Registered Nurses

RNs can contribute to primary care in several ways. Two of these are RN co-visits (Table 5) and care management. A study of RNs at 13 community health centers found that RNs confined to telephone triaging are often frustrated, but those doing co-visits and care management fully utilize their professional skills.⁸⁹

Community Care of North Carolina (CCNC) situated RN care managers around the state to provide care management for patients of small practices with chronic conditions. Hospital admissions and emergency department visits for high-risk Medicaid patients dropped dramatically and risk-adjusted costs were 15% lower than for non-CCNC patients.⁹⁰

The most effective care management involves RN authorization to manage medications through (1) physician-created standing orders that allow RNs to pend prescriptions in the EMR or (2) patient-specific orders for RNs to prescribe a particular medication to a particular patient. A few state nursing boards allow RNs to adjust medication doses under physician-approved standing orders.⁹¹ RN care managers able to make medication changes can significantly improve hemoglobin A_{1c} levels in patients with diabetes compared with usual care.⁹² Intermountain HealthCare found that physician productivity was 8% higher for clinics with care managers. The additional revenue outweighed the program's cost.⁹³

Clinicians performing care management themselves suffer greater burnout than clinicians delegating coaching to team nurses.⁹⁴ More task delegation to nurses is associated with lower burnout among clinicians but more burnout for RNs on the team.⁹⁵

Pharmacists

When pharmacists manage medication-related care, physicians have time for additional patient visits.⁹⁶ Diabetes care provided by pharmacists improves diabetes and hypertension

Table 4. Interprofessional Team Facilitators and Barriers

	RNs	Pharmacists	Behaviorists	Physical Therapists
Workforce and training	RNs may enter a period of shortage following COVID. Most nursing schools train hospital nurses and provide little ambulatory care education. ⁸¹ Fewer than 10% of RNs work in ambulatory care. ⁸²	The nation has an adequate supply but 5% in ambulatory care. ⁸³ Pharmacists are trained to provide such primary care functions as medication management.	National shortages are projected for psychologists and licensed clinical social workers. They are trained for ambulatory behavioral health but only 20% of primary care practices have a social worker. ⁸²	PTs are experts in ambulatory musculoskeletal management Nationally, a surplus of PTs is projected.
Regulations	Many state laws restrict RNs' authority to care for appropriate patients independently.	Most states allow pharmacists to initiate/modify medications under Collaborative Practice Agreements. ⁸⁴	Behaviorists are authorized to perform all appropriate functions except prescribing.	All 50 states allow patients to see a PT without referral; PTs can perform all relevant services except prescribing. ⁸⁵
Business case	RNs are more of an expense than a revenue producer. Medicare care management codes provide some payment but not enough. ⁸⁶	Pharmacists' billing is limited, meaning that pharmacists are often a net expense to primary care practices.	In a recent survey, 3 out of 30 practices with behavioral health integration had a positive business case, 10 lost money, and the rest did not know. ⁸⁷	PTs in primary care cannot bill, but patients seen by PTs in primary care can be referred to a physical therapy practice where PTs can bill.

PT = physical therapist; RN = registered nurse.

outcomes.^{97,98} Primary care clinicians report that pharmacists performing medication management decreased workload, reduced mental exhaustion, and increased patient access.^{99,100} At one hospital, 27% of chronic disease patient appointments were converted to pharmacy appointments, opening access for other patients.¹⁰¹ Small practices, unable to hire a pharmacist, can share pharmacist time with similar practices in their health system or network.

