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Form **990-PF**

Department of the Treasury
Internal Revenue Service

Return of Private Foundation

or Section 4947(a)(1) Trust Treated as Private Foundation

▶ **Do not enter Social Security numbers on this form as it may be made public.**

▶ **Information about Form 990-PF and its separate instructions is at *www.irs.gov/form990pf.***

OMB No 1545-0052

2013

Open to Public Inspection

For calendar year 2013 or tax year beginning , **2013, and ending** , **20**

Name of foundation

Merck Foundation

A Employer identification number

22-6028476

Number and street (or P O box number if mail is not delivered to street address) | Room/suite

One Merck Drive, P.O. Box 100

B Telephone number (see instructions)

908-423-1000

City or town, state or province, country, and ZIP or foreign postal code

Whitehouse Station, NJ 08889-0100

C If exemption application is pending check here . . . . . ▶ ☐

G Check all that apply: ☐ Initial return ☐ Initial return of a former public charity ☐ Final return ☐ Amended return ☐ Address change ☐ Name change

D 1 Foreign organizations, check here . ▶ ☐

2 Foreign organizations meeting the 85% test, check here and attach computation . . . . . ▶ ☐

H Check type of organization ☒ Section 501(c)(3) exempt private foundation ☐ Section 4947(a)(1) nonexempt charitable trust ☐ Other taxable private foundation

E If private foundation status was terminated under section 507(b)(1)(A), check here . ▶ ☐

I Fair market value of all assets at end of year *(from Part II, col (c), line 16)* ▶ $ 172,067,130

J Accounting method ☒ Cash ☐ Accrual ☐ Other (specify) _____ *(Part I, column (d) must be on cash basis)*

F If the foundation is in a 60-month termination under section 507(b)(1)(B), check here . ▶ ☐

Part I Analysis of Revenue and Expenses *(The total of amounts in columns (b), (c), and (d) may not necessarily equal the amounts in column (a) (see instructions))*	(a) Revenue and expenses per books	(b) Net investment income	(c) Adjusted net income	(d) Disbursements for charitable purposes (cash basis only)
1 Contributions, gifts, grants, etc , received (attach schedule)				
2 Check ▶ ☒ if the foundation is **not** required to attach Sch B				
3 Interest on savings and temporary cash investments	38,253	38,253		
4 Dividends and interest from securities	2,092,411	2,092,411		
5a Gross rents				
b Net rental income or (loss) _____				
6a Net gain or (loss) from sale of assets not on line 10				
b Gross sales price for all assets on line 6a _____				
7 Capital gain net income (from Part IV, line 2)		0		
8 Net short-term capital gain			0	
9 Income modifications				
10a Gross sales less returns and allowances _____				
b Less Cost of goods sold _____				
c Gross profit or (loss) (attach schedule)				
11 Other income (attach schedule) Stmt #1	6,416,885	6,416,885		
12 **Total.** Add lines 1 through 11	8,547,549	8,547,549	0	
13 Compensation of officers, directors, trustees, etc				
14 Other employee salaries and wages				
15 Pension plans, employee benefits				
16a Legal fees (attach schedule)				
b Accounting fees (attach schedule)				
c Other professional fees (attach schedule)	70,024	70,024		
17 Interest				
18 Taxes (attach schedule) (see instructions) Stmt #2	172,416			
19 Depreciation (attach schedule) and depletion				
20 Occupancy				
21 Travel, conferences, and meetings				
22 Printing and publications				
23 Other expenses (attach schedule) Stmt #3	2,161,516			2,161,516
24 **Total operating and administrative expenses.** Add lines 13 through 23	2,403,956	70,024	0	2,161,516
25 Contributions, gifts, grants paid	41,823,400			41,823,400
26 **Total expenses and disbursements** Add lines 24 and 25	44,227,356	70,024	0	43,984,916
27 Subtract line 26 from line 12				
a **Excess of revenue over expenses and disbursements**	-35,679,807			
b **Net investment income** (if negative, enter -0-)		8,477,525		
c **Adjusted net income** (if negative, enter -0-)			0	

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Form **990-PF** (2013)

9-14

Part II Balance Sheets Attached schedules and amounts in the description column should be for end-of-year amounts only (See instructions)

		Beginning of year	End of year	
		(a) Book Value	(b) Book Value	(c) Fair Market Value
Assets	1 Cash - non-interest-bearing	1,363,043	20,136,278	20,136,278
	2 Savings and temporary cash investments			
	3 Accounts receivable ▶			
	Less allowance for doubtful accounts ▶	0	1,529	1,529
	4 Pledges receivable ▶			
	Less allowance for doubtful accounts ▶		0	
	5 Grants receivable			
	6 Receivables due from officers, directors, trustees, and other disqualified persons (attach schedule) (see instructions)			
	7 Other notes and loans receivable (attach schedule) ▶			
	Less allowance for doubtful accounts ▶		0	
	8 Inventories for sale or use			
	9 Prepaid expenses and deferred charges			
	10 a Investments - U S and state government obligations (attach schedule)			
	b Investments - corporate stock (attach schedule)			
	c Investments - corporate bonds (attach schedule)			
	11 Investments - land, buildings, and equipment basis ▶ Less accumulated depreciation ▶ (attach schedule)		0	
	12 Investments - mortgage loans			
	13 Investments - other (attach schedule)	210,209,411	151,929,323	151,929,323
	14 Land, buildings, and equipment basis ▶ Less accumulated depreciation ▶ (attach schedule)			
	15 Other assets (describe ▶)			
	16 **Total assets** (to be completed by all filers - see the instructions Also, see page 1, item I)	211,572,454	172,067,130	172,067,130
Liabilities	17 Accounts payable and accrued expenses	3,278,548	2,119,253	
	18 Grants payable			
	19 Deferred revenue			
	20 Loans from officers, directors, trustees, and other disqualified persons			
	21 Mortgages and other notes payable (attach schedule)			
	22 Other liabilities (describe ▶)			
	23 **Total liabilities** (add lines 17 through 22)	3,278,548	2,119,253	
Net Assets or Fund Balances	**Foundations that follow SFAS 117, check here ▶ ☐ and complete lines 24 through 26 and lines 30 and 31.**			
	24 Unrestricted			
	25 Temporarily restricted			
	26 Permanently restricted			
	Foundations that do not follow SFAS 117, ▶ ☒ check here and complete lines 27 through 31.			
	27 Capital stock, trust principal, or current funds			
	28 Paid-in or capital surplus, or land, bldg , and equipment fund			
	29 Retained earnings, accumulated income, endowment, or other funds	208,293,906	169,947,877	
	30 **Total net assets or fund balances** (see instructions)	208,293,906	169,947,877	
	31 **Total liabilities and net assets/fund balances** (see instructions)	211,572,454	172,067,130	

Part III Analysis of Changes in Net Assets or Fund Balances

1	Total net assets or fund balances at beginning of year - Part II, column (a), line 30 (must agree with end-of-year figure reported on prior year's return)	1	208,293,906
2	Enter amount from Part I, line 27a	2	-35,679,807
3	Other increases not included in line 2 (itemize) ▶	3	
4	Add lines 1, 2, and 3	4	172,614,099
5	Decreases not included in line 2 (itemize) ▶ To reconcile	5	2,666,222
6	Total net assets or fund balances at end of year (line 4 minus line 5) - Part II, column (b), line 30	6	169,947,877

Part IV Capital Gains and Losses for Tax on Investment Income

	(a) List and describe the kind(s) of property sold (e g., real estate, 2-story brick warehouse, or common stock, 200 shs. MLC Co)	(b) How acquired P - Purchase D - Donation	(c) Date acquired (mo , day, yr)	(d) Date sold (mo , day, yr)
1a				
b				
c				
d				
e				

	(e) Gross sales price	(f) Depreciation allowed (or allowable)	(g) Cost or other basis plus expense of sale	(h) Gain or (loss) (e) plus (f) minus (g)
a				0
b				0
c				0
d				0
e				0 0

	Complete only for assets showing gain in column (h) and owned by the foundation on 12/31/69			(l) Gains (Col (h) gain minus col (k), but not less than -0-) or Losses (from col (h))
	(i) F M V as of 12/31/69	(j) Adjusted basis as of 12/31/69	(k) Excess of col (i) over col. (j), if any	
a			0	0
b			0	0
c			0	0
d			0	0
e			0	0

2	Capital gain net income or (net capital loss) { If gain, also enter in Part I, line 7 / If (loss), enter -0- in Part I, line 7 }	2	0
3	Net short-term capital gain or (loss) as defined in sections 1222(5) and (6) If gain, also enter in Part I, line 8, column (c) (see instructions) If (loss), enter -0- in Part I, line 8	3	

Part V Qualification Under Section 4940(e) for Reduced Tax on Net Investment Income

(For optional use by domestic private foundations subject to the section 4940(a) tax on net investment income)

If section 4940(d)(2) applies, leave this part blank

Was the foundation liable for the section 4942 tax on the distributable amount of any year in the base period? ☐ Yes ☐ No

If "Yes," the foundation does not qualify under section 4940(e). Do not complete this part

1 Enter the appropriate amount in each column for each year, see the instructions before making any entries

(a) Base period years Calendar year (or tax year beginning in)	(b) Adjusted qualifying distributions	(c) Net value of noncharitable-use assets	(d) Distribution ratio (col (b) divided by col (c))
2012			0
2011			0
2010			0
2009			0
2008			0

2	**Total** of line 1, column (d)	2	0
3	Average distribution ratio for the 5-year base period - divide the total on line 2 by 5, or by the number of years the foundation has been in existence if less than 5 years	3	
4	Enter the net value of noncharitable-use assets for 2013 from Part X, line 5	4	0
5	Multiply line 4 by line 3	5	0
6	Enter 1% of net investment income (1% of Part I, line 27b)	6	0
7	Add lines 5 and 6	7	0
8	Enter qualifying distributions from Part XII, line 4	8	0

If line 8 is equal to or greater than line 7, check the box in Part VI, line 1b, and complete that part using a 1% tax rate See the Part VI instructions

Part VI Excise Tax Based on Investment Income (Section 4940(a), 4940(b), 4940(e), or 4948 - see instructions)

1a	Exempt operating foundations described in section 4940(d)(2), check here ▶ ☐ and enter "N/A" on line 1. Date of ruling or determination letter _____ (attach copy of letter if necessary - see instructions)		
b	Domestic foundations that meet the section 4940(e) requirements in Part V, check here ▶ ☐ and enter 1% of Part I, line 27b	1	169,550
c	All other domestic foundations enter 2% of line 27b Exempt foreign organizations enter 4% of Part I, line 12, col (b)		
2	Tax under section 511 (domestic section 4947(a)(1) trusts and taxable foundations only Others enter -0-)	2	
3	Add lines 1 and 2	3	169,550
4	Subtitle A (income) tax (domestic section 4947(a)(1) trusts and taxable foundations only Others enter -0-)	4	
5	**Tax based on investment income.** Subtract line 4 from line 3 If zero or less, enter -0-	5	169,550
6	Credits/Payments		
a	2013 estimated tax payments and 2012 overpayment credited to 2013 — 6a: 172,416		
b	Exempt foreign organizations - tax withheld at source — 6b:		
c	Tax paid with application for extension of time to file (Form 8868) — 6c:		
d	Backup withholding erroneously withheld — 6d:		
7	Total credits and payments Add lines 6a through 6d	7	172,416
8	Enter any **penalty** for underpayment of estimated tax Check here ☐ if Form 2220 is attached	8	
9	**Tax due.** If the total of lines 5 and 8 is more than line 7, enter **amount owed** ▶	9	0
10	**Overpayment.** If line 7 is more than the total of lines 5 and 8, enter the **amount overpaid** ▶	10	2,866
11	Enter the amount of line 10 to be **Credited to 2014 estimated tax** ▶ 2,866 **Refunded** ▶	11	

