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ARCHI

Atlanta Regional Collaborative for Health Improvement
Joining Forces to Improve Health Outcomes in Metro Atlanta

ARCHI

PLAYBOOK

On Leadership

Leaders are called to stand in that lonely place
between the no longer and the not yet
and intentionally make decisions
that will bind, forge, move and create history.

We are not called to be popular,
we are not called to be safe,
we are not called to follow.

We are the ones called to take risks,
we are the ones called to change attitudes, to risk displeasures.
We are the ones called to gamble our lives for a better world.

                                        -Mary Lou Andersen

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PREFACE

This Playbook is produced by The Atlanta Regional Collaborative for Health Improvement (ARCHI) for use by anyone who would like to align with ARCHI's vision and contribute to collective impact. It describes the circumstances that gave rise to this new collaborative and why we expect success in creating substantial, sustainable improvements for Atlanta. The Playbook presents the elements of ARCHI members' shared agenda and the roles these elements play in the health, health care, and economy of Atlanta. It provides guidance on using evidence in choosing and prioritizing interventions and lists specific, evidence-informed interventions for consideration. These lists are not exhaustive, and Playbook users are encouraged to consider other interventions that have evidence for effectiveness as well. The lists do provide a broad menu of well-vetted strategies and are a good place to start. They were developed by ARCHI subcommittees, who also identified which might yield "quick wins" and offered some local examples of existing efforts.

Opportunity

Several converging factors create a singular opportunity to improve the healthcare system in the Atlanta region and the health of the region's residents. Public health departments that seek accreditation must perform community assessments. Local governments are thinking seriously about their investments in health, assessing needs and setting priorities. Foundations are increasingly choosing to invest in collaborative efforts rather than in single agencies. Federally Qualified Health Centers (FQHCs) must assess the need for expansion. Hospitals are pressed to assess, plan, and invest to meet new IRS regulations. Further, the Atlanta area is home to large population groups with significant unmet needs. In particular, Fulton and DeKalb counties, the most populous in Georgia, are suffering. It's tempting to approach this work independently, but the real opportunity lies in collaboration. With the potential to be more efficient and effective, collaborative assessment can lay the groundwork for collective priority setting and investment to achieve maximum impact.

ARCHI

ARCHI is a multisectoral, public-private partnership formed to seize this opportunity for transformation through a collaborative approach to community needs assessment and action. ARCHI builds on successes and learns from setbacks in Atlanta's rich history of collaborative initiatives. With an innovative strategy, strong leadership and broad participation, ARCHI expects to produce substantial, sustainable results.

Vision

Interests, incentives and investments are aligned to generate and sustain a healthy population and a vibrant economy.

Mission

To engage public, private, and community partners to improve healthcare and foster health-promoting social, economic, and educational environments.

Priorities

Encouraging healthy behaviors; increasing pathways to advantage for families and students; increasing care coordination; expanding health insurance coverage.

Financing

Innovation portfolio to seed early interventions; increased use of contingent global payment; capture and reinvestment of half of savings generated.

ARCHI members comprise a range of organizations and individuals who are committed to working together toward the Collaborative's vision, mission, and priorities. They include hospitals, FQHCs, behavioral health providers, public health, physicians, insurers, academics, business leaders, local government, philanthropy, and faith communities.

A leadership team representing the Atlanta Regional Commission, Georgia Health Policy Center, and United Way of Greater Atlanta facilitates ARCHI's Steering Committee, which is made up of diverse organizations and perspectives:

Atlanta Regional Commission	Carter Center Mental Health Program
Centers for Disease Control and Prevention	DeKalb County Board of Health
Fulton County Department of Health & Wellness	Georgia Association for Primary Health Care
Georgia Department of Public Health	Georgia Health Policy Center
Georgia Hospital Association	Grady Health System
Kaiser Permanente of Georgia	Oakhurst Medical Center
Philanthropic Collaborative for a Healthy Georgia	Southside Medical Center
St. Joseph's Health System	United Way of Metropolitan Atlanta

In addition to considerable in-kind contributions from the three leadership organizations, crucial support for the creation of ARCHI came from the Centers for Disease Control and Prevention, Kaiser Permanente, Grady Health System, and St. Joseph's Health System.

Underpinnings

The Philanthropic Collaborative for a Healthy Georgia provides strong evidence that collaboration can work. This group studies health issues and decides whether to invest in them collectively. Each partner gives in the manner and amount that suits the individual organization. With this flexible, collaborative approach, the group has been able to affect numerous issues over the last decade. Other ARCHI members also bring a wealth of experience. For example: the Atlanta Regional Commission led the creation of the Lifelong Communities Collaborative, the Care Transitions Collaborative, and Neighborhood Nexus, a multi-institutional data-sharing network; the Georgia Health Policy Center has a 18-year history of convening diverse partners to create evidence-based policy; and United Way of Metropolitan Atlanta has been a convener on key social service issues in the region for decades.

Complementing this experience, the Leadership Team studied the work of Nobel Laureate Elinor Ostrom, who traveled the world and saw that people can, indeed, collaborate to forge progress on difficult social issues. The principles for success outlined in Dr. Ostrom's Prize-winning work provided a framework for the development of ARCHI. Subsequently, 23 individuals from ten ARCHI member organizations participated in the webinar series "ReThinking Health: Leadership Essentials in a Changing System". The eight-week series and supplemental discussions, readings, and assignments covered theories and practices of leadership, systems thinking and dynamics, community organizing, shared governance, and sustainable financing models, all in support of innovation to improve health system performance. Among other learnings, ARCHI participants embraced the five conditions favoring collective impact described by John Kania and Mark Kramer (Stanford Social Innovation Review, 2011):

The Five Conditions of Collective Impact

1. Common Agenda: All participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions.

2. Shared Measurement: Collecting data and measuring results consistently across all participants ensures efforts remain aligned and participants hold each other accountable.

3. Mutually Reinforcing Activities: Participant activities must be differentiated while still being coordinated through a mutually reinforcing plan of action.

4. Continuous Communication: Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and appreciate common motivation.

5. Backbone Organization: Creating and managing collective impact requires a separate organization(s) with staff and a specific set of skills to serve as the backbone for the entire initiative and coordinate participating organizations and agencies.

Developing a Common Agenda

ARCHI stakeholders participated in a series of conversations from July 2012 to November 2012 to review the metro area health system, analyze current health data, and build consensus on challenges and potential solutions. They produced a collaborative, regional health assessment and short- and long-term improvement plans that allow different partners to invest according to their interests and needs.

This phase of ARCHI's work culminated in a six-hour work session on November 14, 2012 at which Bobby Milstein presented the ReThink Health model to 70 Atlanta stakeholders. This system dynamics model simulates the short- and long-term impacts that a variety of intervention and investment scenarios can have on a region's population and economy. A version of ReThink Health is calibrated specifically for Atlanta, incorporating extensive data on residents' health and the area's healthcare system.

Meeting participants, working in teams of eight, devised scenarios they thought would give Atlanta the best overall outcomes in terms of health, productivity, equity, and healthcare system efficiency. As Dr. Milstein simulated these scenarios using ReThink Health and reviewed comparative results with the whole room, a clear set of priorities emerged. Using instant polling technology, 87 percent of participants expressed support for the scenario titled Atlanta Transformation. This scenario forms the basis of ARCHI's common agenda.

Alignment

ARCHI envisions a distributed approach to advancing ARCHI's agenda. This means that members are encouraged, supported, and recognized for aligning decisions and activities with these priorities within their spheres of influence. For example, grant-making agencies might devote a portion of their portfolio to programs that promote healthy behaviors or sharpen their scrutiny of the evidence base behind healthy behavior initiatives they fund. A health care provider might increase its care coordination activities. Any organization might adopt policies for employee compensation, leave, or educational support that increase pathways to advantage for staff and their families.

In addition to nurturing broad-based alignment with ARCHI's agenda, the collaborative is pursuing a pilot project to demonstrate the approach. The pilot will address a limited portion of the two-county population, defined either geographically or by a shared characteristic, and will implement as many of the Atlanta Transformation Scenario elements as are relevant and feasible, with the aim of producing quick and visible, but also sustainable, wins.

Evidence Considerations

Stakeholders investing in an intervention want to know there is evidence of its effectiveness – to have credible reason for expecting the positive results they seek. Evidence of effectiveness has two components. First is the level of evidence – the amount and quality of information available that speaks to an intervention's likelihood of producing desired results. Second is the degree of effectiveness – the magnitude of results that can reasonably be expected from the intervention. One would typically prefer to invest in interventions with strong evidence of large, positive effect. However, not only are such choices not always available, but the specific context may call for different priorities. Sound investments are based on careful consideration of the level of evidence, degree of effectiveness, and contextual factors.

Level of evidence ranges from low to high; from solid logic to multiple, rigorous research studies. Is the cause-effect relationship plausible? Is it backed by established theory? Has the intervention or something similar been tested in practice? Have studies been published in peer-reviewed journals? Have they been replicated independently? Were research designs rigorous?

Degree of effectiveness also varies along a continuum. Is the intervention likely to produce a small change, a large change, or possibly an unacceptable type of change? Will it affect an outcome of primary interest, such as deaths averted, or an intermediate one, such as smoking prevalence? Will the effect be distributed evenly across the population or could it reduce or exacerbate an existing disparity?

Figure 1. Evidence of Effectiveness

Level of Evidence

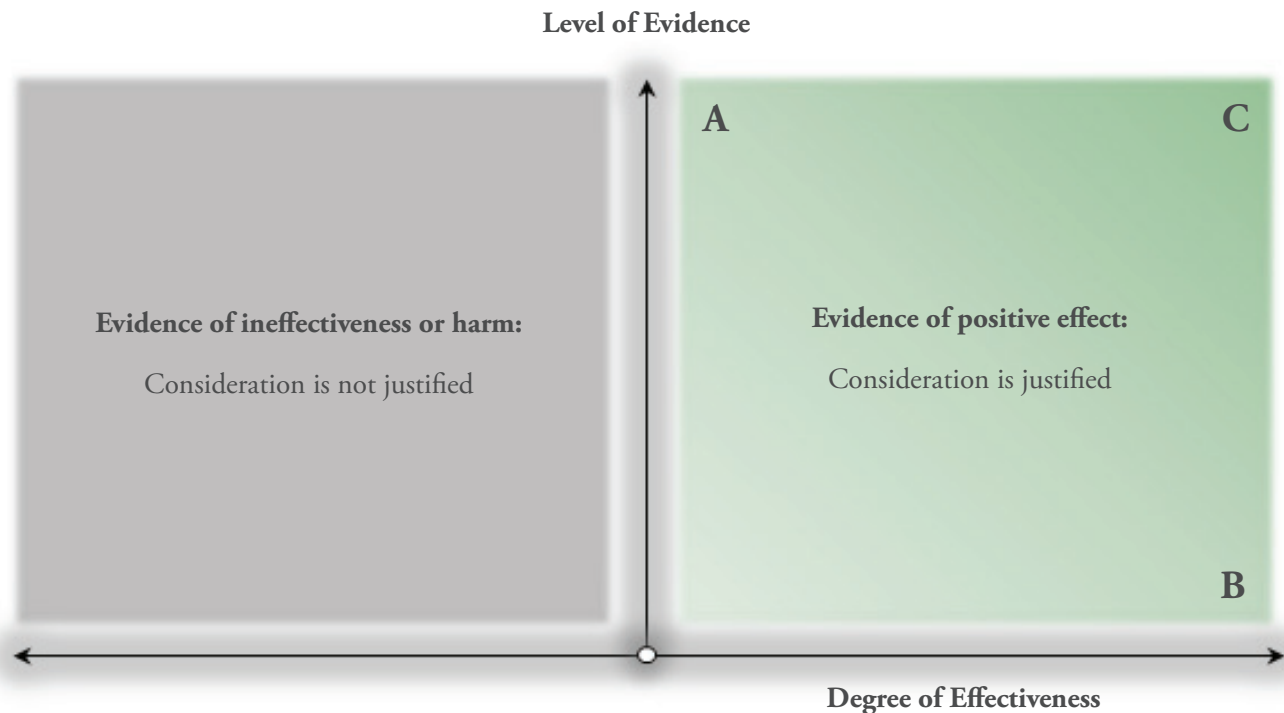|	
Evidence of ineffectiveness or harm:	A C
Consideration is not justified	**Evidence of positive effect:**
	Consideration is justified
	B

Degree of Effectiveness

Figure 1 illustrates the combined domains of evidence and effectiveness, with level of evidence on the y-axis and degree of effectiveness on the x-axis. There is some level of evidence for some degree of positive effect in the green area; thus, consideration is justified for any intervention that falls in this zone. Strategies in the gray area must be rejected; with evidence of ineffectiveness or harm, there is reason to expect that implementing these interventions would be, at best, futile, if not unethical. Point A represents a strategy that has been demonstrated through multiple, rigorous studies to produce a positive, though small, effect. Point B is one that may be untested, but for which sound logic and theory suggest it has potential for a large, positive impact. Point C is a strategy that has strong evidence for a large-scale effect. All of these interventions are reasonable to consider. The context might argue for A or B, even though C is most compelling on its face.

