Michigan Health Endowment Fund

Resource Contact List

Geralyn Lasher
Michigan Department of Community Health
lasherg@michigan.gov
517-241-2112
201 Townsend St.
Lansing, MI 48913

Mark Neithercut
Neithercut Philanthropy Advisors
mark@neithercutphilanthropy.com
313-568-9000
300 River Place, Suite 5000
Detroit, MI 48207

Jeffrey Padden
Public Policy Associates, Inc.
paddenjd@publicpolicy.com
517-485-4477
119 Pere Marquette Dr., Suite 1C
Lansing, MI 48912

Duane Tarnacki
Clark Hill
dtarnacki@clarkhill.com
313-965-8264
500 Woodward Ave, Suite 3500
Detroit, MI 48226

Act No. 4
Public Acts of 2013
Approved by the Governor
March 18, 2013
Filed with the Secretary of State
March 18, 2013
EFFECTIVE DATE: March 18, 2013

STATE OF MICHIGAN
97TH LEGISLATURE
REGULAR SESSION OF 2013

Introduced by Senators Hune and Smith

ENROLLED SENATE BILL No. 61

AN ACT to amend 1980 PA 350, entitled "An act to provide for the incorporation of nonprofit health care corporations; to provide their rights, powers, and immunities; to prescribe the powers and duties of certain state officers relative to the exercise of those rights, powers, and immunities; to prescribe certain conditions for the transaction of business by those corporations in this state; to define the relationship of health care providers to nonprofit health care corporations and to specify their rights, powers, and immunities with respect thereto; to provide for a Michigan caring program; to provide for the regulation and supervision of nonprofit health care corporations by the commissioner of insurance; to prescribe powers and duties of certain other state officers with respect to the regulation and supervision of nonprofit health care corporations; to provide for the imposition of a regulatory fee; to regulate the merger or consolidation of certain corporations; to prescribe an expeditious and effective procedure for the maintenance and conduct of certain administrative appeals relative to provider class plans; to provide for certain administrative hearings relative to rates for health care benefits; to provide for certain causes of action; to prescribe penalties and to provide civil fines for violations of this act; and to repeal certain acts and parts of acts," by amending the title and sections 218, 401e, and 414b (MCL 550.1218, 550.1401e, and 550.1414b), the title as amended by 1994 PA 169, section 218 as added by 2002 PA 559, section 401e as added by 1996 PA 516, and section 414b as added by 2006 PA 413, and by adding sections 201a, 220, 400, 401m, 410b, 501c, and 620 and part 6A.

The People of the State of Michigan enact:

TITLE

An act to provide for the incorporation of nonprofit health care corporations; to provide their rights, powers, and immunities; to prescribe the powers and duties of certain state officers relative to the exercise of those rights, powers, and immunities; to prescribe certain conditions for the transaction of business by those corporations in this state; to define the relationship of health care providers to nonprofit health care corporations and to specify their rights, powers, and immunities with respect thereto; to provide for a Michigan caring program; to provide for the regulation and supervision of nonprofit health care corporations by the commissioner of insurance; to prescribe powers and duties of certain other state officers with respect to the regulation and supervision of nonprofit health care corporations; to provide for the imposition of a regulatory fee; to regulate the merger or consolidation of certain corporations; to prescribe an expeditious and effective procedure for the maintenance and conduct of certain administrative appeals relative to provider class plans; to provide for certain administrative hearings relative to rates for health care benefits; to provide for the creation of and the powers and duties of certain nonprofit corporations for the purpose of receiving and administering funds for the public welfare; to provide for certain causes of action; to prescribe penalties and to provide civil fines for violations of this act; and to repeal acts and parts of acts.

Sec. 201a. Notwithstanding section 201, a health care corporation shall not be formed in this state on or after January 1, 2014.

Sec. 218. A health care corporation shall not do any of the following:

(a) Take any action to change its nonprofit status.

(b) Except as otherwise provided in section 220, dissolve, merge, consolidate, mutualize, or take any other action that results in a change in direct or indirect control of the health care corporation or sell, transfer, lease, exchange, option, or convey assets that results in a change in direct or indirect control of the health care corporation.

Sec. 220. (1) Notwithstanding any provision of this act to the contrary, a health care corporation may establish, own, operate, and merge with a nonprofit mutual disability insurer formed under chapter 58 of the insurance code of 1956, 1956 PA 218, MCL 500.5800 to 500.5840. The surviving entity of a merger described in this subsection is the nonprofit mutual disability insurer. A merger described in this subsection is exempt from the application of sections 1311 to 1319 of the insurance code of 1956, 1956 PA 218, MCL 500.1311 to 500.1319.

(2) The merger of a health care corporation with a nonprofit mutual disability insurer is effective upon completion of both of the following:

(a) The adoption of a plan of merger by the majority of the boards of directors of both the health care corporation and the nonprofit mutual disability insurer. The health care corporation shall include in the plan of merger that beginning in April of the first full calendar year after the adoption of the plan of merger the surviving entity of a merger described in subsection (1) shall use its best efforts to make annual social mission contributions in an aggregate amount of up to $1,560,000,000.00 over a period of up to 18 years beginning in April of the first full calendar year after the adoption of the plan of merger to a nonprofit corporation created under part 6A. If adopted, the boards of directors shall submit the plan of merger to the commissioner for his or her consideration as provided in subdivision (b). A nonprofit mutual disability insurer is considered to be making its best effort under this subdivision if it makes the annual social mission contribution to a nonprofit corporation created in part 6A when the nonprofit mutual disability insurer's surplus is at least 375% of the authorized control level under risk-based capital requirements.

(b) The approval of the plan of merger by the commissioner. The commissioner shall make a determination to approve or disapprove a plan of merger within 90 days of receipt of the plan, and the commissioner shall not unreasonably withhold approval of a plan of merger submitted under subdivision (a).

(3) Notwithstanding any other provision of this act to the contrary, the directors of a health care corporation may serve as incorporators of the corporate body of, directors of, or officers of the nonprofit mutual disability insurer formed through a merger described in subsection (1).

(4) A merger described in subsection (1) is the dissolution of the health care corporation, and the surviving nonprofit mutual disability insurer assumes the performance of all contracts and policies of the merged health care corporation that exist on the date of the merger, including the participating hospital agreement, and its definition of certificate which excludes as covered services benefits provided pursuant to automobile no-fault or worker's compensation coverage, and all related contract obligations that result from orders relating to hospital provider class plans that are issued by the commissioner after July 1, 2012. However, the officers of a health care corporation may perform any act or acts necessary to close the affairs of the merged health care corporation after the date of the merger.

(5) Notwithstanding anything in this act to the contrary, if the merger of a health care corporation and a nonprofit mutual disability insurer becomes effective as described in subsection (2), the property of the health care corporation is subject to the collection of general ad valorem taxes and applicable specific taxes under the general property tax act, 1893 PA 206, MCL 211.1 to 211.155, beginning December 31, 2013. As provided in section 201, the property of a health care corporation is exempt from taxation before December 31, 2013. This act does not confer an exemption from taxation on a nonprofit mutual disability insurer that merges with a health care corporation.

Sec. 400. (1) Notwithstanding any provision of this act to the contrary, this section applies to the use of a most favored nation clause in a provider contract on and after February 1, 2013.

(2) Subject to subsection (3), beginning February 1, 2013, a health care corporation shall not use a most favored nation clause in any provider contract, including a provider contract in effect on February 1, 2013, unless the most favored nation clause has been filed with and approved by the commissioner. Subject to subsection (3), beginning February 1, 2013, a health care corporation shall not enforce a most favored nation clause in any provider contract without the prior approval of the commissioner.

(3) Beginning January 1, 2014, a health care corporation shall not use a most favored nation clause in any provider contract, including a provider contract in effect on January 1, 2014.

(4) As used in this section, "most favored nation clause" means a clause that does any of the following:

(a) Prohibits, or grants a contracting health care corporation an option to prohibit, a provider from contracting with another party to provide health care services at a lower rate than the payment or reimbursement rate specified in the contract with the health care corporation.

(b) Requires, or grants a contracting health care corporation an option to require, a provider to accept a lower payment or reimbursement rate if the provider agrees to provide health care services to any other party at a lower rate than the payment or reimbursement rate specified in the contract with the health care corporation.

(c) Requires, or grants a contracting health care corporation an option to require, termination or renegotiation of an existing provider contract if a provider agrees to provide health care services to any other party at a lower rate than the payment or reimbursement rate specified in the contract with the health care corporation.

(d) Requires a provider to disclose, to the health care corporation or its designee, the provider's contractual payment or reimbursement rates with other parties.

Sec. 401e. (1) Except as otherwise provided in this section, a health care corporation that has issued a nongroup certificate shall renew or continue in force the certificate at the option of the individual.

(2) Except as otherwise provided in this section, a health care corporation that has issued a group certificate shall renew or continue in force the certificate at the option of the sponsor of the plan.

(3) Guaranteed renewal is not required in cases of fraud, intentional misrepresentation of material fact, lack of payment, if the health care corporation no longer offers that particular type of coverage in the market, or if the individual or group moves outside the service area.

(4) A health care corporation shall not discontinue offering a particular plan or product in the nongroup or group market unless the health care corporation does all of the following:

(a) Provides notice to the commissioner and to each covered individual or group, as applicable, provided coverage under the plan or product of the discontinuation at least 90 days before the date of the discontinuation.

(b) Offers to each covered individual or group, as applicable, provided coverage under the plan or product the option to purchase any other plan or product currently being offered in the nongroup market or group market, as applicable, by that health care corporation without excluding or limiting coverage for a preexisting condition or providing a waiting period.

(c) Acts uniformly without regard to any health status factor of enrolled individuals or individuals who may become eligible for coverage in making the determination to discontinue coverage and in offering other plans or products.

(5) A health care corporation shall not discontinue offering all coverage in the nongroup or group market unless the health care corporation does all of the following:

(a) Provides notice to the commissioner and to each covered individual or group, as applicable, of the discontinuation at least 180 days before the date of the expiration of coverage.

(b) Discontinues all health benefit plans issued in the nongroup or group market from which the health care corporation withdrew and, except as allowed under subsection (6), does not renew coverage under those plans.

(6) If a health care corporation discontinues coverage under subsection (5), the health care corporation shall not provide for the issuance of any health benefit plans in the nongroup or group market from which the health care corporation withdrew during the 5-year period beginning on the date of the discontinuation of the last plan not renewed under that subsection.

Sec. 401m. Until January 1, 2014, a health care corporation established, maintained, or operating in this state shall offer health care benefits to all residents of this state regardless of health status.

Sec. 410b. Notwithstanding section 410a(8), for a certificate delivered, issued for delivery, or renewed in this state on or after January 1, 2014, the premium for a group conversion certificate under section 410a shall be determined only by using the rating factors set forth in section 3474a of the insurance code of 1956, 1956 PA 218, MCL 500.3474a.

Sec. 414b. (1) A health care corporation may offer group wellness coverage. Wellness coverage may provide for an appropriate rebate or reduction in premiums or for reduced copayments, coinsurance, or deductibles, or a combination of these incentives, for participation in any health behavior wellness, maintenance, or improvement program offered by the employer. The employer shall provide evidence of demonstrative maintenance or improvement of the members' health behaviors as determined by assessments of agreed-upon health status indicators between the employer and the health care corporation. Any rebate or premium provided by the health care corporation is presumed to be appropriate unless credible data demonstrate otherwise, but shall not exceed 30% of paid premiums, unless otherwise approved by the commissioner. A health care corporation shall make available to employers all wellness coverage plans that it markets to employers in this state.

(2) A health care corporation may offer nongroup wellness coverage. Wellness coverage may provide for an appropriate rebate or reduction in premiums or for reduced copayments, coinsurance, or deductibles, or a combination of these incentives, for participation in any health behavior wellness, maintenance, or improvement program approved by the health care corporation. The member shall provide evidence of demonstrative maintenance or improvement of the individual's or family's health behaviors as determined by assessments of agreed-upon health status indicators

between the member and the health care corporation. Any rebate of premium provided by the health care corporation is presumed to be appropriate unless credible data demonstrate otherwise, but shall not exceed 30% of paid premiums, unless otherwise approved by the commissioner. A health care corporation shall make available to individuals all wellness coverage plans that it markets to individuals in this state.

(3) A health care corporation is not required to continue any health behavior wellness, maintenance, or improvement program or to continue any incentive associated with a health behavior wellness, maintenance, or improvement program.

Sec. 501c. Beginning January 1, 2014, a health care corporation shall establish and maintain a provider network that, at a minimum, satisfies any network adequacy requirements imposed by the commissioner pursuant to federal law.

Sec. 620. (1) Notwithstanding any provision of this act to the contrary, a certificate delivered, issued for delivery, or renewed in this state on or after January 1, 2014 by a health care corporation is subject to the policy and certificate issuance and rate filing requirements of the insurance code of 1956, 1956 PA 218, MCL 500.100 to 500.8302, including the rating factor requirements of section 3474a of the insurance code of 1956, 1956 PA 218, MCL 500.3474a.

(2) For a certificate delivered, issued for delivery, or renewed in this state on or after January 1, 2014, subject to the prior approval of the commissioner, a health care corporation may establish reasonable open enrollment periods.

(3) The commissioner shall establish minimum standards for the frequency and duration of open enrollment periods established under subsection (2). The commissioner shall uniformly apply the minimum standards for the frequency and duration of open enrollment periods established under this subsection to all health care corporations.

(4) A health care corporation offering coverage during an open enrollment period established under subsection (2) shall not deny or condition the issuance or effectiveness of a certificate and shall not discriminate in the pricing of the certificate on the basis of health status, claims experience, receipt of health care, or medical condition.

PART 6A

HEALTH ENDOWMENT FUND CORPORATIONS

Sec. 651. As used in this part:

(a) "Board" means the board of a health endowment fund corporation incorporated under this part.

(b) "Executive director" means the executive director of a fund appointed by the board.

(c) "Fund" means a health endowment fund corporation organized as a nonprofit corporation under section 653.

Sec. 652. (1) A health endowment fund corporation shall not be incorporated in this state except under this part.

(2) A board shall adopt a conflict of interest policy. A board member with a direct or indirect interest in any matter before the fund shall disclose the member's interest to the board before the board takes any action on the matter. The board shall record the member's disclosure in the minutes of the board meeting. If a board member or a member of his or her immediate family, organizationally or individually, would derive a direct and specific benefit from a decision of the board, that member shall recuse himself or herself from the discussion and the vote on the issue.

(3) Subject to this subsection, the governor shall appoint the members of a board with the advice and consent of the senate. An individual who is an employee, officer, or board member of a health care corporation; a lobbyist affiliated with a health care corporation; or an employee of a health insurer, health care provider, or third party administrator is not eligible to be appointed and shall not be appointed to a board under this subsection. On or before the expiration of 60 days after the incorporation of a fund under section 653, the governor shall appoint the following initial members of the board with the advice and consent of the senate:

(a) One member from a list of 3 or more individuals recommended by the senate majority leader.

(b) One member from a list of 3 or more individuals recommended by the speaker of the house of representatives.

(c) One member representing the interests of minor children.

(d) One member representing the interests of senior citizens.

(e) Two members of the general public.

(f) One member representing the business community.

(g) One member from a list of 3 or more individuals recommended by the house minority leader.

(h) One member from a list of 3 or more individuals recommended by the senate minority leader.

(4) A vacancy on a board shall be filled in the same manner as the initial appointment under subsection (3). Except as otherwise provided in this subsection, a board member shall be appointed for a term of 4 years or until a successor is appointed, whichever is later. For the initial members appointed under subsection (3), 3 members shall be appointed for 2-year terms, 3 members shall be appointed for 3-year terms, and 3 members shall be appointed for 4-year terms.

(5) Six members of a board constitute a quorum for the transaction of business at a meeting of the board. An affirmative vote of 5 board members is necessary for official action of a board.

(6) The business that a board may perform shall be conducted at a meeting of the board that is held in this state, is open to the public, and is held in a place that is available to the general public. However, a board may establish reasonable rules and regulations to minimize disruption of a meeting of the board. At least 10 days and not more than 60 days before a meeting, a board shall provide public notice of its meeting at its principal office and on its internet website. A board shall include in the public notice of its meeting the address where board minutes required under subsection (7) may be inspected by the public. A board may meet in a closed session for any of the following purposes:

(a) To consider the hiring, dismissal, suspension, or disciplining of board members or employees or agents of the fund.

(b) To consult with its attorney.

(c) To comply with state or federal law, rules, or regulations regarding privacy or confidentiality.

(7) A board shall keep minutes of each meeting. Board minutes shall be open to public inspection, and the board shall make the minutes available at the address designated on the public notice of its meeting under subsection (6). A board shall make copies of the minutes available to the public at the reasonable estimated cost for printing and copying. A board shall include all of the following in its board minutes:

(a) The date, time, and place of the meeting.

(b) Board members who are present and absent.

(c) Board decisions made at a meeting open to the public.

(d) All roll call votes taken at the meeting.

(8) Board members shall serve without compensation. However, board members may be reimbursed for their actual and necessary expenses incurred in the performance of their official duties as board members.

Sec. 653. (1) A charitable purpose nonprofit corporation may be incorporated on a nonstock, directorship basis, under the nonprofit corporation act, 1982 PA 162, MCL 450.2101 to 450.3192 consistent with this part and, if incorporated under this section, shall be organized to receive and administer funds for the public welfare. The articles of incorporation must include the word "Michigan" and the phrase "health endowment fund" in the name of the fund. As soon as practicable after the incorporation of a fund under this subsection, the fund shall apply for and make its best effort to obtain tax-exempt status under section 501(c)(3) of the internal revenue code, 26 USC 501.

(2) The articles of incorporation of a fund must provide that the fund is organized for the following purposes:

(a) Supporting efforts that improve the quality of health care while reducing costs to residents of this state.

(b) Benefitting the health and wellness of minor children and seniors throughout this state with a significant focus in the following areas:

(*i*) Access to prenatal care and reduction of infant mortality rates.

(*ii*) Health services for foster and adopted children.

(*iii*) Access to healthy food.

(*iv*) Wellness programs and fitness programs.

(*v*) Access to mental health services.

(*vi*) Technology enhancements.

(*vii*) Health-related transportation needs.

(*viii*) Foodborne illness prevention.

(c) Awarding grants for a term not exceeding 3 years in duration for projects that will promote the purposes of the fund.

(d) Subsidizing the cost of individual medigap coverage to medicare-eligible individuals in this state who demonstrate a financial need in order to be able to purchase individual medigap coverage.

(3) The board shall establish a comprehensive and competitive process to award grants.

(4) The nonprofit corporation act, 1982 PA 162, MCL 450.2101 to 450.3192, applies to a fund. If a provision relating to a fund under this part conflicts with other state law, this part controls.

(5) If a fund is eligible to receive social mission contributions under section 220(2), the eligible fund shall implement a program to disburse money to subsidize the cost of individual medigap coverage to medicare-eligible individuals in this state who demonstrate a financial need in order to be able to purchase individual medigap coverage. The commissioner shall develop a means test to be used to determine if a medicare-eligible individual applicant is eligible for the medigap coverage subsidy provided for in this subsection and shall submit the test developed to the attorney general for approval.

(6) If a fund is eligible to receive social mission contributions under section 220(2), beginning on the first day of the third August after the fund receives its initial social mission contribution, and ending on the thirty-first day of the eighth December after the fund receives its initial social mission contribution, the fund shall disburse $120,000,000.00 to subsidize the cost of individual medigap coverage purchased by medicare-eligible individuals in this state, subject to subsection (5).

(7) A fund is a private, nonprofit corporation organized for charitable purposes and is not a state agency, governmental agency, or other political subdivision of this state. Money of a fund is held by the fund for the purposes consistent with this part and is not money of this state or a political subdivision of this state and shall not be deposited in the state treasury. A member of a board is not a public officer of this state.

Sec. 654. (1) A board shall appoint an executive director to serve as the chief executive officer of the fund. The executive director shall serve at the pleasure of the board. The executive director may employ staff and hire consultants as necessary with the approval of the board. The board shall determine compensation for the executive director and staff employed under this subsection and shall approve contracts under this subsection.

(2) The executive director shall display on the fund internet website information relevant to the public, as defined by the board, concerning the fund's operations and efficiencies, as well as the board's assessments of those activities.

Sec. 655. (1) Subject to this section, a fund may disburse money contributed to the fund each year, not including any interest, earnings, or unrealized gains or losses on those contributions, for the purposes of the fund as described in section 653. A fund may expend a portion of the money contributed to the fund in each year following the initial contribution to the fund according to the following schedule:

(a) Years 1 through 4, 80%.

(b) Years 5 through 8, 67%.

(c) Years 9 through 12, 60%.

(d) Years 13 through 18, 25%.

(2) On and after the date that the accumulated principal of money held by a fund reaches $750,000,000.00, the fund shall maintain that amount for investment to provide an ongoing income to the fund. On and after the date that the accumulated principal in the fund reaches $750,000,000.00, the board shall not allow the accumulated principal of the fund to fall below $750,000,000.00 due to expenditures made for the purposes of the fund as described in section 653.

(3) A fund may expend money received by the fund from any source in a fiscal year of the fund that is in excess of the amount required to maintain the accumulated principal goals as described in subsection (2), not including any interest, earnings, or unrealized gains or losses on those funds, on the reasonable administrative costs of the fund and for the purposes of the fund as described in this part. The investment of fund money and donations by the fund are under the exclusive control and discretion of the fund and are not subject to requirements applicable to public funds.

(4) A fund may invest accumulated principal in the fund only in securities permitted by the laws of this state for the investment of assets of life insurance companies, as described in chapter 9 of the insurance code of 1956, 1956 PA 218, MCL 500.901 to 500.947.