Part VII-A Statements Regarding Activities

			Yes	No
1a	During the tax year, did the foundation attempt to influence any national, state, or local legislation or did it participate or intervene in any political campaign?	1a		X
b	Did it spend more than $100 during the year (either directly or indirectly) for political purposes (see instructions for the definition)?	1b		X
	If the answer is "Yes" to 1a or 1b, attach a detailed description of the activities and copies of any materials published or distributed by the foundation in connection with the activities			
c	Did the foundation file **Form 1120-POL** for this year?	1c		X
d	Enter the amount (if any) of tax on political expenditures (section 4955) imposed during the year. (1) On the foundation ▶ $ _____ (2) On foundation managers ▶ $ _____			
e	Enter the reimbursement (if any) paid by the foundation during the year for political expenditure tax imposed on foundation managers ▶ $ _____			
2	Has the foundation engaged in any activities that have not previously been reported to the IRS? *If "Yes," attach a detailed description of the activities*	2		X
3	Has the foundation made any changes, not previously reported to the IRS, in its governing instrument, articles of incorporation, or bylaws, or other similar instruments? *If "Yes," attach a conformed copy of the changes*	3		X
4a	Did the foundation have unrelated business gross income of $1,000 or more during the year?	4a		X
b	If "Yes," has it filed a tax return on **Form 990-T** for this year?	4b		
5	Was there a liquidation, termination, dissolution, or substantial contraction during the year? *If "Yes," attach the statement required by General Instruction T*	5		X
6	Are the requirements of section 508(e) (relating to sections 4941 through 4945) satisfied either • By language in the governing instrument, or • By state legislation that effectively amends the governing instrument so that no mandatory directions that conflict with the state law remain in the governing instrument?	6	X	
7	Did the foundation have at least $5,000 in assets at any time during the year? *If "Yes," complete Part II, col (c), and Part XV*	7	X	
8a	Enter the states to which the foundation reports or with which it is registered (see instructions) ▶ NEW JERSEY			
b	If the answer is "Yes" to line 7, has the foundation furnished a copy of Form 990-PF to the Attorney General (or designate) of each state as required by *General Instruction G? If "No," attach explanation.*	8b	X	
9	Is the foundation claiming status as a private operating foundation within the meaning of section 4942(j)(3) or 4942(j)(5) for calendar year 2013 or the taxable year beginning in 2013 (see instructions for Part XIV)? *If "Yes," complete Part XIV.*	9		X
10	Did any persons become substantial contributors during the tax year? *If "Yes," attach a schedule listing their names and addresses*	10		X

Part VII-A Statements Regarding Activities *(continued)*

			Yes	No
11	At any time during the year, did the foundation, directly or indirectly, own a controlled entity within the meaning of section 512(b)(13)? If "Yes," attach schedule (see instructions)	11		X
12	Did the foundation make a distribution to a donor advised fund over which the foundation or a disqualified person had advisory privileges? If "Yes," attach statement (see instructions)	12		X
13	Did the foundation comply with the public inspection requirements for its annual returns and exemption application?	13	X	

Website address ▶ NONE

14 The books are in care of ▶ TAXPAYER Telephone no ▶ 908-423-1000

Located at ▶ ONE MERCK DRIVE, WHITEHOUSE STATION, NJ ZIP+4 ▶ 08889-0100

15 Section 4947(a)(1) nonexempt charitable trusts filing Form 990-PF in lieu of **Form 1041** - Check here ▶ ☐

and enter the amount of tax-exempt interest received or accrued during the year ▶ 15

			Yes	No
16	At any time during calendar year 2013, did the foundation have an interest in or a signature or other authority over a bank, securities, or other financial account in a foreign country?	16		X
	See the instructions for exceptions and filing requirements for Form TD F 90-22.1. If "Yes," enter the name of the foreign country ▶			

Part VII-B Statements Regarding Activities for Which Form 4720 May Be Required

			Yes	No
	File Form 4720 if any item is checked in the "Yes" column, unless an exception applies.			
1a	During the year did the foundation (either directly or indirectly)			
	(1) Engage in the sale or exchange, or leasing of property with a disqualified person? ☐ Yes ☒ No			
	(2) Borrow money from, lend money to, or otherwise extend credit to (or accept it from) a disqualified person? ☐ Yes ☒ No			
	(3) Furnish goods, services, or facilities to (or accept them from) a disqualified person? ☒ Yes ☐ No			
	(4) Pay compensation to, or pay or reimburse the expenses of, a disqualified person? ☒ Yes ☐ No			
	(5) Transfer any income or assets to a disqualified person (or make any of either available for the benefit or use of a disqualified person)? ☐ Yes ☒ No			
	(6) Agree to pay money or property to a government official? (**Exception.** Check "No" if the foundation agreed to make a grant to or to employ the official for a period after termination of government service, if terminating within 90 days) ☐ Yes ☒ No			
b	If any answer is "Yes" to 1a(1)-(6), did **any** of the acts fail to qualify under the exceptions described in Regulations section 53 4941(d)-3 or in a current notice regarding disaster assistance (see instructions)?	1b		X
	Organizations relying on a current notice regarding disaster assistance check here ▶ ☐			
c	Did the foundation engage in a prior year in any of the acts described in 1a, other than excepted acts, that were not corrected before the first day of the tax year beginning in 2013?	1c		X
2	Taxes on failure to distribute income (section 4942) (does not apply for years the foundation was a private operating foundation defined in section 4942(j)(3) or 4942(j)(5))			
a	At the end of tax year 2013, did the foundation have any undistributed income (lines 6d and 6e, Part XIII) for tax year(s) beginning before 2013? ☐ Yes ☒ No			
	If "Yes," list the years ▶ _____, _____, _____, _____			
b	Are there any years listed in 2a for which the foundation is **not** applying the provisions of section 4942(a)(2) (relating to incorrect valuation of assets) to the year's undistributed income? (If applying section 4942(a)(2) to **all** years listed, answer "No" and attach statement - see instructions.)	2b		
c	If the provisions of section 4942(a)(2) are being applied to **any** of the years listed in 2a, list the years here.			
	▶ _____, _____, _____, _____			
3a	Did the foundation hold more than a 2% direct or indirect interest in any business enterprise at any time during the year? ☐ Yes ☒ No			
b	If "Yes," did it have excess business holdings in 2013 as a result of **(1)** any purchase by the foundation or disqualified persons after May 26, 1969, **(2)** the lapse of the 5-year period (or longer period approved by the Commissioner under section 4943(c)(7)) to dispose of holdings acquired by gift or bequest; or **(3)** the lapse of the 10-, 15-, or 20-year first phase holding period? *(Use Schedule C, Form 4720, to determine if the foundation had excess business holdings in 2013)*	3b		
4a	Did the foundation invest during the year any amount in a manner that would jeopardize its charitable purposes?	4a		X
b	Did the foundation make any investment in a prior year (but after December 31, 1969) that could jeopardize its charitable purpose that had not been removed from jeopardy before the first day of the tax year beginning in 2013?	4b		X

Part VII-B Statements Regarding Activities for Which Form 4720 May Be Required *(continued)*

5a	During the year did the foundation pay or incur any amount to			
	(1) Carry on propaganda, or otherwise attempt to influence legislation (section 4945(e))?	☐ Yes ☒ No		
	(2) Influence the outcome of any specific public election (see section 4955); or to carry on, directly or indirectly, any voter registration drive?	☐ Yes ☒ No		
	(3) Provide a grant to an individual for travel, study, or other similar purposes?	☐ Yes ☒ No		
	(4) Provide a grant to an organization other than a charitable, etc, organization described in section 509(a)(1), (2), or (3), or section 4940(d)(2)? (see instructions)	☒ Yes ☐ No		
	(5) Provide for any purpose other than religious, charitable, scientific, literary, or educational purposes, or for the prevention of cruelty to children or animals?	☐ Yes ☒ No		
b	If any answer is "Yes" to 5a(1)-(5), did **any** of the transactions fail to qualify under the exceptions described in Regulations section 53 4945 or in a current notice regarding disaster assistance (see instructions)?	**5b**		X
	Organizations relying on a current notice regarding disaster assistance check here . . . . . ▶ ☐			
c	If the answer is "Yes" to question 5a(4), does the foundation claim exemption from the tax because it maintained expenditure responsibility for the grant? . . . . . ☒ Yes ☐ No			
	If "Yes," attach the statement required by Regulations section 53.4945-5(d).			
6a	Did the foundation, during the year, receive any funds, directly or indirectly, to pay premiums on a personal benefit contract? . . . . . ☐ Yes ☒ No			
b	Did the foundation, during the year, pay premiums, directly or indirectly, on a personal benefit contract?	**6b**		X
	If "Yes" to 6b, file Form 8870			
7a	At any time during the tax year, was the foundation a party to a prohibited tax shelter transaction? . . ☐ Yes ☒ No			
b	If "Yes," did the foundation receive any proceeds or have any net income attributable to the transaction?	**7b**		

Part VIII Information About Officers, Directors, Trustees, Foundation Managers, Highly Paid Employees, and Contractors

1 List all officers, directors, trustees, foundation managers and their compensation (see instructions).

(a) Name and address	(b) Title, and average hours per week devoted to position	(c) Compensation (If not paid, enter -0-)	(d) Contributions to employee benefit plans and deferred compensation	(e) Expense account, other allowances
SEE ATTACHED STATEMENT #4		0		

2 Compensation of five highest-paid employees (other than those included on line 1 - see instructions). If none, enter "NONE."

(a) Name and address of each employee paid more than $50,000	(b) Title, and average hours per week devoted to position	(c) Compensation	(d) Contributions to employee benefit plans and deferred compensation	(e) Expense account, other allowances
NONE				

Total number of other employees paid over $50,000 . . . . . ▶ 0

Part VIII **Information About Officers, Directors, Trustees, Foundation Managers, Highly Paid Employees, and Contractors** *(continued)*

3 Five highest-paid independent contractors for professional services (see instructions). If none, enter "NONE."

(a) Name and address of each person paid more than $50,000	(b) Type of service	(c) Compensation
NONE		
Total number of others receiving over $50,000 for professional services ▶		0

Part IX-A **Summary of Direct Charitable Activities**

List the foundation's four largest direct charitable activities during the tax year Include relevant statistical information such as the number of organizations and other beneficiaries served, conferences convened, research papers produced, etc	Expenses
1 SEE ATTACHED STATEMENT #5	11,768,320
2	
3	
4	

Part IX-B **Summary of Program-Related Investments** (see instructions)

Describe the two largest program-related investments made by the foundation during the tax year on lines 1 and 2	Amount
1 NONE	
2	
All other program-related investments See instructions 3	
Total. Add lines 1 through 3 ▶	0

Part X Minimum Investment Return (All domestic foundations must complete this part Foreign foundations, see instructions.)

1	Fair market value of assets not used (or held for use) directly in carrying out charitable, etc , purposes		
a	Average monthly fair market value of securities	1a	
b	Average of monthly cash balances	1b	193,385,343
c	Fair market value of all other assets (see instructions)	1c	
d	**Total** (add lines 1a, b, and c)	1d	193,385,343
e	Reduction claimed for blockage or other factors reported on lines 1a and 1c (attach detailed explanation) — 1e		
2	Acquisition indebtedness applicable to line 1 assets	2	
3	Subtract line 2 from line 1d	3	193,385,343
4	Cash deemed held for charitable activities Enter 1 1/2 % of line 3 (for greater amount, see instructions)	4	2,900,780
5	**Net value of noncharitable-use assets.** Subtract line 4 from line 3 Enter here and on Part V, line 4	5	190,484,563
6	**Minimum investment return.** Enter 5% of line 5	6	9,524,228

Part XI Distributable Amount (see instructions) (Section 4942(j)(3) and (j)(5) private operating foundations and certain foreign organizations check here ▶ ☐ and do not complete this part)

1	Minimum investment return from Part X, line 6			1	9,524,228
2a	Tax on investment income for 2013 from Part VI, line 5	2a	169,550		
b	Income tax for 2013 (This does not include the tax from Part VI)	2b			
c	Add lines 2a and 2b			2c	169,550
3	Distributable amount before adjustments Subtract line 2c from line 1			3	9,354,678
4	Recoveries of amounts treated as qualifying distributions			4	
5	Add lines 3 and 4			5	9,354,678
6	Deduction from distributable amount (see instructions)			6	
7	**Distributable amount** as adjusted Subtract line 6 from line 5. Enter here and on Part XIII, line 1.			7	9,354,678

Part XII Qualifying Distributions (see instructions)

1	Amounts paid (including administrative expenses) to accomplish charitable, etc , purposes		
a	Expenses, contributions, gifts, etc - total from Part I, column (d), line 26	1a	43,984,916
b	Program-related investments - total from Part IX-B	1b	
2	Amounts paid to acquire assets used (or held for use) directly in carrying out charitable, etc , purposes	2	
3	Amounts set aside for specific charitable projects that satisfy the		
a	Suitability test (prior IRS approval required)	3a	
b	Cash distribution test (attach the required schedule)	3b	
4	**Qualifying distributions.** Add lines 1a through 3b. Enter here and on Part V, line 8, and Part XIII, line 4	4	43,984,916
5	Foundations that qualify under section 4940(e) for the reduced rate of tax on net investment income Enter 1% of Part I, line 27b (see instructions)	5	
6	**Adjusted qualifying distributions.** Subtract line 5 from line 4	6	43,984,916

Note. The amount on line 6 will be used in Part V, column (b), in subsequent years when calculating whether the foundation qualifies for the section 4940(e) reduction of tax in those years

Part XIII Undistributed Income (see instructions)