As suggested by the blurred regions along the axes, there are some interventions for which the level of evidence and/or the effect size is non-zero, but so negligible that it should be treated as zero. Simple hunches and research results that are not statistically different from zero are examples.

The Playbook offers a menu of strategies informed by the best available evidence in each priority intervention and financing area. Because the quality and quantity of evidence varies across these areas, no single standard for evidence of effectiveness could be applied in determining inclusion. Thus, these lists are not exhaustive: some strategies worthy of consideration may be missing because the evidence base is just emerging; others because the body of evidence is so large that only strategies in the upper tiers of evidence of effectiveness were included.

In general, we suggest that Playbook users give first priority and/or devote the largest share of an intervention portfolio to strategies with the strongest evidence of effectiveness and lesser priority or portfolio share to ones with weaker evidence – always considering options in light of financial feasibility, political acceptability, time needed to produce results, and other contextual factors.

Finally, evidence of effectiveness also can and should be considered in evaluation planning. Where substantial evidence and replication guidance are available for a selected intervention, it may be sufficient to monitor and document implementation fidelity: the pathway to desired outcomes is already established. Conversely, a more rigorous evaluation is recommended when evidence is sparse – to verify effectiveness, to inform course correction, and to contribute to the evidence base.

Atlanta Transformation Scenario

As indicated by ReThink Health simulations (Figure 2), the Atlanta Transformation Scenario sets up a virtuous cycle that achieves gains in multiple core values over time. For example, the portion of the population under 200 percent of the federal poverty level is projected to drop on the order of eleven percent by 2040; non-urgent emergency department episodes to drop as much as 30 percent; productivity to increase five percent; and death rates to drop five percent compared to the business-as-usual scenario.

Figure 2. Summary outcome indicators for Atlanta (Fulton and DeKalb Counties) at year 2040 under the Atlanta Transformation scenario, compared to business-as-usual projections
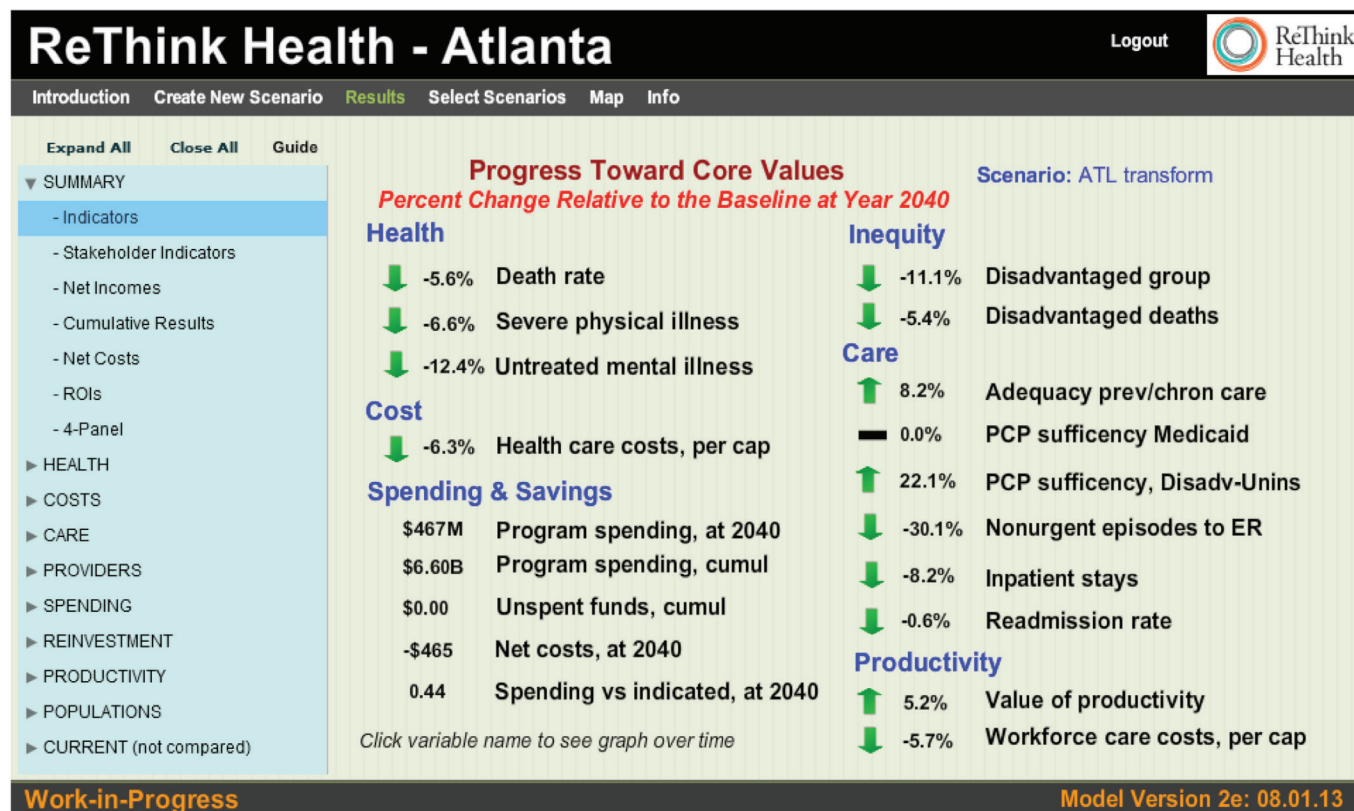

Looking at projected trends over time in Figure 3 (on page 6), we see that death rates in the general population, which currently are declining, begin to flatten out around 2024 under the status quo; under the Atlanta Transformation scenario they continue to drop. For the disadvantaged population, the preferred scenario almost levels what is otherwise projected to be an ongoing increase in death rate. The preferred scenario replaces a rising trend in health costs with a falling one over time.

There are seven key elements of the Atlanta Transformation Scenario: two assumptions regarding future health system trends (contingent global payment levels and rates of uninsurance); two financing propositions (an innovation portfolio and a capture and reinvest scheme); and three priority areas for intervention (healthy behaviors, pathways to advantage, and care coordination). These factors and their roles in the system as a whole are described below.

Health Insurance Coverage

ReThink Health allows users to establish the trends they anticipate in health insurance coverage (or uninsurance rates) among the disadvantaged and those covered by private insurance. ARCHI members left insurance coverage for the disadvantaged at status quo projections for the Atlanta Transformation Scenario, since Georgia has opted not to expand Medicaid eligibility under the ACA. They posited declines in the portion of the advantaged population that remains uninsured based on uptake of private insurance due to various features of the ACA.

Figure 3. Trends in four outcome indicators over time under the base case (status quo) and Atlanta
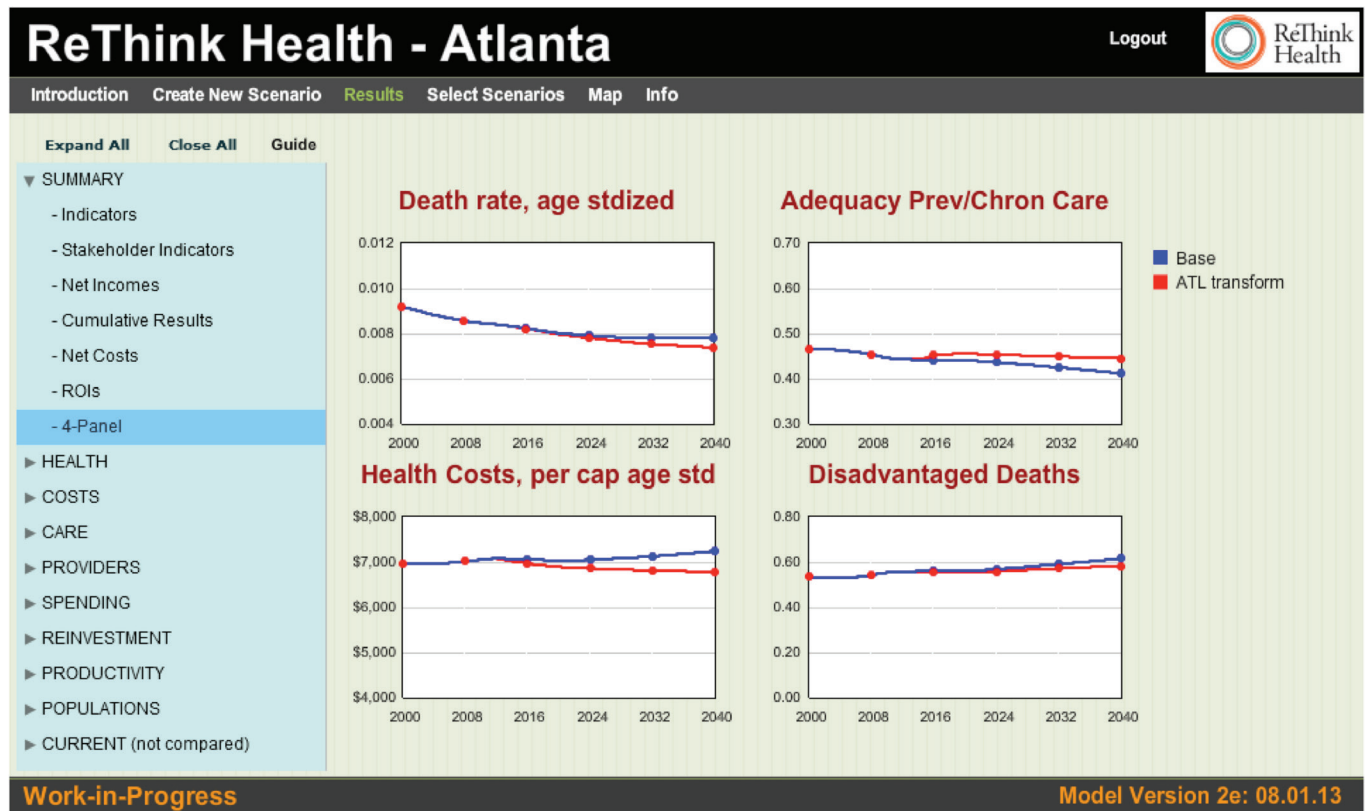
The evidence underlying ReThink Health shows that having insurance makes people more likely to seek preventive and chronic care. This is good from a health standpoint but has mixed cost effects, since it increases routine visits and medication purchases while reducing acute episodes. Greater insurance coverage among the disadvantaged may put added pressure on general primary care capacity as it takes pressure off FQHC primary care capacity, because some of the newly insured disadvantaged will have the choice of going to a general PCP. These shifts may also affect the volume of non-urgent emergency department visits. At the same time, newly insured advantaged individuals are better able to afford to see specialists and have elective tests and procedures, thereby increasing certain costs.

County Health Rankings gave the portion of adults under age 65 who were uninsured in 2010 as in 27 percent in Fulton County and 27 percent in DeKalb County. The uninsurance rate for adults in Georgia overall was 27 percent. Eleven percent of Fulton County children were uninsured; 12 percent in Fulton County; 10 percent in the state.

Contingent Global Payment

The goal of various payment reform models, as illustrated in Figure 4, is to promote higher quality, lower cost care. Further toward the goal is the contingent global (or bundled) payment approach, in which the provider is paid a fixed amount to cover all of the care an individual requires for a given condition and receives a share of any savings that result from their providing high quality care. In ARCHI's preferred scenario, contingent global payment is set to 50 percent of the care provided through Medicare, Medicaid, and commercial payers.