(5) A fund's articles of incorporation or bylaws must provide for a system of financial accounting, controls, audits, and reports. The board annually shall have an audit of the fund conducted by an independent public accountant firm, and the auditor's audit report and findings shall be submitted to the board. The expense of an audit required under this subsection is considered a reasonable administrative cost under subsection (3).

(6) A fund's articles of incorporation or bylaws must require that the board shall appoint from its members an audit committee consisting of no fewer than 3 members and for the audit committee to contract with an independent auditing firm to provide an annual financial audit in accordance with applicable auditing standards.

(7) The executive director shall do all of the following:

(a) Review and certify external auditor reports.

(b) Make external auditor reports available to the board and to the general public.

(c) Develop and implement corrective actions to address weaknesses identified in an audit report.

(8) The articles of incorporation or bylaws of a fund must require the fund to keep an accurate accounting of all activities, receipts, and expenditures and annually submit to the board, the governor, the senate and house of representatives appropriations committees, and the senate and house of representatives standing committees on health policy a report regarding those accountings.

(9) A fund and its directors, officers, and employees shall fully cooperate with any investigation conducted by this state or a federal agency under its authority under state or federal law, to do any of the following:

(a) Investigate the affairs of the fund.

(b) Examine the assets and records of the fund.

(c) Require periodic reports in relation to the activities undertaken by the fund in compliance with applicable law.

Enacting section 1. This amendatory act does not take effect unless Senate Bill No. 62 of the 97th Legislature is enacted into law.

This act is ordered to take immediate effect.

Carol Morey Viventi

Secretary of the Senate

Gary E. Randall

Clerk of the House of Representatives

Approved .....

.....

Governor

Adopted: March 24, 2014

BYLAWS

OF

MICHIGAN HEALTH ENDOWMENT FUND

(A Michigan Nonprofit Corporation)

ARTICLE I
Board of Directors

Section 1. Directorship. The Fund is organized upon a directorship basis. The property, business and affairs of the Fund will be managed by its Board of Directors.

Section 2. Number, Qualification and Term of Office. The Board of Directors of this Fund will consist of nine persons.

The Governor of the State of Michigan shall appoint the members of the board with the advice and consent of the Michigan Senate. An individual who is an employee, officer, or board member of a health care corporation; a lobbyist affiliated with a health care corporation; or an employee of a health insurer, health care provider, or third party administrator is not eligible to be appointed and shall not be appointed to the board. On or before the expiration of 60 days after the incorporation of the Fund, the Governor shall appoint the following initial members of the board with the advice and consent of the Senate:

(a) One member from a list of 3 or more individuals recommended by the Senate Majority Leader.

(b) One member from a list of 3 or more individuals recommended by the Speaker of the House of Representatives.

(c) One member representing the interests of minor children.

(d) One member representing the interests of senior citizens.

(e) Two members of the general public.

(f) One member representing the business community.

(g) One member from a list of 3 or more individuals recommended by the House Minority Leader.

(h) One member from a list of 3 or more individuals recommended by the Senate Minority Leader.

A vacancy on the board shall be filled in the same manner as the initial appointment under this Section 2. Except as otherwise provided in this section, a board member shall be appointed for a term of 4 years or until a successor is appointed, whichever is later. For the initial members appointed under this Section 2, 3 members shall be appointed for 2-year terms, 3 members shall be appointed for 3-year terms, and 3 members shall be appointed for 4-year terms.

Section 3. Resignation, Removal and Vacancies. A Director may resign by written notice to the Governor. The resignation will be effective upon its receipt by the Governor or a subsequent time as set forth in the notice of resignation. A Director may be removed, either with or without cause, by written direction of the Governor.

Section 4. General Powers as to Negotiable Paper. The Board of Directors may, from time to time, authorize the making, signature or endorsement of checks, drafts, notes and other negotiable paper or other instruments for the payment of money and designate the persons who will be authorized to make, sign or endorse the same on behalf of the Fund.

Section 5. Powers as to Other Documents. All material contracts, conveyances and other instruments may be executed on behalf of the Fund by the Executive Director, the Chairperson or any Vice Chairperson, and, if necessary, attested by the Secretary or the Treasurer.

Section 6. Compensation. Directors will serve without compensation but may be reimbursed for actual and necessary expenses incurred by a Director in the performance of his or her official duties as a Board member consistent with policies adopted by the Board.

ARTICLE II
Meetings

Section 1. Annual Meeting. The annual meeting of the Directors of the Fund will be held at the principal office of the Fund during the month of January of each year, or at any other place and date as designated by the Directors for the purpose of installing Directors and electing officers for the ensuing year, presenting to the Directors a copy of the Fund's financial report for the preceding fiscal year and for the transaction of other business properly brought before the meeting.

Section 2. Open Meetings. The business that the board may perform shall be conducted at a meeting of the board that is held in this state, is open to the public, and is held in a place that is available to the general public. However, the board may establish reasonable rules and regulations to minimize disruption of a meeting of the board. At least 10 days and not more than 60 days before a meeting, the board shall provide public notice of its meeting at its principal office and on its internet website. The board shall include in the public notice of its meeting the address where board minutes may be inspected by the public. The board may meet in a closed session for any of the following purposes:

(a) To consider the hiring, dismissal, suspension, or disciplining of board members or employees or agents of the Fund.

(b) To consult with its attorney.

(c) To comply with state or federal law, or regulations regarding privacy or confidentiality.

Section 3. Notice of Meeting. Except as otherwise provided by these Bylaws or by law, and in addition to the public notice described in Section 2 above, written notice containing the time and place of all meetings of the Board of Directors will be given personally, by mail, or by electronic transmission to each Director not less than ten days before a meeting. Notice by electronic transmission will be deemed to have been given when electronically transmitted to the person entitled to the notice or communication in a manner authorized by the person. Notice of a meeting need not state the purpose or purposes of the meeting nor the business to be transacted at the meeting.

Attendance of a Director at a meeting constitutes a waiver of notice of the meeting, except where the Director attends the meeting for the express purpose of objecting to the transaction of any business because the meeting was not lawfully called or convened.

Section 4. Quorum and Voting. Six members of the Board constitute a quorum for the transaction of business at a meeting of the Board. An affirmative vote of 5 Board members is necessary for official action of the Board.

Section 5. Conduct at Meetings. Meetings of the Directors will be presided over by the Chairperson. The Secretary or an Assistant Secretary of the Fund or, in their absence, a person chosen at the meeting will act as Secretary of the meeting.

Section 6. Minutes. The Board shall keep minutes of each meeting. Board minutes shall be open to public inspection, and the Board shall make the minutes available at the address designated on the public notice of its meeting under Section 2. The Board shall make copies of the minutes available to the public at the reasonable estimated cost for printing and copying. The Board shall include all of the following in its Board minutes:

(a) The date, time, and place of the meeting.

(b) Board members who are present and absent.

(c) Board decisions made at a meeting open to the public.

(d) All roll call votes taken at the meeting.

Section 7. Participation by Remote Communication. A Director may participate in a meeting of Directors by conference telephone or other means of remote communication by which all persons participating in the meeting may communicate with

each other. Participation in a meeting pursuant to this section constitutes presence in person at the meeting.

ARTICLE III
Officers

Section 1. Election or Appointment. The Board of Directors will elect a Chairperson, a Vice Chairperson, a Secretary and a Treasurer of the Fund at each annual meeting. The Board will appoint an Executive Director to serve as the chief executive officer of the Fund. The same person may hold any two or more offices, but no officer will execute, acknowledge or verify any instrument in more than one capacity. The Directors may also appoint any other officers and agents as they deem necessary for accomplishing the purposes of the Fund.

Section 2. Term of Office. The term of office of all officers will commence upon their election or appointment and will continue until the next annual meeting of the Fund and until their respective successors are chosen or until their resignation or removal. Any officer may be removed from office at any meeting of the Directors, with or without cause, by the affirmative vote of a majority of the Directors then in office, whenever in their judgment the best interest of the Fund will be served.

An officer may resign by written notice to the Fund. The resignation will be effective upon its receipt by the Fund or at a subsequent time specified in the notice of the resignation.

Section 3. Compensation. Any officer who is an employee of the Fund will receive reasonable compensation for his or her services as fixed by the Board of Directors.

Section 4. Chairperson. The Chairperson will preside over all board meetings and will perform such other duties prescribed by the Board of Directors.

Section 5. Vice Chairperson. The Vice Chairperson will, in the absence or disability of the Chairperson, perform the duties and exercise the powers of the Chairperson and will perform any other duties prescribed by the Board of Directors or the Chairperson.

Section 6. The Executive Director. The Executive Director will be the chief executive officer of the Fund and will have general and active management of the activities of the Fund. The Executive Director will see that all orders and resolutions of the Board of Directors are carried into effect. The Executive Director will execute all authorized conveyances, contracts or other obligations in the name of the Fund except where required by law to be otherwise signed and executed and except where the signing and execution is expressly delegated by the Directors to some other person.

The Executive Director shall serve at the pleasure of the Board. The Executive Director may employ staff and hire consultants as necessary with the approval of the

Board. The Board shall determine compensation for the Executive Director and staff and shall approve contracts under this Section 6.

The Executive Director shall display on the Fund internet website information relevant to the public, as defined by the Board, concerning the Fund's operations and efficiencies, as well as the Board's assessments of those activities.

The Executive Director shall do all of the following:

(a) Review and certify external auditor reports.

(b) Make external auditor reports available to the Board and to the general public.

(c) Develop and implement corrective actions to address weaknesses identified in an audit report.

Section 7. The Secretary. The Secretary will attend meetings of the Board of Directors and record or cause to be recorded the minutes of all proceedings in a book to be kept for that purpose. The Secretary will give or cause to be given notice of all meetings of the Board of Directors for which notice may be required and will perform any other duties prescribed by the Directors.

Section 8. The Treasurer. The Treasurer will oversee the financial activities of the Fund. The Treasurer will perform all duties incident to the office of Treasurer and other administrative duties as may be prescribed by the Board of Directors. All books, papers, vouchers, money and other property of whatever kind belonging to the Fund which are in the Treasurer's possession or under his or her control will be returned to the Fund at the time of his or her death, resignation or removal from office.

ARTICLE IV
Committees

Section 1. Executive and Compensation Committee. The Board of Directors shall establish an Executive and Compensation Committee consisting of the elected officers of the Board. Minutes of the Executive and Compensation Committee meetings will be made available to the public. The Executive and Compensation Committee, subject to those limitations as may be required by law or imposed by resolution of the Board of Directors, may make recommendations to the Board of Directors regarding the business and affairs of the Fund, but shall not conduct the business that the board may perform.

The Executive and Compensation Committee shall review staff performance and make recommendations to the Board of Directors with respect to compensation and benefits to be paid to the Fund's staff and personnel. Notwithstanding anything contained in this Section 1 to the contrary, the Board of Directors will be responsible for approving compensation and benefits.

Section 2. Audit Committee. The Board shall appoint from its members an Audit Committee consisting of no fewer than 3 members. The audit committee will contract with an independent auditing firm to provide an annual financial audit in accordance with applicable auditing standards.

The Audit Committee will insure that the Fund will keep an accurate accounting of all activities, receipts, and expenditures and annually submit to the Board, the Governor, the Senate and House of Representatives appropriations committees, and the Senate and House of Representatives standing committee on health policy a report regarding those accountings.

The Audit Committee will establish and maintain a system of financial accounting, controls, audits, and reports. The Board annually shall have an audit of the Fund conducted by an independent public accountant firm, and the auditor's audit report and findings shall be submitted to the Board. The expense of an audit required under this subsection is considered a reasonable administrative cost of the Fund.

Section 3. Governance Committee. The Board shall appoint a Governance Committee to review and make recommendations to the Board of Directors regarding matters of the Fund's governance, including its Articles of Incorporation, Bylaws, committee structure, and policies and procedures.

Section 4. Other Committees. The Board of Directors may designate other committees as deemed appropriate. The committees will have the authority as delegated to them by the Board of Directors. Notwithstanding the foregoing, all committees shall be advisory in nature and may not transact the business of the board.

Section 5. Procedure. All committees, and each member thereof, will serve at the pleasure of the Board of Directors. Except as provided in the law, the Board of Directors will have the power at any time to increase or decrease the number of members of any committee, to fill vacancies thereon, to change any member thereof, and to change the functions or terminate the existence of any committee. Regular meetings of any committee may be held in the same manner provided in these Bylaws for meetings of the Board of Directors, and a majority of any committee will constitute a quorum at the meeting.

ARTICLE V
Indemnification

Section 1. Indemnification. The Fund will, to the fullest extent now or hereafter permitted by law, indemnify any Director or officer of the Fund (and, to the extent provided in a resolution of the Board of Directors or by contract, may indemnify any volunteer, employee or agent of the Fund) who was or is a party to or threatened to be made a party to any threatened, pending, or completed action, suit or proceeding by reason of the fact that the person is or was a Director, officer, volunteer, employee or agent of the Fund, or is or was serving at the request of the Fund as a director, trustee, officer, partner, volunteer, employee or agent of another corporation, partnership, joint

venture, trust or other enterprise, whether for profit or not for profit, against expenses including attorneys' fees (which expenses may be paid by the Fund in advance of a final disposition of the action, suit or proceeding as provided by law), judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with the action, suit or proceeding if the person acted (or refrained from acting) in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the Fund, and with respect to any criminal action or proceeding, if the person had no reasonable cause to believe his or her conduct was unlawful.

Section 2. Rights to Continue. This indemnification will continue as to a person who has ceased to be a Director or officer of the Fund. Indemnification may continue as to a person who has ceased to be a volunteer, employee or agent of the Fund to the extent provided in a resolution of the Board of Directors or in any contract between the Fund and the person. Any indemnification of a person who was entitled to indemnification after such person ceased to be a Director, officer, volunteer, employee or agent of the Fund will inure to the benefit of the heirs and personal representatives of that person.

ARTICLE VI
Miscellaneous

Section 1. Fiscal Year. The fiscal year of the Fund will end on the last day of December.

Section 2. Amendments. These Bylaws may be amended or repealed by the affirmative vote of a majority of the Directors of the Fund then in office.

Section 3. Loans and Guarantees. The Fund will not provide loans to or guarantee obligations of an officer or Director of the Fund, unless expressly permitted under State law.

Michigan Health Endowment Fund
Board Meeting

Monday, June 16, 2014
Radisson Hotel – Lansing, Michigan

Meeting Minutes

Call to order
The board meeting of the Michigan Health Endowment Fund called to order at 9 a.m. by Chairman Robert Fowler.

Roll call
Quorum established based on the presence of the following Board Members:

Board Members present:
Lynn Alexander
Tim Damschroder
Cindy Estrada
Rob Fowler
Sue Jandernoa
Jim Murray
Keith Pretty
Michael Williams
Marge Robinson

Others present:
Geralyn Lasher
Mark Neithercut
Jeff Padden
Jennifer Smith
Duane Tarnacki

Approval of agenda
Chairman Fowler approves the agenda.

Learning session: Senior services in Michigan
Kari Sederburg, Director of the Michigan Office of Services to the Aging, presents to the Board on the health status of Michigan's aging population.

Public comment

I. Marilyn Lieber, President and CEO of Michigan Fitness Foundation

Ms. Lieber highlights the importance of: measurable impact and good evaluation models; evidence based and also meaningful and innovative pilot programs; the

ability to show and point to accomplishments; and being thoughtful about sustainability.

II. Kim Sibilsky, Michigan Primary Care Association

Ms. Sibilsky defines the meaning and nature of Federally Qualified Health Centers (FQHCs). She says FQHCs are comprehensive community based centers focused on Michigan systems. Ms. Sibilsky stresses that although FQHCs serve 700,000 people, their centers can only be in federally qualified underserved communities and can only look at categorical issues. Ms. Sibilsky believes the Michigan Health Endowment Fund has the unique opportunity to invest in systems.

Review and adoption of the minutes from the previous meeting

I. Open Meeting minutes

Board Member Robinson notes that she participated in the May 19 Board Meeting via telephone. With that change, Board Member Robinson moves to approve the meeting minutes from the May 19, 2014, Board Meeting. Board Member Damschroder seconds. Motion passes by a vote of nine to zero.

Report of the Chair

I. Chairman Fowler states that a new contract with Public Policy Associates extends the relationship through the end of July.

II. The Board is continuing on a path and philosophy of learning and doing.

III. The possibility of a commission study is something to consider down the road, but is currently on hold for 2014.

Executive Director report

I. Ms. Lasher reports that weekly informational calls will continue in the short-term given positive feedback from the Board.

II. Ms. Lasher is working to coordinate the listening tour and recommends that the Board move forward with engaging Public Sector Consultants to assist in the planning efforts.

BREAK

Committee reports

I. Executive and Compensation Committee

Chairman Fowler reminds the Board that as a discipline, it is important that the Executive Committee does not do the work of the Full Board. Chairman Fowler presents recommendations based on volunteer assignments for committee chairs and members to be taken up for action later on during the meeting. Volunteers and subsequent recommendations are as follows:

Committee	Recommended Chairperson
Investment	Timothy Damschroder
Grantmaking	Sue Jandernoa
Audit	Keith Pretty
Governance	Michael Williams

Chairman Fowler states that each committee chair will have staff support for their committees.

Regarding the compensation of the CEO, Kittleman will discuss compensation range and benefit package, but the final recommendation will be up to the Executive and Compensation Committee and then the Full Board for the final decision.

II. Investment Committee

Board Member Damschroder reports that, based on the investment world, it would not be prudent from a cost or procedural perspective to hire a consultant to act as CIO. Instead, Board Member Damschroder recommends that the Board hire a CFO that has CIO-type experience. Board Member Damschroder and the Investment Committee will engage with Kittleman to begin the search process. The Investment Committee also recommends that they begin the process for selecting an investment consulting firm.

In the interim, the Board will hold back on pursuing any medium-term investments. To date, $90 million has been moved to Huntington Bank and that is where it will stay until there is a CFO in place. The remaining funds from the initial deposit are with Chemical Bank.

III. President and CEO Recruitment Committee

Mr. Rick King with Kittleman and Associates reviews the Benchmark Calendar, Position Guide, and Constituent Outreach List with the Board. Regarding timing, Mr. King believes they will have a number of candidates ready for the Board to review on paper by the end of August. From there, the Board can first conduct a round of phone interviews, or skip that step and move right into in-person interviews with a smaller, select group of candidates.

As a reminder to the Board, Chairman Fowler states that the Board will act as a Committee of the Whole regarding the selection. The Board agrees that, if it decides

to conduct two rounds of interviews, a subset of Board Members may interview the first round of candidates. Final interviews will be conducted with the Full Board.

Old business

I. Mission building

Proposed Mission Statement: The mission of the Michigan Health Endowment Fund is to improve the health of Michigan residents and reduce the cost of health care with special emphasis on the health and wellness of children and seniors.

Board Member Robinson moves to adopt the Mission Statement. Board Member Pretty seconds. Motion passes by a vote of nine to zero.

II. Grantmaking plan

The Board has decided that there is a way and good reason to move forward with getting funds out in 2014. The Board suggests the Grantmaking Committee further review and discuss the mechanisms by which grantees will be selected and funds will be disbursed. Once they have a recommendation, they will bring it back to the Full Board.

Legal issues

I. Possible appointment of non-Board members to committees

Board is presented with the following resolution to allow the appointment of non-Board members to serve on committees.

WHEREAS, in order to gain the experience and expertise of a broad class of individuals, the Board of Directors of Michigan Health Endowment Fund (the "Fund") recognizes the value of appointing non-board members to serve as advisory members of the Fund's committees.

NOW, THEREFORE, BE IT:

RESOLVED, that non-board members may be appointed to serve as non-voting members of the Fund's committees and any such non-board member appointed to a Fund committee will not count toward the quorum requirement for holding committee meetings; and

RESOLVED, that each non-board member who is appointed to a committee will serve for a term commencing with his or her appointment and continuing until the next annual meeting of the Fund or until his or her resignation or removal by the Board.

Board Member Pretty moves to have the Board adopt a policy to allow non-Board members to serve on committees in a non-voting capacity. Board Member Jandernoa seconds. Motion passes by a vote of eight to one.

Lynn Alexander – affirmative
Tim Damschroder – affirmative
Cindy Estrada – affirmative
Rob Fowler – affirmative
Sue Jandernoa – affirmative
Jim Murray – negative
Keith Pretty – affirmative
Marge Robinson – affirmative
Michael Williams – affirmative

II. Gift policy

Clark Hill will revise the gift policy and circulate to the board for action at the next Board meeting.

III. Spending and endowment fund policy

Mr. Duane Tarnacki presents the Board with the following Spending and Endowment Fund Resolutions:

WHEREAS, Public Act 4 of 2013 (the "Act") restricts the portion of contributions that Michigan Health Endowment Fund (the "Fund") may expend each year for the first 18 years of its existence;

WHEREAS, the Act requires that once the accumulated principal held by the Fund reaches $750,000,000, the Fund must maintain that amount as an endowment fund and may not allow the principal to fall below $750,000,000 ("Accumulated Principal Goal");

WHEREAS, amounts received in excess of the Accumulated Principal Goal may be spent for the purposes of the Fund and for reasonable administrative costs of the Fund; and

WHEREAS, the Board of Directors desires to establish a spending and endowment fund policy with respect to the expenditure, management and investment of contributions received by the Fund for the first 18 years of its existence.

NOW, THEREFORE, BE IT:

RESOLVED, that the Fund may expend a portion of the money contributed to it in each year following the initial contribution in an amount up to the percentage specified below ("Maximum Spending Allowance"):

(a) Years 1 through 4, 80%;
(b) Years 5 through 8, 67%;
(c) Years 9 through 12, 60%;
(d) Years 13 through 18, 25%

RESOLVED, that the Board of Directors of the Fund shall annually determine a budget range for spending which shall not exceed the Maximum Spending Allowance set forth above.