	(a) Corpus	(b) Years prior to 2012	(c) 2012	(d) 2013
1 Distributable amount for 2013 from Part XI, line 7				9,354,678
2 Undistributed income, if any, as of the end of 2013				
a Enter amount for 2012 only				
b Total for prior years 20____,20____,20____				
3 Excess distributions carryover, if any, to 2013				
a From 2008 21,576,905				
b From 2009 27,186,634				
c From 2010 33,727,019				
d From 2011 41,131,269				
e From 2012 32,979,453				
f **Total** of lines 3a through e	156,601,280			
4 Qualifying distributions for 2013 from Part XII, line 4 ▶ $ 43,984,916				
a Applied to 2012, but not more than line 2a				
b Applied to undistributed income of prior years (Election required - see instructions)				
c Treated as distributions out of corpus (Election required - see instructions)				
d Applied to 2013 distributable amount				9,354,678
e Remaining amount distributed out of corpus	34,630,238			
5 Excess distributions carryover applied to 2013 *(If an amount appears in column (d), the same amount must be shown in column (a).)*				
6 **Enter the net total of each column as indicated below:**				
a Corpus Add lines 3f, 4c, and 4e Subtract line 5	191,231,518			
b Prior years' undistributed income Subtract line 4b from line 2b		0		
c Enter the amount of prior years' undistributed income for which a notice of deficiency has been issued, or on which the section 4942(a) tax has been previously assessed				
d Subtract line 6c from line 6b Taxable amount - see instructions		0		
e Undistributed income for 2012 Subtract line 4a from line 2a Taxable amount - see instructions			0	
f Undistributed income for 2013. Subtract lines 4d and 5 from line 1 This amount must be distributed in 2014				0
7 Amounts treated as distributions out of corpus to satisfy requirements imposed by section 170(b)(1)(F) or 4942(g)(3) (see instructions)				
8 Excess distributions carryover from 2008 not applied on line 5 or line 7 (see instructions)	21,576,905			
9 **Excess distributions carryover to 2014.** Subtract lines 7 and 8 from line 6a	169,654,613			
10 Analysis of line 9				
a Excess from 2009 27,186,634				
b Excess from 2010 33,727,019				
c Excess from 2011 41,131,269				
d Excess from 2012 32,979,453				
e Excess from 2013 34,630,238				

Part XIV Private Operating Foundations (see instructions and Part VII-A, question 9)

1a If the foundation has received a ruling or determination letter that it is a private operating foundation, and the ruling is effective for 2013, enter the date of the ruling . . . . . ▶

b Check box to indicate whether the foundation is a private operating foundation described in section ☐ 4942(j)(3) or ☐ 4942(j)(5)

	Tax year	Prior 3 years			(e) Total
	(a) 2013	(b) 2012	(c) 2011	(d) 2010	
2a Enter the lesser of the adjusted net income from Part I or the minimum investment return from Part X for each year listed					0
b 85% of line 2a	0	0	0	0	0
c Qualifying distributions from Part XII, line 4 for each year listed .					0
d Amounts included in line 2c not used directly for active conduct of exempt activities					0
e Qualifying distributions made directly for active conduct of exempt activities Subtract line 2d from line 2c	0	0	0	0	0
3 Complete 3a, b, or c for the alternative test relied upon					
a "Assets" alternative test - enter (1) Value of all assets . . .					0
(2) Value of assets qualifying under section 4942(j)(3)(B)(i)					0
b "Endowment" alternative test- enter 2/3 of minimum investment return shown in Part X, line 6 for each year listed . . .					0
c "Support" alternative test - enter (1) Total support other than gross investment income (interest, dividends, rents, payments on securities loans (section 512(a)(5)), or royalties)					0
(2) Support from general public and 5 or more exempt organizations as provided in section 4942 (j)(3)(B)(iii)					0
(3) Largest amount of support from an exempt organization					0
(4) Gross investment income .					0

Part XV Supplementary Information (Complete this part only if the foundation had $5,000 or more in assets at any time during the year - see instructions.)

1 Information Regarding Foundation Managers:

a List any managers of the foundation who have contributed more than 2% of the total contributions received by the foundation before the close of any tax year (but only if they have contributed more than $5,000) (See section 507(d)(2))

NONE

b List any managers of the foundation who own 10% or more of the stock of a corporation (or an equally large portion of the ownership of a partnership or other entity) of which the foundation has a 10% or greater interest

N/A

2 Information Regarding Contribution, Grant, Gift, Loan, Scholarship, etc., Programs:

Check here ▶ ☐ if the foundation only makes contributions to preselected charitable organizations and does not accept unsolicited requests for funds If the foundation makes gifts, grants, etc (see instructions) to individuals or organizations under other conditions, complete items 2a, b, c, and d

a The name, address, and telephone number or e-mail address of the person to whom applications should be addressed

Brian Grill, Exec VP, 908-423-1000, Merck Foundation, PO Box 100, Whitehouse Station, NJ 08889-0100

b The form in which applications should be submitted and information and materials they should include

SEE ATTACHED STATEMENT #6

c Any submission deadlines

d Any restrictions or limitations on awards, such as by geographical areas, charitable fields, kinds of institutions, or other factors

SEE ATTACHED STATEMENT #6

Part XV Supplementary Information (continued)

3 Grants and Contributions Paid During the Year or Approved for Future Payment

Recipient Name and address (home or business)	If recipient is an individual, show any relationship to any foundation manager or substantial contributor	Foundation status of recipient	Purpose of grant or contribution	Amount
a *Paid during the year*				
SEE ATTACHED STATEMENT #7				41,823,400
Total ▶ **3a**				41,823,400
b *Approved for future payment*				
SEE ATTACHED STATEMENT #8				42,203,726
Total ▶ **3b**				42,203,726

Part XVI-A Analysis of Income-Producing Activities

Enter gross amounts unless otherwise indicated	Unrelated business income		Excluded by section 512, 513, or 514		(e) Related or exempt function income (See instructions)
	(a) Business code	(b) Amount	(c) Exclusion code	(d) Amount	
1 Program service revenue					
a					
b					
c					
d					
e					
f					
g Fees and contracts from government agencies					
2 Membership dues and assessments					
3 Interest on savings and temporary cash investments			14	38,253	
4 Dividends and interest from securities			14	2,092,411	
5 Net rental income or (loss) from real estate					
a Debt-financed property					
b Not debt-financed property					
6 Net rental income or (loss) from personal property					
7 Other investment income					
8 Gain or (loss) from sales of assets other than inventory					
9 Net income or (loss) from special events					
10 Gross profit or (loss) from sales of inventory					
11 Other revenue a OTHER INCOME			14	6,416,885	
b					
c					
d					
e					
12 Subtotal Add columns (b), (d), and (e)		0		8,547,549	0
13 **Total.** Add line 12, columns (b), (d), and (e)					13 8,547,549

(See worksheet in line 13 instructions to verify calculations)

Part XVI-B Relationship of Activities to the Accomplishment of Exempt Purposes

Line No. ▼	Explain below how each activity for which income is reported in column (e) of Part XVI-A contributed importantly to the accomplishment of the foundation's exempt purposes (other than by providing funds for such purposes) (See instructions.)
	N/A

Part XVII Information Regarding Transfers To and Transactions and Relationships With Noncharitable Exempt Organizations

			Yes	No
1	Did the organization directly or indirectly engage in any of the following with any other organization described in section 501(c) of the Code (other than section 501(c)(3) organizations) or in section 527, relating to political organizations?			
a	Transfers from the reporting foundation to a noncharitable exempt organization of:			
	(1) Cash	1a(1)		X
	(2) Other assets	1a(2)		X
b	Other transactions			
	(1) Sales of assets to a noncharitable exempt organization	1b(1)		X
	(2) Purchases of assets from a noncharitable exempt organization	1b(2)		X
	(3) Rental of facilities, equipment, or other assets	1b(3)		X
	(4) Reimbursement arrangements	1b(4)		X
	(5) Loans or loan guarantees	1b(5)		X
	(6) Performance of services or membership or fundraising solicitations	1b(6)		X
c	Sharing of facilities, equipment, mailing lists, other assets, or paid employees	1c		X

d If the answer to any of the above is "Yes," complete the following schedule Column **(b)** should always show the fair market value of the goods, other assets, or services given by the reporting foundation. If the foundation received less than fair market value in any transaction or sharing arrangement, show in column **(d)** the value of the goods, other assets, or services received.

(a) Line no	(b) Amount involved	(c) Name of noncharitable exempt organization	(d) Description of transfers, transactions, and sharing arrangements

2a Is the foundation directly or indirectly affiliated with, or related to, one or more tax-exempt organizations described in section 501(c) of the Code (other than section 501(c)(3)) or in section 527? ☐ Yes ☒ No

b If "Yes," complete the following schedule

(a) Name of organization	(b) Type of organization	(c) Description of relationship

Sign Here

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete Declaration of preparer (other than taxpayer) is based on all information of which preparer has any knowledge

▶ [signature] | 10/2/2014 | ▶ Sr. VP

Signature of officer or trustee | Date | Title

May the IRS discuss this return with the preparer shown below (see instructions)? ☐ Yes ☐ No

Paid Preparer Use Only

Print/Type preparer's name	Preparer's signature	Date	Check ☐ if self-employed	PTIN

Firm's name ▶ | Firm's EIN ▶

Firm's address ▶ | Phone no

STATEMENT #1

MERCK FOUNDATION (22-6028476)
FORM 990-PF 2013
OTHER INCOME
PART 1, LINE 11

REALIZED GAIN ON SECURITIES (SSgA)	$	6,416,885
REALIZED GAIN ON SECURITIES (BNYM)	$	-
TOTAL	$	6,416,885

STATEMENT #2

MERCK FOUNDATION (22-6028476)
FORM 990-PF 2013
EXCISE TAX DETAIL
PART 1 LINE 18

2012 Credit per T/R	$30,613.00
5/9/2013	$18,641 00
6/10/2013	$18,457 00
9/9/2013	$48,973.00
12/11/2013	$55,732.00
Paid With 1st Extension	$0.00
TOTAL	$172,416.00

STATEMENT #3

MERCK FOUNDATION (22-6028476)
FORM 990-PF 2013
OTHER EXPENSE
PART 1, LINE 23

BANK CHARGES	-
OUTSIDE SERVICES	2,142,587
OPERATING EXPENSES	18,929
MISCELLANEOUS EXPENSES	-
	2,161,516

STATEMENT #4
MERCK FOUNDATION (22-6028476)
FORM 990-PF PAGE 6 PART VIII INFORMATION ABOUT OFFICERS
2013

(a) NAME AND TITLE	(b) AVE HOURS/WEEK	(c) COMPENSATION	(d) EMPLOYEE BENEFITS	(e) EXPENSES & ALLOWANCE
Miriam M Graddick-Weir, Chairperson of the Board	0	0	0	0
Geralyn S Ritter, President	0	0	0	0
Brian Grill, Executive Vice President	0	0	0	0
Robert B McGovern, Vice President, Tax	0	0	0	0
Leslie M Hardy, Vice President	0	0	0	0
Mark E McDonough, Treasurer	0	0	0	0
Timothy Dillane, Assistant Treasurer	0	0	0	0
Juanita Lee, Assistant Treasurer	0	0	0	0
Joseph Promo, Assistant Treasurer	0	0	0	0
Stephen C Propper, Assistant Treasurer	0	0	0	0
Mark J Simon, Assistant Treasurer	0	0	0	0
Jon Filderman, Secretary	0	0	0	0
Katie Fedosz, Assistant Secretary	0	0	0	0

STATEMENT #5

MERCK FOUNDATION
22-6028476
FOUR LARGEST GRANTS MADE IN 2013
FORM 990-PF 2013, PAGE 7, PART IX-A

Organization Name	Program Title	2013 Payment
African Comprehensive HIV/AIDS Partnerships (ACHAP)	To support and enhance Botswana's response to the HIV/AIDS epidemic through a comprehensive approach that includes HIV/AIDS prevention, treatment, care and support, and impact mitigation	6,000,000
Merck Childhood Asthma Network (MCAN)	To enhance the quality of life for children with asthma and their families, and to reduce the burden of the disease on them and society	4,339,340
Merck Institute for Science Education (MISE)	To improve science education from kindergarten through 12th grade through teacher and program development	1,428,980
	TOTAL	11,768,320

MERCK FOUNDATION
22-6028476
FORM 990-PF, PAGE 10
2013

STATEMENT #6

Part XV, Question 2b

Requests may be submitted by letter containing a brief summary of the organization, including documentation of its federal tax-exempt status, objectives of the project and means for accomplishing the goal, the budget, sources of other funding, and amount of the grant request. Evidence of a sound program, competent leadership, and the ability to accomplish objectives must be shown.

Part XV, Question 2d

Requests are evaluated on the basis of relevance to the philanthropic priorities of the Merck Company Foundation, the interests of Merck & Co., Inc. the location of its major facilities, and the concerns of its employees.

Grants are not made to political, labor, or sectarian groups, nor for endowments, publications, or media productions. Except within Foundation programs, grants are not given for scholarships, fellowships, or to individuals.