Contingent global payment alone can lead to some provider-driven improvements -- for example, better preventive and chronic care, better coordination of care, and better post-discharge planning -- even without community-level initiatives. It also can reduce providers' resistance to cost-curbing community-level initiatives, like care coordination, that occur in a fee-for-service environment. In addition, as ReThink Health bears out, increasing contingent global payment amplifies the effect on the system of certain other initiatives, among them healthy behavior interventions and care coordination, two of the most powerful components of the Atlanta Transformation Scenario.

Recent technological advances make contingent global payment structures easier to implement within provider networks of any size:

- » Electronic health records allow providers to better coordinate care by increasing their access to patients' health information and by tracking population health outcomes.

- » Integrated management systems give providers information about the scope of services available to their patients, including social support services.

- » Integrated billing systems improve administration of global budgets.

- » Risk adjustment strategies factor patient pools' health status into provider payment levels to prevent the exclusion of medically complex patients.

Figure 4. Payment Reform Continuum

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┌──────────────┐          ┌──────────────┐
│   Pay for    │          │   Bundled    │
│ Performance  │          │   Payments   │
└──────┬───────┘          └──────┬───────┘
       │                         │
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║                                            ║        │              │
║      PAYMENT REFORM CONTINUUM      ───▶    ║        │ High Quality/│
║                                            ║        │Low Cost Care │
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    │               │           │
┌───┴────┐     ┌────┴───┐   ┌───┴────┐
│Fee-for-│     │  PCMH  │   │Total Cost│
│Service │     │        │   │ of Care │
└────────┘     └────────┘   └────────┘
                    │
                ┌───┴───┐
                │ ACOs  │
                └───────┘
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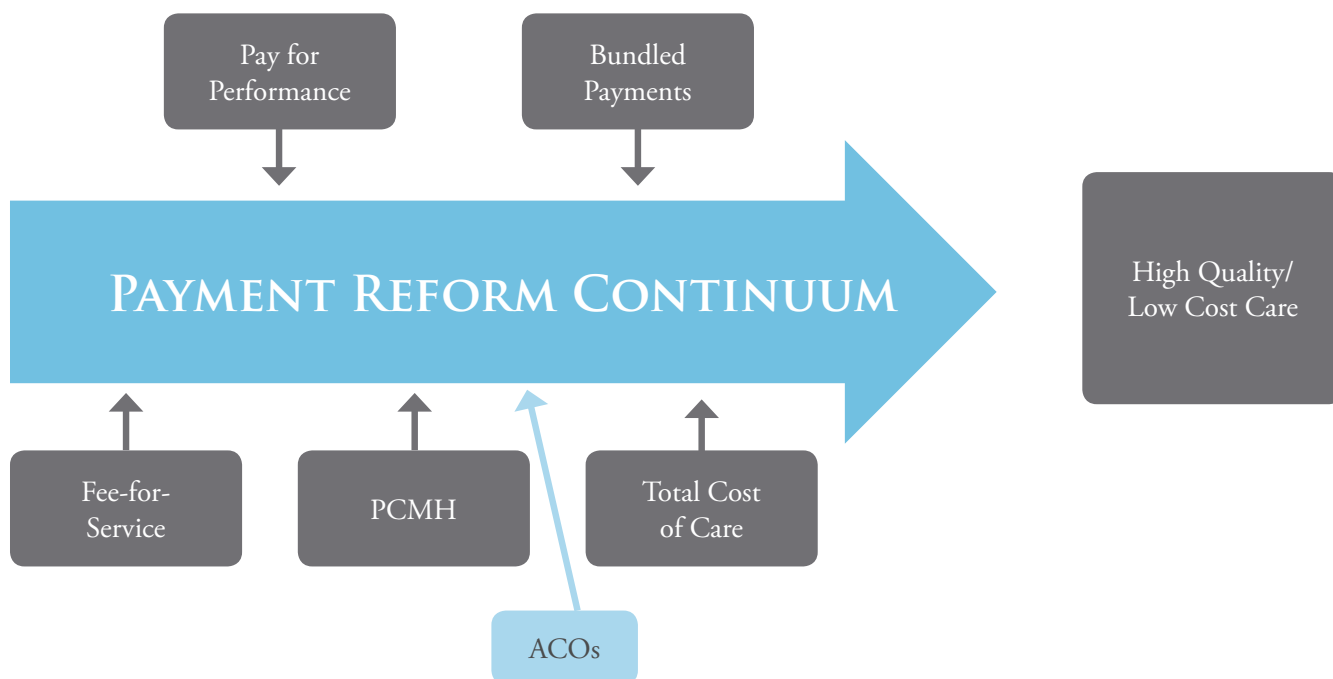
While examples of various alternatives to the traditional fee-for-service approach have been operating for a number a years, it is still too early to effectively assess their overall impact on lowering the cost and improving the quality of health care. Two notable models are described here briefly. One operates within a state Medicaid program; the other is led by a commercial payer. Both include capture and reinvest components, directing a portion of savings to community-based prevention programs.

Vermont's "Global Commitment to Health" began in 2006 as a five-year demonstration project to test the impact of giving the state more flexibility to manage its Medicaid health services by capping federal Medicaid payments. The state received monthly payments to cover the needs of its Medicaid beneficiaries, approximately 25 percent of its total population. The agreement allowed the state to retain the difference if expenditures were less than the cap, and required it to absorb any costs above the cap. Vermont was able to keep expenditures on beneficiaries below the cap and chose to direct the savings to community programs such as school health and mental health services. These investments should improve the health of the population, which also reduces healthcare costs.

In 2009, Blue Cross Blue Shield of Massachusetts (BCBSMA) implemented a global payment model called the Alternative Quality Contract (AQC). The AQC pays provider organizations a set amount to cover all services and costs. The model includes inpatient, outpatient, pharmacy, behavioral health, and other services and costs associated with each of their beneficiaries. In 2013, the AQCs covered approximately 85 percent of BCBSMA's physician network. BCBSMA offers performance incentives to promote quality, safety, and patient-centered care. The incentives are linked to clinical measures related to process, outcomes, and patient care experience. The BCBSMA global budget approach is

supported by community-focused prevention and public health programs. A study published in Health Affairs in 2012 showed that after two years of the AQC, providers generated an average savings of 2.8 percent and that there was an increase of the quality of care for patients participating in the program. In 2012, the state of Massachusetts passed a law that replaced the fee-for-service payment structure with alternative payment models, including global budgets.

Fee-for-service is currently used by most payers and providers in Fulton and DeKalb Counties. There is some evidence that the healthcare system here is moving in the direction of contingent global payment, particularly for the Medicare population, with the recent establishment of several accountable care organizations (ACOs). ACOs fall between patient-centered medical homes (PCMHs) and bundled payments in the payment reform continuum. Despite these recent developments, there is still a great deal of work to be done to move the local health system toward global payments. The ARCHI subcommittee is taking steps to bring the right parties together and to accelerate this movement.

Innovation Portfolio

ARCHI's preferred intervention priorities all require funding. ReThink Health allows users to specify the dollars and duration of an innovation fund to be used in carrying out the specified interventions. If some of the available funds are not required in a given year, ReThink Health rolls the remainder over to the next year. Any such rollovers can be used even after the designated termination of the innovation fund. If, based on the model's assumptions, not enough money is available to implement the chosen interventions at specified levels, the level of intervention intensity is reduced proportionately.

ARCHI members simulated the Atlanta Transformation scenario with an innovation fund of $100 million per year over the first five years; a total of $500 million. The model indicates an initial shortfall in funds relative to anticipated program costs that drops over the first five years as savings begin to accrue. The shortfall rises again when the innovation fund is depleted but resumes falling off at a rate of about $9 million per year due to increasing savings available for reinvestment.

The subcommittee that met to develop strategies for identifying and distributing financial resources decided to reframe the fund concept. They felt that because the fund will ultimately support a number of initiatives with varying degrees of risk and return, it actually operates more like a balanced-risk portfolio. Thus, they adopted the term Innovation Portfolio to more accurately reflect what the mechanism would be and do.

In the preferred scenario, the Innovation Portfolio is used to support initiatives in Care Coordination, Healthy Behaviors, and Pathways. Each of these areas represents a different part of the system's overall risk or investment. For example, Care Coordination initiatives are likely to provide a relatively rapid return on investment. The savings generated from the coordination of care (e.g. decreased hospitalizations, decreased ER visits, etc.) can be captured quickly, compared to those in the other two areas, and reinvested to sustain or fund other initiatives.

Interventions that support healthy behaviors have more intermediate risk and will take time to produce measurable change. Programs that aim to increase physical activity or reduce obesity in a defined population, for example, take time to implement and evaluate. Any savings from these initiatives will not be realized immediately and will require funding over a longer period of time.

The initiatives likely to have the greatest return on investment, albeit on a relatively long time horizon, are those that increase pathways to advantage for families and students. These require the greatest investment over time; and with the highest costs aimed at a younger population, they take the longest to produce savings.

The Innovation Portfolio subcommittee plans to work with the other subcommittees to identify one or more communities within Fulton-DeKalb where ARCHI can develop a demonstration project to include the implementation of some of the initiatives and interventions identified in this Playbook.

Capture and Reinvest

Capturing and reinvesting savings is another financing option in the ReThink Health model and one selected by ARCHI members for the Atlanta Transformation scenario. The strategy involves negotiating arrangements with payers whereby they calculate health care cost savings against appropriate benchmarks and then return to the community some fraction of those savings. This money, in combination with the innovation fund, is then used to finance scenario initiatives. In ARCHI's preferred scenario, the negotiated split of savings with each payer – Medicare, Medicaid, and

commercial –is 50 percent. Figure 5 plots the annual funds this strategy could generate under the Atlanta Transformation scenario over the next 25+ years.

Figure 5. Cost Savings Available from Capture and Reinvest Strategy

As previously discussed, the initiatives that are likely to generate savings relatively quickly are those designed around care coordination. With this in mind, the subcommittee will work closely with both the Care Coordination and Innovation Portfolio subcommittees to coordinate efforts in areas where the groups' work overlaps. The Global Payment/Capture and Reinvest subcommittee also is reviewing models across the country where payers and providers are working together to generate cost savings and then reinvesting those savings back into communities. The subcommittee's goal is ultimately to develop and implement capture and reinvest strategies that will sustain existing initiatives and allow for the adoption of new ones to produce real and measurable improvements in health and health care in Fulton and DeKalb Counties.

Healthy Behaviors

As simulated by ReThink Health, promoting healthy behavior and preventing risky behavior can lead to reductions in the onset of mild and severe chronic physical illness, the likelihood of urgent events (e.g., heart attacks from cigarette smoke), and the onset of mental illness associated with drug use. It also reduces the need for medications for lifestyle-related disorders including asymptomatic hypertension and high cholesterol. Based on the literature, the model estimates that risky behavior prevalence declines by a factor of 2.5 over time as cessation increases and that new onset decreases by 50 percent. It estimates implementation costs at $100 per person per year for the population engaging in risky behavior and assumes that interventions are targeted at specific populations and/or neighborhoods.

ARCHI's Healthy Behaviors subcommittee focused on the five healthy behavior areas that are included in the ReThink Health model: reduce smoking and tobacco use, improve diet and nutrition, increase exercise and physical activity, reduce alcohol and drug use, and reduce incidence of unprotected sex and sexually transmitted infections. At its discretion, the group added a sixth focus area: increasing regular preventive care for physical and mental health.

SMOKING AND TOBACCO USE

More deaths are caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined, and it is estimated that one in five deaths (443,000) in the U.S. is related to cigarette smoking. The CDC estimates that more than 10 percent of those deaths are attributable to exposure to environmental tobacco smoke (ETS).

The numbers of deaths and diseases related to cigarette smoking and exposure to ETS is not surprising. Analyses of the National Health Interview Survey show that approximately one in five (20%) Americans over the age of 18 are current smokers. This rate has fallen in almost a linear fashion since 1965, when approximately 43 percent of the U.S. population smoked. Across U.S. states and territories, recent analyses of the Behavioral Risk Factor Surveillance System (BRFSS) show variations in adult smoking prevalence from a low of 8.7 percent in the U.S. Virgin Islands to a high of 31 percent in Guam.

According to the 2012 County Health Rankings, 19 percent of Georgians smoke, while 15 percent of Fulton County residents and 12 percent of DeKalb County residents smoke.