RESOLVED, that the Board of Directors of the Fund shall maintain an endowment fund (the "Endowment Fund") for purposes of meeting and complying with the Act's Accumulated Principal Goal.

RESOLVED, that the Fund shall contribute to the Endowment Fund, at a minimum, a portion of the money contributed to it each year according to the following schedule:

(a) Years 1 through 4, 20%;
(b) Years 5 through 8, 33%;
(c) Years 9 through 12, 40%;
(d) Years 13 through 18, 75%

unless the Endowment Fund reaches $750,000,000 prior to the end of the 18 year term.

RESOLVED, that the Board of Directors shall maintain a segregated account for the accounting control of monies in the Endowment Fund.

RESOLVED, that the Board of Directors shall have final authority and discretion as to the investment and reinvestment of the assets of the Endowment Fund, including the authority to delegate investment decisions to professional investment managers, subject to the Act's requirement that accumulated principal be invested only in securities permitted by the laws of the State of Michigan for the investment of assets of life insurance companies.

RESOLVED, that administrative expenses pertaining to the Endowment Fund may be charged to the Endowment Fund or paid from the general assets of the Fund, at the discretion of the Board of Directors.

RESOLVED, that the Board shall annually review amounts spent for the year and in the event that the Fund has not spent the Maximum Spending Allowance, it may allocate to a "Spendable Account" all or a portion of such contributions which would be available for spending in the current year and future years, and may also allocate to

the Spendable Account all or a portion of other amounts received by the Fund, including investment income; amounts not allocated to the Spendable Account will be deemed added to the Endowment Fund.

Board Member Robinson moves to adopt. Board Member Alexander seconds. Motion passes by a vote of nine to zero.

IV. Contract with Clark Hill

Mr. Tarnacki presents the Board with the contract to extend their relationship with Clark Hill until June 30, 2015. Board Member Pretty moves to extend the contract. Board Member Robinson seconds. The motion passes by a vote of nine to zero.

Business for action

I. Position descriptions for board members and officers

Board Member Pretty moves to adopt. Board Member Williams seconds. Motion passes by a vote of nine to 0.

II. CEO position description

Board Member Robinson moves to approve. Board Member Murray seconds. Motion passes by a vote of nine to zero.

III. Listening tour contract with Public Sector Consultants

The Board is presented with Public Sector Consultants contract to coordinate a six-stop listening tour. Board Member Alexander moves to approve. Board Member Robinson seconds. Motion passes by a vote of seven to two.

Lynn Alexander – affirmative
Tim Damschroder – affirmative
Cindy Estrada – affirmative
Rob Fowler – affirmative
Sue Jandernoa – affirmative
Jim Murray – negative
Keith Pretty – affirmative
Marge Robinson – affirmative
Michael Williams – negative

IV. Learning plan

Board Member Estrada moves to adopt learning plan as a guideline. Board Member Pretty seconds. Motion passes by a vote of nine to zero.

V. Committee members and chairs

Recommended committee assignments:

Committee	**Chair**	**Members**
Investment	Timothy Damschroder	Jim Murray, Keith Pretty
Grantmaking	Sue Jandernoa	Roby Fowler, Cindy Estrada, Marge Robinson, Michael Williams
Audit	Keith Pretty	Lynn Alexander, Timothy Damschroder
Governance	Michael Williams	Jim Murray, Marge Robinson

Board Member Pretty moves to appoint the recommended chairs and members to the corresponding committees. Board Member Murray seconds. The motion passes by a vote of nine to zero**.**

Adjournment

Board Member Jandernoa moves to adjourn the meeting. Board Member Williams seconds. Motion passes by a vote of six to zero. Meeting adjourns at 3:25 p.m.

Respectfully submitted,

_____

Secretary of the meeting

Marianne Udow-Phillips
MHSA, University of Michigan
Director

Marianne Udow-Phillips is the director of the Center for Healthcare Research & Transformation (CHRT) at the University of Michigan. CHRT is a non-profit partnership of the University of Michigan (U-M) and Blue Cross Blue Shield of Michigan (BCBSM) with a mission to promote evidence based care delivery, improve population health, and expand access to care. Housed at the University of Michigan, CHRT is committed to helping policy makers make decisions based on facts. CHRT tests new ideas through demonstration projects, informs and educates the public through policy briefs and symposia and brings policy makers and researchers together through the CHRT Fellowship at the University of Michigan.

Before coming to CHRT, Marianne served as director of the Michigan Department of Human Services from 2004 to 2007, appointed by Governor Jennifer M. Granholm. Marianne came to state service from Blue Cross Blue Shield of Michigan (BCBSM), where she served in a number of leadership roles for over 20 years, most recently as senior vice president of Health Care Products and Provider Services, with responsibility for the BCBSM social mission, health policy, data analysis, care and network management programs for the traditional and PPO products. She also served as senior vice president and vice president of Plans and Operations for Mercy Alternative and Care Choices. Marianne holds a master's degree in Health Services Administration from the U-M School of Public Health; she is a lecturer of public health at the U-M School of Public Health.

In addition to her long-standing commitment to improving the quality and affordability of health care, Marianne is a passionate advocate for improving the lives of the poor with a special emphasis on children, including a focus on early childhood development. She has served on many boards and commissions. Among others, her current non-profit board involvement includes the HighScope Educational Research Foundation, the Early Childhood Investment Corporation, Freedom from Hunger, the U-M School of Public Health Dean's Advisory Board, the U-M Depression Center's National Advisory Board, and Arboretum Ventures Advisory Board. In addition, she is a member of the Dialog Direct board of directors and the External Advisory Group for the VHA Center for Applied Healthcare Studies.

Marianne has received numerous awards and recognitions, including the Anti-Defamation League's "Women of Achievement Award," Crain's Detroit Business top 100 "Most Influential Women" in 2002 and 2007, Wayne State College of Nursing's "2003 Lifeline Award," Girl Scouts of Huron Valley Council's "2006 Women of Distinction Award," Michigan Business and Professional Association's "2006 Women & Leadership in the Workplace Award," Michigan Fatherhood Coalition's "2007 Child Advocate Award," Michigan Women's Foundation's "2007 Women of Achievement and Courage Award," and Michigan's Children's 2008 "Heroes" award. Ambassador Magazine named her as one of its 2011 "Ambassadors of the Year," and Crain's Detroit Business 2012 "Game-Changer" award.

Who is CHRT?

CHRT is a non-profit partnership of the University of Michigan (U-M) and Blue Cross Blue Shield of Michigan (BCBSM) with a mission to promote evidence-based care delivery, improve population health, and expand access to care.

Located at U-M, CHRT provides information and objective analyses for policy makers, health care providers, payers, purchasers and the public at large on major health care trends in the state and nationally.

CHRT contributes to Michigan's health care policy discussions by:

- Publishing issue briefs and hosting symposia to help explain and clarify the most pressing health care issues in Michigan and the United States, helping to translate complex subject matter for targeted audiences.
- Conducting original research on health care spending, health system capacity and financing, and insurance coverage using administrative claims data and CHRT survey data.
- Running demonstration projects that bring together diverse groups of stakeholders and expert advisors to test the best practices and opportunities for improving health policy and practice.
- Connecting researchers and policy makers through the CHRT Policy Fellowship and the U-M Institute for Healthcare Policy & Innovation (IHPI).
- Providing health care consultation to selected groups with an interest in improving the cost and quality of health care and/or improving population health.

Center for Healthcare Research & Transformation
2929 Plymouth Road, Suite 245 • Ann Arbor, MI 48105-3206
Phone: 734-998-7555 • chrt-info@umich.edu • www.chrt.org

CHRT
CENTER FOR HEALTHCARE
RESEARCH & TRANSFORMATION

CHRT
CENTER FOR HEALTHCARE
RESEARCH & TRANSFORMATION

#$ $ %

& '

( ) *

& '

( ) *

% ( )

*

& + $,

$ *

2

CHRT
CENTER FOR HEALTHCARE RESEARCH & TRANSFORMATION

" ( )

! $

#

")

3

CHRT
CENTER FOR HEALTHCARE RESEARCH & TRANSFORMATION

( )

! $

#

"

4

-$! . $

/)

/)

5

0 0 / " 1

, (. 2 1

!"##$ %%%

& ' 3%%%4 4)

3 5 4

35

6

MICHIGAN HEALTH ENDOWMENT FUND
Learning Opportunities, July 2014

Focus Topics This Month:
Access to healthy food, health care reform, health information technology, Medigap, philanthropy, seniors' health

Health Care Briefing

Medigap

"Medigap Insurance and the Michigan Health Endowment Fund Board." Briefing prepared by Public Policy Associates, Inc. July 2014.

This briefing defines the term "Medigap" as a supplement to Medicare, identifies what MHEF's legal responsibilities for Medigap insurance will be, and provides some general information on the size and characteristics of Michigan's Medicare enrollee population.

Conferences

Philanthropy

"Growing the Impact of Michigan Philanthropy." Council of Michigan Foundations 42nd Annual Conference. Grand Traverse Resort and Spa, Traverse City, Michigan. October 12 – 14, 2014.

Keynote speakers:

- Jim Clifton, CEO of the Gallup Organization
  "The American Dream Has Changed: What Does Philanthropy Need to Know?"
- Hilly Gottlieb, Co-founder and Chief Boundary Pusher, Creating the Future
  "Change the Questions, Change the World"

For further information contact the Council of Michigan Foundations at:
http://conference.michiganfoundations.org/schedule/
616-842-7080

30

Articles

Health Care Reform

Buettgens, Matthew, and Jay Dev. "The ACA and America's Cities: Fewer Uninsured and More Federal Dollars" (Urban Institute/Robert Wood Johnson Health Policy Brief). Washington, DC: Urban Institute, June 19, 2014.

This report estimated the effect of the Affordable Care Act (ACA) on 14 large and diverse cities: Los Angeles, Chicago, Houston, Philadelphia, Phoenix, Indianapolis, Columbus, Charlotte, Detroit, Memphis, Seattle, Denver, Atlanta, and Miami (from the introduction to the report). Estimates of changes in the health coverage of the population in each of these cities and the associated changes in federal funding for healthcare services in each city were prepared. Estimates of additional funding that would have been provided to cities in states where Medicaid was not expanded under the provisions of the ACA were also prepared.

Brief:
http://www.urban.org/uploaded pdf/413162-The-ACA-and-Americas-Cities-Fewer-Uninsured-and-More-Federal-Dollars.pdf

Charts:
http://www.urban.org/uploaded pdf/413162-The-ACA-and-Americas-Cities-Chart-Pack.pdf

Fairbrother, Gerry, et al. "Cincinnati Beacon Community Program Highlights Challenges and Opportunities on the Path to Care Transformation." *Health Affairs* 33, no. 5 (2104): 871-877.

The benefits and challenges of building a regional health information system to support health delivery transformation and improve the quality of care for selected patients (including children with asthma) are described and analyzed. The authors conclude that health IT provides great opportunities to reform the healthcare system but that the time needed to plan, train staff, and implement these systems is considerably greater than what had been expected.

31

Health Information Technology

Miranda, Marie Lynn, et al. "Geographic Health Information Systems: A Platform to Support the Triple Aim." *Health Affairs* 32, no. 9 (2013): 1608-1615.

A local health information system that is linked to social and environmental data can provide a sophisticated understanding of individual and community health status by mapping these various factors and where and how they overlap. This can lead to better care, greater efficiency, and improve the overall health of the community.

Access to Healthy Food

Glickman, Dan, and Ann M. Veneman. "The Essential Role of Food and Farm Policy in Improving Health." *Health Affairs* 32, no. 9 (2013): 1519-1521.

Former Congressman Dan Glickman and former U.S. Secretary of Agriculture Ann Veneman provide suggestions for agricultural policy changes and research needed to support new agriculture policy in order to improve overall nutrition and overall health in the United States.

Video Learning

Seniors' Health

"How Well Are Seniors Making Choices Among Medicare's Private Plans And Does It Matter? Briefing and Panel Discussion." Kaiser Family Foundation. May 2013.

http://tinyurl.com/n2yg72f

"The typical Medicare beneficiary this year has 18 private Medicare Advantage plans and 35 stand-alone Part D drug plan options to consider, in addition to traditional Medicare. Medicare encourages seniors to make informed decisions with respect to their health coverage options when they first become eligible for Medicare, and to review these options annually so they select coverage that best meets their needs. Yet research suggests only a small share of Medicare beneficiaries voluntarily switch plans during Medicare's open enrollment periods. This raises questions about the role of choice in Medicare: How do Medicare beneficiaries choose among coverage options? Are Medicare beneficiaries happy with their coverage or just "sticky" when it comes to

32

plan choice? What motivates some to switch plans and why don't others do so? What are the implications for Medicare beneficiaries, private plans, health care providers, and Medicare's future?"

Presenter biographies and presentation slides are also available at:
http://tinyurl.com/n2yg72f.

Newsletters and Other Communications

Health Care Reform

"Advances"®. Robert Wood Johnson Foundation, Princeton, NJ.

Advances® is a newsletter that is published monthly by the Robert Wood Johnson Foundation (RWJF) and is available free of charge. This new sletter reports on the key work of RWJF through articles, interviews, summaries of RWJF-funded research, information on RWJF grants, and other news from the Foundation.

The June 2014 issue of Advances® included the following articles:

- Success! Smart snacks in school
- Budget cuts force nearly half of local health departments to reduce or eliminate services
- Nearly 28 million Americans eligible for assistance under ACA
- Help us build a Culture of Health
- News in Research, Evaluation & Learning

Individual subscriptions may be obtained by signing up for electronic delivery at:
http://www.rwjf.org/en/newsletters/advances.html.

Public Policy Associates Incorporated

Michigan Health Endowment Fund

Medigap Insurance and the MHEF

July 9, 2014

"Medigap" is a term used for supplemental health insurance for people age 65 and older to bridge the gap between what Medicare pays for care and what you are charged for care. Traditional Medicare typically pays for 80 percent of the charge, leaving the patient to pay part or all of the remaining charge.

The Centers for Medicare and Medicaid Services describes Medigap as follows:

> ***A Medicare supplement (Medigap) insurance, sold by private companies, can help pay some of the health care costs that original Medicare doesn't cover, like copayments, coinsurance, and deductibles. Some Medigap policies also offer coverage for services that original Medicare doesn't cover, like medical care when you travel outside the U.S. If you have original Medicare and you buy a Medigap policy, Medicare will pay its share of the Medicare-approved amount for covered health care costs. Then your Medigap policy pays its share. A Medigap policy is different from a Medicare Advantage Plan. Those plans are ways to get Medicare benefits, while a Medigap policy only supplements your original Medicare benefits.***
>
> ***Medigap policies generally don't cover long-term care, vision or dental care, hearing aids, eyeglasses, or private-duty nursing.***

1. ***You must have Medicare Part A and Part B. (Hospital and Medical respectively).***
2. ***If you have a Medicare Advantage Plan, you can apply for a Medigap policy, but make sure you can leave the Medicare Advantage Plan before your Medigap policy begins.***
3. ***You pay the private insurance company a monthly premium for your Medigap policy in addition to the monthly Part B premium that you pay to Medicare.***
4. ***A Medigap policy only covers one person. If you and your spouse both want Medigap coverage, you'll each have to buy separate policies.***
5. ***You can buy a Medigap policy from any insurance company that's licensed in your state to sell one.***
6. ***Any standardized Medigap policy is guaranteed renewable even if you have health problems. This means the insurance company can't cancel your Medigap policy as long as you pay the premium.***

Public Policy Research,
Development,
and Evaluation

Jeffrey D. Padden
President

119 Pere Marquette
Lansing, MI 48912-1231
517-485-4477
Fax: 485-4488
ppa@publicpolicy.com
www.publicpolicy.com

7. ***Some Medigap policies sold in the past cover prescription drugs, but Medigap policies sold after January 1, 2006 aren't allowed to include prescription drug coverage. If you want prescription drug coverage, you can join a Medicare Prescription Drug Plan (Part D).***
8. ***It's illegal for anyone to sell you a Medigap policy if you have a Medicare Medical Savings Account (MSA) Plan.***

2(.3 4

According to PA 4 of 2013, the MHEF Board is being asked to contribute $120 million to subsidize the cost of individual Medigap coverage. Eligibility for Medigap coverage is to be means-tested. The test is to be submitted to the attorney general for approval.

The following excerpts from the legislation that created MHEF describe the Board's legal responsibilities for subsidizing Medigap insurance for eligible Medicare enrollees during MHEF's first eight years of operation.

> ***Sec. 653. (1) A charitable purpose nonprofit corporation may be incorporated on a nonstock, directorship basis, under the nonprofit corporation act, 1982 PA 162, MCL 450.2101 to 450.3192 consistent with this part and, if incorporated under this section, shall be organized to receive and administer funds for the public welfare. The articles of incorporation must include the word "Michigan" and the phrase "health endowment fund" in the name of the fund. As soon as practicable after the incorporation of a fund under this subsection, the fund shall apply for and make its best effort to obtain tax-exempt status under section 501(c)(3) of the internal revenue code, 26 USC 501.***
>
> ***(2) The articles of incorporation of a fund must provide that the fund is organized for the following purposes: . . .***
>
> ***(d) Subsidizing the cost of individual medigap coverage to medicare-eligible individuals in this state who demonstrate a financial need in order to be able to purchase individual Medigap coverage. . . .***
>
> ***(5) If a fund is eligible to receive social mission contributions under section 220(2), the eligible fund shall implement a program to disburse money to subsidize the cost of individual Medigap coverage to medicare-eligible individuals in this state who demonstrate a financial need in order to be able to purchase individual Medigap coverage. The commissioner shall develop a means test to be used to determine if a medicare-eligible individual applicant is eligible for the Medigap coverage subsidy provided for in this subsection and shall submit the test developed to the attorney general for approval.***
> ***(6) If a fund is eligible to receive social mission contributions under section 220(2), beginning on the first day of the third August after the fund receives its***

initial social mission contribution, and ending on the thirty-first day of the eighth December after the fund receives its initial social mission contribution, the fund shall disburse $120,000,000.00 to subsidize the cost of individual Medigap coverage purchased by medicare-eligible individuals in this state, subject to subsection (5).

5 6

According to research done by the Kaiser Family Foundation, as of 2012 1,728,338 Michigan residents are enrolled in Medicare. Of those enrolled in Medicare, 529,090 are enrolled in Medicare Advantage. Furthermore, approximately $10,925 is spent per recipient, per year totaling approximately $19 million.

Medicare enrollee demographics are as follows. These figures include dual enrollees in Medicare and Medicaid.

(7

Female 55%
Male 45%

(4

White 83%
Black 12%
Not sufficient data for Hispanic and Others

(4 . +

Source: U.S. Census Bureau, 2010-2012 American Community Survey, Table B27016

Under 100%: 8.0%
100% to 149%: 10.4%
150% to 199%: 11.9%
200% to 299%: 22.8%
300% to 399%: 16.8%
400% or more: 30.1%

4 6

“What’s Medicare supplement (Medigap) insurance?,” Medicare.gov The Official U.S. Government Site for Medicare, accessed June 5, 2014, http://www.medicare.gov/supplement-other-insurance/Medigap/whats-Medigap.html.

% 6,8 -

“Public Acts,” Michigan Legislative Website, accessed June 5, 2014, http://www.legislature.mi.gov/documents/2013-2014/publicact/htm/2013-PA-0004.htm.

5 6

“State Health Facts: Michigan: Medicare,” The Henry J. Kaiser Family Foundation, accessed June 5, 2014, _____

HealthAffairs

At the Intersection of Health, Health Care and Policy

Cite this article as:
Gerry Fairbrother, Tara Trudnak, Ronda Christopher, Mona Mansour and Keith Mandel
Cincinnati Beacon Community Program Highlights Challenges And Opportunities On The Path To Care Transformation
Health Affairs, 33, no.5 (2014):871-877

doi: 10.1377/hlthaff.2012.1298

By Gerry Fairbrother, Tara Trudnak, Ronda Christopher, Mona Mansour, and Keith Mandel

Cincinnati Beacon Community Program Highlights Challenges And Opportunities On The Path To Care Transformation

doi: 10.1377/hlthaff.2012.1298
HEALTH AFFAIRS 33,
NO. 5 (2014): 871–877

ABSTRACT The Cincinnati, Ohio, metropolitan area was one of seventeen US communities to participate in the federal Beacon Community Cooperative Agreement Program to demonstrate how health information technology (IT) could be used to improve health care. Given $13.7 million to spend in thirty-one months, the Cincinnati project involved hundreds of physicians, eighty-seven primary care practices, eighteen major hospital partners, and seven federally qualified health centers and community health centers. The thrust of the program was to build a shared health IT infrastructure to support quality improvement through data exchange, registries, and alerts that notified primary care practices when a patient visited an emergency department or was admitted to a hospital. A special focus of this program was on applying these tools to adult patients with diabetes and pediatric patients with asthma. Despite some setbacks and delays, the basic technology infrastructure was built, the alert system was implemented, nineteen practices focusing on diabetes improvement were recognized as patient-centered medical homes, and many participants agreed that the program had helped transform care. However, the experience also demonstrated that the ability to transfer data was limited in electronic health record systems; that considerable effort was required to adapt technology to support quality improvement; and that the ambitious agenda required more time for planning, training, and implementation than originally thought.

Gerry L. Fairbrother is a senior scholar at AcademyHealth, in Washington, D.C.

Tara Trudnak (taratrudnak@gmail.com) is a senior research manager at AcademyHealth.

Ronda Christopher is an executive in health care transformation redesign and improvement at Health Partners Consulting, in Cincinnati, Ohio.