STATEMENT 7
FORM 990-PF 2013
PAGE 11, PART XV, 3a

MERCK FOUNDATION
22-6028476
GRANTS

Grant Id	Organization Name	Program Title	2013 Payment
9799	180 Turning Lives Around	NJ Neighbor of Choice 2NDFLOOR Operations	10,000
7763	A Woman's Place	Education and Training: Young Adult Program (YA)	5,000
11333	Achilles International Inc	Achilles International Philadelphia Chapter	1,000
10287	Alegent Health	Emergency Services Technology	3,000
10473	Ambler Area YMCA	Annual Campaign	7,500
2809	American Cancer Society Eastern Division Inc.	Toward Excellence in American Cancer Society Patient Navigation Services	332,188
5267	American Jewish World Service	Sexual Health in Emergency, Conflict, Post-Conflict and Repressive Contexts	300,000
1025	American Red Cross	The American Red Cross Annual Disaster Giving Program (ADGP)	500,000
10081	America's Grow-a-Row	New Jersey Neighbor of Choice Grant for the Newark Area Hunger Relief and Healthy Eating Program	5,000
10069	Anderson House, Inc.	For the Health of It!	15,000
10311	Angels Among Us	Family Assistance Financial Aid Program	3,000
10233	Ann Silverman Community Health Clinic	Medication Assistance Program	10,000
10483	Association for Adults with Developmental Disabilities Young Adult Group	Social Services for Greater Independence Program	5,000
10187	Barton College	Expansion of Student Research at Barton College Department of Science and Mathematics	25,000
2385	Baylor Health Care System Foundation	Baylor Research Institute	282,095
9887	Bergen Volunteer Medical Initiative	BVMI Diabetes Program Expanding diabetes care for working, low-income residents of northern NJ	10,000
7667	Big Brothers Big Sisters of Delaware, Inc.	Sussex County Academic Achievers Project	6,000
10485	Bloomsburg Area YMCA	Mini Art and Science Camps	1,250
10583	Bloomsburg University Foundation	Chemicals in the home: Do's and Don'ts	1,250
10191	Boys & Girls Clubs of Delaware	The BUILD STEM Program	8,000
10471	Bradley Cleveland Public Education Foundation	21st Century Science by iPads	21,400
10143	Brinkley Heights Urban Academy	Run, Run Readers!	25,000
10451	Broad Street Ministry	The Hospitality Collaborative	10,000
2725	BroadReach Institute for Training and Education, Inc.	Management and Leadership Academy (MLA) - Zambia Program Implementation	1,000,000
10541	Camps for Spiffy-Kyds Inc	Camp Spifida 2013	4,000
10457	Career Wardrobe	Gateway to Success Job Readiness Program	10,000
9285	CDC Development Solutions	Richard T. Clark Fellowship for World Health	57,100
9813	CDC Development Solutions	Merck Richard T. Clark Fellowship for World Health	601,446
11279	CDC Development Solutions	Richard T. Clark Fellowship for World Health	425,403
9763	Center for Educational Advancement	Consulting services to benefit students with autism and related disorders	10,000
10105	Center for Non-Profit Corporations, Inc.	NJ Non-Profit Public Education and Capacity Building	5,000
11033	Central Bucks Family YMCA	Ability Progam	10,000

10231	Children's Hospital & Medical Center	Children's Developmental Clinic (CDC)	3,000
1231	Children's Inn at NIH	Children's Inn at NIH	1,000,000
4477	Children's Inn at NIH	Friends Fund Challenge Grant	100,000
10727	Children's Scholarship Fund Philadelphia	K-8th Grade Scholarships for Students from Low-Income Philadelphia Families	15,000
10101	Circle of Life Childrens Center, Inc.	Pediatric Palliative Care/Clinical Services Program	20,000
9863	Citizen Schools	Transforming STEM Education and Increasing Access to STEM Careers	10,000
6347	City of Philadelphia	Engaging HIV-Positive Patients in Care (EHPPIC)	333,333
10523	Columbia County Volunteers in Medicine Clinic, Inc.	Columbia County Volunteers in Medicine Clinic, Inc.	2,539
10235	Cooperative for Assistance and Relief Everywhere Inc.	Join My Village India (Year 3)	1,250,000
10487	Curtis Institute of Music	Full-tuition fellowship for one of two incoming students from Lansdale, PA	15,000
10443	Danville Area School District	Danville High School Transition Program	4,000
10591	Danville Area School District	Liberty Valley Intermediate School STEM Education Initiative	10,000
10421	Danville Area School District	Danville Head Start	6,711
10513	Day Care Association of Montgomery County, Inc	Building S.T.E.A.M. in Out of School Time Environments	5,000
11219	Dedham Community Association, Inc	Cindy Nemet Legacy Fund	1,000
10517	Delaware Technical Community College Educational Foundation	Job Training and Professional Development	5,500
10469	DR100	DR100	9,800
9957	Drew University	Drew Summer Science Institute (DSSI)	10,000
10505	Duke University	Incredible Years Parenting Program for School-Age Children	5,000
10465	Durham Technical Community College Foundation	Further Enhancement of the Inter-profession Simulation Program at Durham Technical Community College	25,000
11135	East Carolina University Foundation, Inc.	Neighbor of Choice Grants Program- North Carolina-- Microwave-Accelerated Reactions in the Undergrad	6,500
10099	Edison Wetlands Association Inc.	Environmental Awareness and Resource Conservation for Children in Central New Jersey	5,000
4303	EngenderHealth, Inc.	Mobile Outreach Services Project: Accelerating Access to Contraceptive Choices	216,014
9765	Family Promise of Hunterdon County, Inc.	NJ Neighbor of Choice Family Life Support	15,000
9949	FAN4Kids, A NJ Nonprofit Corporation	FAN4Kids Newark. Reversing the Trend of Childhood Obesity	15,000
8341	Foundation for Morristown Medical Center	Touched by an Agency	1,000
9851	Foundation of UMDNJ	Establishing a Perscription Food Pantry at New Jersey Medical School/University Hospital, Newark NJ	15,000
10367	Free Library of Philadelphia Foundation	Science Program for Children and Teens	10,000
6351	Fulton County Government	Bridging the Gap - A Linkage to Care Project in Fulton County, Atlanta, GA	333,333
11217	Georgia E. Gregory Interdenominational School of Music	Out of School and Summer Music Camp Keyboard/Computer Lab.	1,000
5449	Girls Incorporated	Girls Inc. Eureka! Expansion	169,765

10445	Good Samaritan Mission Center	Many Hands Helping Others	5,000
10437	Greater Susquehanna Valley YMCA	YMCA School Age Child Care	1,250
9817	HAR, Inc.	Accessible Housing and Modifications for Hunterdon County Seniors and the Disabled	2,000
10303	Harrisonburg Rockingham Free Clinic	Golden Circle Donor Program	50,000
9561	HealthLink Medical Center, Inc.	Diabetes Wellness Management	30,000
2397	Healthy Memphis Common Table	Healthy Memphis Common Table	390,821
10037	Homeless Solutions, Inc.	Family & Women's Shelter Program	10,000
11241	HOPE FOR THE HEART	Biblical Counseling Services	1,000
11343	Horseways Inc.	Trail mapping and sign project	1,000
6355	Houston Department of Health and Human Services	Expanded Linkage to Care Initiatives (ELCI)	198,648
9869	Hunterdon Art Museum	Artistic Expressions	10,000
9687	Hunterdon Drug Awareness Program, Inc.	NJ Neighbor of Choice - Intensive Outpatient Treatment Program.	15,000
9853	Hunterdon Land Trust	Hunterdon Land Trust Stewardship Program	3,000
9715	Hunterdon Prevention Resources	Prevention Programs for County Youth and Seniors	10,000
10095	Independent College Fund of New Jersey	College Pathways Reinforcement (CPR) for Underserved Student Populations	15,000
10319	Intercultural Senior Center	Healthy Snack Program/Fitness Program	3,000
6343	International Centre for Diarrhoeal Disease Research Bangladesh	Cholera Outbreak Preparedness--An Innovative Model	371,522
9867	Jewish Family Service of Somerset, Hunterdon and Warren Counties	Integrated Senior Care	7,500
9935	John F. Kennedy Medical Center Foundation	Chronic Disease Health Management for the Uninsured	25,000
10333	Kent-Sussex Industries, Inc.	Health & Wellness Center Renovations	5,000
11245	Landmark Training Development Company	Youth Urban Farm Training Program	1,000
10515	Laurel House	Domestic Abuse Response Team (DART)	10,000
10189	Lusco Farms Rescue	Phase I Quarantine barn and medical building.	3,000
10371	Main Line Hospitals	Annenberg Annual High School Science Symposium	15,000
10055	Main St. Counseling Service	Accessible Mental Health for Schools and the Community	10,000
11111	Mann Center for the Performing Arts	Young People's Concert Series	10,000
9889	Manna on Main Street	Manna on Main Street Emergency Food Services	20,000
10429	March of Dimes Foundation	NICU Family Support Program	2,000
10039	March of Dimes Foundation	Centering Pregnancy for Diabetic Women	20,000
10539	Marine Education, Research & Rehabilitation Institute, Inc.	Marine Education as key to Conservation	8,000
10607	Memphis Child Advocacy Center	Child Sexual Abuse Prevention	5,000
10339	Mitzvah Circle Foundation	Classroom4Good - Mitzvah Circle Foundation	5,000
11043	Musicopia, Inc.	Adventures in Great Music Education	5,000
5597	National Academy of Sciences	Strengthening K-12 Science Education Through a Teacher Learning Continuum	300,000
4197	National Association of Basketball Coaches Foundation	TICKET TO READING REWARDS	60,000

9541	National Multiple Sclerosis Society	National MS Society Greater Delaware Valley Chapter grant request	15,000
10577	National Museum of Education	Science Screen Report series	3,600
10301	Nebraska Children's Home Society	Children and Family Center	3,000
10173	Nebraska Humane Society	Animal Medical Expenses Program	3,000
10389	Neighborhood Christian Centers, Inc.	Operation Smart Child (OSC)- early childhood parenting training and education program	5,000
10033	New Jersey Conservation Foundation	Creating New Trail Systems at Two Preserves	21,500
9937	New Jersey Institute for Social Justice, Inc.	NJISJ Comprehensive Case Management Support and Job Training	15,000
9891	New Jersey Intergenerational Orchestra	NJIO 20th Anniversary Concert Season	5,000
10265	New Jersey Symphony Orchestra	Education and Community Engagement Programs	200,000
10433	New voices foundation	Teacher professional development for teachers /speech therapists to work with disabled children.	5,000
9737	Newark Beth Israel Medical Center Foundation	The Beth Greenhouse	25,000
10449	Nicholas Wolff Foundation, Inc.	Greenwood Environmental Education Center (GEEC)	4,000
10199	Norristown Zoological Society	Zoo-on-Wheels and Educational Outreach Programs	10,000
10489	North Carolina Central University	STEM Student Mentoring and Tutoring	49,800
11123	North Carolina Museum of Life and Science	Access to STEM Learning for Triangle Families at the Museum of Life and Science, Durham, NC	15,200
9727	North Penn Valley Boys & Girls Club	Project Learn Homework Assistance Program	20,000
10717	North Penn YMCA	Strong Kids ... Strong Community Campaign	20,000
9893	North Wales Area Library	Collection, Programming and Technology Upgrades for the North Wales Area Library	15,000
10479	Omaha Zoological Society	Early Childhood Education at Omaha's Henry Doorly Zoo and Aquarium	10,000
11227	Opportunities Industrialization Center of Wilson, Inc.	OIC Wilson Health Services	30,000
6261	Paper Mill Playhouse	Theater for Everyone Project	5,000
9833	Partners for Women and Justice, Inc.	Domestic Violence Legal Representation	10,000
11271	Penn Foundation, Inc.	Wellspring Clubhouse	1,000
10003	Please Touch Museum	STEAM (Science, Technology, Engineering, Arts and Math) Learning at Please Touch Museum	15,000
10419	Priestley-Forsyth Memorial Library	Beneath the Surface: Get Hip to Health	2,500
9673	Princeton Ballet Society dba American Repertory Ballet	American Repertory Ballet's Access and Enrichment programs	10,000
10071	Rahway Community Action Organization	Rahway Community Action Organization (RCAO) Connect: Health and Wellness Programs for 2013- 2014	15,000
10015	Rahway River Association	Rahway River Association - Stormwater Advisory Board	20,000
9955	Reach Out and Read, Inc.	Neighbor of Choice/Reach Out and Read- NJ: Preparing NJ's Youngest Children for School Success	20,000
10867	Rector and Visitors of the University of Virginia	Alumni Engagement for the Virginia Natural Resources Leadership Institute (VNRLI)	19,525
10769	River Bend Elementary School PTA	Computer Lab Fundraising Drive	1,000