UNHEALTHY DIET

An unhealthy diet can be a contributing cause to overweight and obesity. Common reasons for unhealthy diets include lack of nutrition awareness, lack of access to affordable, nutritious foods, and general bad habits. Overweight and obesity can contribute to other diseases such as cardiovascular disease, diabetes, and overall poor health. According to the United States Department of Agriculture's Economic Research Service, approximately 15 percent of U.S. households were food insecure in 2011, meaning they did not have enough food for all family members to live an active, healthy life. According to the Atlanta Community Food Bank, 16.9 percent of people in the Atlanta metropolitan area and North Georgia are food insecure. Food insecurity can lead to eating large quantities of less nutritious foods, leading to overweight and obesity. According to the County Health Rankings, 28 percent of Georgians, 25 percent of Fulton County residents, and 26 percent of DeKalb County residents are obese, meaning they have a body mass index greater than or equal to 30 kilograms per square meter.

Estimates of the cost of obesity are imprecise. A 2006 study estimated that annual medical spending for an obese person were almost $1,500 more than for a person of normal weight; while, a 2012 study estimated the difference to be more than $2,700 higher. A 2003 study by Trust for America's Health estimated the per capita cost of obesity in Georgia to be $246 or $2,164,800,000 for all of Georgia.

EXERCISE AND PHYSICAL ACTIVITY

Lack of exercise and physical activity can contribute to overweight and obesity. Common reasons for lack of physical activity include lack of free time, lack of access to safe spaces for activity, and general bad habits. Overweight and obesity can contribute to other diseases such as cardiovascular disease, diabetes, and overall poor health. According to the County Health Rankings, 24 percent of Georgians, 19 percent of Fulton County residents, and 21 percent of DeKalb County residents are physically inactive.

ALCOHOL AND DRUG ABUSE

Alcohol and drug use are associated with a number of adverse health conditions including heart attack and high blood pressure. Alcohol and drug use also contribute to fatal traffic accidents and school and work absenteeism. Alcohol use is frequently measured as binge drinking – the consumption of large amounts of alcohol in a relatively short period of time with the intention of becoming inebriated. Drug use is less well defined but can include the misuse of prescription drugs. The County Health Rankings indicate that 14 percent of Georgians, 17 percent of Fulton County residents, and 14 percent of DeKalb County residents engage in excessive drinking. According to the Office of National Drug Control Policy, 7.3 percent of Georgians reported past month illicit drug use compared with 8.8 percent nationally. County level estimates were not available.

Unprotected Sex and Sexually Transmitted Infections

Risky sexual behavior such as having unprotected sex can lead to sexually transmitted infections, unintended pregnancy, and diseases such as HIV and AIDS. According to County Health Rankings, Georgia has a teen birth rate of 54 per 1,000 and a sexually transmitted infection rate of 411 per 100,000. Corresponding rates in Fulton County are 47 and 579 respectively; in DeKalb County they are 48 and 560.

Preventive Care for Physical and Mental Health

It is assumed that regular preventive care for physical and mental health results in both better long-term outcomes for the individual and lower cost for the health system. Most recommendations for preventive care are disease specific; thus the interventions listed in the Playbook show the specific diseases to which they apply.

One strategy that cuts across this and other areas covered in the Playbook is school-based health centers. Evidence indicates that school-based health centers improve access to care, especially for school-aged minorities and males, and increase utilization of health care and mental health services, with demonstrated sequelae that include reductions in hospitalizations, inappropriate emergency room use, absenteeism and tardiness, and school discipline referrals. Depending on the student population age and particular services provided, school-based health centers can also support better nutrition, weight loss, and education and screening for risky behaviors. The American Academy of Pediatrics, School-Based Health Centers and Pediatric Practice issued a statement that summarizes documented benefits and makes recommendations for care coordination with the pediatric medical home.

Pathways to Advantage

The ReThink Health model includes creating pathways to advantage among intervention options for improving health outcomes and other measures. Advantage is defined as having annual income that is at least twice the federal poverty level.

Evidence indicates that advantage plays multiple roles in the health and healthcare system. The model reflects that the advantaged are more likely to be insured, seek care and engage in self-care activities, compared to the disadvantaged. They are less likely to engage in unhealthy behavior, live in hazardous or high-crime environments or go to the hospital for non-urgent care. Because of these and other factors, they are less likely to develop chronic physical or mental illness.

ReThink Health offers two intervention approaches for addressing disadvantage: creating family pathways to advantage and creating student pathways to advantage. Family pathways are described as policies and programs that improve economic prospects and increase the opportunities for families to move from disadvantage to advantage. Student pathways to advantage are expanded by enabling more disadvantaged students to complete high school, enter college, and complete college. Greater educational attainment increases individuals' chances to move out of disadvantage by improving their access to higher-paying jobs.

Results of pathways interventions do not happen quickly. It takes time to improve economic prospects for struggling families and for student graduation and matriculation rates to respond to program and policy interventions. ReThink Health assumes an average delay of three years to produce increased rates of advantage with family pathways interventions and five years after completion of a student pathways program. The time estimates are based on a literature review conducted by the model developers that established an average amount of time to implement the programs, for the participant to complete the program, and the participant to establish him or herself in a place to see results. Both types of interventions are cost-intensive as well. The model assumes family pathways interventions cost an average of $1,000 per capita per year for the disadvantaged population and $14,000 per disadvantaged student over the period of high school and college for student pathways.

Although the Atlanta Transformation Scenario only included family pathways, at the recommendation of the ARCHI steering committee the pathways subcommittee explored student pathways as well. The pathways subcommittee also noted some potential opportunities for engaging existing Atlanta initiatives in advancing pathways to student and family advantage:

Aerotropolis

Atlanta Beltline

Fort McPherson redevelopment (McPherson Implementation Local Redevelopment Authority)

Hope VI projects

Stadium-English Avenue-Vine City project (Blank Foundation)

Turner Field parking project

Whitefoord Community Program (Zeist Foundation)

Care Coordination

As incorporated in ReThink Health, health care coordination includes coordinating patient care and providing patient and physician coaching to reduce duplicative or unnecessary care and costs. Using integrated information systems, coaching arrangements, protocols for shared decision-making, and increased use of generic drugs when appropriate, care coordination can result in fewer referrals to specialists, less ambulatory testing and procedures, and fewer hospital admissions, without adversely affecting outcomes.

ReThink Health estimates that it takes about a year for an office-based physician to implement components of care coordination, with an initial investment of $30,000 per physician. Subsequent maintenance of the integrated information system and on-going physician coaching are estimated to cost $3,000 per year, per office-based physician.

Evidence is emerging on care coordination strategies, but gaps still exist. Because these practices are in their infancy and only one met the highest standard for evidence of effectiveness, the subcommittee agreed to include promising and emerging programs in its recommendations for consideration. Further, while no extensive data has become available thus far to confirm the outcomes of some models, many have begun sharing narratives of their experiences. Important lessons learned from these are provided in the Playbook. Although it is not a care coordination strategy itself, health information technology is recognized as an important tool to facilitate various models of coordinated care; thus examples of integrated health information systems are also included.

PATIENT-CENTERED MEDICAL HOMES

Built on the chronic care model, the goal of the patient-centered medical home (PCMH) is to improve the care of patients across the continuum of prevention and treatment of chronic and acute illness. PCMH also addresses co-morbid behavioral health issues such as depression, problem drinking and drug use, medication adherence, and lifestyle choices. It may improve both patient and provider experiences and result in efficiencies that help contain costs. Five key attributes define the PCMH:

- » Comprehensive care
- » Patient-centeredness
- » Coordinated care
- » Accessible services
- » Quality and safety

A variety of enhanced payment models are being used to motivate and compensate practices for providing patient-centered care, including per-member per-month fees and shared savings. Because of its focus on improving patient care and the support for the approach in the ACA, many public and private health care providers and payers have developed PCMH initiatives. Reflecting rapid growth, they vary widely. By early 2012, there were more than 90 commercial health plans, 42 states, and three federal initiatives testing PCMH strategies.

Patient-centered medical homes require both functional and structural changes in operations. The transition to a PCMH requires time, commitment of leadership, utilization of health information technology, and a defined process that continuously evaluates and works to improve care coordination and patient centeredness.

ACCOUNTABLE CARE ORGANIZATIONS

Accountable Care Organizations (ACOs) are collaborations of hospitals, doctors and other health care providers that have committed to taking responsibility for the cost, quality of care and health outcomes of a particular patient group. More specifically, ACOs work "to improve care transitions, ensure patient safety, enhance the patient and caregiver experience, improve health outcomes and help patients achieve wellness goals," although some goals may vary across organizations.

ACOs draw their inspiration from health maintenance organizations (HMOs) such as Kaiser Permanente or Geisinger Health System. They were created with the goal of increasing coordination of care for patients, particularly the chronically ill. ACOs strive to provide more efficient and higher quality care, for example, by eliminating unnecessary duplication of services and medical errors. An ACO's payment structure is formatted so that when it delivers high quality, cost-efficient health care, the members (organizations and providers) share in the savings through either reimbursements or other incentive payments. Because of altered provider behaviors in care delivery, successful ACOs operating in a multi-payer environment may result in lower spending for all payers, not just those operating the ACOs.

Because ACOs share the savings created by better efficiency, quality of care, and health outcomes, it is critical that ACOs operate in conjunction with the main health care payers, either private or public, for the patient group that they are serving. The Centers for Medicare & Medicaid Services (CMS) provides Medicare reimbursements, and in the case of other non-CMS programs, the participating payers (insurance carriers) provide the reimbursements.

Based on available ACO examples, subject matter experts have published guidance on components necessary for successful creation of an ACO:

» An organization structure, including information technology infrastructure, that is conducive to integrated delivery (i.e. electronic health records, coordination between various providers) as well as risk management.

» Appropriate financial set-up (ability to manage financial risk and receive/distribute payments or savings.)

» Patient engagement through education and self-management support.

» Adequate funding to support the organization structure must be in place upfront. This may come from payers, donors or cross-subsidization from other provider revenue sources. Later, reimbursements may be reinvested.

» Commitment and buy-in from key leadership, physicians, and payers.

» Regular performance measurement and reporting to show progress on cost reduction and improved quality of care.

» Flexibility to continuously adapt the business plan to feedback received while monitoring the program and market conditions.

ACCOUNTABLE CARE COMMUNITIES

Accountable Care Communities (ACCs) take the concepts of medical homes and accountable care organizations one step further by fostering collaboration and shared responsibility among clinical and community sector participants to reform health systems in particular localities. The Accountable Care Community builds on the increasing prominence of ACOs to develop healthier communities.

CARE TRANSITION PROGRAMS

Care transition programs (CTPs), which support the transition of patients from hospitals to other care settings in order to reduce readmissions and improve quality of care, have been identified by CMS as an important method of reducing hospital readmissions. CTPs provide a benefit to patients, providers, hospitals, and payers, by increasing the health of patients and reducing hospital readmissions and associated costs. CTPs may be particularly useful in improving the health of more vulnerable populations with fewer social supports, such as seniors or lower income individuals.

Because of the potential of such practices, the ACA, through CMS's Partnership for Patients, provided funding opportunities for community-based organizations that provide care transitions to Medicare beneficiaries under the five-year Community-based Care Transitions Program (CCTP). Recent studies show that CTPs such as Coleman Care Transitions Intervention (CTI), BPIP, INTERACT, Medication Management/Reconciliation, Discharge Standardization/Project RED and the Transitional Care Nursing Model may offer promising outcomes in health improvement and cost savings. More specifically, communities with operating CTPs have been found to have lower all-cause hospital admissions and 30-day readmissions compared to communities without CTPs. More than 100 CCTPs and many more non-CMS funded CTPs currently operate nationwide.

EMERGENCY DEPARTMENT CARE COORDINATION

Almost one-third of ED visits can be classified as semi-urgent or non-urgent. A large percent of ED visitors are covered by Medicaid or Medicare rather than private insurance, which can be problematic for hospitals, as Medicaid and Medicare have lower reimbursement rates. Further, hospitals must largely absorb the costs of any ED patient who does not have any health insurance. Because of the high costs of ED visits to hospitals and the large amount of frequent ED visitors who are non-urgent, there is a great need for care coordination between hospitals and community health centers (federally qualified or otherwise) in order to guide non-urgent patients to seek care at the most appropriate venue.