Mona Mansour is director of primary care and an associate professor of pediatrics, Division of General and Community Pediatrics, Children's Hospital and Medical Center, in Cincinnati.

Keith E. Mandel is chief clinical integration officer at the University of Missouri Health System, in Columbia.

The Beacon Community Program in Cincinnati, Ohio, was a thirty-one-month program that sought to leverage health information technology (IT) to improve care quality. In operation from September 1, 2010 to March 31, 2013, the Cincinnati initiative was one of seventeen federally funded Beacon Communities nationwide. The Beacon Community Cooperative Agreement Program grew out of a larger federal strategy to use health IT as a foundation for improving the nation's health care system.[1] It was funded as part of the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 and was administered by the Office of the National Coordinator for Health Information Technology in the Department of Health and Human Services.[2]

The objective of the Beacon Community Program was to demonstrate how technology, together with quality improvement efforts, could significantly improve health care for a community.[2] Beacon Communities were encouraged to draw not only from innovations in health IT but also from effective care delivery innovations in a variety of spheres, including quality improvement, payment reform, and consumer engagement.[3] Federal officials expected that Beacon

Communities would provide examples to the nation of how health IT, combined with these other innovations, might make health care more efficient and improve its quality. [4]

The Beacon Community in Cincinnati was led by the following three community organizations working in concert: HealthBridge, a health IT corporation that was the recipient of the Beacon grant; the Greater Cincinnati Health Council, whose members were leaders of local hospitals; and the Health Collaborative, an organization of multiple stakeholders focused on improving health care for the Greater Cincinnati region. The Greater Cincinnati region consisted of the city of Cincinnati and sixteen counties in Ohio and its neighboring states Kentucky and Indiana, with a total population of more than two million residents. The health care entities that participated in the Beacon Community were eighty-seven primary care practices, eighteen hospital partners, seven federally qualified health centers and community health clinics, and three insurance partners.

Awarded a grant of $13.7 million, the Beacon Community implemented an IT infrastructure for the Greater Cincinnati region. In keeping with the overall aim of the Beacon Program, the focus of the community in Cincinnati was not on technology per se but on using technology, along with quality improvement strategies, to improve care and outcomes. Hence, at least one-third of the $13.7 million was used for care improvement.

The Cincinnati Beacon Community targeted two chronic diseases: adult diabetes and pediatric asthma. Fifteen of the sixteen other Beacon programs also targeted diabetes, a disease with a high health and cost burden whose outcomes can be improved through better disease management.

This article focuses on the Cincinnati Beacon Community ’s efforts to build a technology infrastructure and demonstrate that the technology could be used to improve outcomes, with adult patients with diabetes and pediatric patients with asthma as the test cases. However, we believe the results that the Cincinnati Beacon Community achieved with regard to diabetes and asthma can be broadly applied to other diseases.

In describing the experience of the Cincinnati Beacon Community —beginning with the vision for the endeavor and continuing through the community ’s implementation —we hope that the successes and challenges we faced will help other communities make decisions about both communitywide health IT systems and care transformation.

Study Data And Methods

Ours was a qualitative study, relying on semi-structured, in-depth interviews with leaders of the Cincinnati Beacon Community and key informants from participating hospitals and community practices. This research was approved by the Western Institutional Review Board.

In the fall of 2012 we conducted thirty-eight interviews, eighteen of which were with leaders from HealthBridge, the Greater Cincinnati Health Council, and the Health Collaborative and twenty of which were with administrators and providers from the major hospital systems and practices in the Cincinnati Beacon Community, including people involved in the asthma and diabetes care efforts.

Interview questions pertained to improvement efforts and health IT infrastructure, including the vision for the Cincinnati Beacon Community, implementation of the vision and the diabetes and asthma care efforts, challenges and successes, and opinions about the future. Each interview was audio recorded and lasted approximately sixty minutes.

Study Results

The Vision Most of the people we interviewed shared a vision of transformed health care throughout the community, with health IT playing a key role in supporting the transformation.

Interviewees supported more effective and efficient organization of care, practices ’ becoming patient-centered medical homes, and improved outcomes. Interviewees said that they saw such homes as central to providing care for people with diabetes and other chronic diseases. They also saw the use of proven quality improvement strategies—such as coaching, monitoring outcomes, and sharing experiences with other practices—as crucial to improving outcomes.

One element of health IT seen as crucial for supporting patient-centered medical homes and improving outcomes was an enhanced communitywide health information exchange that would include information on patients ’ visits to the emergency department (ED) and admissions to any community hospital, as well as information from practices ’ electronic health records (EHRs). The information on hospital and ED visits would be used to create alerts notifying primary care practices when their patients were seen in any facility in the region.

Respondents also envisioned creating summary information —such as lists of patients ’ problems and medications, utilization history, results from laboratory tests, and other disease-specific information —that would follow the patient from one provider to another, so they

could better coordinate care. Such information could also be used for planning a visit to maximize the value of that visit. And respondents envisioned having communitywide registries with information contributed from various providers (both physicians and social workers) to create a complete picture of a patient.

Many interviewees felt that these technological advances would enable practices and health systems to manage their patient populations better by identifying those patients whose disease indicators (for example, blood sugar level for patients with diabetes) were outside the acceptable range. Practices could then use special interventions for those patients, such as calling them to come in for a visit, giving them educational materials, and adjusting their medications. Interviewees expected that these advances would be implemented during the life of the Cincinnati Beacon Community and remain in place after its end, when they could also be used for other diseases and conditions.

Interviewees hoped that the Cincinnati Beacon Community would establish a permanent health IT infrastructure for use in future quality improvement initiatives. The decision to use Beacon Program funds to build such an infrastructure set the direction for the Beacon Community. Some interviewees noted that the funds could have been spread across multiple hospitals and institutions instead. However, leaders of the Beacon Community believed that using the funds to develop a communitywide health IT infrastructure was the best way to achieve long-term improvement in health care quality.

Implementing The Vision During its thirty-one months the Cincinnati Beacon Community expanded and significantly improved the regional health care infrastructure, focusing on technology, quality of care, care transformation, and governance. Technological advances included improving data warehousing and registry capabilities, developing tools for performance measurement and analysis, and developing a system for alerting practices when their patients were seen in any of the hospitals or EDs in the region. Quality improvement efforts included helping practices become patient-centered medical homes and applying these heath IT advances to improving outcomes for adult patients with diabetes and pediatric patients with asthma. (For details on the infrastructure, see Appendix Exhibit A1.) [5]

To support and sustain transformation of health care in the Greater Cincinnati region beyond the period of the Beacon Community, HealthBridge, the Greater Cincinnati Health Council, and the Health Collaborative established a new governance structure with overlapping boards for these entities and created a new position: a single CEO for the three organizations.

DATA SHARING : A crucial step in establishing an administrative infrastructure for the Cincinnati Beacon Community was having participating hospitals sign data-sharing agreements to allow data to flow from the hospitals to the communitywide information exchange that would be used to trigger the sending of alerts to primary care practices when a patient visited any ED or was admitted to any hospital in the region.

Hospital executives had written letters endorsing the need for a Beacon Community in Cincinnati that were included in the grant submission. Thus, the Beacon Community 's leaders assumed that it would be easy to get hospitals to agree to share their data in the health information exchange. However, when the time came to work out the details of a data-sharing agreement, hospital privacy officers —responsible for ensuring adherence to their organization 's policies and procedures regarding patient privacy and access to patient information —raised numerous concerns about releasing their patient data to a central repository.

Beacon Community leaders contacted CEOs and other leaders of the hospitals in an attempt to move forward with the data-sharing agreements. It became apparent to the Beacon Community leaders that although the hospital CEOs understood the nature and purpose of data-sharing agreements in general, they did not understand precisely what data were to be shared or the potential advantage to hospitals and the practices they owned.

The process of procuring data-sharing agreements was more challenging than the Beacon Community leaders had expected. The agreements were not finalized for nearly ten months —almost one-third of the community 's lifetime.

HEALTH IT ADVANCES : As explained above, building a health IT infrastructure was at the heart of the Cincinnati Beacon Community. During the community 's life, the health information exchange was expanded significantly, a core IT infrastructure was put in place, and applications were created for the target populations: adult patients with diabetes and pediatric patients with asthma.

The applications included web-based and direct e-mail alerts for notifying primary care practices when patients with diabetes or asthma visited the ED or were admitted to a hospital. In addition, considerable efforts were made to manage patient populations through the establishment of registries of patients with asthma and diabetes. (For a description of the core infra-

structure put in place during the Beacon program, see Appendix Exhibit A1.) [5]

A registry was developed for patients with asthma that was highly customized. It brought information together from various sources and providers of health care and social services. The customized information in the registry included data on asthma control scores, asthma risk assessment, social risk assessment, and self-management. However, efforts to create a registry for patients with diabetes were less successful, as described in the section below on challenges.

TRANSFORMING DIABETES CARE : An important precursor to the Cincinnati Beacon Community was a project implemented by the Health Collaborative in 2007 with a grant from the Robert Wood Johnson Foundation 's Aligning Forces for Quality initiative. [6] Like the Beacon Program, the initiative focused on transforming care, fostering the development of recognized patient-centered medical homes, and improving outcomes, with a special focus in Cincinnati on improving outcomes for patients with diabetes. [7]

The practices that were part of the Cincinnati Beacon Community 's diabetes effort participated in a learning collaborative. They received instruction and coaching in the following four broad areas: becoming patient-centered medical homes, meeting federal criteria for the meaningful use of health IT, becoming more effective and efficient organizations, and using improvement science methodology to improve outcome measures for patients with diabetes. [8]

Coaches from the Health Collaborative met (in person and by phone) with physicians, nurses, and administrative staff at individual practices to deliver this instruction and coaching. The coaches also organized learning collaboratives with staff members from multiple practices to share best practices. The overall framework for improvement was based on the Institute for Healthcare Improvement 's collaborative model. [9]

Program Successes

Making The Alerts Work During the final twelve months of the Cincinnati Beacon Community, alerts were "turned on" to notify primary care practices when a patient with diabetes or pediatric asthma visited the ED or was admitted to a hospital. These alerts were a significant decision support tool and had the potential to reduce unnecessary utilization by targeting for interventions those patients who were high users of hospitals and EDs.

However, considerable resources were needed to integrate the appropriate responses to the alerts into the participating practices ' workflow. [10] For example, practices had to allocate personnel to go through the alerts, identify the patients who seemed to have the most acute needs, contact those patients and their families, ascertain the patients ' problems, and implement solutions.

In addition, "tool kits" that included outcome and process measures to be improved and strategies for improving them needed to be developed and given to individual practices. And practices needed coaching in how to use the tool kits.

Practice Transformation Providers who participated in the Cincinnati Beacon Community transformation efforts reported that their involvement in the program had led not only to their practice 's becoming a medical home but also to the transformation of the care they provided. By the end of the Cincinnati Beacon Community, all nineteen participating practices had been recognized by the National Committee for Quality Assurance as level 3 patient-centered medical homes (the highest level). [11]

Furthermore, according to our interviewees, practices had been redesigned to ensure that all staff members could take on as many and as advanced duties as their licenses permitted. This shift meant that physicians could devote more of their time to aspects of care that required a medical degree. Similarly, nurses and other staff members could become responsible for patient care tasks that previously had been performed by physicians.

Interviewees reported that as a result, their offices just "worked better," and providers and patients seemed more satisfied than in the past. Although we did not interview patients and were thus not able to assess their views, providers believed that care had markedly improved.

Objective data substantiated these beliefs. For example, measures for diabetes care extracted from medical records of the practices participating in the Beacon Community showed improvement in these practices compared with practices in the region as whole. [12] An analysis in 2010–11—midway through the community 's life—of publicly reported data showed that a diabetes composite measure score had improved by 32 percent for practices in the Beacon Community, compared to an 11 percent improvement for local practices that were not part of the community. [12]

Most interviewees not only believed that the care their practices provided had been transformed; they also were confident that they could sustain the improvements. Interviewees noted that whole practices had been involved in the changes and, as a result, were invested in sustaining them.

Implementation Challenges

Some of the most vexing implementation challenges confronted by participants in the Cincinnati Beacon Community stemmed from limitations of EHR technology. Other challenges included the program 's ambitious plans; its short time frame; and the inevitable delays in designing, testing, and implementing the health IT infrastructure. Most practices and hospitals had implemented and were using EHR systems at the time of our interviews. However, most of the remaining challenges that interviewees identified were related to limitations in these systems.

EHR Limitations Interviewees cited difficulties in recording relevant data, saying that it took "twenty clicks " to get to the proper field in the record. They also noted that recording information in the EHR took considerably longer than doing so on paper. And they noted that at least in the case of patients with diabetes, EHRs were not able to bring together data that would help the practice prepare for a patient 's visit. For example, practice staff members were not able to generate lists of patients coming in on a given day who had elevated blood sugar levels. This meant that it was not possible before the visit to investigate these patients ' histories and decide what interventions and educational materials from an online library might be appropriate for them.

Summary Patient Record Abandoned An essential aspect of the vision for the Cincinnati Beacon Community was the ability to share data across health care settings. End users were particularly eager to have summary patient records, which would follow patients from the hospital to ambulatory care settings and elsewhere. One interviewee emphasized that "having a truly sharable patient summary record across the community would be a real driver for improvement. "

Initially, it seemed that data from EHRs could be extracted for such a summary patient record, based on the proposed meaningful-use criteria for EHR systems.[13] However, it became clear that even systems that met the criteria had limited capability to produce, send, and receive summary records as structured, usable data. Interviewees attributed the problems to the state of EHR technology. Plans for developing a summary patient record during the life of the Cincinnati Beacon Community therefore had to be abandoned.

Difficulties With Patient Registries Another challenge cited by almost all of the providers and administrators was the difficulty of extracting data from EHRs for population management. Providers were unable to use their EHR systems to identify patients with diabetes and then ascertain, for example, how many of the patients had their blood sugar level under control. Thus, providers were not able to electronically extract the outcome measures for diabetes care for their entire population of patients with diabetes. Instead, they selected a sample of patients each month, reviewed those patients ' charts, and reported their outcomes manually on a spreadsheet.

The Cincinnati Beacon Community had originally planned to have a communitywide registry populated with data from individual EHRs so that providers could track patients ' progress, no matter where they received care. However, the reality of EHR technology fell far short of the community 's goals. EHR systems were not able to receive and export data; nor —for the most part—were they able to monitor outcomes for specific diseases.

By the end of the Cincinnati Beacon Community, no communitywide registry was in place for patients with diabetes. However, thanks to a great deal of effort devoted to customization across provider groups, a registry was created for patients with pediatric asthma. Because of the time required for the complex customization, full testing of the registry did not occur until after the Beacon grant had ended.

Despite the problems involved in developing a communitywide registry, hospitals still needed to be able to view data on a population (of patients with diabetes or asthma, for example), ascertain the status of selected outcomes (blood sugar levels for patients with diabetes, for example), and intervene if necessary. To fill the gap created by the lack of a communitywide registry, some of the region 's major hospital systems purchased their own registry systems or upgraded their existing capabilities for warehousing data. (For a description of the EHRs and registries of the participating health systems, see Appendix Exhibit A2.)[5]

Ambitious Plans, Tight Timelines, And Changing Market Conditions The funding for the Cincinnati Beacon Community was awarded in September 2010, as part of the second round of awards by the Beacon Program. All Beacon grantees were given a firm end date for their grants of March 31, 2013. Thus, the Cincinnati Beacon Community had only thirty-one months to complete its development and implementation work, whereas communities that were awarded grants in the first round had thirty-six months.

In addition, the Cincinnati Beacon Community encountered delays because the major hospital systems that participated in the community were coping with changes in the health care marketplace as well as making significant investments in health IT on their own, including EHR upgrades. Thus, they sometimes had difficulty pro-

viding the level of attention and resources needed for the Beacon work. The resulting delays, although inevitable, meant that the schedule for the introduction of key products, such as registries, was continually adjusted. The asthma registry was not fully implemented until late in the Beacon program, and some of the registries of patients with diabetes were not implemented at all, to the widespread disappointment of end users.

Discussion

The broad vision for the Cincinnati Beacon Community was to develop a technology infrastructure that could be applied to care improvement initiatives for many conditions across multiple settings in the future. Care transformation was also part of the vision, with a key objective of the Beacon Community being that practices would become patient-centered medical homes.

The successes and challenges experienced by the Cincinnati Beacon Community have yielded important lessons that will inform other communities embarking on a path similar to the Beacon Communities. Of note, some of these challenges will require resolution at the federal level, as discussed later.

One important lesson resulted from the mismatch between the time necessary to implement a project of this size and the thirty-one-month grant period. The time frame for the Beacon Program was driven by the deadline for spending money appropriated by the American Recovery and Reinvestment Act of 2009, which was the source of the Beacon funds.

The Cincinnati Beacon Community chose to build a robust communitywide infrastructure instead of something more localized that could have been completed more quickly. Much of the envisioned infrastructure was built before the end of the Beacon Program, but implementation occurred later than originally planned. As a result, the technology 's effect on care improvement was not seen until after the program ended.

This delay created challenges on at least two fronts. Not only was there a reduced opportunity to use the infrastructure to improve the quality of care, but end users were also disappointed. The lesson here is that implementation delays should be expected, especially when extensive development is needed, and, as a result, schedules should be developed that anticipate delays.

Another lesson is that significant time and funding need to be allowed for integrating technology into quality improvement activities, in addition to what is needed to develop and implement the technology. With respect to the alerts that notified practices that their patients had visited the ED or been admitted to a hospital, for example, quality improvement protocols, tool kits, and coaching were needed to support practices in identifying, prioritizing, and reaching out to the patients with diabetes or pediatric asthma who were the subjects of the alerts.

> The future of care transformation depends on the ability to sustain the transformation within practices and to expand it beyond them.

Although the Cincinnati Beacon Community had some major accomplishments, it was unable to overcome a number of challenges. The most important of these was the limitations of EHR technology.

The difficulties cited by providers in using and extracting data from EHRs are sobering. Additional training when an EHR system is implemented might help, but the problems cannot be solved by training alone. For example, there were problems exporting and importing patient summary records, and it was extremely difficult to extract data for population management.

The Office of the National Coordinator for Health Information Technology, which funded the Beacon Program, has already strengthened the meaningful-use criteria that vendors must meet.[14] It remains to be seen how long it will take vendors to upgrade their EHR systems and what problems will remain. The meaningful-use criteria may need to be more specific about what interoperability and reporting features vendors must include.

In spite of the problems with EHR systems that meant that technology was not able to support quality improvement to the extent envisioned, progress was made in the area of care transformation. For example, all of the practices that participated in the Cincinnati Beacon Community were recognized as patient-centered medical homes. Interviewees from these practices said that they believed the changes they had made to become medical homes were sustainable. They

cited steps they had taken to recruit and train new staff members so that the whole practice would follow the principles of patient-centered medical homes.

Conclusion

The future of care transformation in a community or health system through interventions such as the one described here depends on the ability to sustain the transformation within practices and to expand it beyond them. Technology and quality improvement are essential ingredients in such transformations, and payment reform is also needed to provide the incentives for improvement.

This final ingredient has recently been added in Cincinnati. One health system, which was part of the Cincinnati Beacon Community, has been approved as an accountable care organization.[15] Leaders in this organization expect that the practice-level improvements achieved as part of the Cincinnati Beacon Community (including the transformation of practices into medical homes) can be applied to all practices in the accountable care organization and will result in the improved outcomes and lower costs that the accountable care organization is trying to achieve. Furthermore, the Dayton–Cincinnati–Northern Kentucky market was recently selected to participate in the Center for Medicare and Medicaid Innovation's Comprehensive Primary Care Initiative to pilot a payment reform model.[16]

Both the accountable care organization and the Comprehensive Primary Care Initiative support care coordination and ultimately will reward improvements in outcomes. With payment reform added to the technology enhancements and care transformation that occurred as part of the Cincinnati Beacon Community, the components are in place for broader, sustainable care transformation.

The authors thank the Cincinnati Beacon Program participants involved in this research and Patricia Bondurant, Trudi Matthews, Sara Bolton, Barbara Tobias, Brian McCloy, Gina Hemmingway, Carl Donisi, Gerry Pandzik, Hadley Sauers, and other members of HealthBridge, the Health Collaborative, and the Greater Cincinnati Health Council. The research reported here was supported by a Beacon Community grant to Cincinnati, Ohio (Grant No. 90BC00116/01), funded by the Department of Health and Human Services, Office of the National Coordinator for Health Information Technology.