9857	Rutgers University Foundation	Rutgers, the State University of New Jersey – ODASIS	25,000
10049	Rutgers University Foundation	The Merck Biology Equipment Lending Library (MBELL) for the Waksman Student Scholars Program at Rutg	20,000
10075	Rutgers University Foundation	Rutgers-Merck Summer Bioethics Institute	24,862
9941	SAGE Eldercare, Inc.	NJ Neighbor of Choice: SAGE Eldercare, Caring for Older Adults in their Own Homes with Meals on Whee	5,000
10593	Saint Joseph School	Science Night and Science related Assemblies	5,000
9751	Saint Peter's Foundation	Jump Start 4 Autism	20,000
4373	Save the Children Federation, Inc.	Partnering in Pakistan and Nepal to Save Children's Lives Through Frontline Health Workers	1,000,000
9969	Sisters of Charity of Saint Elizabeth	Healthy Eating, Healthy Living	7,305
10891	Society for Public Health Education	The Alliance to Reduce Disparities in Diabetes: Infusing Policy and System Change with Local Expe	30,000
10031	Somerset Medical Center Foundation	El Poder Sobre La Diabetes	40,000
9429	Special Equestrians	Therapeutic Riding for Low Income Individuals	10,000
10045	Summit Area YMCA	LIVESTRONG at the YMCA	5,000
2387	Sundance Research Institute	Sundance Research Institute, Inc.	395,464
10181	Support Center for Child Advocates	Child Victim Assistance Project	5,000
10331	Susan G. Komen Breast Cancer Foundation Nebraska Affiliate	Susan G. Komen Nebraska	5,000
5165	Sustainable Innovations	Arogya or Laptop-based Clinics for Masses	113,750
10387	Teach For America	Teach For America - Memphis	5,000
10059	Teach For America	Teach For America-Greater Newark	20,000
9797	Tennessee Wesleyan College	Management Excellence Program	20,000
9371	Terri Lynne Lokoff Foundation	General Operating Support to Result in Increased Child Care Center Enhancement Grant Funding	15,000
10667	Arc of Wilson County, Inc	The Arc of Wilson County Lending Library	1,000
10509	Association for the Preservation of the Eno River Vally, Inc.	Taking Care of Our Own Back Yard: Conservation, Environmental Education & Stewardship on the Eno	25,000
9927	Connection for Women and Families	The Connection After School Enrichment Program	10,000
2389	Cooper Foundation	Cooper Foundation, Inc., The	394,100
10257	Delaware Adolescent Program, Inc.	Student Support Services	7,500
10609	Eagles Charitable Foundation	Eagles Eye Mobile	50,000
10403	Food Trust	Norristown Healthy Corner Store Initiative	10,000
10455	Friends of Joseph Priestley House	Education video on Priestley discoveries in gas chemistry	2,500
7325	GEORGE WASHINGTON UNIVERSITY	HIV Care Collaborative Program Office	200,000
10021	Land Conservancy of New Jersey	Partners for Parks	5,000
10057	Midland Foundation	Midland After School Program	5,000
6117	National Alliance for Hispanic Health	Alliance/Merck Ciencia Scholars Program	406,053
9669	Nature Conservancy	NJ Neighbor of Choice - Urban Community Conservation in Camden, NJ	10,000
2395	Regents of the University of Michigan	Regents of the University of Michigan	350,000

10377	Salvation Army	The Salvation Army Emergency and Family Shelter - Furniture Replacement Project	15,000
9613	StreetLight Mission Inc.	StreetLight Mission Food Pantry	25,000
2393	University of Chicago	University of Chicago	436,364
10373	Theatre Horizon	Theatre Horizon's 2013-2014 Season	2,500
2409	Trustees of Columbia University in the City of New York	The Millennium Villages Project: Community Health Workers Program	200,000
10323	Trustees of the University of Pennsylvania	Bridging the Gaps	15,000
10243	Twin Rivers YMCA	Strong Communities Campaign 2013	2,000
2537	United Negro College Fund Inc	UNCF/Merck Science Initiative	1,715,038
10023	United Way of Greater Union County	GIRLS TODAY, LEADERS TOMORROW (GTLT)	20,000
4725	University of Colorado Foundation Inc	XSci Extraordinary Educator Experiences	289,418
10491	Valley Associates for Independent Living, Inc.	Living Independent Fully Empowered (LIFE)	24,160
9713	W.E.B. DuBois Scholars Institute, Inc.	W.E.B. DuBois Scholars Institute	25,000
10493	Wesley Shelter, Inc.	Wesley Shelter, Inc. Domestic Violence/Sexual Assault Services	7,500
10507	Wilson Community College Foundation, Inc.	Wilson Community College Environmental Biology and Chemistry Labs and Scholarship Award Project	20,000
10535	Wilson Crisis Center Inc.	Wilson Crisis Center	15,000
10211	Wilson Education Partnership Inc	Project: Back-to-School 2013	10,000
10527	Wissahickon Valley Watershed Association	WVWA 2013 Creek Clean Up and Wissahickon Habitat Restoration Programs	20,000
10079	Women's Health and Counseling Center	Chronic Disease Management Program (CDM) for the Medically Underserved	15,000
1913	Worldwide Orphans Foundation	WWO Academy, Addis Ababa, Ethiopia	300,000
10097	Young Men's Christian Association of Eastern Union County	Diabetes Prevention Program	15,000
------	Partnership for Giving	Partnership for Giving	14,234,573
------	ACHAP	ACHAP	6,000,000
------	MCAN	MCAN	4,339,340
------	MISE	MISE	1,278,980
			41,823,400

II Progress and Results

GENERAL PROGRESS

Twenty thriteen marked a year of continued transition for ACHAP. Significant occurences included the engagement of a new Research Director, and Business Development Director; restructuring to include an Executive Officer Programs, Executive Officer Operations, Lead Technical Advisor and placement of one program officer in each of the 10 focus districts; and development of a strategy and business plan for post Phase II activities.

In the midst of this transition, ACHAP prioritized completion of Phase II program activities. This included significantly improving performance and cost effectiveness for the flagship program safe male circumcision, launching and completing over 6,000 HIV tests for the Treatment Optimization project, presenting at a major regional conference (ICASA), support disseminiation and sustainable training activities for the TB Advocacy, Communication and Socail Mobilisation strategy and continued support of institutional and national monitoring and evaluation systems.

Building off of the 2013 accomplishments, 2014 will have a strategic focus on developing partnerships that can support organizational sustainability while the organization continues to work toward completing Phase II targets.

CRITICAL MILESTONES

For each objective, describe the critical milestones for the reporting period and whether they were achieved or delayed	If achieved: What source of evidence[2] do you have to support the result? If delayed: What was the cause of delay?
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26,700 circumcisions performed by ACHAP funded teams	35,507 circumcisions were carried out by ACHAP supported teams during the period under review as evidenced by our field reports and data base. This translates to 133% of the annual target.
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Support SMC activities within large enterprises in Botswana	Discussions with major companies in Botswana were initiated. These are Debswana, Kgalagadi Breweries and Choppies. Concept notes indicating the scope of work were developed shared and discussed with these companies. ACHAP is waiting for final decisions by the companies.
Evaluate SMC demand creation interventions	A consultancy firm was contracted, study protocol was developed, data collection tools are being revised and submission to ethics review committee of MOH expected by fourth week of March. This activity was delayed because of the process of identifying the appropriate consultancy firm, the need to provide methodological guidance to the consultants, and the time the SMC program from MOH took to review and provide feedback and support to the proposed study.
Objective 3:	
Regional and International conference participation	ICASA 2013 International Conference on AIDS and Sexually Transmitted Infections in Africa (ICASA) was held in South Africa at the Cape Town International Convention Centre (CTICC) from 07 – 11 December 2013. The conference theme was

6351	Health	Health HIV Care Collaborative	Fulton County Government	Bridging the Gap - A Linkage to Care Project	2012-2014	1,000,000	333,333	333,334	0	0	0	0	
6355	Health	Health HIV - Health Multi-year Commitment	Department of Health and Human	Linkage to Care Initiatives	2012-2014	999,997	198,648	468,017	0	0	0	0	
7325	Health	Health HIV - Health Multi-year Commitment	THE GEORGE WASHINGTON UNIVERSITY	HIV Care Collaborative Program	2012-2014	600,000	200,000	200,000	0	0	0	0	
10265	Community	Community Headquarters Relations	New Jersey Symphony Orchestra	Education and Community	2013-2015	600,000	200,000	200,000	200 000	0	0	0	
10891	Health	Health Diabetes (Disparities Commitment)	Society for Public Health Education	to Reduce Disparities in Diabetes	2013-2014	55,000	30,000	25 000	0	0	0	0	
11063	Health	Health - (Non-Strategic) Commitment	Children's Inn at NIH	The Woodmont House and Isolation	2014-2018	5,000,000		1 000,000	1 000,000	1 000,000	1,000 000	1 000,000	
11411	Community	Community Headquarters Relations Commitment	Kimmel Center, Inc.	Multi-Year Sponsorship	2014-2016	450,000		150,000	150 000	150 000	0	0	
	Totals						17,962,906	16,567,540	4,216,496	1,456,784	1,000,000	1,000,000	42,203,726

STATEMENT #8 MERCK FOUNDATION
FORM 990-PF 2012 22-6028476
PART XV, 3b PLEDGES

Grant ID	Strategic Priority	Budget Line Item	Organization	Program Title	Funding Term	Approved Amount	2013 Milestone or Committed Amount	2014 Milestone or Committed Amount	2015 Milestone or Committed Amount	2016 Milestone or Committed Amount	2017 Milestone or Committed Amount	2018 Milestone or Committed Amount	
- -----	Health	SAP	ACHAP	ACHAP	2010-2014	30,000,000	6,000,000	6 000 000					
-------	Health	SAP	CMAP	CMAP			0	3,000 000					
1231	Health	Health (Non-Strategic) Commitment	Children's Inn at NIH	Children's Inn at NIH	2009 2013	5,000,000	1,000,000	0	0	0	0	0	
1739	Community	Community Headquarters Relations	New Jersey Performing Arts Center	New Jersey Performing Arts Center	2009-2013	1,000,000	200,000	0	0	0	0	0	
1913	Education	Education (Non Strategic) Commitment	Worldwide Orphans Foundation	WWO Academy, Addis	2011-2014	1,000,000	300,000	250 000	0	0	0	0	
2385	Health	Health Diabetes	Baylor Health Care System Foundation	Baylor Research Institute	2009-2013	1,868,967	282,095	0	0	0	0	0	
2387	Health	Health Diabetes	Sundance Research Institute	Sundance Research Institute,	2009 2013	1,898,571	395,464	0	0	0	0	0	
2389	Health	Health Diabetes	The Cooper Foundation	Cooper Foundation, Inc , The	2009-2013	2,000,000	394,100	0	0	0	0	0	
2393	Health	Health Diabetes	The University of Chicago	University of Chicago	2009-2013	2,000,000	436,364	0	0	0	0	0	
2395	Health	Health Diabetes	The Regents of the University of	Regents of the University	2009-2013	1,750,000	350,000	0	0	0	0	0	
2397	Health	Health Diabetes	Healthy Memphis Common	Healthy Memphis Common	2009-2013	1,977,562	390,821	0	0	0	0	0	
2409	Health	Health - (Non-Strategic) Commitment	Trustees of Columbia University in	The Millennium Villages	2011 2013	1,000,000	200,000	0	0	0	0	0	
2451	Education	Education (Non Strategic) Commitment	American Australian Association	The Merck Company Foundation	2011-2014	100,000	25 000	25,000	0	0	0	0	
2477	Education	Education (Non Strategic) Commitment	Theatre Repertory, Ltd	Program-Building Academic	2011 2013	105,000	45,000	0	0	0	0	0	
2537	Education	Education Commitment	United Negro College Fund	UNCF/Merck Science	2011-2015	6,073,789	1,715,038	1 500,000	1,360,427				
2653	Education	Education (Non Strategic) Commitment	Liberty Science Center Inc	Early Childhood Education	2011-2013	800,000	275,000	0	0	0	0	0	
2725	Health (not strategically aligned with Health Strategy)	Health (Non-Strategic) Commitment	BroadReach Institute for Training and	Management and Leadership	2011-2014	4,000,000	1,000,000	1,201 761	0	0	0	0	
2809	Health	Health - (Non-Strategic) Commitment	American Cancer Society Eastern	Society's Excellence in American Cancer	2011 2013	996,565	332,188	0	0	0	0	0	
4197	Education	Education (Non Strategic) Commitment	National Association of Basketball Coaches	TICKET TO READING REWARDS	2011-2013	150,000	60,000	0	0	0	0	0	
4303	Health	Health - (Non-Strategic) Commitment	EngenderHealth, Inc	Mobile Outreach Services Project	2011-2013	651,225	216,014	0	0	0	0	0	
4373	Health (not strategically aligned with Health Strategy)	Health - (Non-Strategic) Commitment	Save the Children Federation,	Partnering in Pakistan and Nepal	2011-2015	5,000,000	1,000,000	1,000,000	1,000,000	0	0	0	
4477	Health	Health - (Non-Strategic) Commitment	Children's Inn at NIH	Friends Fund Challenge	2012-2016	500,000	100,000	100,000	100,000	100,000	0	0	
4725	Education	Education (Non Strategic) Commitment	University of Colorado Foundation	ASU Extraordinary Educator	2011 2013	899,795	289,418	0	0	0	0	0	
5165	Health	Health - (Non-Strategic) Commitment	Sustainable Innovations	Arogya of Laptop-based	2012 2013	341,250	113,750	0	0	0	0	0	
5267	Health	Health - (Non-Strategic) Commitment	American Jewish World Service	Sexual Health in Emergency,	2011-2013	900,000	300,000	0	0	0	0	0	
5449	Education	Education (Non Strategic) Commitment	Girls Incorporated	Girls Inc Eureka! Expansion	2012-2013	364,848	169,765	0	0	0	0	0	
5597	Education	Education (Non Strategic) Commitment	National Academy of Sciences	Strengthening K-12 Science	2012 2014	1,000,000	300 000	200 000	0	0	0	0	
6117	Education	Education (Commitment)	The National Alliance for Hispanic	Alliance/Merck Ciencia Scholars	2008-2016	4,000,000	406,053	581,094	406,069	206 784	0	0	
6343	Community	Community Disaster Relief (Commitment)	International Centre for Diarrhoeal Disease	Cholera Outbreak Preparedness--An	2012-2013	743,045	371,522	0	0	0	0	0	
6347	Health	Health HIV Care Collaborative	City of Philadelphia	Engaging HIV-Positive Patients in Care	2012-2014	1,000,000	333,333	333,334	0	0	0	0	