INTEGRATION OF PRIMARY CARE AND BEHAVIORAL HEALTH

Recent data show that frequent utilizers of healthcare, such as frequent ED visitors, often suffer from substance use. Furthermore, the higher a frequent visitor's use of the ED, the more likely they are to have a substance use problem. Other studies point to behavioral health issues such as depression or substance use as being tied to other psychosocial or medical problems, as well as high healthcare utilization. Thus, the need for behavioral health interventions during primary care or non-emergency ED visits can be justly inferred. Various models of integrating primary care and behavioral health, such as Screening, Brief Intervention and Referral to Treatment (SBIRT) and IMPACT have been successful in increasing patient health and reducing overall healthcare costs.

PATIENT SAFETY AND CLINICAL PHARMACY COLLABORATIVE

Patient Safety and Clinical Pharmacy Services Collaborative (PSPC) Teams coordinate health care by integrating medication management into the care of patients suffering from multiple chronic health conditions in more than 350 communities across the country. According to the Institute of Medicine (IOM), patients who lack coordinated medication management account for one-third of health care costs. As members of the interprofessional medical team, clinical pharmacists assist with the management of chronic disease and provide care to patients who are at high medication risks. The model has shown effectiveness for the following diseases: Asthma, Cardiovascular Disease, Depression, Diabetes, and HIV/AIDS.

The Patient Safety and Clinical Pharmacy Services Collaborative National Performance Report summarizes the success achieved by 55 PSPC teams that tracked 92 populations over 12 months. Teams documented the following achievements after six to 12 months:

» In diabetes patients who had out of control A1c levels, 35% achieved desired levels;

» In patients with hypertension, 43% achieved desired blood pressure levels;

» In patients with dyslipidemia and persistently high cholesterol levels, 37% achieved desired levels; and

» In patients taking anticoagulation medications who had International Normalized Ratio (INR) levels consistently out of control, 51% achieved INR levels in the safe range.

Integrated Information Systems

The ReThink Health model explicitly identifies the need for integrated information systems to facilitate care coordination. Integrated information systems supported through the practice of health information exchange (HIE) can help physicians and other health care providers access inter-health system data. HIEs are developing at local, regional, and national levels. Their purpose is multifaceted. The convergence of clinical data from multiple providers linked with payor data can equip physicians with the information needed to coordinate patient care and provide data-informed care delivery. Physicians may access results of previous diagnostics procedures that can minimize the need for duplicative services and reduce costs. Payors and self-insured employers can use the data to help develop wellness programs and control costs.

The Deloitte Center for Health Solutions identifies four types of HIE models that are being used by health care providers and payors:

» Not-for-profit models are usually local and facilitated by a community nonprofit health care entity. An emerging practice among not-for profit HIEs is the use of philanthropy to drive sustainability.

» Public utility models are created, maintained, and governed by state and/or federal laws and regulations and funded with state and/or federal dollars.

» Physician and payor collaborative models are usually locally formed to benefit the physicians and payors in a region.

» For-profit models are created through private funding (i.e. supported through transaction fees) and are established to have a clear return-on-investment.

Formerly known as Nationwide Health Information Exchange Networks, the e-Health Exchange is coordinated by the Office of National Coordinator of Health IT (ONC). Participants currently include four federal agencies, five states, eight beacon communities and more than a dozen Health Information Organizations (HIOs) and health systems, which represent hundreds of hospitals, thousands of providers, and millions of patients. The e-Health Exchange helps to improve health through health information exchange by supporting comprehensive, longitudinal health records. Currently, Kaiser Permanente is the only Georgia provider participating in the e-Health Exchange.

ONC administers the State Health Information (State HIE) Exchange Cooperative Agreement Program. In total, 56 states, eligible territories, and qualified State Designated Entities (SDE) have received awards. The funds awarded through the State HIE Cooperative Agreement Program supports states' efforts to rapidly build capacity for exchanging health information across the health care system both within and between states. Awardees are responsible for increasing connectivity and enabling patient information flow to improve the quality and efficiency of care.

Evidence-Informed Strategies

The following lists of strategies were compiled by volunteer ARCHI subcommittees. Though not exhaustive, they cover many of the intervention approaches with the best evidence of effectiveness in each priority area. ARCHI subcommittees also provided input on which strategies might yield results relatively quickly; i.e., within three years. Those that were deemed likely to take more than three years to produce measurable effects are marked with an asterisk (*) below. Finally, subcommittees gave local examples of some of the strategies that are included but recognize there are many more that could be cited in Atlanta and elsewhere.

Healthy Behaviors and Pathways to Advantage strategies included here are listed as recommended in the Centers for Disease Control and Prevention's Guide to Community Preventive Services and/or rated as scientifically supported or some evidence in the What Works for Health compilation by the Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute. The National Cancer Institute's Research Tested Intervention Programs offer additional examples of evidence-informed strategies to promote healthy behaviors.

Because Care Coordination practices are in their infancy and only one met the highest standard for evidence of effectiveness, this subcommittee chose to include promising and emerging models and to provide examples and lessons learned to date from programs that have begun to share narratives of their experiences. Health information technology, although not a care coordination strategy itself, is recognized as an important tool to facilitate various models of coordinated care; thus, examples of integrated health information systems are included as well.

Playbook users are encouraged to consider these and other interventions that have evidence for effectiveness, prioritizing, as described in the section on Evidence Considerations, based on level of evidence along with contextual factors.

Healthy Behaviors

SMOKING AND TOBACCO USE

1. Community mobilization with additional interventions*

2. Education to reduce home exposure to secondhand smoke*

3. Increase the unit price of tobacco products*

4. Internet-based tobacco cessation interventions

5. Mass media campaigns combined with other interventions (tobacco price increases, school-based and community education)*

   Example: As part of its CPPW grant, the DeKalb County Board of Health worked closely with media partners to increase residents' awareness of the dangers of tobacco use. As part of this effort, they—in partnership with Univision, Comcast, Radio Disney, and other local radio stations—aired public-service announcements (PSAs) to more than 300,000 residents on tobacco use prevention. The PSAs were aimed at the entire population, including youth, with a focus on groups with high incidences of chronic disease, including blacks and Hispanics.

6. Mobile phone based interventions

7. Provider reminders when used alone

8. Provider reminders with provider education

   Example: As part of its CPPW grant, DeKalb County public health clinics asked each patient about use of tobacco and their willingness to quit as part of its redesigned patient intake process. Those who wanted to quit were provided with educational resources.

9. Quitline interventions

   Example: DeKalb County launched a countywide public awareness initiative to educate residents on the risks associated with exposure to secondhand smoke and to promote the smoking cessation resources available such as the Georgia Tobacco Quitline. The initiative utilized television, radio, social networking, and community engagement efforts and reached the majority of DeKalb County citizens.

   Example: The Georgia Tobacco Quit Line is a toll-free telephone-based cessation program implemented statewide. The Georgia Tobacco Quit Line delivers personalized counseling support to individuals who want to quit smoking or quit using smokeless tobacco products including snuff.

10. Reducing out of pocket costs for evidence based cessation treatments

    Example: As part of its CPPW grant, DeKalb County provided free nicotine patches and gum to eligible individuals who sought to quit smoking

11. Restrict minor access to tobacco

12. Smoking bans and restrictions*

    Example: Georgia Tobacco Use Prevention Program – funded by CDC, coordinated by Georgia Division of Public Health; encourages school districts across the state to adopt a 100% Tobacco Free School Policy (50 of the 181 public school systems in Georgia have adopted a 100% Tobacco Free School Policy.)

    Example: As part of its CPPW grant, DeKalb County worked with the county and municipalities within the county restrict smoking in outdoor venues.

    Example: The Georgia Tobacco Use Prevention Program and the Georgia Cardiovascular Health Initiative –

funded by CDC and in collaboration with national organizations including the American Lung Association, American Heart Association, American Cancer Society and Americans for Nonsmokers Rights is supporting local health districts in the "5-City Project" to educate and advance community stakeholders regarding the limitations of the existing state smoke-free law and the health benefits of implementing comprehensive smoke-free legislation. The target areas include Fulton County/Atlanta as well as Columbus, Macon, Augusta and Savannah.

13. Tobacco cessation contests

14. Workplace incentives and interventions when combined with additional interventions

15. Workplace smoke-free policies to reduce tobacco use

UNHEALTHY DIET

1. Breastfeeding promotion programs

2. Competitive pricing in schools*

3. Farm to school programs

4. Healthy vending machine options

5. Increase fruit & vegetable availability

    Example: Kaiser Permanente of Georgia supports the Atlanta Community Food Bank's Mobile Produce Pantry Project.

    Example: A Kaiser Permanente of Georgia partnership with the Atlanta Regional Commission's Area Agency on Aging brings together two elements vital for good health: nutrition and physical activity. The Senior Community Garden initiative established eight community gardens across metro Atlanta, bringing the total to 19 gardens supported by this partnership.

    Example: The Fulton County Department of Health and Wellness sponsors community gardens as part of its efforts to prevent obesity and as a part of its Healthy Heart Coalition.

6. Label nutrition information at restaurants

7. Limit access to competitive food in schools*

8. Multi-component obesity prevention programs*

9. Nutrition and physical activity interventions in preschool and child care

10. Nutrition standards for food sold in schools*

11. Point-of-decision prompts: healthy food choices

12. School fruit and vegetable gardens

13. School-based nutrition education programs

    Example: The following organizations' programs, tools and resources are being used in Georgia's school nutrition and nutrition education efforts. Many of them are being used in Fulton and DeKalb Counties.

    » USDA MyPlate/Team Nutrition – materials and resources for schools, community groups, health care professionals and parents

    » USDA HealthierUS School Challenge - a USDA initiative that rewards schools for achieving criteria for health, nutrition and physical activity/education.

    » US DHHS Let's Move/Chefs Move to Schools

> » Fruits & Veggies: More Matters materials
>
> » OrganWise Guys: Materials, characters and interactive media
>
> » CATCH School Nutrition Module
>
> » Farm to School resources/intervention from Georgia Organics, Georgia Department of Education School Nutrition Dept.

14. School-based obesity prevention initiatives

15. Taste testing new fruits & vegetables

16. WIC and Senior Farmers Market Nutrition programs

17. Worksite obesity prevention programs

EXERCISE AND PHYSICAL ACTIVITY

1. Activity programs for older adults

2. Community scale urban design and land use policies*

   Example: The CDC engaged the Georgia Health Policy Center in a Health in All Policies project related to the closure and redevelopment of Fort McPherson, a 488 acre Army base in Atlanta, Georgia. The first phase of this work involved background research, community engagement, participant observation, and a health impact assessment to gather learnings about base closure/redevelopment, issues of community concern, and the "windows of opportunity" to influence the redevelopment plans.

   Example: The Atlanta BeltLine is the most comprehensive revitalization effort ever undertaken in the City of Atlanta and among the largest, most wide-ranging urban redevelopment and mobility projects currently underway in the United States. This sustainable project is providing a network of public parks, multi-use trails and transit by re-using 22-miles of historic railroad corridors circling downtown and connecting 45 neighborhoods directly to each other.

3. Community-wide campaigns

   Example: Children's Healthcare of Atlanta supports the Strong for Life obesity initiative

4. Creation of or enhanced access to places for physical activity combined with informational outreach activities

5. Enhanced school-based physical education

   Example: The Georgia SHAPE Act requires each local school district to conduct an annual fitness assessment program for all students in grades 1 - 12 enrolled in Georgia public school physical education classes taught by certified physical education teachers

6. Extracurricular activities: physical activity

7. Financial rewards for employee healthy behavior

8. Fitness programs in community settings

9. Individually adapted health behavior change programs

10. Multi-component obesity prevention interventions*

11. Nutrition and physical activity interventions in preschool and child care

12. Point of decision prompts to promote use of stairs

13. Safe routes to school

    Example: Decatur, Georgia has had an active SRTS program since 2005. Program goals are to have more students and adults active to help improve fitness levels, to reduce congestion around schools, and to improve air quality around schools. Beginning with the 2008-2009 school year, the Decatur Active Living division took on the management and development of Decatur's program.