NOTES

1 Blumenthal D. Launching HITECH. N Engl J Med. 2010;362(5):382–5.
2 McKethan A, Brammer C, Fatemi P, Kim M, Kirtane J, Kunzman J, et al. An early status report on the Beacon Communities' plans for transformation via health information technology. Health Aff (Millwood). 2011; 30(4):782–8.
3 McKethan A, Brammer C. Uniting the tribes of health system improvement. Am J Manag Care. 2010;16(12 Suppl HIT):SP13–8.
4 Maxson ER, Jain SH, McKethan AN, Brammer C, Buntin MB, Cronin K, et al. Beacon Communities aim to use health information technology to transform the delivery of care. Health Aff (Millwood). 2010;29(9): 1671–7.
5 To access the Appendix, click on the Appendix link in the box to the right of the article online.
6 Painter MW, Lavizzo-Mourey R. Aligning Forces for Quality: a program to improve health and health care in communities across the United States. Health Aff (Millwood). 2008;27(5):1461–3.
7 Scanlon DP, Beich J, Alexander JA, Christianson JB, Hasnain-Wynia R, McHugh MC, et al. The Aligning Forces for Quality initiative: background and evolution from 2005 to 2012. Am J Manag Care. 2012; 18(6 Suppl):s115–25.
8 Langley GJ, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. The improvement guide: a practical approach to enhancing organizational performance. 2nd ed. San Francisco (CA): Jossey-Bass; 2009.
9 Institute for Healthcare Improvement. The breakthrough series: IHI's collaborative model for achieving breakthrough improvement. Boston (MA): IHI; 2003.
10 Trudnak T, Mansour M, Mandel K, Sausers H, Pandzik G, Donisi C, et al. A case study of pediatric asthma alerts from the Beacon Community Program in Cincinnati: technology is just the first step. eGEMS. [Forthcoming].
11 National Committee for Quality Assurance. Patient-Centered Medical Home Recognition [Internet]. Washington (DC): NCQA; [cited 2014 Jan 28]. Available from: http://www.ncqa.org/Programs/Recognition/PatientCenteredMedicalHomePCMH.aspx
12 Health Collaborative. Your health matters [home page on the Internet]. Cincinnati (OH): Health Collaborative; [cited 2014 Jan 28]. Available from: http://www.yourhealthmatters.org
13 Department of Health and Human Services. Health information technology: initial set of standards, implementation specifications, and certification criteria for electronic health record technology. Interim final rule. Fed Regist. 2010;75(8): 2013–47.
14 Department of Health and Human Services. Health information technology: standards, implementation specifications, and certification criteria for electronic health record technology, 2014 edition; revisions to the permanent certification program for health information technology. Final rule. Fed Regist. 2012; 77(171):54163–292.
15 Mercy Health. Accountable care organization [Internet]. Cincinnati (OH): Mercy Health; [cited 2014 Feb 4]. Available from: http://www.e-mercy.com/accoun tabl-care-organization.aspx
16 Center for Medicare and Medicaid Innovation. Comprehensive primary care initiative: Ohio and Kentucky: Cincinnati-Dayton Region [Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; [cited 2014 Feb 4]. Available from: http://innovation.cms.gov/initiatives/Comprehensive-Primary-Care-Initiative/Ohio-Kentucky.html

doi: 10.1377/hlthaff.2012.1199

By Marie Lynn Miranda, Jeffrey Ferranti, Benjamin Strauss, Brian Neelon, and Robert M. Califf

doi: 10.1377/hlthaff.2012.1199
HEALTH AFFAIRS 32,
NO. 9 (2013): 1608–1615

Geographic Health Information Systems: A Platform To Support The 'Triple Aim'

Marie Lynn Miranda (mlmirand@umich.edu) is dean of and a professor in the School of Natural Resources and Environment and is a professor in the Department of Pediatrics, University of Michigan, in Ann Arbor.

Jeffrey Ferranti is the chief medical information officer and vice president for clinical informatics, and an assistant professor in newborn critical care, at Duke University Medical Center, in Durham, North Carolina.

Benjamin Strauss is an associate in research at the Nicholas School of the Environment, Duke University.

Brian Neelon is a statistician at the Nicholas School of the Environment, Duke University.

Robert M. Califf is vice chancellor for clinical and translational research and a professor of medicine in the Division of Cardiology, Duke University Medical Center.

ABSTRACT Despite the rapid growth of electronic health data, most data systems do not connect individual patient records to data sets from outside the health care delivery system. These isolated data systems cannot support efforts to recognize or address how the physical and environmental context of each patient influences health choices and health outcomes. In this article we describe how a geographic health information system in Durham, North Carolina, links health system and social and environmental data via shared geography to provide a multidimensional understanding of individual and community health status and vulnerabilities. Geographic health information systems can be useful in supporting the Institute for Healthcare Improvement 's Triple Aim Initiative to improve the experience of care, improve the health of populations, and reduce per capita costs of health care. A geographic health information system can also provide a comprehensive information base for community health assessment and intervention for accountable care that includes the entire population of a geographic area.

Donald Berwick and colleagues' influential 2008 Health Affairs article, "The Triple Aim: Care, Health, and Cost," describes a conceptual framework developed by the Institute for Healthcare Improvement for improving the US health care system. [1] In the Triple Aim, the institute has identified three aims that must be simultaneously pursued: improve the experience of care, improve the health of populations, and reduce per capita costs of health care. In this article we introduce and describe information technology designed to support health systems and communities in achieving the Triple Aim. We demonstrate how this technology can be used to assess the health of a community and to deploy resources to integrate community and health care delivery system resources to improve population health. We describe three contemporary applications: a public health intervention strategy to prevent childhood lead exposure; a health services application to better manage patient flow to emergency departments (EDs); and a clinical population health application designed to care for people with diabetes at the individual, neighborhood, and county levels.

The Triple Aim has been used by a number of health systems as a conceptual framework for designing health system improvement programs. [2–4] The abundant electronic health data that are accumulating are highly relevant to managing population health and developing new insights. [5] Until recently, however, these data have been dispersed across many locations, with little integration. [6,7] As integrated health systems are becoming more widespread, these data are being organized and stored within enterprise data warehouses, where they link clinical, laboratory, patient history, and prescription data. [8]

To make sense of the health records data, a number of challenging hurdles must be over-

come (for example, interoperability, incompatibility, and unstructured data).[9,10] Even if these obstacles are overcome, the underlying data systems often lack analytical tools that connect individual patient records to disparate data sets from outside the health care delivery information system.[11] As a result, they fail to address how individual patients' social and environmental contexts may influence health outcomes, or how evidence of these connections could be used in the broader context of population health and illness.

Health information systems typically contain information about patients and their clinical status (including medications, diagnoses, labs, and clinical documentation). Geographic health information systems (GHIS) integrate patient databases with census data and other information on where patients live, where they receive their care, the availability of community resources, and other characteristics of their communities.[12]

The key to such geographic or spatial analysis is that most data sets contain a variable that can be tied to a specific location, such as a state, county, ZIP code area, census block, or single address. Geographic analysis enables users to explore and overlay data by location. Additionally, adding geography to a large-scale health information system allows for an alternative method of linking data both from within and outside the system, providing a richer basis for analyzing and understanding patients' choices and outcomes. Geographic health information systems also support the generation of clear and accessible maps and data reports that can be used to inform health management, community outreach, and policy design.

Constructing A Geographic Health Information System

Data Systems The geographic health information system described in this article is specific to Durham County, North Carolina. The system was constructed collaboratively among researchers and health system information systems personnel at Duke University and the University of Michigan, local and state public health agencies, and community stakeholders. It took three years of negotiations and relationship building to establish the trust needed for stakeholders to share the data required to build the system.

The system is maintained and operated by Duke Health Technology Solutions, the clinical informatics infrastructure of the Duke University Health System. It includes data from multiple local and national information sources. Individual patient data come from the Duke University Health System, a multihospital, multiclinic system with two hospitals in Durham County that cares for most of the county's population. Birth and death records were obtained from the State of North Carolina's Office of Vital Records. Also included are US census demographic data; county tax-parcel data; crime and housing quality data; environmental exposure and quality data; and health care, social, and community resources data.

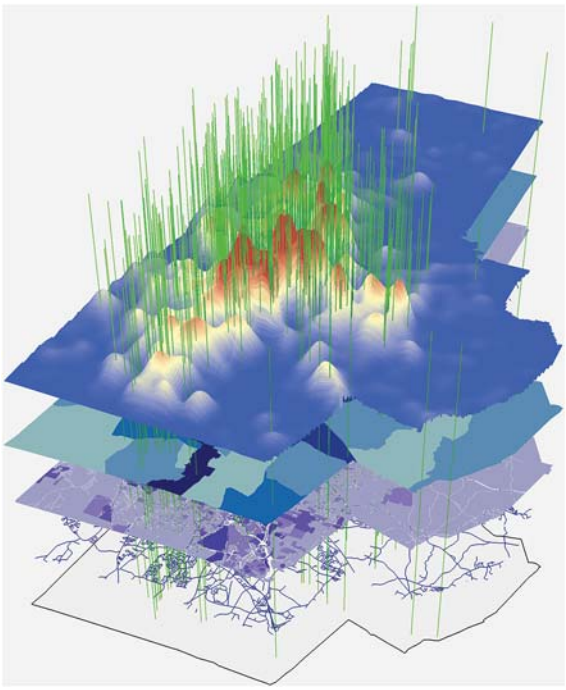
The GHIS is continually refreshed with updated data and with the addition of new data layers as they are built or become available. Access to the systems' capabilities and data is provided to specific participating users. For example, Duke University Health System physicians who would normally have access to patients' medical records through an institutional electronic health record system can access all of the medical record data in the GHIS—as well as the social and environmental data, which, unlike patients' medical record data, are not privacy protected. Public health professionals can access aggregated data in the system for their purposes without breaching patient confidentiality.

Exhibit 1 depicts the terrain of diabetes for Durham County and illustrates the relationships we are building across the major data domains, with clinical, billing, cost, environmental, demographic, community resources, birth record, and death record data all linked via shared geography. The top layer's simulated peaks, colored red, depict the county's highest concentrations of diabetes patients. The next layer down, in shades of blue, represents census block groups shaded to reflect the percentage of households headed by a single female parent—an indicator of socioeconomic status. Below that, another layer, this one in shades of purple, depicts individual tax-parcel boundaries shaded according to the assessed value of the parcel—another indicator of economic status. The bottom layer maps the county boundary and streets. The vertical green spines represent the latitude and longitude coordinates of where diabetes patients live and locations of key social or commercial institutions, such as churches or pharmacies, that can be used to link all of these disparate data sets together based on shared geography.

Patient Data The patient data include all patients using the Duke University Health System. Duke's enterprise data warehouse, also known as the Decision Support Repository (DSR), has been in existence for more than a decade. Originally built for financial analysis and health system planning purposes, the DSR holds sixteen years of patient, diagnosis, and procedure data gathered from billing systems. Clinical data have been added, and the DSR now includes

Exhibit 1

Example Of Geographic Health Information Systems (GHIS) For Mapping The Terrain Of Diabetes In Durham County, North Carolina



SOURCE Duke Health Technology Solutions Decision Support Repository (DSR), using information on boundaries and streets layers from the US Census Bureau Geography Division, census 2010; and tax-parcel data from the Durham County Tax Assessor. NOTE The elements of this GHIS map are explained thoroughly in the text.

laboratory results, computerized physician order entries, medication order and fulfillment data, patient allergy data, data from perioperative systems, data on vital signs, patient home address and other encounter data, and a variety of safety information including adverse drug event surveillance information.

It is recognized that billing codes are suboptimal for identifying clinical phenotypes or diagnoses. The DSR is progressively being populated by standardized clinical data vetted by a health system governance group. This group consists of health system leaders, researchers with analytical skills, and academic leaders. All members participate in planning and resource allocation and in resolving issues concerning access to data.[13] Researchers have used these data in numerous studies with Institutional Review Board approval, quality improvement initiatives, extension programs, and regulatory reports.

As an example of how the DSR can be leveraged, we constructed a data set of all patient records in the DSR from January 1, 2007, to December 31, 2009, from ZIP codes that lie in whole or in part in Durham County. This database includes demographic, medical, administrative, and laboratory data on the patients. From these data, we identified some 216,000 unique individuals residing in Durham County, corresponding to roughly 80 percent of the total county population. The average patient visited Duke University Health System facilities or providers a dozen times during the three-year period, which indicates that most of these patients were frequent users of the health system. Having such a high percentage of the county population captured in a single database enables a true community health assessment, in which most individuals are accounted for, instead of a representative sample. The DSR also supports those making decisions about deploying resources to improve population health, unbiased by adverse selection.[14]

Spatially Referencing The DSR We used the geographic information systems software ArcGIS to place all patients on the map of Durham County by matching residential addresses with addresses from the county tax assessor's office (a process called "parcel geocoding"). This contrasts with the typical public health approach where data are most commonly geocoded to the county, ZIP code, or census tract areal scale. Our approach allows us to link the patient data to a variety of other databases (see below). We successfully mapped the residential addresses of roughly 95 percent of Durham County patients, which is considered a very high proportion in most spatial analyses of health data.

Patient Context Data In addition to the DSR patient data, our spatial data architecture includes demographic data tables from the 1990, 2000, and 2010 US censuses; and birth and death records for Durham County, linked to patient records where possible. Also included are electronic city directories for businesses, institutions, and community resources; county tax assessor data for information on age of housing, zoning codes, land use codes, date remodeled (if any), building class or type, owner address, physical address, owner (versus renter) occupancy, heating/cooling system, and assessed tax value; and public transportation routes. Data on environmental exposures (for example, air pollution data) and community characteristics—such as recreational facilities, green spaces, sidewalks, day care centers, physicians' offices, schools, libraries, athletic programs, religious institutions, traffic patterns, crime, abandoned housing, housing code enforcement actions, and manufacturing facilities —are also part of the system. These additional data layers were developed over the course of several years as project needs evolved. We are rapidly developing the equivalent layers in three additional counties

in the southern United States with the help of a Center for Medicare and Medicaid Innovation grant.

Applying GHIS To Support The Triple Aim

The geographic health information system can be leveraged to support projects focused on achieving the Triple Aim. Here we present three examples from Durham County. Each application uses different subsets of the data embedded in the larger GHIS.

Childhood Lead Exposure As an example of a GHIS public health application, Exhibit 2 presents a sample map from a Durham County project focused on reducing childhood lead exposure. This project created a map that models household-level childhood lead exposure risk levels using a combination of county tax assessor data, blood lead screening data from clinic visits, and census data. This project required only non-DSR data to accomplish its goals. The map uses spatial analysis to categorize lead risk levels at the individual tax-parcel level. The model was validated by conducting in-home environmental sampling. [15]

Exhibit 2 depicts the priority categories for residences in Durham. Dark blue represents priority 1 (highest risk) parcels, predicted to be most likely to contain lead paint hazards. Priority 2 and 3 parcels are colored medium and light green, respectively, and are less likely to contain lead paint hazards. Priority 4 (lowest risk) parcels are light yellow and least likely to contain lead paint hazards.

This project was developed in the early 2000s through collaboration with health care providers, community groups, and local and state agencies. Usefulness to key stakeholders was a critical component in the development of the lead exposure risk model. The Durham County Health Department and community advocacy groups quickly adopted the model for their purposes. In 2003 the health department revised its lead exposure screening strategy to take advantage of the model. Previously the department had used the standard lead exposure screening tool from the Centers for Disease Control and Prevention. [16]

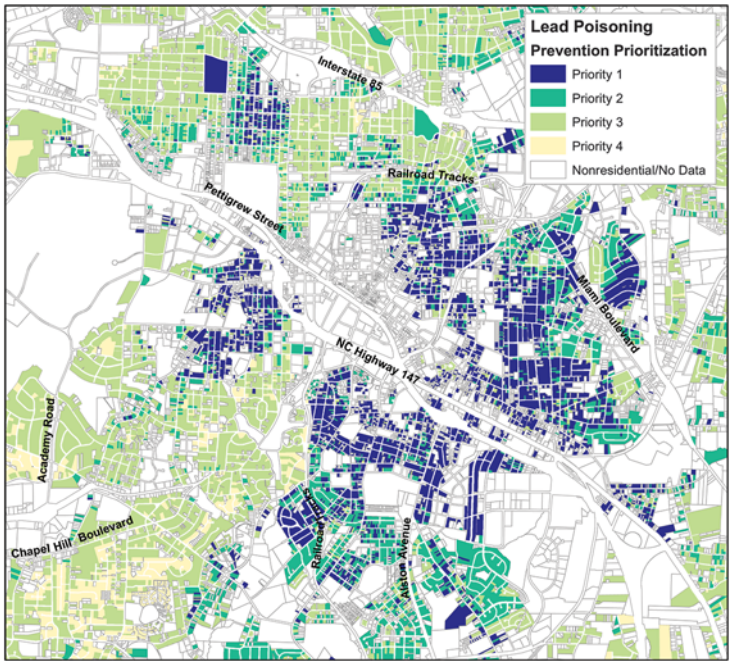
The health department credits the model with contributing to a 600 percent increase in its capture rate of elevated blood lead levels in children, without a cost increase. It also uses the model to monitor progress in eliminating childhood lead exposure and to reach out preventively to new mothers who reside in homes at high risk for lead exposure. In addition, it proactively holds screening clinics in neighborhoods with a significant concentration of housing at high risk for lead exposure.

Community groups have also conducted door-to-door campaigns focusing on the model 's priority 1 houses in a given geographic area. The county 's housing department has used the model to prioritize the expenditure of housing rehabilitation funds. Widespread public dissemination of resources based on the model has transformed lead screening from a public health strategy in which families were passive recipients to one in which families living in housing at high risk for lead exposure are partners, armed with information that prompts them to ask their health care providers to screen their children for lead —and to advocate for improving housing quality. These resources included summaries of state-of-the-art knowledge of the impacts of low-level lead exposure and clinical recommendations from the Centers for Disease Control and Prevention. [17]

The use of this model improved family interactions with the county health department and clinics, and it protected more children from lead exposure. Perhaps most important, it allowed families to advocate for their children using a model that was widely embraced across the county.

Exhibit 2

Childhood Lead Exposure Risk Model For Durham, North Carolina



SOURCE Modeled lead exposure risk based on lead screening data provided by North Carolina Division of Public Health, Children's Environmental Health Branch; and demographic data from the 2000 US census. NOTE The elements of this geographic health information system (GHIS) map are explained thoroughly in the text.

Emergency Department Use Visits to hospital EDs have been rising steadily in the United States. Between 1997 and 2007 ED visits rose to 125 million visits annually —a 23 percent increase.[18] Many of these visits could have been prevented with treatment in lower-cost, and arguably more effective, non-ED settings.[19,20] Mirroring national trends, visits to the two hospital-based EDs in Durham County increased 33.8 percent from 2000 to 2010. Understanding the key drivers and spatial patterns of ED usage can improve the experience of care by directing patients to more appropriate settings or getting them into care before an emergency arises, and it can reduce per capita costs of health care —two of the three Triple Aim components.

To that end, we employed the GHIS to examine the association between patient and census block group characteristics and ED usage. We generated predicted probabilities of at least one ED visit in the past year, by race and insurance status, and for nonsmoking males ages 30–39. The predicted probabilities were generated by fitting mixed-effects logistic regression models that included patient-level predictors (age, race, sex, and insurance and smoking status); block group characteristics (age, race, sex, and education composition of the block group; percentage with below-poverty incomes; and percentage owner occupancy); and random intercepts for each block group.[21] Maps were created using a manual six-class classification to display the four populations on the same scale.

As the maps in the online Appendix indicate,[22] the lowest rates of ED use were among white, privately insured patients (upper left panel), and the highest rates were among African Americans without private insurance (lower right panel) (see Appendix Exhibit 1). These results were confirmed by generalized estimating equation models, which indicated that African Americans have 1.55 (95% confidence interval: 1.46, 1.65) times higher odds of one or more ED visits per year compared to whites. The models also indicate that patients without private insurance have 3.61 (95% CI: 3.47, 3.75) higher odds of at least one visit annually compared to those with private insurance. In addition, all four maps in the online Appendix show clear clustering of ED use in neighborhoods in the central part of the county (see Appendix Exhibit 1). In these areas, whites with private insurance, who typically have the lowest chances of going to the ED, have higher ED use rates than whites with private insurance in other areas.

Our next step is to identify what brought patients to the ED and identify how many of these visits might have been avoided with better access to primary care. We are now working with Duke University Health System leaders —in the ED, primary care, and departments that provide specialty care for disease endpoints often associated with ED visits —to consider the implications of this work for redesigning the delivery of key health services in these geographic hot spots.

These maps may be useful for the formation of partnerships among health care providers, families, and neighborhoods to create effective alternatives to the use of hospital-based EDs for primary care, and the underlying data provide a comprehensive picture of the community used in the Duke University Health System 's community needs assessment. A macrosystem redesign should provide better health outcomes by enabling earlier access to appropriate facilities in the neighborhood, thereby preempting clinical deterioration in a more efficient, lower-cost alternative setting and allowing EDs to focus on critically ill and injured patients.

Managing Diabetes At The Individual And Population Levels According to 2011 figures, 18.8 million children and adults in the United States—roughly 6.0 percent of the total population —have diabetes.[23] Estimates suggest that 7.0 million people are undiagnosed, making the true population burden more on the order of 8.3 percent.[23] According to the North Carolina State Center for Health Statistics, roughly 7 percent of adults in Durham County stated in 2010 that they had been told by a doctor that they have diabetes.[24] This contrasts with a 12.2 percent figure based on clinical indicators available within the DSR.

Using the standardized 2007 –09 DSR data for Durham County described above, we identified 14,345 unique adult patients with an International Classification of Diseases, Ninth Revision (ICD-9), diagnosis code of diabetes mellitus within the patient data warehouse. We mapped these patients by, among other things, their residence and their level of hemoglobin A1c (HbA1c) monitoring and control. Exhibits in the online Appendix[22] display the percentage of patients using the Duke University Health System with diabetes, the percentage of patients with diabetes for whom no HbA1c laboratory result was available, and the percentage of patients with diabetes whose HbA1c laboratory result was out of goal range (>7) (see Appendix Exhibit 2). Although some of these patients may have had their HbA1c checked at a non-Duke facility, these patients had an average of more than a dozen encounters with Duke providers per year.

The maps and analysis we produced are being used by a collaborative consisting of the Duke University Health System, University of Michigan, and Durham County Health Depart-

ment to support the development and implementation of new individual and community-based diabetes intervention programs, funded by the Bristol-Myers Squibb Foundation. The approach is being replicated in Mingo County, West Virginia; Quitman County, Mississippi; and Cabarrus County, North Carolina, through a major Center for Medicare and Medicaid Innovation Health Care Innovations Challenges grant.

