INSTITUTE FOR HEALTHCARE IMPROVEMENT

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SUMMARY REPORT: 90-DAY PROJECT

Primary Health Services for the 21st Century

4/30/10

Executive Summary:

Primary care is critical for all modern health economies. This research and development project focused on understanding the state of primary care in the US and other countries and then finding new design ideas for primary care. A very insightful way to think about primary care is from the work of Neal Halfon and Helen DuPlessis at UCLA. "The first version of primary care (Primary Care 1.0) focused on acute health conditions, and some chronic disease treatment. The current version of primary care (Primary Care 2.0), epitomized by the Wagner Care Model, builds upon the acute care based 1.0 model to include a more integrated approach to providing , clinical prevention and management of chronic disease. The next step in this evolutionary pathway, (Primary Health Care 3.0) will usher in a primary health system that provides a more prospective and anticipatory approach to care delivery, that harnesses the collective intelligence of physicians and patients to collaborate freely to solve problems, and that connects with and integrates evolving community health teams and their prevention and health promotion efforts, and is firmly positioned within an organizational structure that supports health development as well as disease management ."

Primary Health services needs to move from managing disease to working actively across all boundaries of medical and health services with the ultimate goal of optimizing health. It needs to focus on three areas: maximizing the longitudinal potential for health, treating acute diseases and managing chronic diseases. Maximizing the longitudinal potential for health is well described by Neal Halfon and Miles Hochstein in the paper Life Course Health Development. In that paper they talk about risk factors and protective factors that impact a person's potential for health. A primary health system should be supported in three ways: It needs to be organized around the primary health team which includes the patient, horizontal community resources and lastly the vertical system that provides secondary and tertiary care.

The figure below outlines a framework for primary health services:

	Primary Health Team	Community (Horizontal)	Secondary and Tertiary Care (Vertical)
Longitudinal Health	Put details in the relationship between the primary health team and longitudinal health		

Acute Health		Do the same for each cell	
Chronic Health			

The paper concludes with a set of recommendations for moving this work forward.

I. Research and Development Team:

- Leader: <NAME>
- Colleague (Helper): <NAME>

II. Intent:

The primary goals for this work can be divided into two main parts: support a web and action series for IHI and find new design ideas for primary care.

III. Background:

Primary Care in the United States is sometimes viewed as a patient's visit to a primary care or family doctor in an office practice setting and sometimes followed by a referral visit to a specialist. This contact with the primary care doctor is often an individual's key entry way to health & support services (non-emergent). However, this only addresses health issues when someone a) identifies that they are sick or b) requires a regular check up or prescription renewal. Once the individual leaves the practice-setting, key determinants that affect their health are not necessarily chronicled in the health care system's communications.

There are three significant issues afflicting primary care in the U.S. today: 1) There are not enough primary care professionals and this number is not going to increase in the near future. 2) The current primary care model is not always properly equipped to maximize health and coordinate care. 3) The payment model does not work for most of primary care. According to HRSA, in 2008, in the United States there were 6,033 Primary Care Health Professional Shortage Areas (HPSAs) with 64 million people living in them. They estimated that it would take 16,336 practitioners to meet their need for primary care providers if the population to practitioner ratio was 2,000:1 (Highest Areas of need being Louisiana, New Mexico, Mississippi; the lowest areas of need being New Jersey, Hawaii, and Vermont) [1]. Given that only 35% of all current practicing physicians are in primary care and recent studies indicate that fewer that 20% of all US medical students are choosing primary care specialties, the gap in shortages will not fill any time soon [2]. The mean primary care visit duration is 20.8 minutes [3]. However, a study conducted by directly observing doctors workdays concluded that nearly one half of a primary care physician's workday (8.6 hours on average) is spent on activities outside the examination room, predominately focused on follow-up and documentation of care for patients not physically present [4]. These visits represent a small fraction of an individual's lifetime. The present payment model is still primary fee for service.

This rewards the production of health care and does not always reward the production of health. To produce health instead of just health care you need a payment system that looks at how to maximize health and coordinate care.

A very insightful way to think about primary care is from the work of Neal Halfon and Helen DuPlessis at UCLA. "The first version of primary care (Primary Care 1.0) focused on acute health conditions, and some chronic disease treatment. The current version of primary care (Primary Care 2.0), epitomized by the Wagner Care Model, builds upon the acute care based 1.0 model to include a more integrated approach to providing , clinical prevention and management of chronic disease. The next step in this evolutionary pathway, (Primary Health Care 3.0) will usher in a primary health system that provides a more prospective and anticipatory approach to care delivery, that harnesses the collective intelligence of physicians and patients to collaborate freely to solve problems, and that connects with and integrates evolving community health teams and their prevention and health promotion efforts, and is firmly positioned within an organizational structure that supports health development as well as disease management ."[5] We are going to use Neal Halfon and Helen DuPlessis description of 1.0, 2.0 and 3.0 primary health services in this report.