14. School-based obesity prevention interventions

15. Social support interventions in community settings

16. Street-scale urban design and land use policies*

17. Worksite obesity prevention interventions

ALCOHOL AND DRUG ABUSE

1. Blood Alcohol Concentration (BAC) laws*

2. Breath testing checkpoints

3. Dram shop liability laws

4. Electronic screening and brief intervention

5. Enhanced enforcement of laws prohibiting sales to minors*

6. Ignition interlock devices*

7. Increase alcohol taxes*

8. Maintain current minimum drinking age laws

9. Maintain limits on hours and days of sale*

10. Mass media campaigns to reduce alcohol-impaired driving*

11. Multi-component interventions with community mobilization to reduce alcohol-impaired driving*

12. Regulation of alcohol outlet density*

13. School-based social norming programs to reduce alcohol consumption*

14. Universal school-based programs to reduce alcohol misuse and impaired driving

    Example: Drug Education is mandated by Georgia law for grades K-12. This can be done through the Georgia Health Standards with model lessons online at the Georgia DOE website.

15. Vigorous enforcement of existing underage drinking laws & minimum legal drinking age*

UNPROTECTED SEX AND SEXUALLY TRANSMITTED INFECTIONS

1. Behavioral interventions to increase protective behaviors delivered at the individual, group, and community levels

    Example: In 2012, Fulton County received funding for a five-year, multi-million dollar program directly from the CDC to provide High Impact HIV Prevention Program services. The focus of these programs is on targeted testing of high-risk populations for HIV and STDs with linkage to care and treatment, evidence-based behavioral risk reduction programs for infected as well as non-infected persons, condom distribution, and enhanced community prevention planning that includes the involvement of community based organizations serving the most at-risk. Fulton County has partnered with the DeKalb County Board of Health to implement this program.

2. Comprehensive risk reduction interventions for adolescents

   Example: The United Way of Metropolitan Atlanta funds risky behaviors prevention programs directly support intentional exposure of young people to information about the health, developmental, social, professional and legal consequences of engaging in risky behaviors.

3. Computer-based interventions to decrease HIV and other STIs

4. Condom availability programs

5. Encourage human papillomavirus (HPV) vaccination

6. Interventions coordinated with community service to reduce sexual risk behaviors in adolescents

   Example: See Fulton County program above (#1).

7. Mass media interventions to decrease pregnancy and STIs

8. Multi-component interventions*

9. Partner notification by provider referral

   Example: See Fulton County program above (#1).

PREVENTIVE CARE FOR PHYSICAL AND MENTAL HEALTH

1. Case management interventions to improve glycemic control

2. Centering Pregnancy

3. Client or family incentive rewards for recommended vaccinations

4. Client reminder and recall systems for recommended vaccinations

5. Client reminders - recommended for breast, cervical, and colorectal cancer

6. Clinic-based depression care management

7. Collaborative care for the management of depressive disorders

8. Disease management programs for diabetes

9. Expand use of community health workers

10. Federally qualified health centers *

11. Financial incentives for patients undergoing preventive care

12. Group education - recommended for breast cancer

13. Home visits to increase vaccination rates

14. Home-based depression care management

15. Interventions to improve health literacy

16. Mental health benefits legislation*

17. One-on-one education - recommended for breast, cervical, and colorectal cancer

18. Provider assessment and feedback

19. Provider reminder and recall systems

20. Reducing client out-of-pocket costs - recommended for breast cancer

21. Reducing client out-of-pocket costs for recommended vaccinations

22. Reducing out-of-pocket costs for cardiovascular disease preventive services for patients with High Blood Pressure and high cholesterol

23. Reducing structural barriers (non-economic burdens or obstacles that make it difficult for people to access cancer screening) - recommended for breast and colorectal cancer

24. School dental programs

25. School-based or -linked sealant delivery programs

26. Small media to increase breast, cervical, and colorectal cancer screening

27. Systems navigators and integration (e.g., patient navigators)

28. Vaccination programs in schools & organized child care centers

29. Vaccination programs in WIC Settings

30. Vaccination requirements for child care, school & college attendance

Pathways to Advantage

STUDENT PATHWAYS

1. Big Brothers Big Sisters

2. Career Academies

    Example: Atlanta Public Schools recently completed system-wide transformation of its high schools to small school and small learning community models.

3. Chicago Child-Parent Centers*

4. Cognitive-behavioral therapy

5. Comprehensive early childhood development programs*

6. Comprehensive school reform to improve student achievement*

7. Dropout prevention programs

8. Dropout prevention programs for teenage mothers

9. Drug courts

10. Early Head Start

11. Families and Schools Together

12. Family treatment drug courts

13. Functional Family Therapy

14. HighScope Perry Preschool approach*

    Example: The Whitefoord Child Development Center follows a HighScope learning approach curriculum.

15. Incredible Years

16. Kinship care for children removed from home due to maltreatment

17. Mentoring programs to reduce delinquency

18. Mentoring programs: high school graduation

19. Multidimensional Treatment Foster Care

20. Multi-systemic therapy for families

21. Outdoor/experiential education and wilderness therapy

22. Parents as Teachers

    Example: Educare Atlanta, located in the Dunbar Learning Complex and managed by Sheltering Arms Early Education and Family Centers, includes a Parents as Teachers component.

23. Preschool education programs*

24. Programs to help obtain GED or similar certificates

25. Reach Out and Read

26. Reduce class size

27. Restorative justice

28. School Breakfast Programs

29. School-based programs to reduce violence and bullying

30. Smart Start statewide early education system

31. Targeted programs to increase college enrollment

    Example: The Georgia College Advising Corps places recent UGA graduates in Georgia high schools where they work alongside school counselors to encourage and assist low-income, first-generation and underrepresented students in pursuing post-secondary education.

32. Treatment Foster Care

33. Universal pre-kindergarten

34. Youth empowerment programs

35. Youth programs to prevent intimate partner violence

Family Pathways

1. Child support pass-through and disregard

2. Early childhood home visiting programs

3. Exercise and work-oriented back pain management programs

4. Healthy Families America

5. Housing Choice Voucher Program

6. Housing First program

7. Increase funding for child care subsidy

8. Increase the Earned Income Tax Credit*

9. Living wage laws*

10. Moving to Opportunity*

11. Nurse-Family Partnership

12. Paid family & medical leave*

13. Rollover protection structures

14. Service-enriched housing

15. Transitional employment

Care Coordination

PATIENT-CENTERED MEDICAL HOMES

1. Gundersen Lutheran Health System - This large multi-specialty integrated health system that includes hospitals, clinics and medical practices, implemented a Care Coordination program to coordinate care for the system's sickest 1-2 percent of patients. Tracking 530 patients for two years, the program showed a decrease in charges of $9.5 million and patient costs shifted from inpatient to ambulatory care. The average costs of care coordination were $2,000 per patient per year. Patient charges decreased on average of $15,000 per patient in the first 15 months.

2. Group Health Cooperative of Puget Sound - This integrated delivery system located in the Northwest is undertaking a major transformation of its primary care practices based on the results of a PCMH pilot project from one of its Seattle Clinic sites that focuses on team-based chronic and preventive care and 24/7 access using multiple modalities, including EHR patient portals. The redesign includes changes in workforce patient load, increased in-person visit time and the use of planned telephone and email visits and allocation of time for outreach and patient coordination activities. Results from the pilot included better quality as measured through HEDIS quality measures, better work environment, reduction in ER and inpatient hospital costs and better value.

3. Community Care of North Carolina - CCNC began in a single county in North Carolina more than a decade ago to help address the care of Medicaid beneficiaries. Now statewide with substantial financial and health information support from the North Carolina Medicaid, CCNC links beneficiaries to primary medical homes, provides technical assistance to practices to improve chronic care services, employs a team of nurse case managers to assist practices with high risks patients and pays providers a $3 per member per month coordination fee for each patient registered with the practice. External evaluations of the program have found that the program has achieved better quality specifically in the areas of asthma and diabetes and has lowered costs with annual savings calculated to be $135 million for TANF-like populations and $400 million for the aged, blind and disabled population. Challenges continue in effective electronic communications between practices, involving sub-specialties, dedicated time of physician for case management and limited claims data for measuring quality of care.

4. Geisinger ProvenHealth Navigator - In 2007 this large integrated health system in Pennsylvania implemented a PCMH redesign. The model focuses on team models for care coordination and uses nurse care coordinators, EHR decisions support and performance incentives in caring for its Medicare population. Results from the transformation include statistically significant improvements in quality of preventive, CAD, and diabetes care for PCMH sites and reductions in hospital admissions costs and total medical costs after 24 months.

5. Care Oregon - Care Oregon is a nonprofit Medicaid Health Plan that implemented a PCMH in a safety-net clinic setting that emphasizes the use of learning communities through which independent providers can acquire, share and practice techniques to achieve the Triple Aim. The PCMH practices organize care around teams of medical and behavioral health professionals to assess and address patients' needs that enables individual providers to more systematically and proactively identify and address patient needs across the patient population. Implementation of the PCMH has been associated with greater continuity of care and improved health screening and chronic care management with best-performing clinics exceeding national benchmarks. Early results indicate that costs are somewhat lower for dual-eligible patients receiving care in medical-home pilot sites.

ACCOUNTABLE CARE ORGANIZATIONS

1. Cigna Collaborative Accountable Care Initiative - The Cigna Collaborative Accountable Care initiative was launched in 2008, partnering with forty-two practices, and acting as a shared savings program. In order for a practice to qualify for participation, it must meet NCQA standards for patient-centered medical homes. The Cigna ACO gives practices a "care coordination fee" for their first year of participation in the ACO, which they can invest toward quality and cost targets. After the first year, if the practices hit quality and cost targets, the payment becomes an incentive payment, and the better a practice performs, the bigger their payment is. Practices are also paid their typical fee-for-service payments. All of the Cigna ACOs that were studied showed modest improvements in cost reductions, however none were significant.

Challenges faced by the Cigna ACOs included: benefit designs that were not conducive to an ACO (capitation structure with HMOs, non-coordinated care design of PPOs), organizational structures that were not favorable to integrated delivery, and limited funding for the necessary infrastructure development. Alternately, many factors contributed to the success of ACOs. Registered nurses acted as the patient care coordinators (typically 1 per 10,000 patients), focusing on hospital discharge coordination for frequent readmitters, outreach to patients identified as high risk for large medical costs, education, patient referral to other care such as pharmacy or behavioral health, and more. Cigna also sent out practice performance reports every six months that showed opportunities for improvement, and made consultants available to practices looking for assistance. The care coordination fee from Cigna helped the ACOs get started with their care coordinators and other integration solutions; and patient-specific reports (generated by Cigna) showed practices which patients needed more care coordination. Practices with prior Medicare fee-for-service reimbursement program experience or similar demonstration project experience had a head start on understanding the direction to move in.

2. Brookings-Dartmouth ACO Collaborative - The Brookings-Dartmouth ACO Collaborative was established in 2007, with five pilot sites (HealthCare Partners, Monarch HealthCare, Tucson Medical Center, Norton Healthcare, and Carilion Clinic) and collaborated with private payers as well as Medicare. Each site was chosen because a number of factors for success were already present, including: strong local leadership, commitment to measuring performance, interested private payers, and 15,000 consumer and 5,000 Medicare patients. Funding for the initial ACO development came from the Commonwealth Fund. Brookings and Dartmouth staff as well as policy makers and national payers worked together to determine the performance measures to be used, while the sites themselves were in charge of their clinical transformation.

   The main challenge to the success of this ACO was difficulty in technical collaboration. However, the fact that all sites were single payer ACOs instead of multi-payer ACOs made technical collaboration easier, as collaboration between multiple payers that are typically in competition with one another would generally be more difficult. Committed executive leadership and governance played a large role in the success of the ACOs, as did prior experience with performance-based payment, and strong payer-provider relationships. Joint ACO steering committees that included payers, regular meetings and joint historical claims data analysis were critical to the strong payer-provider relationship. Additional factors such as systems transformation abilities, health information technology / interoperability across settings, care management capabilities, performance measurement, physician engagement and confidence, distinct goals, and adaptability also led to greater success. Additionally, creating a new legal entity for the ACO decreased worries about potential antitrust violations.

3. Robert Wood Johnson (RWJ) Medical School - The RWJ Medical School is an academic health center with over 2,800 faculty members located in New Jersey. Development of the ACO began in 2009 after the hospital recognized the importance of integrated primary care teams, including doctors, nurses, medical assistants and behavioral health providers. Development continued for three years, and the ACO was finally implemented in 2012. It is CMS-certified. Kaiser Permanente and Geisinger were loosely used as models for the ACO, which targeted 180,000 people living in central New Jersey. By teaming up the various providers, the ACO aims to alleviate the shortage of primary care providers in the region.