Community health workers are using the GHIS to create individualized diabetes management plans based on patients ' neighborhood contexts. GHIS applications in each of the four counties also support continuous individual, neighborhood, and community monitoring and evaluation of the impact of interventions. A modest improvement in the management of diabetes in the highest-risk patients would indicate that significant savings could be achieved while also improving outcomes.

The GHIS is especially potent in identifying pockets of individuals at very high risk for diabetes, where an intense investment of health care and social services could produce substantial improvement among those projected to have the most complications, as has been demonstrated in a similar effort in Camden, New Jersey. The Camden Coalition of Healthcare Providers has mapped a citywide health database and uses this information to target high-needs patients and develop neighborhood-based diabetes education programs. [25] Thus, the combination of an intervention with community engagement, information system–based risk assessment, and use of the system to follow progress to enable continuous quality improvement offers promise for achieving the Triple Aim.

Discussion

There is growing recognition that fragmentation of care is a key factor in the poor health status of many Americans. Reducing or even eliminating fragmented care has been a central driver in the recent evolution of integrated health systems and accountable care organizations. As the Accountable Care Act's implementation continues, organized delivery systems will assume accountability for population health manifested by community health assessments and accountability plans. Improving population health will require the use of comprehensive geographic systems to prevent delivery systems from employing adverse selection to make their metrics appear improved, leaving out neighborhoods or individuals at high risk.

The visualization capabilities made available through GHIS add an important tool for understanding and addressing critical issues in health care. In addition, since many health systems are in the midst of developing fully functional enterprise data warehouses, incorporating a GHIS into the development process is timely in terms of both data architecture and system costs.

Challenges Remaining Challenges remain on many levels. For most of the United States, the primary challenge is the fragmented and unstructured data that populate electronic health records. The Duke University Health System 's data warehouse represents more than a decade of intensive efforts to develop a systemwide approach in which clinical, financial, and operational data are captured and curated to provide a structured data set that can be used for health care system operations, financial analysis, quality improvement, and clinical care.

Because of the unusual combination of the presence of a dominant health system in a single county and that system 's long history of collaboration with the public health department and federally qualified health center (the other major provider in the county), our system does not have to overcome the fragmentation characteristic of much of American health care. In our Health Care Innovations Challenges grant project, we are finding that issues related to fragmentation are not severe in rural counties, but they do constitute a major obstacle in urban areas, where competition among health care providers leads to difficulty in developing common data standards and to reluctance to share highly detailed data.

Using GHIS Data As data standards develop, additional hurdles will need to be overcome. For example, how can individual patients access and use the GHIS data? The concept of the use of an electronic health record by patients and families is just now evolving. In each of our examples, the spatial dimension enables strategic implementation of interventions at the level of the individual.

PATIENTS AND PROVIDERS : A map or risk algorithm score shared by a provider and a parent could motivate a family in a high-risk home to seek lead screening; a person with an acute illness could seek care at a convenient neighborhood urgent care facility; and a person with diabetes could track how his or her activity logs and food diaries correspond with blood sugar or blood pressure goals. While better navigation and information provide the substrate, more-sophisticated interactions with providers and systematic environmental improvement initiatives will be needed to produce a major change in health outcomes.

NEIGHBORHOODS : At the neighborhood level, meetings between health system leaders and communities could be enabled by sharing

maps that "tell the story" of the health status and resources of the neighborhood compared with others in the county. The integration of graphic information in neighborhood meetings would allow community groups to visualize key issues and advocate for needed resources and services with government agencies and local businesses, while also working within the neighborhood to solve problems. A neighborhood with a high density of high-risk housing could advocate for housing code inspections and housing upgrades; a neighborhood with excessive use of hospital-based emergency care could work with the local hospital and health system to get a local urgent care facility; and a neighborhood with high rates of poorly controlled diabetes could call on the city or county government for appropriate access to safe places to exercise and improved grocery stores.

HEALTH PLANNERS: The combination of data and images of the data has also been instrumental in guiding the deployment of outpatient facilities in Durham County over the past several years, particularly the joint planning by the public health system, the federally qualified health center, and the Duke University Health System in placing clinics in strategic locations to optimize care access in disadvantaged neighborhoods with a high concentration of poor health outcomes.

At the county level, the ability to redesign systems using macrosystem data that are constantly updated is clear in all three cases. The equal application of resources for people and neighborhoods with very high and very low levels of appropriate self-care (low-risk housing, low use of emergency facilities, and well-controlled HbA1c) is wasteful, whereas focusing resources in areas of high risk is much more cost-effective.

Achieving The Goals Of The Triple Aim The spatially based organization and visualization provided by a GHIS can support progress toward all three elements of the Triple Aim. Partnerships between the health system and community would be enhanced by the ability to jointly view data displays on the key issues in the environment that may be affecting their health. Such data architectures could allow providers and patients to view, analyze, and interact with large and complex data sets through familiar map interfaces. For providers, the addition of spatially based applications could be used to understand patients more effectively within the context of their local environments. Providers, both individual and the health system as a whole, could use GHIS applications to identify gaps in care and to monitor specific health endpoints.

Patients could benefit from data and analysis that allowed them to advocate for healthful communities. If the spatial data architecture were married to the web-based patient interfaces being developed by many health systems, patients could better manage their health between visits by exchanging health data with their physicians and other health care staff (such as nurse educators, social workers, and nutritionists), who could in turn provide updated recommendations and information. This content might, for example, include maps depicting local walking trails, pharmacies, grocery stores, and the locations of health-related community events.

Redesign of the health care delivery system is facilitated by the GHIS. Given the comprehensive nature of the data, especially as we incorporate data from the federally qualified health center, population trends at the county level can be followed continuously without concern for adverse selection. GHIS can also be used to more effectively describe, longitudinally follow, and promote patients' interaction with health services.

Limitations Although the strengths of GHIS are significant, it is worth noting some important limitations. First, the use of most of these systems will be maximized only if all local health providers are willing and technologically prepared to participate in the hard work of developing an operational health information exchange. In the prototype described in this article, extensive meetings and negotiations have occurred between the health system and the local federally qualified health center, and data from the latter are only now becoming available. Second, some of the available advanced applications of a GHIS require knowledge of spatial statistics. However, we note that many helpful applications do not require any advanced knowledge of statistics.

Third, in presenting any maps or other visualizations from the GHIS in public settings, care must be taken to ensure that no protected information is presented. Providers and researchers are accustomed to thinking about protecting medical record data, but specialized training in confidentiality considerations in map graphics is necessary. Finally, achieving GHIS upgrades from a standard electronic health record will require enthusiasm and commitment from health system leaders.

Conclusion

The geographic health information system we describe demonstrates a scalable and replicable approach for integrating clinical and geospatial data for research, public health, health services, and clinical applications. It supports work to monitor population health, develop new care models, improve priority setting and decision making, and tailor public health interventions.

By integrating multiple components into a comprehensive system, GHIS and associated analytical applications offer innovative strategies that can facilitate progress toward achieving the Triple Aim and, in so doing, can fundamentally change how health systems address the health needs of their communities.

This research was made possible by grants from the Centers for Medicare and Medicaid Services (1C1CMS331018-01-00); the Bristol-Myers Squibb Foundation; and the National Center for Research Resources (UL1RR024128), a component of the National Institutes of Health (NIH) and the NIH Roadmap for Medical Research. The article's contents are solely the responsibility of the authors and do not necessarily represent the official view of any of the funding agencies.

NOTES

1 Berwick DM, Nolan TW, Whittington J. The Triple Aim: care, health, and cost. Health Aff (Millwood). 2008; 27(3):759–69.
2 Klein S, McCarthy D. Genesys HealthWorks: pursuing the Triple Aim through a primary care–based delivery system, integrated self-management support, and community partnerships. New York (NY): Commonwealth Fund; 2010 Jul 1. p. 49.
3 Hester J Jr. Designing Vermont's pay-for-population health system. Prev Chronic Dis. 2010;7(6):A122.
4 Fisher ES, Berwick DM, Davis K. Achieving health care reform—how physicians can help. N Engl J Med. 2009;360(24):2495–7.
5 Mayer-Schonberger V, Cukier K. Big data: a revolution that will transform how we live, work, and think. New York (NY): Eamon Dolan/Houghton Mifflin Harcourt; 2013.
6 Mathews SC, Pronovost PJ. The need for systems integration in health care. JAMA. 2011;305(9):934–5.
7 Institute of Medicine and National Academy of Engineering Roundtable on Value and Science-Driven Health Care. Engineering a learning healthcare system: a look at the future. Washington (DC): National Academies Press; 2011.
8 Garson K, Adams C. Security and privacy system architecture for an e-hospital environment. In: Seamons K, McBurnett N, Polk T, editors. Proceedings of the 7th Symposium on Identity and Trust on the Internet; Gaithersburg, MD; 2008 Mar 4–6. New York (NY): ACM; 2008. p. 122–30.
9 Botsis T, Hartvigsen G, Chen F, Weng C. Secondary use of EHR: data quality issues and informatics opportunities. AMIA Summits Transl Sci Proc. 2010:1–5.
10 Brailer DJ. Interoperability: the key to the future health care system. Health Aff (Millwood). 2005;24: w5-19–21. DOI: 10.1377/hlthaff.w5.19.
11 Wang T, Plaisant C, Quinn A, Stanchak R, Murphy S, Shneiderman B. Aligning temporal data by sentinel events: discovering patterns in electronic health records. In: Burnett M, Costabile MF, Catarci T, de Ruyter B, Tan D, Czerwinski M, et al., editors. Proceedings of the 26th annual CHI Conference on Human Factors in Computing Systems; Florence, Italy; 2008 Apr 5–10. New York (NY): ACM; 2008. p. 457–66.
12 Bullen N, Moon G, Jones K. Defining localities for health planning: a GIS approach. Soc Sci Med. 1996;42(8): 15.
13 Payne PR, Embi PJ, Sen CK. Translational informatics: enabling high-throughput research paradigms. Physiol Genomics. 2009; 39(3):131–40.
14 Koepsell TD, Wagner EH, Cheadle AC, Patrick DL, Martin DC, Diehr PH, et al. Selected methodological issues in evaluating community-based health promotion and disease prevention programs. Annu Rev Public Health. 1992;13:31–57.
15 Mir anda ML, Dolinoy DC, Overstreet MA. Mapping for prevention: GIS models for directing childhood lead poisoning prevention programs. Environ Health Perspect. 2002; 110(9):947–53.
16 Centers for Disease Control and Prevention. Screening young children for lead poisoning: guidance for state and local public health officials. Atlanta (GA): CDC; 1997.
17 Centers for Disease Control and Prevention. Preventing lead poisoning in young children. Atlanta (GA): CDC; 2005.
18 Owens PL, Mutter R. Emergency department visits for adults in community hospitals, 2008. Rockville (MD): Agency for Healthcare Research and Quality; 2010 Jan 1. (HCUP Statistical Brief No. 100).
19 Weinick RM, Burns RM, Mehrotra A. Many emergency department visits could be managed at urgent care centers and retail clinics. Health Aff (Millwood). 2010;29(9):1630–6.
20 Jayaprakash N, O'Sullivan R, Bey T, Ahmed SS, Lotfipour S. Crowding and delivery of healthcare in emergency departments: the European perspective. West J Emerg Med. 2009;10(4):233–9.
21 Neelon B, Ghosh P, Loebs P. A spatial Poisson hurdle model for exploring geographic variation in emergency department visits. J R Stat Soc Ser A Stat Soc. 2013; 176(2):389–413.
22 To access the Appendix, click on the Appendix link in the box to the right of the article online.
23 Centers for Disease Control and Prevention. National Diabetes Fact Sheet: national estimates and general information on diabetes and prediabetes in the United States. Atlanta (GA): CDC; 2011.
24 Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System survey questionnaire. Atlanta (GA): CDC; 2010.
25 Brenner J. Building an accountable care organization in Camden, NJ. Prescriptions for Excellence in Health Care [serial online]. 2010 Summer;(9) [cited 2013 Aug 12]. Available from: http://jdc.jefferson.edu/cgi/viewcontent.cgi?article=1075&context=pehc

Cite this article as:
Dan Glickman and Ann M. Veneman
The Essential Role Of Food And Farm Policy In Improving Health
Health Affairs, 32, no.9 (2013):1519-1521

doi: 10.1377/hlthaff.2013.0857

Farms and health: A customer pays for produce at a farmers market in San Francisco, California. Congress takes up competing versions of the farm bill this fall to set new farm, food, nutrition, and possibly public health policies.

doi: 10.1377/hlthaff.2013.0857

The Essential Role Of Food And Farm Policy In Improving Health

Congress has an opportunity to repair the disconnect between federal agriculture policy and efforts to promote healthy dietary choices.

BY DAN GLICKMAN AND ANN M . VENEMAN

To many observers, the farm bill that narrowly passed the US House of Representatives this July demonstrated the tremendous challenges involved in generating a bipartisan consensus in the 113th Congress. Important differences in the House and Senate bills—especially in the level of taxpayer-funded commodity and crop insurance subsidies—remain to be resolved, potentially in a September conference. Perhaps the most substantial difference to be resolved is the farm bill 's nutrition title. The House version does not include this section, which would dictate any statutory changes in the Supplemental Nutrition Assistance Program (SNAP), formerly known as food stamps.

Also lost in the legislative wrangling was a serious effort to address a fundamental disconnect between the nation 's farm policies and critical issues of public health and nutrition. On the one hand, with obesity-related health costs rapidly rising, the federal government has encouraged people to make healthy dietary choices through efforts such as Let 's Move! and MyPlate. On the other hand, the federal government spends billions of dollars on traditional agricultural commodity programs that fail to reinforce the kind of healthy dietary choices outlined in federal dietary guidelines. Congress now has an opportunity to repair this disconnect.

The Cost Of Obesity

Two-thirds of US adults and one-third of US children are overweight or obese. [1,2] Obesity-related diseases, such as diabetes and hypertension, not only are chronic, debilitating, and often lethal, but they also account for a large share of overall US health care costs, which in turn have emerged as a main driver of the nation 's long-term deficit and debt.

Various studies have shown that overweight or obese people are at increased risk of developing a range of chronic diseases and can be expected to incur much higher lifetime medical expenses compared to others. [3,4] In other words, America's current obesity epidemic is not only a public health crisis, it is also an enormous economic challenge for both the public and private sectors.

According to one analysis published in 2009, Medicare spending would be 8.5 percent lower and Medicaid spending would be 11.8 percent lower in the absence of obesity.[4] Such findings are relevant in the context of growing alarm about the unsustainable trajectory of health care cost growth in the United States generally and as a share of government spending in particular. The combined costs of Medicare and Medicaid alone, for example, are expected to reach almost $1.5 trillion by 2023, nearly doubling within the next decade. [5] If

that projection is accurate, federal spending for these two programs alone would exceed current federal spending on all discretionary programs, both defense and nondefense.

The cost of treating obesity-related diseases has been estimated to range from $150 billion per year [6] to as much as $300 billion per year if indirect costs are included. [7] That amount exceeds government spending on either farm support or nutrition assistance programs.

The Need To Improve Nutrition

The agricultural sector of the US economy produces roughly 80 percent of the food that Americans eat. However, the links among food and farm policy, population health, and rising health care costs have only recently begun to attract the attention they deserve. As a result, much of the federal government 's current spending on traditional commodity and nutrition assistance programs does not reflect the kinds of dietary choices required to improve health and lower levels of obesity in the general population.

As cochairs of the Bipartisan Policy Center's Nutrition and Physical Activity Initiative, we spent more than a year working with a broad cross section of stakeholders to explore potential levers for change in the fight against obesity and chronic disease in America. In June 2012 the initiative issued Lots to Lose: How America's Health and Obesity Crisis Threatens our Economic Future, a report that outlined a number of concrete recommendations, including possible reforms to food and farm policy. [8]

For example, research from the National Cancer Institute [9] and the US Department of Agriculture (USDA) [10] shows that many Americans are eating more calories than recommended in federal dietary guidelines, yet they are not eating enough fruit, vegetables, and whole grain. Multiple factors may contribute to this imbalance, including the increased availability of and marketing for less healthful foods, limited access to healthier products in certain communities, and the common perception that healthier foods are more expensive or more difficult to prepare.

It is not too soon to begin testing innovative policies that could reduce barriers to the consumption of more-nutritious food. Promotion boards, often overseen by the USDA and funded by industry, already exist to help educate consumers about certain specialty crops, such as blueberries and avocados. The government should authorize a new entity focused on promoting all fresh fruit and vegetables, increasing their consumption, and addressing informational barriers that might prevent consumers from understanding the importance of fruit and vegetables to a healthy diet.

New Approaches And The Importance Of Research

Millions of families depend on federal nutrition assistance programs, most notably SNAP, for basic food security. The House's failure to include any kind of nutrition title in the farm bill that it recently passed not only breaks with longstanding bipartisan tradition, but it also misses a critical opportunity to promote better nutrition and health among the most vulnerable Americans.

Instead of slashing federal nutrition programs such as SNAP, a far better approach that could win support across a broad range of stakeholders would be to couple continued support for these programs with increased efforts to align nutrition program guidelines and incentives with federal dietary guidelines. To implement this approach, however, policy makers need empirical evidence and analysis to better understand the potential impact of specific program changes. USDA offices such as the Agricultural Research Service, the National Institute of Food and Agriculture, and the Economic Research Service continue to study how nutrients affect our health, the role of behavioral economics on our diet, and the impact of food assistance programs on people 's dietary choices.

Congress should continue to support this important work. Cutting research now would limit the tools we have to better connect farm policy with the goals of better health and lower costs.

Emerging Signs Of Progress

There is a growing consensus across a wide range of groups —including farmers, health care providers, advocates for hunger relief, public health officials, and food companies —that a greater focus on nutrition, health, and health care costs must be part of any discussion of farm and food policy. In June 2013 the Bipartisan Policy Center hosted a Bridge-Builder Breakfast that brought together experts from a wide range of organizations to discuss the role of federal food and farm policy. The gathering made possible the kind of dialogue and cross-sector engagement that is so crucial to advancing meaningful reform. The mere fact that these stakeholders are talking to one another is a positive sign that the barriers that have discouraged cooperation across interest groups with different agendas and across congressional committees with different jurisdictions are beginning to be overcome.

Evidence that emphasis on nutrition and health is slowly increasing can be found in federal programs —such as the Healthy Food Financing Initiative, Community Food Projects, and Hunger Free Communities Grants —that have expanded access to staple foods, fruit, and vegetables for low-income families. Similarly, nonprofit organizations such as the Fair Food Network and Wholesome Wave are providing incentives for SNAP participants to purchase local fruit and vegetables.

And in the private sector, employers and insurers are increasingly offering programs to promote healthy eating and active living. The food industry is also beginning to recognize the need to offer healthier choices for consumers. Many manufacturers, including members of the Healthy Weight Commitment Foundation, [11] are lowering the salt, fat, and calorie content of processed foods such as soups. Restaurants are adding healthier menu options that go beyond salads. For example, the 140 companies that are participating in the National Restaurant Association 's Kids LiveWell program offer children 's menu items that meet nutritional guidelines. [12]

These efforts across sectors are both early signs of change and potential models for accelerated progress.

Conclusion

Changes to US food and farm policy alone cannot solve America 's obesity crisis. But the scale and long-term implications of that crisis also mean that the nation cannot afford to forgo any oppor-

tunity to address it. The current debate over the farm bill is one of those opportunities: a critical moment when we can ensure that improvements to our nation ’s physical and fiscal health go hand in hand with meaningful reform in food and farm policy.

Dan Glickman(dglickman@bipartisanpolicy.org), formerly a US representative from Kansas, served as US secretary of agriculture from 1995 to 2001 and as chair and CEO of the Motion Picture Association of America from 2004 to 2010.Ann M. Venemanserved as US secretary of agriculture from 2001 to 2005 and as executive director of UNICEF from 2005 to 2010. With former health and human services secretaries Mike Leavitt and Donna E. Shalala, they cochair the Nutrition and Physical Activity Initiative of the Bipartisan Policy Center, in Washington, D.C.

NOTES

1 Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System: BRFSS 2012 survey data and documentation [Internet]. Atlanta (GA): CDC; [last updated 2013 Jul 23; cited 2013 Aug 19]. Available from: http://www.cdc.gov/brfss/annual_data/annual_2012.html

2 Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in US children and adolescents, 2007 –2008. JAMA. 2010;303(3):242 –9.

3 Wang YC, McPherson K, Marsh T, Gortmaker SL, Brown M. Health and economic burden of the projected obesity trends in the USA and the UK. Lancet. 2011; 378(9793):815–25.

4 Finkelstein EA, Trogdon JG, Cohen JW, Dietz W. Annual medical spending attributable to obesity: payer- and service-specific estimates. Health Aff (Millwood). 2009;28(5):w822 –31. DOI: 10.1377/hlthaff.28.5.w822.