The IHI has been working on primary care improvement. The following model was produced over 10 years ago and still has many important principles that can be used for primary care.

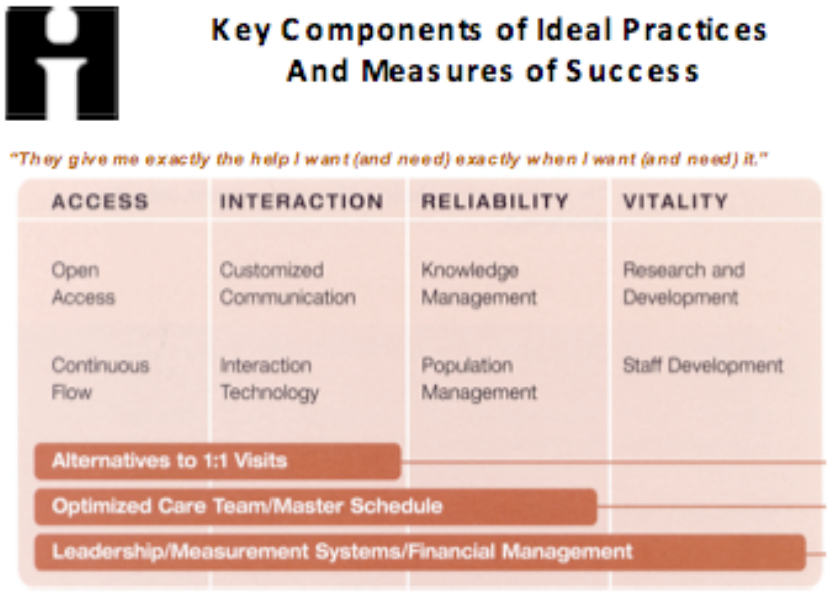

Figure 1

Recently, in the last few years the following driver diagram has been used by the IHI faculty to direct their work.

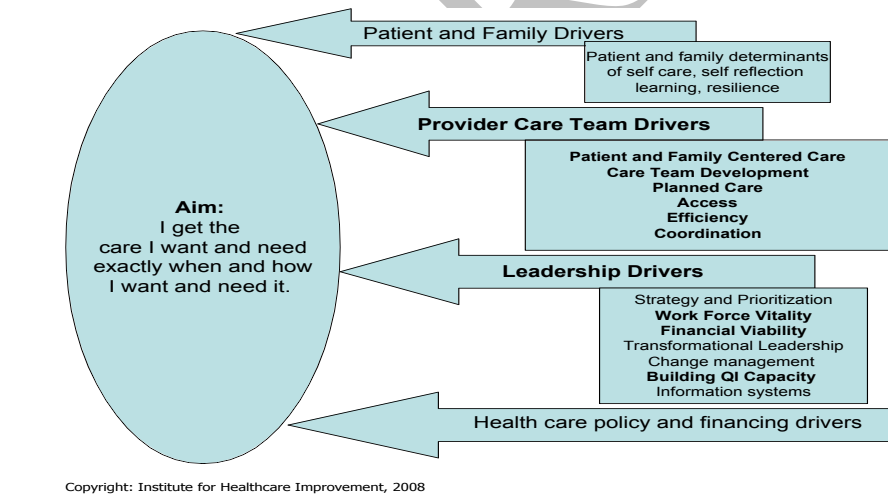

Figure 2

The primary care organizations working with this model have mainly focused on the provider care team's drivers, which are illustrated with the following diagram.