   In order to facilitate integration, the RWJ ACO: 1) elected faculty clinicians as representatives for their governance, 2) centralized strategic planning, 3) has income and expense controls, 4) instituted system-wide electronic health records, 5) has a productivity measurement system and 6) implemented a group incentive plan. The RWJ ACO business plan also included the goals of empowering patients and strengthening community ties, as well as detailed financial predictions. The RWJ ACO model uses various compensation methods, including fee-for-service, care management fees (which are paid monthly per patient and adjusted for complexity of illness), higher fees for sicker patients, and gain sharing (shared savings pay-for-performance). The main challenges to the RWJ ACO included: lack of conceptual models to guide formation process, balancing interests of all participating parties, getting start-up funding ($3-5 million), internal structural changes to the hospital, reluctance from physicians, antitrust concerns, and skepticism at health reform related efforts. Factors relevant to the success of the ACO were strong research base on primary care practice transformation, extensive stakeholder engagement in forming business plan (providers, hospitals, payers, researchers and patients), cross-subsidization of primary care practices with money from other hospital revenue sources, engagement among key leaders, flexibility in the ACO business plan, commitment from funders and a general local business environment interested in collaboration.

4. Morehouse Choice ACO and Education System - In January 2013, Morehouse Choice ACO- Education System (ACO) was granted approval to participate in the Medicare Shared Savings Program (MSSP) offered through CMS. Members of the provider-governed, Morehouse Choice ACO include Southside Medical Center, West End Medical Centers, Four Corners Primary Care, Morehouse Healthcare, Grady Health System, and a number of community-based primary care solo practitioners. ACO participants serve as safety net providers, working collaboratively to deliver coordinated care at a lower cost, while engaging patients in self-management and improved outcomes. The ACO currently has approximately 6,200 beneficiaries and has plans to double its Medicare-attributable beneficiaries under the MSSP by 2016.

The ACO Model has the following key elements:

» An integrated health care information technology foundation to ensure data centricity and data analysis to be able to manage the target population through real time information.

» The Base Provider Network that includes affiliate, certified and strategic providers and the education system to train providers to manage performance under a patient-centered care delivery model and value-based reimbursement. The integrated provider network includes the full continuum of clinical care, including but not limited to safety net primary care, federally-qualified health centers (FQHCs), community-led group practices, comprehensive specialty care, behavioral health, hospitals, ancillary services (dental, vision), home health, pharmacy, laboratory, care and disease management. A Quality Consortium will be developed to improve structured outreach and utilization of community based agencies as extenders in the improvement of population health outcomes.

» Preferred referral pathways will be refined over time to optimize health care resources across the continuum and coordinate care in the right location, at the right time. With this approach, the ACO will work to match the patient's enrollment into a patient centered medical home (PCMH) with their primary care need, linking the chronically ill to advanced primary care with active specialty care coordination and those needing primarily acute primary care and health maintenance to wellness and prevention focused patient centered medical homes. A key goal of the integrated care delivery model is to progressively incentive and move chronically ill patients across 4 progressive "levels" of primary care to the wellness-focused PCMH. The advanced PCMH also integrates behavioral health with primary care services.

» Outcomes will be measured for economic performance, clinical improvement and patient experience. Cost savings will be reinvested in the ACO for ongoing operations, as well as downstream to its Participant organizations, their individual providers and as appropriate to patients, aligning financial incentives to reduce waste, duplication of cost/care and sustaining targeted quality goals.

The ACO model is designed to replicate various "best practice" clinical and operational models from across the country, with the unique element of a comprehensive staff development and education program to help rapidly disseminate and scale the integrated care methodology to a broader number of providers.

Key Performance Indicators for improvement are being tracked through the following:

» Improvement in 33 quality measures defined by CMS

» Improvement in expenditure per attributed patient as tracked by the ACO and CMS

» Increase in the volume of services rendered through more cost efficient primary care

» Enhanced care coordination between providers across the entire clinical care continuum

» Comprehensive enterprise-wide analytics for ongoing performance monitoring, research and refinement of the integrated care delivery model

» Alignment of financial incentives across the continuum of care

» Attainment of patient centered medical home recognition by the National Committee for Quality Assurance (NCQA) and Joint Commission accreditation

In addition the ACO is constantly affirming sustainable adherence to administrative best practice (i.e., monitoring and training on coding compliance, accuracy of coding for hierarchical condition categories, , etc.) as leading indicators of the its overall operational excellence in revenue cycle and cost control. With an emphasis on improving health equity, the ACO also anticipates to improve patient self-management.

ACCOUNTABLE CARE COMMUNITIES

1. Vermont Accountable Care Organization - This report describes the findings from an accountable care community pilot funded by The Commonwealth Fund. It identifies four levels of geographic scale that support an ACO and five functional capabilities needed for its success. Because rural settings make potential ACOs more dependent on supporting infrastructure, the authors recommend a pilot community approach. Most small and medium sized communities will need state or regional support for defining a common financial framework for all payers, creating a consolidated performance pool involving multiple payers, developing and expanding both medical homes and IT tools, and providing other technical support, training, and start-up funding.

2. Colorado Medicaid Accountable Care Community - Colorado Medicaid created an ACC to transform the Medicaid program into a better system of integrated care for clients and to lower costs for the State of Colorado. First year reports indicate the program is demonstrating cost savings and reductions in utilization. ACC members experienced an 8.6 percentage point reduction in hospital readmissions compared to the non-enrolled group, ED utilization by ACC enrollees increased 1.2 percentage points less than utilization by non-enrollees, and ACC enrollee utilization rates of high-cost imaging services decreased 3.3 percentage points more than the non-enrolled population. Program savings are estimated to be between $9 million and $30 million dollars for FY11-12.

CARE TRANSITION PROGRAMS

1. Atlanta Regional Commission/Area Agency on Aging CCTP Model - Partners to this program include Emory University Hospital Midtown, Gwinnett Medical Center, Piedmont Hospital, Southern Regional Medical Center, WellStar Cobb Hospital and WellStar Kennestone Hospital. Two of the hospitals had high readmission rates, four already had some form of care transition initiative and two have diverse patient populations. Forming the care transition program required: connecting the community-based organization with key hospital leaders, carrying out a Root Cause Analysis (to show reasons for frequent readmissions of the target Medicare patient population), gaining access to readmission rate data (to show diagnoses of frequent readmitters) and running a pilot program. The Root Cause Analysis found that the reasons for readmission were often tied to non-compliance or lack of self-management skills, including medication management, lack of primary care follow-up and lack of community support systems and services.

   The care transition approach taken consisted of a combination of the CTI coaching model, and a timely short-term supportive service package where necessary, including home-delivered meals, transportation to medical appointments and in-home services. The CTI coaching model equips patients with the ability to manage their health after hospital discharge and entails one month of in-person or telephone coaching by a "transition coach" for the patients and or their caregivers, on 1) managing medications, 2) maintaining and sharing health records, 3) maintaining follow-up appointments with primary care providers or specialists and 3) identifying and responding to "red flags" of their condition.

2. Transitional Care Nursing - The Transitional Care Nursing Model incorporates a master's-level "Transition Care Nurse" who is trained in chronic care conditions, health complications and rehospitalizations of chronically ill. The goal of the model is to prevent elderly hospital patients from readmitting after discharge through comprehensive discharge planning and home follow-up. More specifically, the model aims to identify changes in the patient's health, and manage or prevent health problems. Transition Care Nurses work in partnership with treating physicians, and while a patient is in-hospital, they: 1) conduct a comprehensive assessment of patient health status, health behaviors, social support, and goals; 2) develop an individualized plan of care founded on evidence-based guidelines; and 3) conduct daily patient visits focused on discharge planning. Post-discharge, the Transition Care Nurse is available to the patient every day via telephone, conducts regular home visits or telephone calls with the patient, and accompanies the patient to their first post-discharge doctor's appointment. The level of post-discharge contact can vary by individual program, from 12 home visits over 3 months, to 4-5 home visits and weekly phone calls over one month. Transitional Care Nurses typically have a caseload of approximately 18-20 patients. Costs of such a program have been found to range from $456 per patient to $1,019 per patient.

3. INTERACT - INTERACT is designed to reduce avoidable hospital transfers and improve the quality of care of residents in skilled nursing facilities, by enhancing the early identification, assessment, documentation, and communication of health status changes. INTERACT employs three tools for selected nursing facility team members on: 1) communication (within nursing homes and between nursing homes and hospitals); 2) care paths or clinical decision support; and 3) advanced care planning. INTERACT also includes on-site education and bi-weekly teleconferences led by a nurse practitioner. A recent three-state (Florida, Massachusetts, and New York) evaluation of 6-month INTERACT II interventions found there to be a 17% reduction in self-reported nursing home to hospital transfer admissions. Nursing homes highly engaged in INTERACT had even higher reductions, at 24%. Average cost of a 6-month INTERACT program was estimated at $7,700 per nursing home, while Medicare savings for a 100 bed nursing home were estimated at $125,000. INTERACT is currently being used by a number of nursing homes in Georgia and nationwide.

EMERGENCY DEPARTMENT CARE COORDINATION

1. Milwaukee Emergency Department Care Coordination - In 2010, 46% of ED visits in Milwaukee County were classified as non-emergencies. Medicaid and uninsured patients accounted for 68% of those visits. In 2011, Milwaukee emergency departments scheduled more than 7,600 appointments with area safety-net clinics for high-risk individuals. 42% of patients kept their initial appointment with approximately 45% returning for a second appointment within six months. Using a combination of care coordination and health information technology, the Milwaukee Health Care Partnership through the EDCC Initiative committee has created an ED to Medical Home process for Medicaid and uninsured patients, with a particular focus on improving health outcomes for pregnant women and patients with asthma, COPD, diabetes and hypertension.

   Since launching the ED Linking project in 2008 with four hospital EDs, the program has grown to include all 10 EDs and FQHCs in Milwaukee County, resulting in over 700 appointments each month with area safety-net clinics. The committee regularly updates its progress in a quarterly report. The EDCC committee has established a community-wide ED to Medical Home referral protocol supported by MyHealthDIRECT web-based appointment scheduling. Through health system and grant funding, intake coordinators in safety net clinics have been added to follow up with patient appointments scheduled in the ED and help establish those patients for ongoing primary care. The health systems have also enhanced the role of ED case managers in transition care management for this patient population. The partnership has also supported the implementation and continuous improvement of the Wisconsin Health Information Exchange (WHIE), allowing for expanded functionality and content, aiding providers in clinical decision making and care planning. WHIE supports clinical decision-making and care coordination by providing private and secure patient utilization and clinical data in the ED.

   EDCC Strategies:
   » Community-wide ED to Medical Home Care Coordination Process

   » Milwaukee County EDs identify target populations, provide patient education and schedule appointments with medical homes.

   » Using MyHealthDIRECT appointment scheduling technology, community health centers post open appointments. EDs schedule appointments electronically while the patient is at the hospital.

   » Intake coordinators at community health centers reach out to patients prior to first appointment and attempt to reschedule if appointment is not kept.