5 Congressional Budget Office. The budget and economic outlook: fiscal years 2013 to 2023 [Internet]. Washington (DC): CBO; 2013 Feb [cited 2013 Aug 14]. Available from: http://www.cbo.gov/sites/default/files/cbofiles/attachments/43907-BudgetOutlook.pdf

6 Centers for Disease Control. Chronic disease prevention and health promotion: obesity: halting the epidemic by making health easier [Internet]. Atlanta (GA): CDC: [last updated 2011 May 26; cited 2013 Aug 14]. Available from: http://www.cdc.gov/chronicdisease/resources/publications/aag/obesity.htm

7 O’Grady MJ, Capretta JC. Assessing the economics of obesity and obesity interventions [Internet]. Washington (DC): Campaign to End Obesity, 2012 Mar [cited 2013 Aug 14]. p. 14. Available from: http://obesitycampaign.org/documents/StudyAssessingtheEconomicsofObesityandObesityIntervention.pdf

8 Nutrition and Physical Activity Initiative. Lots to lose: how America’s health and obesity crisis threatens our economic future [Internet]. Washington (DC): Bipartisan Policy Center; 2012 Jun [cited 2013 Aug 14]. Available from: http://bipartisanpolicy.org/sites/default/files/5023_BPC_NutritionReport_FNL_Web.pdf

9 National Cancer Institute. Usual dietary intakes: food intakes, US population, 2001 –04 [Internet]. Bethesda (MD): NCI; [updated 2010 Dec 21; cited 2013 Aug 14]. Available from: http://riskfactor.cancer.gov/diet/usualintakes/pop/

10 Department of Agriculture, Department of Health and Human Services. Dietary guidelines for Americans, 2010 [Internet]. Washington (DC): Government Printing Office; 2010 Dec [cited 14 Aug 2013]. Available from: http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/PolicyDoc.pdf

11 Healthy Weight Commitment Foundation [Internet]. Washington (DC): The Foundation. Press release, Food and beverage companies surpass 2015 goal of reducing calories in the U.S. three years ahead of schedule; 2013 May 30 [cited 2013 Aug 14]. Available from: http://www.healthyweightcommit.org/news/food_and_beverage_companies_surpass_2015_goal_of_reducing_calories_in_the_u/

12 National Restaurant Association. Kids LiveWell Program [Internet]. Washington (DC): The Association; [cited 2013 Aug 14]. Available from: http://www.restaurant.org/Industry-Impact/Food-Healthy-Living/Kids-Live Well-Program

Michigan Health Endowment Fund
Listening Tour

DRAFT AGENDA

July 21, 2014
1:00PM –3:00PM
Kellogg Center, Michigan State University
East Lansing, Michigan

1:00PM **Welcome and overview of the MHEF**
Rob Fowler, Board Chairperson, Michigan Health Endowment Fund

1:15 **Discussion of Priority Health Issues**

Participants will be asked to review and provide comments on a list of issues that have been identified through community health needs assessments completed in the region.

1. What "jumps out" to you in this list of priority health issues? Are these the issues that you think are most important? Is there anything missing?
2. Which issues do you think are most important for the health and wellness of children and why? What are some of the factors contributing to these issues?
3. Which issues do you think are most important for the health and wellness of seniors and why? What are some of the factors contributing to these issues?

1:30 **Discussion of Challenges**

Participants will be asked to describe the challenges facing their community in addressing priority health issues.

4. Given the issues that you have identified, what barriers are preventing people from achieving good health? As you answer this question, please think about children, the elderly, and minority populations in particular.

1:50 **Discussion of Innovative and Promising Approaches**

Participants will be asked what is working well in their community to address the issues they have identified. As they answer the following questions, participants will be asked to describe how people and organizations are working collaboratively; what outcomes or benefits are being achieved; and how quality and cost are being affected.

5. What is working well to address the health and well-being of children? What innovative and promising approaches are underway?
6. What is working well to address the health and well-being of seniors? What innovative and promising approaches are underway?

2:40 Special Topics

Priority areas for the Michigan Health Endowment Fund include infant mortality, wellness and fitness programs, access to healthy food, technology enhancements, health-related transportation needs, and foodborne illness prevention. Participants will be asked to describe special challenges or innovative and promising approaches related to these areas that have not been covered in the discussion.

2:50 Additional Comments and Concluding Remarks

MHEF board members may use this time to ask for additional comments and clarification from participants, and will describe next steps.

3:00 Adjourn

Michigan Health Endowment Fund: Listening Tour Announcement

In 2013, the Michigan Health Endowment Fund was created through passage of Public Act 4 of 2013, which authorized certain changes to how Blue Cross Blue Shield of Michigan (BCBSM) operates in the state. The law required the Michigan Health Endowment Fund to be established as a separate, non-profit corporation, and directed BCBSM to contribute up to $1.56 billion to the fund over a period of 18 years.

The Michigan Health Endowment Fund's purpose is to improve the health and well-being of children and seniors throughout the state. Priority areas include infant mortality, wellness and fitness programs, access to healthy food, technology enhancements, health-related transportation needs, and foodborne illness prevention.

The Michigan Health Endowment Fund board is organizing operations and will be developing a granting strategy in the near future. Meanwhile, board members are conducting a listening tour to gain a deeper understanding of the health issues confronting Michigan residents, and to familiarize the public with the Michigan Health Endowment Fund. General information about the listening tour is provided below:

Number of sessions:	Six
Frequency:	About monthly
First session:	July 21, 2014 1:00 PM to 3:00 PM Kellogg Center East Lansing
Remaining sessions:	Locations to be determined in the Upper Peninsula, northern Lower Peninsula, west Michigan, east Michigan, and southeast Michigan
Invitees:	General public and representatives of health-related organizations
Format:	Presentation by the Michigan Health Endowment Fund board chairperson, followed by facilitated discussion in response to structured questions

The listening tour sessions will be an opportunity for participants to respond to questions about health concerns in their community, the barriers preventing people from achieving good health, and approaches that are working well to improve the health and well-being of children and the elderly. Requests for funding are not being accepted at this time.

Individuals may register for the session on July 21 by following this link. The agenda for the listening tour sessions, and information and registration instructions for the five remaining sessions will be posted on the Michigan Health Endowment Fund website as soon as dates and locations are confirmed.

We look forward to seeing and hearing from you at one of the Michigan Health Endowment Fund listening tour sessions this year.

Michigan Health Endowment Fund

DRAFT Listening Tour Announcement Distribution List

An announcement of the Listening Tour will be sent by the MHEF directly to the following associations/organizations. These organizations will be asked to distribute the notice using their membership or mailing lists.

Possible Host	Organizations to Receive Listening Tour Announcement*
	Area Agencies on Aging Association of Michigan
y	Council of Michigan Foundations
	Health Care Association of Michigan
	Hospice and Palliative Care Association of Michigan
	LeadingAge Michigan
	Mental Health Association in Michigan
	Michigan Association for Local Public Health
	Michigan Association of Community Mental Health Boards
	Michigan Association of Health Plans
y	Michigan Association of United Ways
	Michigan Coalition for Children and Families
	Michigan Council for Maternal and Child Health
	Michigan Health & Hospital Association
	Michigan Home Health Association
	Michigan League for Public Policy
	Michigan Primary Care Association
y	Michigan Recreation and Parks Association
	NAMI Michigan (National Alliance on Mental Illness)
y	State Alliance of Michigan YMCAs

*Note: This list does not include state departments or offices (e.g., MDCH Maternal and Child Health Division, Office of Services to the Aging, Office of Great Start) or professional associations (e.g., MSMS, MOA, MNA). State departments and/or offices could be asked to share their mailing lists with the MHEF so that the notice can be distributed more broadly but still come directly from the MHEF.

July 10, 2014

To: Lynn Alexander
Michael Watkins

From: Rikki Krug

Re: Progress on CEO Search Process

Much has been accomplished since our last progress report which included the attached outline of the search on July 1. Following the approval of the Position Guidelines by the Board at its June meeting, announcements were prepared for distribution via posting sites at the Council on Foundations, Chronicle of Philanthropy, Michigan Council of Foundations, Grantmakers in Health, Chronicle of Higher Education and the American Public Health Association, to name a few. These sources were selected based on the professional orientation of their members and therefore the likelihood that candidates may be referred or nominated from such sources.

The recruitment strategy also includes an outreach campaign designed to communicate directly with health and healthcare related entities in Michigan including professional associations, universities, public sector leaders, foundations and health services providers. As of this date, we have conducted phone conversations with the following individuals (listed according to date of contact):

- Gail Haines, Committee Chair - House of Representatives Health Policy Council
- Kim Sikkema, Chief Executive Officer – Michigan Primary Care Association
- Douglas L. Strong, CEO, University of Michigan Hospitals and Health Centers
- Amy Zaagman, Executive Director – Michigan Council for Maternal and Child Health
- Marianne Udow-Phillips, Director – Center for Healthcare Research and Transformation, University of Michigan
- Ed Wiankowski, President Elect – Michigan Association of School Nurses

- Mary Alban, Director – Area Agencies on Aging Association of Michigan
- Stephanie Moore, President – Michigan Association of Senior Centers
- Debra McGuire, CEO – Michigan Academy of Family Physicians
- Donna Wishart, President – Michigan Directors of Services to the Aging
- Dr. Michelle Theall, President – Michigan Academy of Pediatric Dentistry
- Mike DeGrow, Executive Director, Michigan Academy of Physician Assistants

In addition to receiving the input on all types of health issues related to children and seniors, the participants have also offered the names of leaders in their sector, either as potential candidates or as additional sources for us to contact. We are following leads in that regard.

Finally, the search calendar was completed after the Board confirmed its future meeting dates in June. The attached calendar illustrates the effort to synchronize the key milestones of the search and selection process, including interviewing candidates, around the dates of these future Board meetings. Depending on the dates and locations of the planned Listening Tours stops in the months of September and October, the effort to arrange candidate interviews at those times might help us keep on schedule.

More specific information on this will be presented at the August 18 Board meeting.

RMK

PRESIDENT & CEO

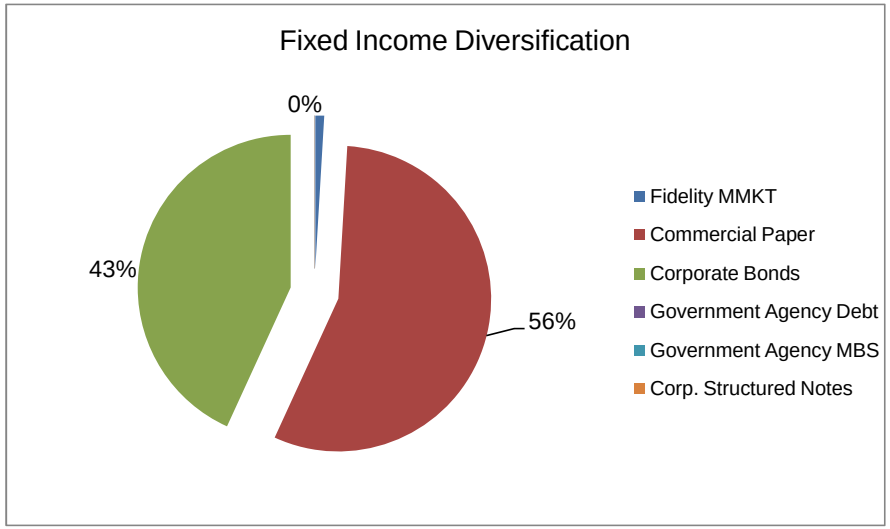
BENCHMARK CALENDAR

Dates	Jun 16 (Board Mtg)	June 23	June & July	July 21 (Board Mtg)	August	August 18 (Board Mtg)	Sept 14 or Sept 16 (Board Mtg)	TBD	October 20 (Board Mtg)	October 30
Search Co- Chairs	Report on Progress to Board	Review Final Position Guide				Lead Credentials Review Meeting	Lead First Interviews with Candidates	Second Interviews with Finalists	Final Selection	Offer Prepared and Delivered
Board of Directors	Review and Comment on Search Documents	Submit Final Comments on Position Guide		Receive Progress Report	Receive Progress Report	Candidate Credentials Review Meeting	Participate in First Interviews with Candidates	Second Interviews with Finalists	Final Selection	Offer Ratified
Office of MHEF		Fact-Check Position Guide	Assist in Constituent Outreach Campaign			Logistics for Meeting	Assist with Logistics for Candidate Interviews	Logistics for Meetings	Internal Processing	Assistance in Transition
Kittleman & Associates	Report on Progress to Board; Present Search Documents	Launch Position Announcement Campaign	Conduct Constituent Outreach Campaign	Prospect & Candidate Screening & Qualifying	Prospect & Candidate Screening & Qualifying	(August 14) Distribute Candidate Credentials	Arrangement for Candidate Interviews	Assist with Final Candidates Interviews	Final Reference and Background Checks	Assist in Offer, Closure and Transition

Summary of Investments
MI Health Endowment Fund 7-10-2014

Fixed Income Diversification

Description			Percentage
Fidelity MMKT	$	851,754.05	1%
Commercial Paper	$	49,978,685.00	56%
Corporate Bonds	$	38,611,071.08	43%
Government Agency Debt	$	-	0%
Government Agency MBS	$	-	0%
Corp. Structured Notes	$	-	0%
Total	$	89,441,510.13	100%

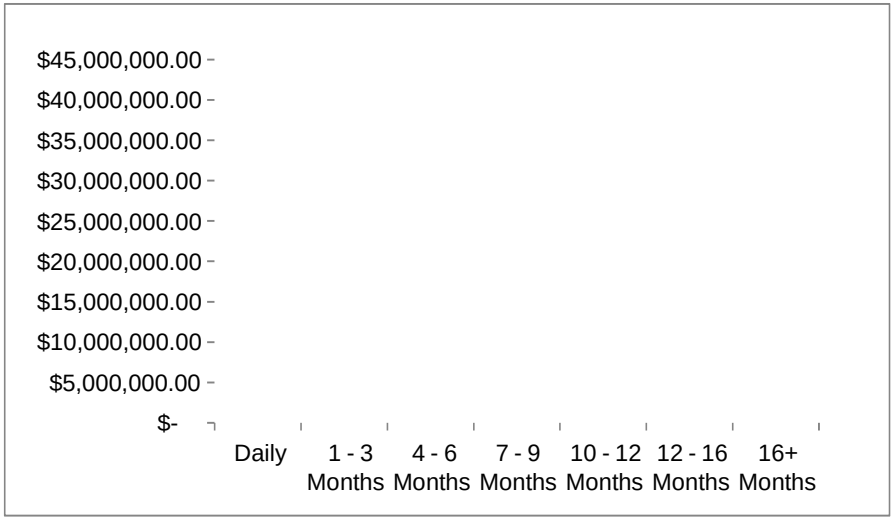


Portfolio Analysis

Description	
Weighted Average Yield	0.42%
Weighted Average Life in Years / Duration	0.31

Maturity Schedule

Description			Percentage
Daily	$	851,754.05	1%
1 - 3 Months	$	41,819,261.50	46%
4 - 6 Months	$	21,740,428.13	24%
7 - 9 Months	$	10,794,146.25	12%
10 - 12 Months	$	8,283,878.13	9%
12 - 16 Months	$	7,023,648.13	8%
16+ Months	$	-	0%
Total	$	90,513,116.19	100%



MI Health Endowment Fund 7-10-20

Security ID	Description	Credit Rating	Maturity	Maturity Mths	Yield to Call	Yield	Purhcase Price	Maturity Value	Market Value	Principal Cost	$ Gain/Loss	Acrd Int Paid	Settleme
Cash / Cash Equivalents													
	Fidelity Prime	AAA	Daily	0.03	0.10%	0.10%	$ 100.000	$ 851,754.05	$ 851,754.05	$ 851,754.05	$ -	$ -	Daily
							Total	$ 851,754.05	$ 851,754.05	$ 851,754.05	$ -	$ -	
Commercial Paper													
	AON CORPORATION DISC COMML PAPER		8/18/2014	1.00	0.24%	0.24%	$ 99.970	$ 5,000,000.00	$ 4,998,650.00	$ 4,998,600.00	$ 50.00	$ -	7/7/2014
	CBS CORP DISC COMML PAPER		7/18/2014	0.25	0.22%	0.22%	$ 99.980	$ 5,000,000.00	$ 4,999,745.00	$ 4,999,144.44	$ 600.56	$ -	6/20/2014
	DISCOVERY COM LLC DISC COMML PAPER		9/8/2014	2.00	0.28%	0.28%	$ 99.950	$ 5,000,000.00	$ 4,997,700.00	$ 4,997,588.89	$ 111.11	$ -	7/8/2014
	HARLEY DAVIDSON FINL DISC COMML		9/8/2014	2.00	0.20%	0.20%	$ 99.960	$ 5,000,000.00	$ 4,997,700.0	$ 4,998,277.7	$ (577.78	$ -	7/8/2014
	HASBRO INC DISC COMML PAPER		9/18/2014	2.00	0.24%	0.24%	$ 99.950	$ 5,000,000.00	$ 4,997,265.00	$ 4,997,566.67	$ (301.67	$ -	7/7/2014
	HITACHI CAP AMER DISC COMML PAPER		7/11/2014	0.25	0.24%	0.24%	$ 99.860	$ 5,000,000.00	$ 4,999,940.00	$ 4,999,300.00	$ 640.00	$ -	6/20/2014
	SANTANDER CP DISC COMML PAPER		10/21/2014	3.00	0.40%	0.40%	$ 99.860	$ 5,000,000.00	$ 4,995,255.00	$ 4,993,333.33	$ 1,921.67	$ -	6/23/2014
	SUNCORP MTWY LTD DISC COMML PAPER		11/5/2014	4.00	0.28%	0.28%	$ 99.890	$ 5,000,000.00	$ 4,996,215.00	$ 4,994,750.00	$ 1,465.00	$ -	6/23/2014
	TIME WARNER CBL DISC COMML PAPER		8/4/2014	1.00	0.23%	0.23%	$ 99.980	$ 5,000,000.00	$ 4,999,180.00	$ 4,999,105.56	$ 74.44	$ -	7/7/2014
	WELLPOINT INC DISC COMML PAPER		10/1/2014	3.00	0.18%	0.18%	$ 99.950	$ 5,000,000.00	$ 4,997,035.00	$ 4,997,850.00	$ (815.00	$ -	7/7/2014
											$ -	$ -	
							Total	$ 50,000,000.00	$ 49,978,685.00	$ 49,975,516.67	$ 3,168.33	$ -	
Corporate Bonds													
	AMERICAN INTL GROUP INC 2.37500%		8/24/2015	2.00	0.79%	0.79%	$ 101.833	$ 1,000,000.00	$ 1,016,710.00	$ 1,017,675.65	$ (965.65	$ 7,982.64	6/25/2014
	BNP PARIBAS US MEDIUM TERM NT 5.12500%		1/15/2015	6.00	0.66%	0.66%	$ 102.470	$ 500,000.00	$ 510,100.00	$ 511,428.71	$ (1,328.71	$ 11,388.89	6/25/2014
	BLOCK FINL CORP SR GLBL NT 5.12500%		10/30/2014	3.00	0.61%	0.61%	$ 101.550	$ 1,000,000.00	$ 1,010,430.00	$ 1,013,749.96	$ (3,319.96	$ 7,972.22	6/26/2014
	DEUTSCHE BK FINL LLC MTN 5.37500%		3/2/2015	9.00	0.70%	0.70%	$ 103.100	$ 1,500,000.00	$ 1,543,935.00	$ 1,544,908.02	$ (973.02	$ 29,114.58	7/1/2014
	DUKE CAPITAL LLC NOTES 5.668%		8/15/2014	1.00	0.57%	0.57%	$ 100.776	$ 2,500,000.00	$ 2,512,200.00	$ 2,512,345.36	$ (145.36	$ 49,201.39	6/20/2014
	DUN & BRADSTREET CORP DEL NEW 2.87500%		11/15/2015	4.00	0.85%	0.85%	$ 102.791	$ 3,300,000.00	$ 3,386,163.00	$ 3,389,350.70	$ (3,187.70	$ 10,541.67	6/25/2014
	ENERGY TRANSFER PRTNRS L P 5.95000%		2/1/2015	7.00	0.68%	0.68%	$ 103.064	$ 2,854,000.00	$ 2,935,281.92	$ 2,937,700.69	$ (2,418.77	$ 70,755.42	7/1/2014
	FORD MOTOR CREDIT CO LLC 12.00000%		5/15/2015	11.00	0.67%	0.67%	$ 109.835	$ 1,130,000.00	$ 1,237,259.60	$ 1,237,954.68	$ (695.08	$ 17,326.67	7/1/2014
	FORD MOTOR CREDIT CO LLC 2.75000%		5/15/2015	11.00	0.64%	0.64%	$ 101.829	$ 1,100,000.00	$ 1,119,635.00	$ 1,119,543.14	$ 91.86	$ 3,865.28	7/1/2014
	GOLDMAN SACHS GROUP INC 5.12500%		1/15/2015	6.00	0.62%	0.62%	$ 102.410	$ 1,500,000.00	$ 1,535,265.00	$ 1,534,587.78	$ 677.22	$ 35,447.92	7/1/2014
	MERRILL LYNCH CO INC MTN BE 5.45000%		7/15/2014	0.25	0.43%	0.43%	$ 100.348	$ 2,600,000.00	$ 2,601,859.00	$ 2,601,809.58	$ 49.42	$ 61,009.72	6/20/2014
	MERRILL LYNCH CO INC MTN BE 5.00000%		1/15/2015	6.00	0.60%	0.60%	$ 102.360	$ 1,596,000.00	$ 1,632,851.64	$ 1,631,971.51	$ 880.13	$ 36,796.67	7/1/2014
	NEWELL RUBBERMAID INC 2.00000%		6/15/2015	12.00	0.59%	0.59%	$ 101.367	$ 3,000,000.00	$ 3,038,460.00	$ 3,039,254.94	$ (794.94	$ 1,666.67	6/25/2014
	PENSKE TRUCK LEASING CO L P 3.12500%		5/11/2015	11.00	0.60%	0.60%	$ 102.220	$ 2,849,000.00	$ 2,907,746.38	$ 2,908,892.01	$ (1,145.63	$ 10,386.98	6/23/2014
	PRUDENTIAL COVERED TRUST 2.99700%		9/30/2015	15.00	0.73%	0.73%	$ 102.630	$ 3,000,000.00	$ 2,461,056.00	$ 2,463,240.00	$ (2,184.00	$ 16,983.00	6/25/2014
	QWEST CORP SR GLBL NT 7.50000%		10/1/2014	3.00	0.65%	0.65%	$ 101.858	$ 2,378,000.00	$ 2,413,503.54	$ 2,414,518.75	$ (1,015.21	$ 40,624.17	6/23/2014
	STRUCT REP ASSET BKD NOTES SER GECC		9/15/2014	2.00	0.88%	0.88%	$ 100.550	$ 750,000.00	$ 746,400.00	$ 754,125.00	$ (7,725.00	$ -	6/23/2014
	TIMKEN CO MAKE WHOLE 06.00000%		9/15/2014	2.00	0.61%	0.61%	$ 101.267	$ 1,955,000.00	$ 1,971,813.00	$ 1,973,941.63	$ (2,128.63	$ 30,954.17	6/20/2014
	XSTRATA FINANCE CANADA LIMITED NOTE 02.85000%		11/10/2014	4.00	0.70%	0.70%	$ 100.797	$ 3,000,000.00	$ 3,016,152.00	$ 3,023,917.55	$ (7,765.55	$ 10,925.00	6/26/2014
	ZIONS BANCORPORATION SR GLBL NT 7.75000%		9/23/2014	2.00	0.51%	0.51%	$ 101.720	$ 1,000,000.00	$ 1,014,250.00	$ 1,014,633.88	$ (383.88	$ 20,236.11	6/27/2014
							Total	$ 38,512,000.00	$ 38,611,071.08	$ 38,645,549.54	$ (34,478.46	$ 473,179.17	
Corp. Structured Notes													
											$ -		
											$ -		
							Total	$ -	$ -	$ -	$ -	$ -	
							Portfolio Totals	$ 89,363,754.0	$ 89,441,510.1	$ 89,472,820.2	$ (31,310.13	$ 473,179.1	