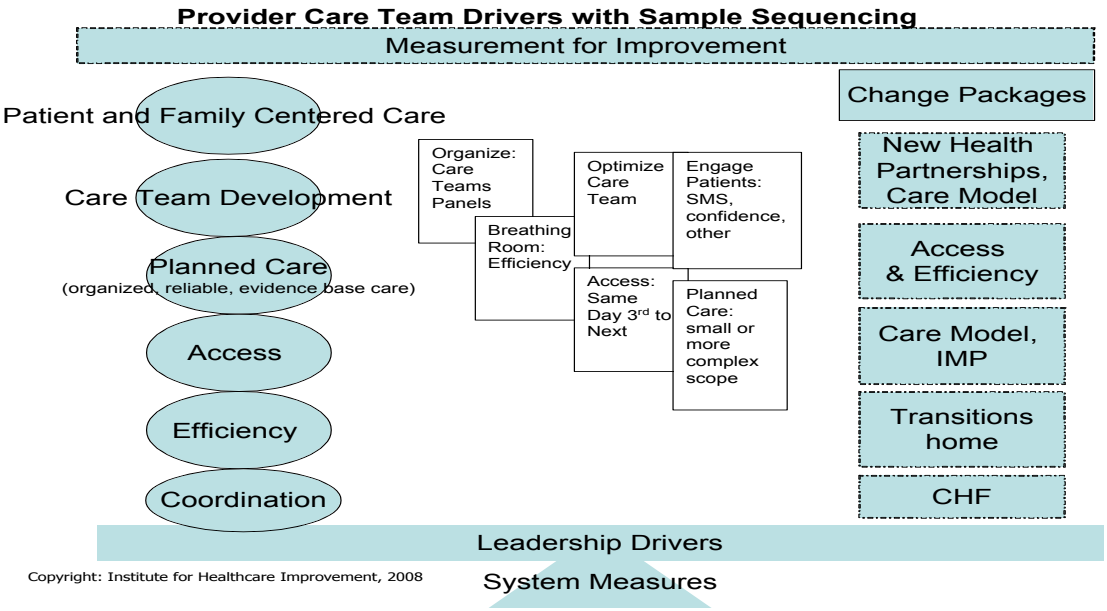

Figure 3

IV. Description of Work to Date:

The primary deliverables for this work can be divided into two main parts: support a web and action series for IHI for this work and find new design for primary care. Both of these deliverables are on track for this project

V. Results of the 90-Day Scan:

Primary care in the US has been a second-class citizen in the health care arena. Primary care doctors feel overworked, underpaid and underappreciated. Our society believes high tech and specialization are the answer for health care. Yet when we look outside the world of the US, primary care is understood to be the backbone of modern health care. IHI recognizes the importance of focusing on primary care and that the focus on quality improvement has favored the hospital world—though emphasis and the steady growth of projects such the Triple Aim (etc.) suggest that this focus is changing. Using the ideas presented by Neal Halfon and Helen DuPlessis for US health care system as a whole we see that primary care is somewhere between a 1.0 and 2.0 model. Many have not actively embraced the medical home 2.0 model even at this time. For instance, in Illinois not one primary care practice was identified under the National Committee for Quality Assurance (NCQA) Patient Centered Medical Home Certification Program at the time of this writing. We have to be careful about leaping too quickly to a 3.0 model. This is an evolutionary pathway in which we need to build sequentially. One nice example of this transition in primary care comes from New Zealand.

Primary Care in New Zealand

Over the last decade primary care has evolved from a medical fee-for-service model to a team based capitation payment model. The Primary Healthcare Strategy 2001 (with values of health equity, prevention of illness and universal access to care) encouraged General Practitioners (GPs) to join non-profit community Primary Health Organizations (PHOs) with responsibility for enrolled populations. PHOs contract to District Health Boards (DHBs) on a per capita basis to provide both primary care and preventative services. There are 82 PHOs and 95% of NZers are enrolled. GPs are independent contractors to PHOs and income is derived from subsidized payments as well as patient co-payments. Nearly all GPs use an electronic medical record and there is a successful model of a primary care information technology (IT) integrator (HealthLink) facilitating and supporting communications with other parts of the health sector. All claims with government agencies are performed electronically. Whilst the degree of uptake of IT within practices is high, the interoperability with other practices and public hospitals is less developed and hence the focus of current HIT strategy.

Successes and Challenges Ahead in Zealand

Recent studies [6,7] confirm that NZ primary care scores well in relation to patient focused care over time, and in the coordination of care. Patients report good access by telephone and email, with a high rate of same day appointments and easy access to after hours services. The move to capitation has resulted in longer consultation times and an improved perception of the role of GPs. Significant challenges lie ahead with increasingly restrained resources in both human and financial terms. An increased understanding of a holistic systems approach may help to overcome problems of integration and a history of fraught relationships between PHOs and DHBs as well as between GPs and government.

The Path Forward for 21st Century Primary Health Services

The evolution of primary care is from a model in which we initially focused on acute care and chronic care primarily on an episodic basis, which was physician, medical, professional, and location centric. The introduction of the chronic care model by Ed Wagner along with some of the idealized design work by IHI and lots of work by many other groups including AAFP, AAP, ACP and others has lead to a more comprehensive model that we commonly call the medical home or in the words of Neal Halfon a good 2.0 system. Movement of primary care from a 1.0 to this 2.0 system is important. Asking primary care to move from 1.0 to a 3.0 system in one jump maybe too much for many organizations. The following list tries to highlight the key aspect that a primary health system will need to become a good 2.0 system. Getting to this point is a recruitment to be able to build to the next level.