2. Washington State Community Collaboration for Appropriate Emergency Department Care - Four pilot sites were chosen for the Washington State Community Collaboration for Appropriate Emergency Department Care. Data was collected for the first three months' activity for the sites in 2010. Across all programs, the key theme is for hospital staff to work closely with community health center partners to reduce non-emergency ED visits. Programs may establish referral processes, where a "Patient Liaison" works directly with a patient while he is still in the hospital, referring him to appropriate care at the community health center. The Patient Liaison also works one day a week in the ED with "Consistent Care" staff. There they educate patients about appropriate ED use and help connect the patients with care needed to avoid future ED visits. More specifically, the community health partner works with the hospital to get primary care physicians established for all inpatient discharges. An ED Information
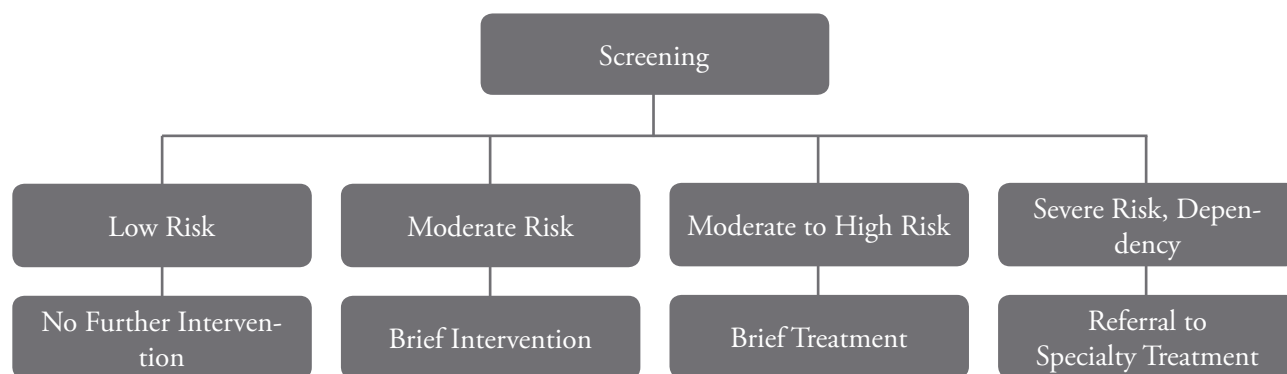
Exchange (EDIE) is also being created in one program, which would automatically notify staff when known high ED users show up at the ED, so that staff can immediately work with those patients. One program used a nurse triage line to divert non-urgent patients to a community clinic. In another program, the community health center is also developing a pain management clinic to treat prescription drug addiction, chronic pain and ED visits for pain medication (as this is one of the identified reasons for frequent ED visits). One of the sites has extended their collaboration beyond just their community health centers, to local food banks, charities, businesses and local media to create educational PSA's about proper ED use. Across all four sites, data sharing and electronic health records are critical to program success. Each pilot site was found to have success with their various ED diversion methods. Challenges to program operation have included staff turnover with case managers and other staff and data collection (completing monthly monitoring reports timely and accurately).

INTEGRATION OF PRIMARY CARE AND BEHAVIORAL HEALTH

1. Screening, Brief Intervention and Referral to Treatment - SBIRT is defined as "a comprehensive, integrated, public health approach to the delivery of early intervention for individuals with risky alcohol and drug use and the timely referral to more intensive substance abuse treatment for those who have substance abuse disorders." The model includes a screening, plus a brief intervention, brief treatment, or a referral to treatment, if a problem is identified. The model's effectiveness is strongly supported for alcohol and tobacco abuse, but has less backing in the categories of drug abuse or depression, anxiety and trauma.

   SBIRT is:

   » Brief – 1-5, 5-10 minute sessions for brief interventions, 5-12 one hour sessions for brief treatments.

   » Uses a universal screening tool – such as Alcohol Use Disorders Identification Test (AUDIT), Drug Abuse Screening Test (DAST), Alcohol, Smoking, Substance Involvement, Screening Test (ASSIST) and the Cut Down, Annoyed, Guilty, Eye-Opener (CAGE).

   » Targets 1 or more risky behaviors related to alcohol or drug abuse.

   » Takes place in a non-substance abuse treatment setting – such as an emergency room, primary care environment, or schools / colleges.

   » Is comprehensive – includes the screening, brief intervention or treatment, and referral.

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                              Screening
         ┌──────────────┬─────────────┴────────┬──────────────────────┐
    Low Risk      Moderate Risk    Moderate to High Risk    Severe Risk, Dependency
         │              │                      │                      │
 No Further       Brief Intervention      Brief Treatment       Referral to
 Intervention                                                   Specialty Treatment
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   In a SAHMSA study on SBIRT, about 15% of patients receive scores requiring brief intervention, and about 3% of patients receive a score requiring brief treatment. Only 3-4% of screened patients in a primary care setting typically need to be referred. Challenges with implementing SBIRT include time commitment from physicians required to conduct SBIRT and physician concerns about bringing up sensitive topics. Prescreening (with i.e. Alcohol Use Disorders Identification Test-Consumption (AUDIT-C)) before conducting SBIRT may help physicians identify risky behavior patients before spending time on SBIRT.

2. IMPACT - The IMPACT model aims to identify and provide coordinated care to patients suffering from depression, as identified in a primary care setting. The IMPACT model has been shown to double the effectiveness of depression treatment for the elderly in primary care settings, including HMOs, fee-for-service, VAs and hospitals. IMPACT has also been shown to be equally effective with all groups of patients (Black, White and Hispanic) and to be effective with adolescents and adults of all ages and with certain co-morbidities (diabetes, cancer). IMPACT costs approximately $580 per patient; if patients are insured older adults, the cost is less than $1.00 per member per month. IMPACT has also been shown to reduce overall patient healthcare costs by over $3,000 over a four year period.

IMPACT interventions consist of:

1. Collaborative care – between primary care physicians (PCP), care managers and psychiatrists.

2. Depression care manager – a nurse, social worker, or psychologist, who can also be supported by a medical assistant or paraprofessional. Care managers educate the patients about depression, supports the antidepressant therapy, coaches patient in behavioral activation and pleasant event scheduling, offers brief counseling, monitors patient's depression symptoms and completes a relapse prevention plan with improved patients.

3. Psychiatrist – consults care manager and PCP

4. Outcome measurement – depressive symptoms are measured at beginning and end of treatment (PHQ-9 recommended)

5. Stepped care – treatment adjusted if there is not a 50% reduction in symptoms after 10-12 weeks.

Patient Safety and Clinical Pharmacy Services Collaborative

1. Medication therapy management services in Minnesota - A prospective study of six ambulatory care clinics provide medication therapy management (MTM) services to patients 285 intervention group patients with at least 1 of 12 medical conditions using pre-study health claims; 126 comparison group patients with hypertension and 126 patients with hyperlipidemia were selected among 9 clinics without MTM services for HEDIS analysis. HEDIS measures improved in the intervention group compared with the comparison group for hypertension (71% versus 59%) and cholesterol management (52% versus 30%). Total health expenditures decreased from $11,965 to $8,197 per person (n = 186, P < 0.0001). The reduction in total annual health expenditures exceeded the cost of providing MTM services by more than 12 to 1.

Integrated Information Systems

1. CAL eConnect - Cal eConnect is part of the e-Health Exchange who establish policies, services, and innovations collaboratively that make possible the appropriate, secure, and efficient exchange of health information for the purpose of improving health and healthcare safety, quality, access, and efficiency for all Californians. Cal eConnect is made up a broad array of public and private stakeholders. Process and outcome measures tracked through the Cal eConnect to make the business case for HIE investment include:

   » Streamlined access to patient histories

   » Improve the consistency and completeness of documentation

   » Administrative savings (hospital & payer)

   » Improved care (rapid access to test results, and enable data access outside clinical settings)

   » Quicker and improved access to medical records (hospital)

   » Reductions in admission times and improvements in care delivery and efficiency

» Colorado Regional Health Information Organization (CORHIO) - Colorado Regional Health Information Organization (CORHIO) is a not-for-profit public-private partnership that serves as the state-designated entity for health information exchange (HIE). CORHIO was one of 58 recipients of the State HIE Cooperative Agreement Awards to rapidly develop health information exchanges. CORHIO has been successful in demonstrating positive ROI for participating providers' $35 per month CORHIO subscription fee. Recent program analysis has demonstrated that participating small practices were able to repurpose half of one FTE, decrease paper and printing costs by $1,600 per year, and discontinue lab interfaces costing as much as $2,500 per year.

2. Beacon Community HIE - Beacon Community HIE is an initiative supported by the Office of the National Coordinator. Seventeen communities and regions throughout the US received funding to help demonstrate how health IT investments and Meaningful Use of electronic health records (EHR) advance patient-centered care achieving the triple aim. Communities are using the funds to support:

   » Use of EHR data to assist in performance management;

   » Engagement of non-traditional care delivery partners such as schools, public health agencies, long-term and post-acute care providers;

   » Expanding the functionality of the data including enhancing the infrastructure to support analytics and advanced reporting to inform and measure community health outcomes;

   » Developing and testing technologies and care models around patient reported outcomes, mobile health, and patient engagement;

   » Testing new models for community-wide HIE that helps to increase the amount of data being shared in a patient centric view; and

   » Implementing tools that allow providers to proactively identify and coordinate care across settings.

As each Beacon Community identifies its own set of priorities, process and outcome measures vary. Examples of achievements include:

   » Colorado Beacon Community (CBC)

   - Savings of approximately $3.1 million in hospital re-admission costs for Medicaid adults and dual eligible patients were reported based upon independent analysis by the Colorado Department of Health Care Policy and Financing for State Fiscal Years 2010 and 2011.

   - The Colorado Medicaid program awarded $2.2 million in shared savings to CBC participants for achievement in this area.

   » Greater Cincinnati Beacon Community (GCBC)

   - Enrolling high-risk Medicaid patients with asthma into an intensive care coordination program. The time between asthma-related ED/urgent care visits for high-risk Medicaid patients has improved by more than 100 days.

   - Addressing health disparities through improved data collection practices and training on race, ethnicity, and primary language. The percentage of acute care hospitals that are submitting complete data for patients' race, ethnicity, and primary language has increased to 94% from 56%.

   - Reducing readmissions at 18 hospitals through endorsement of best practices standards and formation of a hospital discharge planners group to help support standards implementation.

» Delta BLUES Beacon Community (DBBC)

- Clinical decision support (CDS) tools have been used in over 10,000 patient encounters to date. Clinics that have embraced CDS have demonstrated improvements in uncontrolled A1C (a measure of blood glucose level) and cholesterol, and have recorded an increase in foot checks, diabetic eye screenings, and other best practices for diabetic care.

- Reduced 30-day inpatient readmissions to only 2 percent of 200 patients who received case management services through the DBBC post discharge.

- Pharmacists participating in the medication adherence program have found over half of participating patients have a drug therapy problem requiring mitigation by the pharmacist, such as medication that is inadequate to meet treatment goals. Patients participating in this project have seen reductions in their hemoglobin A1C values of up to 2 percentage points, as well as promising results for blood pressure, cholesterol, and triglycerides values.

» Greater New Orleans Health Information Exchange (GNOHIE)

- Between when CCBC Beacon interventions began in April 2011 and the second quarter of 2012, diabetes HbA1c control (<8.0%) has increased. Number of patients represented ranged from 2,606 to 3,944.

- All of CCBC's clinics have established clinical care teams and developed criteria to stratify their patient populations based upon risk of further complications, such as disease progression or hospitalization.

- Nine of 16 CCBC clinics have initiated chronic disease registries for patients with diabetes, and 11 of 16 are able to generate lists of their patients electronically.

Eleven of 16 CCBC clinics have implemented at least one clinical decision support rule related to diabetes care delivery.

State and local examples of information integration to support care coordination include the following:

1. Georgia Direct - GeorgiaDirect was launched in Spring 2013, a state-wide public-private initiative spearheaded by the Georgia Department of Community Health and the Georgia Health Information Network (GaHIN). As of June 2013, more than 2,100 health care providers statewide and also connects with other states including Alabama, Florida, Mississippi, Wisconsin and Hawaii. The goals of GeorgiaDirect are to facilitate greater coordination of care, delivering better health outcomes, increasing administrative efficiencies. Currently there are five regional health information exchange RHIE organizations within the GaHIN. Currently there are no RHIEs in the Fulton and Dekalb area.

2. Georgia Health Information Network - The Georgia Health Information Network (GaHIN) serves with the Georgia Department of Community Health (DCH) and the Georgia Health Information Technology Regional Extension Center (GA-HITEC) in a public-private collaborative to establish Georgia's statewide health information exchange, to connect Service Area HIEs, large integrated health systems, payers, wellness partners and other health care stakeholders. These organizations have come together to enable statewide electronic health information network through governance, project management, policy development, business and financial planning, technical infrastructure development, marketing, and stakeholder engagement.

3. Grady Health System Integrated Information Systems Initiatives: Epic to Epic Exchanges - Epic providers including Grady, Kaiser and Children's Healthcare of Atlanta can exchange patient information using Care Everywhere, a module of the Epic system. This system allows for management of patients across a number of settings.

Home Health Agencies Health Information Exchange – Grady, in partnership with Amedysis and VNA, is working to establish data connectivity and integrity to manage patients who are discharged to a home health agency. Access to records will allow providers to see activity from the inpatient stay and discharge instructions, as well as to input notes from the home health care delivered for the inpatient provider to view.

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