Please refer to the Progress Report Guidelines for instructions on completing this form

I Summary Information

GRANT INFORMATION

Project Name	Phase II		
Organization Name	African Comprehensive HIV/AIDS Partnerships (ACHAP)		
Grant ID#		**Foundation Program Officer**	Leslie Hardy
Date Grant Awarded	*January 2010*	**Project End Date**	*December 2014*
Grant Amount	*In U S dollars*	**Project Duration**	*48 months*
Report Period From	*January 2013*	**To**	*December 2013*
Report Due	*March 2014*		
Has this project been granted a no-cost extension?	*No*		

PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR

Prefix	Dr	**E-mail Address**	JMafeni@ACHAP org
Surname	Mafeni	**Phone**	+267 369 7202
First name	Jerome	**Fax**	
Suffix		**Web Site**	www.achap org
Title	CEO		
Mailing Address	*Block C, Plot 69120 Letsema Office Park, Fairgrounds Gaborone BOTSWANA*		

Report Prepared by	Rachel Jackson	**Date Submitted**	*03 April 2014*
Phone	+267 369 7202		
E-mail	Rachel@ACHAP org		

II Progress and Results

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Regional and International conference participation	ICASA 2013 International Conference on AIDS and Sexually Transmitted Infections in Africa (ICASA) was held in South Africa at the Cape Town International Convention Centre (CTICC) from 07 – 11 December 2013 The conference theme was

	"Now More Than Ever: Targeting Zero". ACHAP shared two studies including one which was presented by Monitoring & Evaluation Specialist Lesego Busang on "Communication Interventions - SMC Motivators and Associated Factors"
Revamp ACHAP website	The ACHAP website was revamped in 2013 to a dynamic, interactive and more user-friendly version.
Host media Forums post ciritical events to increase public awareness of ACHAP	A series of media briefings and press conferences were held, the most recent being in August 2013 chaired by the ACHAP Board Chair Mrs. Joy Phumaphi, ACHAP CEO, Dr. Jerrome Mafeni and the NACA National Coordinator, Mr. Richard Maaltlhare. The media was briefed on the organization's transition and how ACHAP continues to play a positive role in the lives of Batswana.
Facilitate a campaign to assist staff in internalizing corporate statements	The campaign was suspended pending the completion of the new vision, mission, values and business plan by the board. The campaign was reinitiated in 2014, and three ACHAP offices had been covered by the time this report was submitted in March 2014.
Objective 4: Treatment Support	
Manage Merck Medicine Donation Program	In 2013 the ARV Merck donation was catering for 75% of the Atripla and 100% Raltegravir needs for the country in line with the agreed transition plan. Mylan continue to supply generic Atripla for Botswana.
Commence Treatment Optimization pilot	The Treatment Optimization pilot project was launched in August 2013, its goal is to expand access to quality HIV/AIDS treatment services and reduction of treatment initiation delays by the use of point-of-care CD4 count testing services in health facilities and outreach sites in Tutume district. Intended outcomes. • *Increased uptake for HCT services among* communities in the project area • Reduction in delays to ART initiation in Tutume district • Generate knowledge and evidence for the use of point-of-care CD4 testing to inform policy at national and international levels. All key project staff have been recruited including the project coordinator, program officer, counselors and data clerks. By December 2013, 6008 clients *had been tested for HIV and 2483 CD4 count tests* done with 150 patients started on ARV. Preliminary findings show a reduction of waiting period for treatment initiation from 5-6 weeks to 2-3 weeks.
Objective 5: TB/HIV Collaborative and Inteegration Services	
Scale up collaborative and integrated services through Advocacy, Communication and Social	ACHAP supported MOH tp conduct the TB KAP study (2011), key findings significantly informed the TB ACSM strategy development. The TB ACSM

Mobilization Strategy	strategy was launched in March 2013. The strategy has been disseminated in the 14 supported districts, with each district developing their implementation plan aligned to the strategy. IEC materials have also been developed to enhance the implementation. Community leaders have been oriented on the TB ACSM strategy to improve their knowledge and understanding of TB/HIV, improve their participation and ownership of the prevention and control efforts. The expected outcomes are increased case detection, improved contact tracing and better treatment outcomes.
Capacity building activities for health care workers	ACHAP supported training of 2 Communication Officers to serve as master trainers for TB ACSM strategy implementation. A training curriculum was later developed for training district TOTs. TOTs in the 14 supported disricts have been trained and also tasked to spearhead the implementation of the TB ACSM strategy. Health worker orientations on TB infection prevention and the use of Intensified case finding tools were done in IDCCs in supported districts. Regular mentorship and supervision was carried out in all supported districts to ensure improved quality service delivery in supported facilities.
Community TB Care Services sub-grant	BOCAIP was sub-contracted to provide Community TB care in Francistown. Goal was to advocate for increased community participation and ownership in TB/HIV care services In 2013 a total of 154 of the 314 TB patients (49.0%) in the district were registered in the 9 facilities supported by BOCAIP CTBC. It should be remembered that there is a portion of TB patients who opted for family administered CTBC and those who were not eligible for CTBC due to social and medical reasons; habitual treatment interrupters or defaulters, TB patients receiving injectables TB treatment, those just started on TB treatment (below 8weeks on treatment), treatment failures and children under 12 years of age. 100% of TB patients were screened for HIV, HAART initiation among co-infected patients increased from 87% to 96%, with CPT being at 100%. All the Health Education Assistants have been orientated on CTBC to address sustainability issues post the current grant.
Objective 6: Monitoring, Evaluation, Research and Development	
Support mapping of populations by SMC site catchement areas	The M&E department generated calculated numbers of the "pools" of eligible males for circumcision at the district and village levels for all the SMC sites that are supported by ACHAP. Generating these figures required the triangulation of several sources of data such as census, HIV epidemiologic data (Botswana AIDS Impact Survey

	IV), and SMC performance data. These figures are updated on a regular basis, and help the teams in the field to plan outreach and campaign activities in a more targeted form.
Support the use of electronic register for SMC	In the year 2012, ACHAP provided technical support to the MOH to build the SMC electronic data collection system, which was to be integrated into the MOH HIV Patient Information Management System (PIMS II). ACHAP supported this initiative providing technical support to the building of the module, as well as by purchasing 12 desktop computers that were then distributed in the ACHAP supported districts. This electronic system was piloted by the MOH in three districts. However, given the reduction in donor support to the SMC program in the country, there was not follow-up to the pilot and no further implementation of the system at the national level.
Participate in technical working groups and reference groups	ACHAP has provided technical support to the MOH and NACA through its active participation in the following monitoring and evaluation related Technical Working Groups (TWG): • SMC Monitoring & Evaluation- provide technical advice in matters relating to monitoring and evaluation of SMC programme • National Monitoring and Evaluation – provide technical support on all M&E issues for the country through this TWG based at the MOH • NACA Technical Working Group – supports development of strategic plans, National Operational Plans, national target setting for HIV interventions and development of district plans • National Disease Surveillance – Technical support to MOH regarding national disease surveillance • Prepex Technical Working Group – oversee the PrePex pilot and potential scale-up ACHAP was also part of both the reference and the TWG for the Fourth Botswana AIDS Impact Survey (BAIS IV) completed in 2013. In addition to the participation of its core professional staff in technical working groups, the department seconded one staff member to support monitoring and evaluation activities in the MOH specifically in the SMC and the HIV / ART programs.

[1]See the Glossary of Terms in the Progress Report Guidelines for definitions of the terms in this table.

[2]**Source of evidence** a routine monitoring report, an evaluation study, or any document such as a project report or even an email message that could be used as evidence that a particular result or critical milestone has been achieved.

Objective 1: Safe Male Circumcision

ACHAP supported Safe Male Circumcision (SMC) interventions in Botswana have been implemented in line with national protocols and guidelines. However, field experiences and lessons learnt have continuously informed decisions to adjust programming to ensure relevance of interventions to the communities being served. While provision of services at static sites and in established health facilities has been the traditional approach to service delivery, field experience has demonstrated that taking services to where target populations are generates better results and contributes to community participation and ownership of programme interventions. The application of these experiences to SMC programme planning by ACHAP teams over the years has progressively contributed to improved performance with regard to achieving set targets and reducing costs.

With the revised national SMC target of 50,000 circumcisions to be performed by end of March 2014, ACHAP supported SMC teams performed 35,507 by December 31st 2013 which represents about 71 % of the national target and 133 % of the ACHAP 2013 target of 26,700 circumcisions.

A major activity carried out by ACHAP teams during 2013 was the mapping of catchment areas by district to document the number of circumcised men and eligible uncircumcised men per village. ACHAP teams worked with District Health Management Teams (DHMTs) to define catchment areas within supported districts to determine populations of eligible men in order to plan for mobilization and provision of services.

Objective 3: Communications & Advocacy

For the year 2013, the Communications & Advocacy Department worked on the following activities to support program implementation:

Activities to support an improved understanding of ACHAP's strategy included the following;

- Introductory visits/meetings by the CEO, Dr. Jerome Mafeni to ACHAP partners/stakeholder - Governance structure, Development Partners, CEOs of major local corporations and UN Agencies to discuss the current ACHAP programme of implementation and the organization's future strategy.
- ACHAP Media briefing – A series of media briefings and press conferences were organized- the most recent being in August 2013 chaired by the ACHAP Board Char Mrs. Joy Phumaphi, ACHAP CEO, Dr. Jerome Mafeni and the NACA National Coordinator, Mr. Richard Matlhare. The media was briefed on the organization's transition and the role ACHAP continues to play in the lives of Batswana.
- Participated at the Regional and International conference at the ICASA 2013
- Provision of technical expertise in developing communication materials across all objectives. guideline production, behaviour change communication production for TB/HIV and SMC, branding of implementation facilities, and similar activities.
- Support of the Treatment Optimization pilot project through a weekly newspaper column in a The Midweek Sun newspaper.
- Creating national awareness of a music video promoting SMC developed through the BMGF funded advocacy project, Champions for an HIV Free Generation.
- The ACHAP website was revamped in 2013 to make it be dynamic, interactive and more user-friendly

UNACHIEVED RESULTS:

- One major activity delayed to 2014 for completion is the ACHAP Power of Partnerships documentary. This documentary is meant to highlight the success of the Phase I and II activities providing a valuable source of information regarding successful implementation processes while simultaneously supporting ACHAP's transition strategy.
- Internal campaigns for internalizing ACHAP vision and values was delayed pending completion by management and board

Twenty thirteen saw significant growth in business development activities. Throughout 2013 ACHAP engaged with the Private Sector regarding potential value adding partnerships to support organizational sustainability and improve health outcomes within the country. ACHAP also increased proposal development activities targeting funders outside of the founding organizations.

Several activities in 2013 supported ACHAP's increased focus on businsee development and resource mobilization.

- Hiring a Business Dvelopment Director – September 2013
- Developing a Business Plan and Transition Strategy November 2013
- Engaging with Private Sector regarding potential value adding partnerships
- Engaging with potential multi-lateral, bi-lateral, and foundation funders.

Objective 4: Treatment program support

The Treatment Optimization Pilot was launched in August 2013. The aim of the pilot is to contribute to the reduction of HIV transmission and AIDS related deaths in Botswana through catalytic support to enhance treatment access for eligible patients currently not receiving it; using point-of-care CD4 testing, and enhancing access to community based HIV testing. Intended outcomes are:

- Increased uptake for HCT services among communities in the project area
- Reduction in delays to ART initiation in Tutume district
- Generate knowledge and evidence for the use of point-of-care CD4 testing to inform policy at national and international levels.

All key personel for the project have been recruited. A functional TWG, chaired by the MOH, meets regularly to review progress and provide advice. Aggressive community mobilization activities are undertaken with initial community entry via sensitization of tradional leadership. Multiple mobilization strategies are being employed including door to door, road shows, activiations with popular local musicians, and community dialogues. The HIV testing is being conducted in static clinic facilities and outreach sites including moonlight services in the night- these are very popular with youths. By the end December 2013, 6008 HIV tests were administered with 473 testing positive, and 2483 CD4 count tests were carried out. Preliminary results show reduction of the period from diagnosis to initiation from 5-6 weeks to 2-3 weeks for the eligible patients.