Behavioral Health Professionals

Behaviorists include psychologists, licensed clinical social workers, marriage and family counselors, drug/alcohol counselors, and others. The integration of behavioral health into primary care has spread over the past 30 years,¹⁰² though only 26% of family physicians reported working with a behavioralist in 2018.¹⁰³ Behavioral health and primary care can be co-located, with warm handoffs to behavioralists working in physical proximity; or integrated, with clinicians and behavioralists creating one treatment plan with behavioral and medical elements.¹⁰⁴

Table 5. RN Co-Visits

Clinica Family Health in Colorado initiated RN co-visits in 2014, with nurses able to perform 8 co-visits per day. The RN takes the history, the clinician enters, and the RN becomes the scribe. The clinician leaves, the RN explains the care plan and arranges follow up services. Twenty- to 30-minute visits take 10 minutes of clinician time, the visit is billed as a clinician visit, and clinician documentation time is minimal. Capacity grew by 17% at 1 site and 12% at another. Patient access improved. Clinicians reported leaving work on time, with charting completed. RN and patient satisfaction were high.⁸⁸

RN = registered nurse.

Behavioral health—primary care integration is associated with improved mental health, diabetes, cardiovascular, and chronic pain outcomes; it can reduce the number of physician visits, adding capacity.¹⁰⁴⁻¹⁰⁶

Physical Therapists

These interprofessional team members are experts on musculoskeletal conditions that make up about 25% of primary care visits. Patients with direct access to physical therapy (seeing the therapist first) vs physician referral had more fully achieved goals, less average pain at discharge from care, fewer missed days from work, higher satisfaction, fewer imaging studies, and lower health care costs.¹⁰⁷ Bellin Health co-locates physical therapists in primary care teams to receive warm handoffs for patients with musculoskeletal complaints. Therapists see about 8 patients per day, adding primary care capacity.⁸⁵

Large Interprofessional Teams

Table 6 provides a follow-up to the thought experiment in Part 1 of this essay, visioning how an interprofessional team could add capacity and reduce burnout.

Few primary care practices, however, have large interprofessional teams. In a 2017-2018 family medicine survey, 38% reported working with a team including one or more behaviorist, physical therapist, and pharmacist. Small practices can build interprofessional teams by sharing personnel with other practices in that health system. Working with interprofessional teams, physician burnout was 21% when teamwork was effective but 69% when teamwork was poor.¹⁰⁸ Care management is the mechanism through which interprofessional team members shift the time-consuming function of behavior-change counseling from physicians to team members.

Table 6. Demand and Capacity for Interprofessional Teams

In Part 1, we offered a thought experiment. A clinician's panel of 2,000 patients generates a demand of 6,000 visits per year. Working 200 days per year and seeing 20 patients per day, the clinician has the capacity of 4,000 visits. Demand exceeds capacity and patient access is poor.

Now, assume that 1,000 of the visits are for diabetes, 1,000 for hypertension, and another 1,000 for uncomplicated back, knee, and shoulder pain. Imagine that registered nurses, pharmacists, and physical therapists can independently care for two-thirds of these visits, for a total of 2,000 non-clinician visits. Capacity increases to 4,000 plus 2,000. Capacity equals demand. Access has improved, and burnout has decreased. These numbers may not be realistic, but they make the point that interprofessional teams can improve access without increasing burnout.

CONCLUSION

My 50 years in practice, teaching, and policy writing have been a love affair with primary care. Primary care means patients from all backgrounds struggling with thousands of symptoms or diagnoses, placing their trust in us. Primary care means knowing the intimacies of patients, their families, and their lives over years or decades. Primary care is built on patients knowing us and we knowing them. Primary care is unique in the panoply of health care services.

This 2-part essay reflects my thinking about primary care. I believe that the root causes of our problems lie in financial neglect and too many patients to handle. As a result, patients have a hard time getting enough time with us, and time is the coin of the realm. Limited initiatives trying to mitigate these problems have scarcely made a dent in our fortunes. Lurking behind this disappointment is low primary care investment.

To counter these difficulties, teams in bright spot practices give us hope for the future, but sustaining these teams is challenging and requires more primary care spending. Conversely, new primary care dollars are best focused on sustaining these teams. Primary care spending and powerful teams need each other. Primary care needs both.

Barriers are daunting. But consider the status quo. Patients can't get appointments while exhausted clinicians spend hours on documentation. We cannot continue to care for too many patients without teams to share the care. With adequate primary care spending and powerful teams, primary care can become accessible to patients and joyful to all.

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