1. Care team development
2. Population based planned care
3. Work on access
4. Efficeincy and reliable design in the office
5. Information technology support
6. Leadership engagement
7. Strong learning system
8. Patient Engagement
9. Accountable outcomes

(See Appendix A for more details)

Primary Health services needs to move from managing disease to working actively across all boundaries of medical and health services with the ultimate goal of optimizing or maximizing health. Maximizing the longitudinal potential for health is well described by Neal Halfon and Miles Hochstein in the paper Life Course Health Development [8]. In that paper they talk about factor risk factors and protective factors that impact a persons potential for health.

The figure below outlines a framework for primary health services:

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Longitudinal Health	Put details in the relationship between the primary health team and longitudinal health		
Acute Health		Do the same for each cell	

Chronic Health			

Figure 4

In this framework we recognize that there are essentially three main areas of focus for a primary care health system: longitudinal care that is focused on maximizing health, acute care treatment as needed and planned population coordinated chronic care. All of this care will involve the primary health team in which the medical providers, patients and family will co-create the health for individuals, the community resources that the primary health team will connect with, in what we are labeling as the horizontal connection, and finally secondary and tertiary health teams that need to coordinate with the primary health care team. In each of the 9 cells created by this 3 x3 table you could put in work that should be done by each part of the system: primary health team, community resources and the secondary and tertiary teams. To build such a system you need strong leadership, a learning system and information technology to assist this work.

A specific set of requirements for such a system is listed below. It is broken into three parts: design, measurement and financial supports. The idea behind this list is to push our thinking regarding health care. The list starts out with the idea of designing a system in which hospitalization for non-surgical problems is eliminated. Another way to think about this is to say that we could look at every hospitalization for a medical problem as a defect in care. Every hospitalization for a medical problem is not truly a defect in care, but the idea is a provocation to build a much better system.

1. Requirements for the design of a new system:
   - No hospitalization for medical (non-surgical) problems
   - Health coaching, self management support and screening for the population
   - Health goal identification for each member with a plan to execute it
   - Active surveillance of the population
   - Coordination of care throughout the health system - vertical integration
   - Coordination and access to community services - horizontal integration
   - Acute and chronic problem identification and management - this is both physical, behavioral and social
   - Information technology infrastructure

2. Measurement requirements:
   - A system of primary care needs to be held accountable for improvement in Triple Aim measures such as the ones listed below.

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Potential Triple Aim Outcome Measures 11/09

Dimension	Measure
Population Health	1. Health/Functional Status: single-question (e.g. from CDC HRQOL-4) or multi-domain (e.g. SF-12, EuroQol)
	2. Risk Status: composite health risk appraisal (HRA) score
	3. Disease Burden: Incidence (yearly rate of onset, avg. age of onset) and/or prevalence of major chronic conditions; summary of predictive model scores
	4. Mortality: life expectancy; years of potential life lost; standardized mortality rates. *Note: Healthy Life Expectancy (HLE) combines life expectancy and health status into a single measure, reflecting remaining years of life in good health. See http://reves.site.ined.fr/en/DFLE/definition/*
Patient Experience	1. Standard questions from patient surveys, for example: -Global questions from US CAHPS or How's Your Health surveys -Experience questions from NHS World Class Commissioning or CareQuality Commission -Likelihood to recommend
	2. Set of measures based on key dimensions (e.g., US IOM Quality Chasm aims: Safe, Effective, Timely, Efficient, Equitable and Patient-centered)
Per Capita Cost	1. Total cost per member of the population per month
	2. Hospital and ED utilization rate

Figure 5

3. A basic set of financial requirements for primary care is listed below:

- Minimal administrative burden to individuals and producers should be part of the financial requirements for the new system
- 24/7/365 coverage
- Responsibility for risk adjusted per-member per-month minus surgical care and reinsurance for catastrophic events. (The goal is to remove insurance / population risk and make the provider responsible for health care quality risk)

There are places where systems begin to approach many of these requirements such as South Central Foundation in Anchorage, Alaska, a native-owned health care system or an English community with a good primary care system.

UK Example of Primary Care

A typical UK general practice has physicians who are independent contractors with the National Health Service. Each physician, on average, sees 1800 patients/full time equivalenet.24 hour contract, but there is an opt-out clause for those who don't want to cover for 24 hours.