In addition to the Treatment Optimization pilot, ACHAP support of the Merck ARV drug donation scale down has continued with ACHAP managing the procurement process of generic Atripla through Mylan.

As part of the management of the Merck donation program, ACHAP took an active role through;

- Participating as an active member of the Ministry of Health Costing and Forecasting Technical Working Group (C&F TWG), which is responsible for the management of forecasting, planning, procurement and donation of ARVs and related commodities in Botswana

- Support in the compilation of the Botswana Ministry of Health request for extension of the Merck Medicines Donations proposal for period 2015 – 2017 which was reviewed by ACHAP and submitted to Merck for its consideration.
- Assisting in conducting and coordinating the annual Merck medicine review at the government Central Medical Stores and selected facilities in Botswana and conducting a follow-up on prior year audit recommendations to determine if these have been implemented.

Objective 5: TB/HIV Collaborative and Integrated services

During the period under review TB/HIV implemented activities were in line with the identified priority areas These include:

- Coordination, governance and leadership
- Scale –up of TB/HIV collaborative services

Coordiantion, governance and leadership

ACHAP continued support and participation in the national TB/HIV advisory committe (which meets every 6-months and is chaired by the PS-Health) and the TWG (which meets quarterly and reviews program implementation). All supported districts have established functional TB/HIV committees which meet every quarter to review implementation based on the district plans.

Scale –up of TB/HIV collaborative and Integrated services

Work in this area includes:

- TB intensified case finding - A total of 242 (92%) out of 263 targeted IDCC personnel and Lay Counsellors have been oriented to screen IDCC patients for TB. In 2013, 800 (1.6%) of IDCC attendees were identified as TB suspects, 257 (32.1%) of these suspects have been diagnosed with TB, 256 (99.6%) started on TB treatment. One patient died before starting treatment. The identified co-infected patients are assessed and quickly initiated on HAART and CPT.

- Active TB case finding among Health Care Workers - Risk assessments conducted in supported districts have revealed that health-care facilities are not infection control compliant; however there were efforts to strengthen workplace wellness to include among other things, periodic screening of health care workers in the health facilities. In the 236 health facilities visited, 53 health care workers were found to have TB, with 49 having susceptible TB, 3 having Multiple-Drug Resistant (MDR-TB) and one (1) with Extensively Drug Resistant TB (XDR-TB); all were started on treatment.

- TB infection prevention- ACHAP has seconded infection control officers (a phycisian and a nurse) to the BNTP, capacity has been built in supported districts through training of trainers, formation of infection control committees, and infection plans being aligned with the TB strategy. IDCCs have been assessed and minor renovations undertaken to make them compliant with TB risk reduction measures. In 2013, 24 IDCCs were fitted with extractor fans in the waiting bay and directional fans in the consulting rooms. Health care workers have been provided with N95 masks for use while attending to TB patients Health facilities have identified and isolated cough centres and encouraged to provide patients with surgical masks to reduce the risk of droplet transmission of TB

- TB Advocacy, Communication and Social Mobilization strategy – ACHAP supported the development of this strategy with significant inputs from the KAP study funded by ACHAP in 2011 The strategy was launched in 2013, with ACHAP supporting training of Communication Officers as Master Trainers. The Master Trainers have supported development of training curriculum which is now being used for training of trainers in the districts. A total of 54/58 (93%) targeted TB Coordinators, Health Education Officers and Civil Society Organizations involved in TB/HIV activities have been trained on TB ACSM strategy by August 2013 for all ACHAP supported districts. The aim is to provide them with knowledge and skills to implement TB ACSM strategy interventions in their respective districts. The supported districts developed implementation plans following the training of TOTs the plans included using the TOTs to spearhead the activities in their districts. TB IEC materials have been developed, adopted and produced to enhance the implementation of TB ACSM strategy, these are being distributed among communities, public transport vehicles etc.

- Community TB Care Services – During the period under review only BOCAIP has been sub-contracted to offer CTBC services in Francistown. Francistown district enrolled 290 (66.5%) TB patients into CTBC in 2012 out of 436 patients registered. In 2013, about 636 patients were registerd for TB with 371 (53.9) being enrolled into CTBC services. Of those enrolled into CTBC services, HIV testing has been registered at the highs of 100% (90% target) for consecutive years (2012 and 2013) with reduction in co-infection rate from 75% (2012) to 68% (2013), ART initiation among patients co-infected increased from 87% to 96% (85% target) and CPT initiation among co-infected TB/HIV patients stood at 100%.

Objective 6: Knowledge Management

In the year 2013, the Monitoring, Evaluation and Research department initiated several activities to improve the collection, management and utilization of strategic information, and the identification and sharing of best practices within ACHAP and its partners

To strengthen the monitoring and evaluation system for the SMC program with the aim of improving its capacity to generate timely, complete, reliable and correct information, the department undertook several activities such as: revision or development of standard operating procedures for data collection; revision or development of data collection tools such as the demand creation register and summary sheets; mentoring and training of personnel in clinical sites and data verification visits. In its effort to contribute to appropriate and efficient program planning at the central and peripheral levels with the mapping of populations eligible for SMC, the department generated calculated numbers of the "pools" of eligible males for circumcision at the district and village levels for all the SMC sites that are supported by ACHAP.

The department also supported the generation and timely reporting of TB and TB / HIV integration program data from the 14 districts supported by ACHAP. The department developed a TB/ HIV database to capture monthly aggregated data and followed-up the submission of monthly reports by the districts. In addition, the department developed the monitoring and evaluation system for the Treatment Optimization project including: definition of indicators and targets, development of data collection tools, and development of a data management system.

In addition to the participation of its core professional staff in technical working groups, the department has also seconded one staff member to support monitoring and evaluation activities in the MOH specifically in the SMC and the HIV / ART programs. Since the second semester of 2013, the department has been actively involved in the process of revising the figures of antiretroviral therapy coverage for the country.

During 2013, the department initiated the evaluation of Community Tuberculosis Care (CTBC) and the evaluation of the SMC demand creation approaches; it participated in the PrePex acceptability and

safety study, and presented findings from the evaluation of the SMC short-term communication strategy and the "Co-Creation" model design to support HIV prevention for females in the 17th ICASA conference. In addition, manuscripts presenting findings from the "Models of Care" study and the evaluation of the SMC short-term communication strategy were published in peer reviewed journals.

SEVERAL MAJOR ACHIEVEMENTS HAVE BEEN ACCOMPLISHED DURING THE PROJECT INCLUDING:

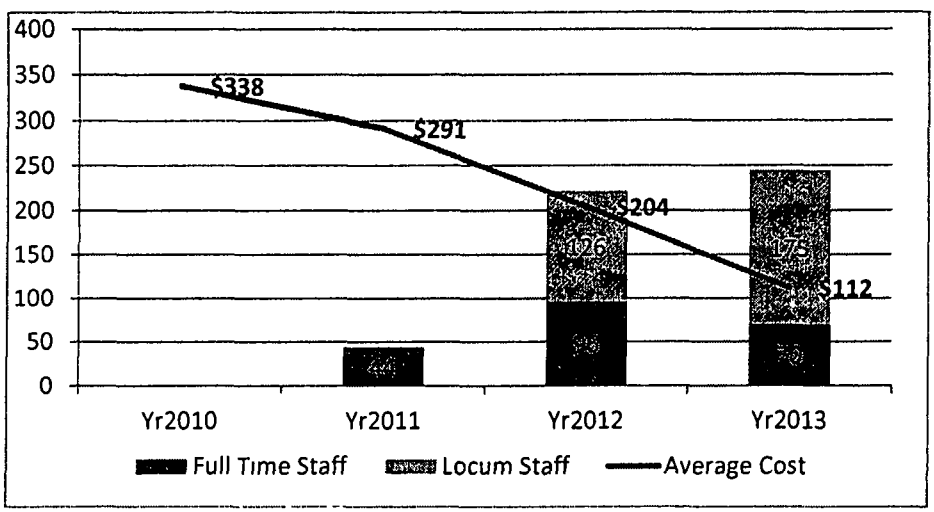
1. ***Significantly reducing SMC costs through revising SMC team structure and demand creation mechanisms***

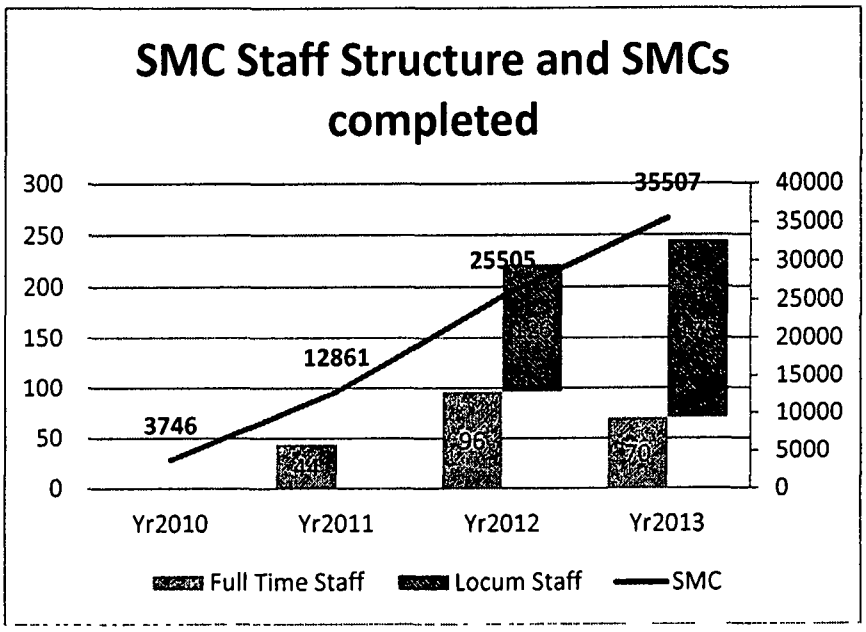
ACHAP's approach to SMC implementation evolved from the commencement of the program in 2010 throughout Phase II. Changes to staffing structure and demand creation methods have consistently improved to support lower costs and to allow for sufficient capacity during high volume periods. While the National program has learned a great deal from implementation in neighboring countries, the unique logistical challenges of Botswana as a country with a small population spread over a large area required country specific solutions.

In 2013, ACHAP adjusted the HCW staffing structure this time reducing the number of full time staff from 96 to 70 HCWs and increasing reliance on locum staff for campaigns from 126 to 175. ACHAP also implemented a Performance Incentive Bonus Scheme for the Safe Male Circumcision field teams and support staff working directly with the teams. The bonus system provides a method of recognition to create motivation and support for the long evening and weekend hours and travel to hard to reach areas that were necessary to serve the demand created during school holiday campaigns. The organization provides quarterly cash bonuses which are shared equally by all team members depending on each teams' perfomance against agreed targets.

Also in 2013, ACHAP made a decision to increase its coordination capacity at district level from 5 Program Officers to 10, allowing each district to have a Program Officer who served as a supervisor and liaison between the service delivery team, demand creation mobilizers and community structures. While Program Officers have always been an important part of the support structure, they previously would support several districts and often lost much of their time to traveling between disparate areas. Their increased focus in 2013 allowed for improved planning, oversight and implementation of the SMC campaigns. The results based individual mobilizer system was also standardized throughout the country including standardizing rates (BWP 80 or $9 per SMC), request process and timings. The result of the changes described above allowed ACHAP to significantly increase utilization of SMC capacity and outputs while simultaneously reducing total SMC objective and average per SMC costs.