Cash Flow	AON CORPORATION	CBS CORP	DISCOVERY COM	HARLEY DAVIDSON FINL	HASBRO INC	HITACHI CAP AMER	SANTANDER	TIME WARNER	WELLPOINT	AIG	BNP	BLOCK	DB	DUKE	DNB	ETP	F
Payment										$ 1,000,000	$ 500,000	$ 1,000,000	$ 1,500,000	$ 2,500,000	$ 3,300,000	$ 2,854,000	$ 1,130,000
Month	03739PHJ8									026874CV7	05566GAA7	093662AC8	2515E0AA7	26439VAB3	26483EAE0	29273RAB5	345397VH3
7/2014		$ 5,000,000.00			$ 5,000,000.00						$ 12,812.50						
8/2014	$ 5,000,000.00							$ 5,000,000.00		$ 11,875.00			$ 40,312.50	$ 67,187.50		$ 84,906.50	
9/2014			$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00												
10/2014						$ 5,000,000.00			$ 5,000,000.00			$ 1,025,625.00					
11/2014							$ 5,000,000.00								$ 47,437.50		$ 67,800.00
12/2014																	
1/2015											$ 512,812.50						
2/2015										$ 11,875.00						$ 2,938,906.50	
3/2015													$ 1,542,776.04	$ 2,571,293.40			
4/2015																	
5/2015															$ 47,437.50		$ 1,197,800.00
6/2015																	
7/2015																	
8/2015										$ 1,011,875.00							
9/2015																	
10/2015																	
11/2015															$ 3,347,437.50		
12/2015																	
1/2016																	
2/2016																	
3/2016																	
4/2016																	
5/2016																	
6/2016																	
7/2016																	
8/2016																	
9/2016																	
10/2016																	
11/2016																	
12/2016																	
1/2017																	
2/2017																	
3/2017																	
4/2017																	
Total	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 5,000,000.00	$ 1,035,625.00	$ 525,625.00	$ 1,025,625.00	$ 1,583,088.54	$ 2,638,480.90	$ 3,442,312.50	$ 3,023,813.00	$ 1,265,600.00

F	GS	BAC	BAC	NWL	PENSKE	PRU	QWEST	GE - STRATS	TKR	XTRA	ZIONS	TOTAL	Cash Flow Payment Month
$ 1,100,000	$ 1,500,000	$ 2,600,000	$ 1,596,000	$ 3,000,000	$ 2,849,000	$ 3,000,000	$ 2,378,000	$ 750,000	$ 1,955,000	$ 3,000,000			
345397WC3	38141GEA8	59018YTZ4	59018YUW9	651229AL0	709599AC8	74432NAA0							
	$ 38,437.50	$ 2,670,850.00	$ 39,900.00					$ 1,875.00				$ 12,763,875.00	7/2014
								$ 1,875.00				$ 10,206,156.50	8/2014
						$ 44,955.00		$ 751,875.00	$ 2,013,650.00		$ 1,038,750.00	$ 18,849,230.00	9/2014
							$ 2,467,175.00					$ 13,492,800.00	10/2014
$ 15,125.00					$ 44,515.63					$ 3,042,750.00		$ 8,217,628.13	11/2014
				$ 30,000.00								$ 30,000.00	12/2014
	$ 1,538,437.50		$ 1,635,900.00									$ 3,687,150.00	1/2015
												$ 2,950,781.50	2/2015
						$ 42,145.31						$ 4,156,214.75	3/2015
												$ -	4/2015
$ 1,115,125.00					$ 2,893,515.63							$ 5,253,878.13	5/2015
				$ 3,030,000.00								$ 3,030,000.00	6/2015
												$ -	7/2015
												$ 1,011,875.00	8/2015
						$ 2,664,335.63						$ 2,664,335.63	9/2015
												$ -	10/2015
												$ 3,347,437.50	11/2015
												$ -	12/2015
												$ -	1/2016
												$ -	2/2016
												$ -	3/2016
												$ -	4/2016
												$ -	5/2016
												$ -	6/2016
												$ -	7/2016
												$ -	8/2016
												$ -	9/2016
												$ -	10/2016
												$ -	11/2016
												$ -	12/2016
												$ -	1/2017
												$ -	2/2017
												$ -	3/2017
												$ -	4/2017
$ 1,130,250.00	$ 1,576,875.00	$ 2,670,850.00	$ 1,675,800.00	$ 3,060,000.00	$ 2,938,031.26	$ 2,751,435.94	$ 2,467,175.00	$ 755,625.00	$ 2,013,650.00	$ 3,042,750.00	$ 1,038,750.00	$ 89,661,362.14	
												$ 89,661,362.14	

1 - 3 Months	$ 41,819,261.50
4 - 6 Months	$ 21,740,428.13
7 - 9 Months	$ 10,794,146.25
10 - 12 Months	$ 8,283,878.13
12 - 16 Months	$ 7,023,648.13
2 - 3 Years	$ -
Total	$ 89,661,362.14

06/01/2014 through 07/11/2014

Account Number - Name	Account Type	Current Balance	Available Balance
XXXXXXXXXX - BUS CASH MAN 1	BUS CASH MAN 1	10,021,581.40	10,021,581.40

Date	Transaction Description	Debit	Credit	Balance
06/16/2014	ENCODING ERROR 6-13-14	39,989,314.23		10,019,333.30
06/23/2014	AC-DLX For Business-BUS PROD	164.80		10,019,168.50
06/30/2014	Business Paper Statement Fee		3.00	10,019,171.50
06/30/2014	PAPER STATEMENT FEE	3.00		10,019,168.50
06/30/2014	SERVICE CHG JUNE ACTIVITY	7.00		10,019,161.50
06/30/2014	INTEREST PAYMENT		2,466.90	10,021,628.40
06/30/2014	CYCLE SERVICE CHARGE	50.00		10,021,578.40
07/01/2014	Business Paper Statement Fee		3.00	10,021,581.40

06/01/2014 through 07/11/2014

Account Number - Name	Account Type	Current Balance	Available Balance
XXXXXXXXXX - JUMBO CERT ACT/ACT	JUMBO CERT ACT/ACT	0.00	0.00

Date	Transaction Description	Debit	Credit	Balance
06/04/2014	INTEREST PAYMENT		959.07	50,009,726.68
06/11/2014	INTEREST PAYMENT		959.09	50,010,685.77
06/13/2014	PENALTY FREE WITHDRAWAL	50,010,685.77		0.00

DRAFT: 7/9/14

POSITION GUIDE

ORGANIZATION: MICHIGAN HEALTH ENDOWMENT FUND

POSITION: Chief Finance Officer

REPORTS TO: President & CEO

LOCATION: Lansing, Michigan

MISSION STATEMENT

The mission of the Michigan Health Endowment Fund is to improve the health of Michigan residents and reduce the cost of healthcare, with special emphasis on the health and wellness of children and seniors.

ABOUT THE FUND

Created in 2013, the Michigan Health Endowment Fund (MHEF) is a grant making foundation established as a result of the passage of Public Act 4 and Public Act 5 of 2013 that allowed Blue Cross Blue Shield of Michigan to operate as a nonprofit mutual insurance company. Over the next 18 years it will contribute $1.56 billion to MHEF. The first payment of $100 million was made on April 1, 2014.

MHEF operates as a separate entity from state government as a tax-exempt organization under Section 501 (c)(3) of Internal Revenue Code and classified as a Type I Supporting Organization. Its purpose is to support efforts to improve the quality of health care while reducing costs and to benefit the health and wellness of Michiganders through funding programs for children and seniors throughout the State.

The focus of its grant making activities is on infant mortality, health services for foster and adopted children, wellness and fitness programs, access to healthy food, access to mental health services, technology enhancements, health-related transportation needs and foodborne illness prevention. In addition, beginning in 2016, the Fund is required to implement a program to subsidize the cost of individual Medicare supplemental, or “Medigap” coverage to help senior citizens who demonstrate financial need.

POSITION SUMMARY

Reporting to the President & CEO, the Chief Financial Officer (CFO) establishes and maintains the financial, accounting and investment activities of MHEF according to the policies and procedures developed for and approved by the Board of Directors. The position serves as the key staff liaison to the Finance Committee of the Board of Directors. Specific responsibilities include:

Leadership:

- Serve as the principle MHEF contact for all financial and investment related inquiries from Board members, grantees, audit firms, technology consultants, investment managers, banking officials and other external vendors and external parties.

- Create, administer and continuously evaluate policies and procedures for managing the financial, investment and regulatory activities of MHEF.

- Serve as liaison with MHEF's auditor by preparing all required financial records and letters for the audit.

- Attend Board meetings and Board committee meetings as appropriate

- Prepare all necessary and requested financial reports for the President/CEO, Board of Directors, Finance Committee, special projects and other reporting requests as appropriate.

Investment:

- Monitor endowment investment performance; manage short-term and long-term objectives of the investment portfolio; monitor trading and rebalance investments as directed by policy and recommend adjustments as appropriate.

- Ensure the continuing financial strength of MHEF by advising the Board on investment matters such as asset allocation strategies and outside manager selection.

Operations/Finance:

- Work with the President & CEO to project and prepare the annual operating and grants budgets for recommendation to the Board of Directors.

- Establish and oversee payroll, payroll taxes and reports; administer employee benefits including retirement plan(s), health, dental and insurance plan(s), and third party administrators.

- Prepare quarterly financial and investment reports; oversee maintenance of general ledger and monthly journal entries; insure proper recordation of all transactions; complete transfers between cash and investment accounts; issue administrative and grant checks.

- Serve as the technology liaison to ensure the security of data at the highest level; implement proper procedures for changes to relevant database tools; work with technology specialists to upgrade and maintain the network.

CANDIDATE PROFILE

We seek a finance executive whose business, nonprofit or public sector leadership experience has included senior level responsibilities for accounting, finance, investment and administration. The successful candidate will understand and function effectively within a nonprofit governing structure while providing leadership in the establishment and implementation of sound financial and investment management practices.

This person must exhibit a background in managing complex fund accounting and investment strategies, ideally in an organization of similar scale and mission to MHEF. This executive will have excellent organizational and managerial skills in building (ideally from scratch) systems and operational structures to support a growing organization or major new initiative that is in the incubator phase. Knowledge and utilization of the highest standards of accountability, controls, timeliness, accuracy and reporting would be expected.

The ability to exercise good judgment and take initiative within broadly defined guidelines, working on complex assignments where analysis of data requires evaluation of internal and external factors, is required. The candidate must possess excellent communications skills and the ability to speak and write in a clear and concise manner particularly when the subject contains complex financial data. Furthermore, he/she should demonstrate the ability to work in an independent but participatory manner within a relatively small employee group.

A bachelor's degree is required; a master's degree in accounting, finance, or business management is highly preferred. Certification as a CPA or equivalent academic training and certification with emphasis on finance or investment management would be a plus.

Applications and nominations are being received by Kittleman & Associates, LLC. To apply, please send a current resume and letter of interest to resumes@kittlemansearch.com.

For more information, please visit the Michigan Health Endowment Fund's website at www.healthendowmentfund.org.

CHIEF FINANCIAL OFFICER

BENCHMARK CALENDAR

Dates	JUL 15	JUL 21	JUL 31	AUG	SEPT	OCT 20	NOV 1	NOV 15	NOV 30	DEC 15
Board of Directors		Approve Position Description and Position Guide				Candidate Credentials Review Meeting	Recommend 4 – 5 Candidates to New CEO	CEO Interviews with Candidates	CEO Interview with Finalist	CEO Offer to & Acceptance by CFO
Office of the MHEF		Record Position Description	Post Position Guide on Website		Receive & Review Progress Reports	Candidate Credentials Review Meeting		Assist with Candidate Interviews	Assist with Finalist(s) Interviews	Assist in Preparation of Offer
Kittleman & Associates	Create Position Description	Develop Position Guide	Postings completed; Search Outreach Strategy Implemented	Prospect Screening and Interviewing	Active Candidate Assessment and Vetting	Present Candidate Credentials	Prepare Candidates for Interviews	Assist with Candidate Interviews	Assist with Final Candidate Interviews	Assist in Offer & Closure as Requested

PROPOSED 2014 GRANTMAKING PLAN

Report of the Grantmaking Committee

(Revised Draft —July 10, 2014)

The Board of the Michigan Health Endowment Fund has, at different times, discussed its dual interests in conducting significant grantmaking in 2014 and in doing grantmaking on a competitive basis, open to many organizations. During its May meeting, the Board indicated that $25 million could be made available for current-year grantmaking to a limited number of grantees, with the balance of $15 million used for individual grantmaking in 2015.[1] The Board has also adopted a formal mission statement that must guide all of its grantmaking activities.

With this document, the Grantmaking Committee has attempted to create a process that, consistent with the mission, advances these dual goals in a manner than honors the Board's previous discussions. To do so, the Committee proposes that the Fund immediately embark upon two grantmaking paths:

1. Develop a competitive grantmaking strategy that will allow a large number of Michigan organizations to apply for grants to improve the health of the state, and

2. Make a few pilot grants to a small number of statewide organizations in 2014 to demonstrate the Fund's commitment to help Michigan residents as soon as possible.

This document sets forth the Grantmaking Committee's recommended plans for implementing both programs.

[1] It bears noting that funds not granted in 2014 can, at the Board's discretion, be placed in an expenditure account for grantmaking in 2015 or future years. Of its current-year assets, only $20 million must be placed in the permanent endowment.

I. DEVELOP COMPETITIVE GRANTMAKING STRATEGIES FOR OPEN APPLICATION PROCESS

Now that the Board has approved a mission statement, the Grantmaking Committee has begun to develop the appropriate grantmaking strategies to implement the Fund's mission. This process will take some months of work and, depending on the Committee's interest, will involve the creation of a number of separate strategies. For example, the Committee may wish to implement separate strategies for improving the health of children and improving the health of seniors. Within each strategy, the size of grants might vary widely, possibly between $100,000 and $5 million, with terms from one to three years depending on the nature of the project and its intended outcomes.

The Grantmaking Committee began this process at its July 7 meeting by discussing the nature of the grantmaking strategy and the appropriate process required when building a grantmaking strategy for an open competitive grantmaking program. This process will continue at the committee's August meeting.

The goal of this effort will be the development of a few grantmaking strategies that will be open to applications from a wide variety of Michigan organizations on a competitive basis.

SCHEDULE

The entire process will likely take three to six months depending upon the availability of Committee members and the other work of the Committee. If all goes well, the first strategy might be complete by the end of the year so that grantmaking can begin in the spring of 2015.

II. PILOT GRANTS IN 2014

The Grantmaking Committee proposes a process to award a few pilot grants in 2014 that will achieve the strategic goals of 1) demonstrating the Fund's impact in 2014 and 2) allowing the Fund to learn more about the health needs of the state. The Grantmaking Committee proposes that this pilot grantmaking program have the following components:

Timing: Grants will be awarded before the end of 2014.

Amount: The initial budget for the program is $25 million.

Mission: Grants will be made for projects that clearly fall within the Fund's approved mission.

Geography: The impact of the grants will have widespread impact throughout the state.

Existing Channels: As approved by the Board of Directors in May, grants will be awarded to a small number of existing statewide organizations that have local branches or affiliates.

Re-granting: If possible, the Board wishes to avoid situations where a grantee would conduct a re-granting process to distribute funds to its local branches or affiliates.

Working with staff, the Grantmaking Committee proposes to seek out a small group of organizations to submit applications. The invited organizations must:

- Have a previous history of exceptional achievement in the area of health.
- Have local affiliates or branches that allow widespread, statewide impact.
- Have the capacity and infrastructure to manage a large-scale, innovative statewide project.
- Demonstrate financial stability and the ability to comply with the financial reporting requirements.

Further, the Grantmaking Committee proposes to use the following criteria in assessing the merits of the submitted applications:

Impact: The proposed project must have meaningful, measurable, statewide impact.

Issues: The project must address key issues that are central to the Fund: youth, seniors, health care cost(s), accessibility, etc.

Innovation and Transformation: The proposed project must implement the latest thinking on health issues and could lead to significant systems improvement.

Learning: The proposed project must be measurable and provide an opportunity to add to knowledge about how to address health needs of the state, particularly challenges that children and seniors face related to health and the organizations that serve them.

PARAMETERS

The Grantmaking Committee proposes to award approximately six pilot grants to statewide organizations that, taken together, could address a broad range of opportunities relevant to its mission. These organizations will likely be statewide nonprofits with local members, chapters, or affiliates.

Grant Size: The Board has tentatively budgeted $25 million for this effort.

Potential grantees:	Approximately 6 organizations
Grant range:	$3 million to $5 million
Average grant:	$4 million
Number of grants:	If 6 x $4m = $24m
Amount per affiliate:	If 20 affiliates, and $4m grant, then avg. $200,000 each

Grant Length: One to three years, depending on how well projects are developed at the time of application, unforeseen policy changes, etc.

Grant Requirements: The Fund's legal counsel will develop an appropriate grant contract to ensure that all the appropriate requirements are in place. At a minimum, each grantee will be required to have accounting procedures to track the use of the grant dollars and to provide thorough annual and final reports on the progress and success of the funded project. In addition, the Fund will require each grantee to provide a financial report on how the funds were spent and to declare that all of the funds were spent for charitable purposes and for their intended outcome.

SCHEDULE

The proposed schedule for the 2014 pilot grants process is listed below. Key Board actions are in bold.

Task	Deadline
Board adopts mission statement	**June [Done]**
Grant Committee has first meeting; reviews plan	July [Done]
Board approves revised plan for its 2014 grantmaking	**July 21**
Staff works to identify potential grantees, meetings occur	July
Staff reports to Grantmaking Committee on results of meetings	Aug. 5
Invitation for applications is provided to select groups	Aug. 5
Organizations submit applications for approved projects	Sept. 5
Staff reviews applications and conducts due diligence	September
Grantmaking Committee meets to review applications	October
Board reviews and approves Grantmaking Committee recommendations	**Oct/Nov**

Michigan Health Endowment Fund
201 Townsend Street, Lansing, MI 48913

Approved Board Policies and Other Actions

Current through June 2014 Board Meeting

January Board meeting – January 14, 2014

- Articles of Incorporation
- Bylaws, subject to modifying the name of the Executive Committee to "Executive and Compensation Committee" and amending its description to include review and consideration of salary matters, and subject to adding a Governance Committee.
- Conflict of Interest Policy

March Board meeting – March 24, 2014

- Banking Resolution
- Revisions to Bylaws
- Open Meetings Rules and Procedures
- Committee Appointments
- Executive Director SearchProcess
- Authorization to Move Forward with Public Policy Associates

April Board meeting – April 28, 2014

- Geralyn Lasher as the Interim Executive Director of the MHEF
- Conflict of Interest Questionnaire

May Board meeting – May 19, 2014

- Committee structure put forth by PPA

June Board meeting – June 16, 2014

- x Non-Board Members to Committees in Non-Voting Capacity
- x Spending and Endowment Fund Policy
- x Revised position descriptions for Board members and officers
- x CEO Position Description
- x Learning Plan

!

! "

$ %

#& '

(#)

* +

, - #

+ #

!

' .

.

· ! " # $

· % " &$

· '(") &$

· $ ") &$

–Michigan Health Endowment Fund–

Board Meeting

July 21, 2014

Attendee Feedback

1. Are you a member of the MHEF Board? _____Yes _____No

2. Using the scale provided, please rate your agreement or disagreement with each of the following statements. For each statement, please circle one number

	Disagree strongly				Agree strongly
a. The meeting topics were the right ones to discuss.	1	2	3	4	5
b. We used our meeting time effectively.	1	2	3	4	5
c. I had sufficient opportunity to contribute my ideas.	1	2	3	4	5
d. I felt my voice was heard.	1	2	3	4	5
e. The meeting was facilitated well.	1	2	3	4	5
f. What I learned at the meeting makes me better prepared to play my role as a Board member.	1	2	3	4	5
g. The facilities were appropriate.	1	2	3	4	5
h. Overall, the meeting advanced the work of the MHEF Board.	1	2	3	4	5

Please use the back if you need more space for your answers to the following questions.

3. What was the best part of the meeting?

4. What would have made this meeting more valuable?

5. What do you see as the next priorities for Board learning or action?

Thank you for your participation and input!