Their main primary care role includes

- Prevention / screening
- Acute care
- Chronic disease management
- End of life care

The health care management team is a multidisciplinary team of health professionals and

community service providers.
The primary health care team could include:

GPs	Social Workers
Practice Nurses	Community Mental Health Nurses
Health visitors	Health Support Workers
Receptionists	Podiatrists
Administrators	Drug and Alcohol Workers
Physiotherapists	Specialists
Counselors	

The primary health care team is held accountable for the following indicators, which will total about 160:

1. Clinical Services
2. Organizational Indicators:
    - Education
    - Practice management
    - Medicines management
    - Records and information
3. Additional Services:
    - Cervical Screening
    - Child health surveillance
    - Contraceptive Services
    - Maternity Services

4. Patient Experience

GP income is based on the following items:

1. Income:
    - Global Sum
    - Enhanced Services
    - Quality and Outcomes Framework
    - Additional Payments- Seniority, Premises
    - Running costs
    - Capital expenses
2. Expenditure:
    - Running costs
    - Capital expenses

A key piece that is needed to support primary care is information technology. In the UK primary care offices all use an electronic medical record for patient visits. Through this system they are able to capture the measures that support the quality and outcome framework. Approximately 30% of their pay is based on these measures.

The primary care system is supported, respected, valued and rewarded in the UK. This is an enviable position for any primary care services in the world.

VII. Conclusions and Recommendations:

1. Use the following framework for Primary Health Services

	Primary Health Team	Community (Horizontal)	Secondary and Tertiary Care (Vertical)
Longitudinal Health	Put details in the relationship between the primary health team and longitudinal health		
Acute Health		Do the same for each cell	
Chronic Care			

Supported primary care with strong leadership and information technology

2. Launch a web and action series on primary care built on the 2.0 outline (see Appendix A).

3. Work with a small group of primary care sites to test and provide another level of detail to the ideas discussed in this paper for primary health services for the 21st Century

A. Testing systems to maximize health longitudinally

B. Developing strong horizontal connections between the primary health care team and the community.

C. Developing stronger vertical integration between primary health services and secondary and tertiary care

4. Build a business plan on primary health services for the 21st Century and test the ideas with entrepreneurs.

5. Do more work on the best way to finance primary health services for the 21st Century.

6. Continue collaboration with the UCLA Blue Sky initiative.

VI. Open Questions:

Who can build it and who will pay for it?
Who are the winners and losers in a new system?
What should the payment model look like for this work?

VII References

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3. Primary Care Visit Duration and Quality Does Good Care Take Longer? Lena M. Chen, MD, MS; Wildon R. Farwell, MD, MPH; Ashish K. Jha, MD, MPH Arch Intern Med. 2009;169(20):1866-1872

4.Time Spent in Face-to-Face Patient Care and Work Outside the Examination Room, Gottschalk, Andrew, Flocke, Susan A. Ann Fam Med 2005 3: 488-493

5. Proposal for the 3.0 primary health system innovation workshop series. UCLA Center for Healthier Children, Families and Communities. Helen M. DuPlessis, M.D., MPH and Neal Halfon, MD, MPH 2010

6. A survey of primary care physicians in eleven Countries Schoen C, et al., Health Affairs 2009; 28(6):w117-83.

7. Critical Analysis of the implementation of the Primary Health Care Strategy. Smith J. Ministry of Health, March 2009. http://www.moh.govt.nz/moh.nsf/indexmh/implementation-strategy-phc?Open

8. Life Course Health Development: An Integrated Framework for Developing Health, Policy, and Research. Neal Halfon and Miles Hochstein. The Milbank Quarterly, Vol 80, No 3, 2002 433-479

VIII: Appendices:

Appendix A

This is an outline for a potential web and action series including topics and possible faculty.

WEB&ACTION: CARE TEAM DEVELOPMENT
Session A – These need to be completed by the expert faculty assigned to each of these topics

Session B -

Session C –

WEB&ACTION : – POPULATION BASED PLANNED CARE
Session A –

Session B -

Session C –

WEB&ACTION :– ACCESS
Session A –

Session B -

Session C –

WEB&ACTION : –EFFICEINCY AND RELIABLE DESIGN IN THE OFFICE

Session A –

Session B -

Session C –

WEB&ACTION– IT FRAMEWORK

Session A –

Session B -

Session C –

WEB&ACTION– LEADERSHIP ENGAGEMENT

Session A –

Session B -

Session C –

WEB&ACTION – LEARNING SYSTEM- THIS IS WHERE YOU PUT QUALITY IMPROVEMENT-CAPACITY DEVELOPMENT

Session A –

Session B -

Session C –

WEB&ACTION – Patient involvement

Session A –

Session B -

Session C –

WEB&ACTION – Accountable outcomes-what results should primary care be held accountable for

Session A –

Session B -