Figure 1 Average SMC costs and SMC staff structure per year

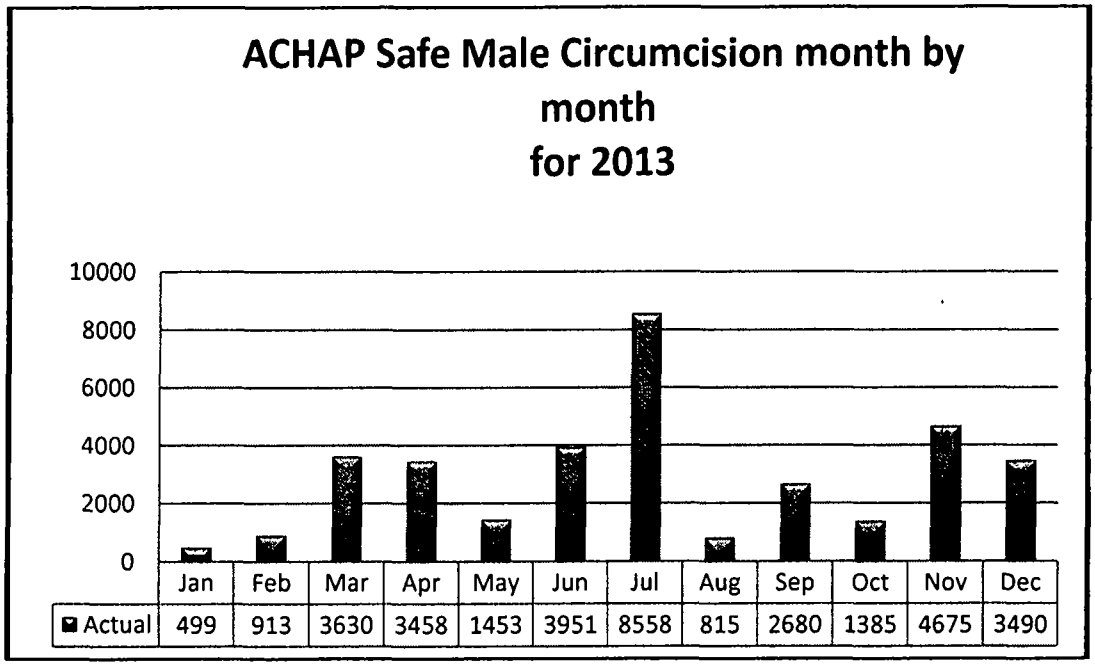



SMC Staff Structure and SMCs completed
300
250
200
150
100
50
0
40000
35000
30000
25000
20000
15000
10000
5000
0
3746
12861
25505
35507
44
96
70
Yr2010
Yr2011
Yr2012
Yr2013
Full Time Staff
Locum Staff
SMC

As highlighted in the charts above, the successive changes made in the SMC staffing structure and implementation methods allowed for consistent improvement in annual numbers achieved and a significant decrease in per SMC costs. SMC costs for these charts were based on total objective specific costs and a proportional amount of overall indirect and program management costs.

2. *Significantly improving SMC uptake through use of campaign approaches.*
In addition to changing the demand creation methods and SMC team structure, ACHAP's improved perfomamce is a direct result of the adoption of a campaign approach to SMC service provision. While continuing to provide consistent services at static sites all year, the use of school break and outreach campaigns were highly influential in creating higher SMC demand and delivering on that demand through increased service delivery capacity.

The campaign approach used two main arms; school holiday campaigns and regular outreach campaigns to reach out of school men. To support the school holidays; Program Officers, HCWs and demand creation teams consistently worked with school officials, parents and communities to build an understanding of the importance of SMC. A structured system was developed which included preparing school children prior to school breaks by collecting parental consent and doing HIV testing and counseling prior to the school break. These activities also provided an indication of the demand in each area allowing for appropriate number of HCWs to be placed most effectively throughout the country during the school break to support meeting that demand. As indicated in the chart below the highest monthly volumes of SMC occurred during the school holiday breaks in March/April, June/July and November



Outreach campaigns were used to create and service demand during non-school holiday periods. This included creating a regular schedule of rotating both demand creation activities and service delivery teams throughout villages neighboring the SMC static sites as well as employing longer distance outreaches in hard to reach areas Again, these outreach campaigns included both preparatory and demand creation activities including, sensitization of village and community leaders,

door to door demand creation teams and HIV testing and counseling activities prior to the SMC service delivery teams arrival.

3 Successful advocacy and support of an improved treatment program

Another major accomplishment of the project is the continued success in transitioning and supporting improvement of the national treatment program. The successful **transition** of the Phase I program highlighted a number of components important in ensuring project sustainability post- ACHAP direct implementation, including· frequent and clear discussions regarding project transition; stakeholder involvement in transition planning, documentation of project implementation strategies and processes; and a process of scaling down support over some time.

ACHAP's advocacy efforts supported the continued improvement of the treatment program in the midst of transition. For example advocacy to support the adoption of WHO recommendations made in 2010 (which expanded treatment initiation to individuals with a 350 CD4 count or lower and TB/HIV co-infected individuals amongst others) was instrumental in the integration of these recommendations into National guidelines in 2012. These advocacy efforts, including modeling and publishing the cost of the changing guidelines supported the decision in the Botswana scenario.

4. Launching the treatment optimization pilot project

In August 2013, ACHAP rolled out the Treatment Optimization Pilot project (TOP), working with the Botswana Ministry of Health (MoH) and Tutume District Health Management Team. The aim was to contribute to the reduction of HIV transmission and AIDS related deaths in Botswana through catalytic support to enhance treatment access for eligible patients currently not receiving HAART; using point-of-care CD4 testing, and enhancing access to community based testing. This is in the context of recent expansion of access to treatment services through introduction of the WHO 2010 Revised HIV treatment guidelines as well as recent evidence of the potential prevention impact of treatment confirmed through the results of the HPTN 052 trial in 2011 following several promising observational studies

This pilot project employs community based HIV testing strategies, such as door-to-door HIV/CD4 testing, workplace-based testing, community outreaches to hard-to-reach remote areas as well as road shows and jam sessions as HCT demand creation interventions. The project also serves as a critical linkage to prevention interventions such as Safe Male Circumcision and Cervical cancer screening. The intended outcome is reduction in delays to ART initiation by providing point-of-care CD4 testing services.

The first phase of the project has seen the roll-out of 10 PIMA CD4 Diagnostic technologies at 6 clinics in the district, served by 10 ACHAP lay Counselors. The second phase will entail the introduction of Daktari and HumaCount point-of-care CD4 machines at 4 additional sites.

By December 2013, a total of 6,008 individuals had been tested for HIV, of whom 3,364 were first-time testers. Similarly, a total of 2,483 clients (of whom 398 were newly diagnosed with HIV) accessed point-of-care CD4 testing during this period, while 167 were initiated on ART.

Preliminary results from a comparative study of time-to-ART initiation before and after introduction of point-of –care PIMA CD4 testing show a significant decline in waiting time, with Pre-PIMA median waiting time of 23 days (range: 12- 43 days) compared to Post-PIMA median waiting time of 12 days (range: 8 - 20 days

5. Supporting improved monitoring and evaluation across all programs

An additional major achievement is the improvement of research, monitoring and evaluation functions and capacity within the organization, which has supported program activities and provided significant capacity

to the GoB. ACHAP, with the Department of Research Evaluation and Monitoring taking lead, has supported a movement toward evidence based planning, improved program and project management and the effective use of innovative applications. Several examples of this and their positive influence can be seen below.

a. SMC short term communication strategy evaluation– ACHAP partnered with the Ministry of Health to co-lead an evaluation of the short term SMC communication strategy which identified the strengths and weaknesses of the short term communication strategies as well as major barriers to demand for SMC. The information from this evaluation was used to support future communication activities by ACHAP and the government, improving understanding of SMC client concerns, supporting improved mobilization techniques and supporting increases in SMC demand. The findings of this study were also used to develop the national long term communication strategy for the SMC programme.
b Knowledge, Attitudes and Practices (KAP) Study on Tuberculosis and development of the TB Advocacy,Communication and Social Mobilsation (ACSM) strategy – Similarly, ACHAP worked collaboratively with the MOH to conduct a Study of TB Knowledge, Attitudes and Practices among Health Care Workers, Community Members and Patients. Findings of the study contributed significantly to the development of theTB Advocacy, Communication and Social Mobilization strategy ACHAP then supported the wide dissemination of this strategy.
c. SMC monitoring and evaluation - ACHAP provided extensive technical support to MOH to build the M&E system for the SMC program. Through the M&E technical working group, ACHAP provided technical input into the development of the SMC M&E framework and plan with detailed results chain matrices, indicator protocols and targets. ACHAP also participated in the definition of the SMC national targets and their subsequent revision in 2013 and provided technical support to develop data collection tools such as the SMC counseling, booking, operation, post operation and demand creation registers as well as financial support for the printing of these registers. Since then, ACHAP has been continuously supporting the MOH to distribute the registers and to orientate health care workers about their use. To ensure that the system generates timely and high quality data, ACHAP also assisted the MOH to conduct periodic mentoring and data verification visits and collaborated with the MOH and I-TECH in the conduct of SMC data audits. In 2012, ACHAP provided technical support to the MOH to build the SMC electronic data collection system which was to be integrated into the MOH HIV Patient Information management System (PIMS II). ACHAP supported this initiative providing technical support to the building of the module as well as by purchasing 12 desk top computers that were then distributed in the ACHAP supported districts. ACHAP has also helped the MOH to build the human resources capacity of the program by directly seconding an M&E Officer to the MOH headquarters.

Lessons Learned

Several important principles for effective program implementation were developed throughout the course of the project.

One important lesson has been the importance of **flexibility and innovation** in implementing effective projects. A flexible approach to implementation strategies based on field experiences and monitoring data coupled with close monitoring of results of different project implementation activities provides opportunities for progressive improvement. ACHAP's ability to be flexible and innovative can be tied to strong operational systems and results focused funding arrangements.

Flexible and innovative implementation was supported by ACHAP's **strong operational systems** ACHAP's finance, grants management, administration and human resources teams were able to work together with the programmes and monitoring and evaluation teams to develop new systems and

processes in response to emerging implementation needs. SMC provides countless examples of this including;the previously discussed staffing structure and sub-award arrangements; access to financial information and budget support to determine most effective processes; shifts in procurement, distribution and transportation mechanisms to support the adopted campaign method; shifts in travel and accomodation processes to reduce cost and cater for campaigns in rural and peri-urban areas.

Another example of the impact of ACHAP's flexibility and innovation is the development of incentive based payment mechanisms.The use of **incentive based payments** has been instrumental in motivating both staff and volunteers and significantly improving project outputs.. ACHAP's chosen system for incentive based payments has also supported lower costs per output. The incentive based payments for mobilizers in particular were helpful in reducing costs by supporting the retention of the most effective mobilizers while lowering the necessity of supervision resources for ineffective mobilizers. The incentive based payments for locum doctors provided a rate that was attractive to this scarce skill set while protecting against unnecessary costs in times or areas where demand was incorrectly predicted. The use of the bonus system for permanent health care workers provided motivation for staff to work weekends and evenings and work in hard to reach areas which often have much less comfortable facilities and accommodation.

ACHAPs Phase II **funding arrangements** were another componenet that supported the flexible and innovative approaches and one of the main reasons for the high variance between ACHAP's performance and the performance of other implementing partners. The Phase II grants focus on performance instead of specific inputs allowed ACHAP to develop and test several methods of implementation and then focus and scale up activities that had the best results. ACHAP has endeavored to spread this lesson to sub-awardees and implementing partners, by promoting the use of deliverable based contracts to support focus on results and outcomes versus inputs.

Strong partnerships formed another key componenet of ACHAP's project success in both Phase I and Phase II This includes partnerships with government, community structures and media.

Government: While government often is unable to move at an ideal pace; their influence; infrastructure; and importance for project sustainability are all invaluable elements to large scale project implementation. To ensure consistent communication with government and alignment between ACHAP activities and Government priorities, ACHAP initiated partnership with the government at multiple levels.

- At the highest level, the **Madikwe Forum** was developed as an ex-officio governance structure. The Madikwe Forum includes Permanent Secretaries from key ministries; Finance, Health, Youth, Sport and Culture; Defence, Justice and Security; Education, Labour, Local Government and NACA. During Phase II the Forum adopted dashboards as a major management tool to support improved tracking and prioritization of key issues for the forum to play strong advocacy for..
- At the National level, supporting logistical and technical alignment, ACHAP participated in a number of technical working groups including:
    - Private Sector Support Technical Working Group
    - ARV Forecasting Technical Working Group
    - The Health Partners Forum
    - Monthly ACHAP MOH Management Meetings led by the Deputy Permaneant Secretary of the MOH
    - The SMC MOVE Governance Board and the Technical Working Group
    - The Global Fund Country Coordinating Mechanism
    - And several M&E specific groups detailed in the M&E objective

- At the district level, participation in District Health Management Teams to support district health plans, product forecasting, target setting, campaign development, and post activity debrief sessions to continue

Community Structures: Another important principle used to support project success has been thorough integration with **community structures** in project planning and implementation. ACHAP's longstanding reputation within the country coupled with program staff placed at the district level, allowed for strong alliances with local government and community leaders. Their support provided invaluable assistance in determining appropriate mobilization, sensitization and community awareness activities. This included support in

- identifying the best placed community mobilizers;
- creating community awareness and acceptance of HIV and TB prevention activities; and
- identifying and solving project implementation challenges.

In addition to supporting improved project implementation, community support has benefits for cost effectiveness and supports project sustainability.

Engaging the Media: In Phase II, ACHAP also made a concerted effort to engage the national media houses to support broadbased understanding and acceptance of health programmes. This was done through: press conferences, media site visits, sponsored publications, newspaper based series, radio and television spots, participation in television and radio talk shows, creating discussion forums and improving ACHAP's social media presence. Media engagement was invaluable in dispelling myths and promoting improved health promoting behaviors.

In hopes of furthering the benefits related to partnerships, from 2013 ACHAP has invested in establishing strong relationships with the local corporate private sector which serves as a method of accessing the working population within Botswana as well as a potential source for project sustainability through CSI efforts.

Challenges

Lessons were also learned from the project challenges. Developing the Young Women's Prevention Strategy provided a great deal of information regarding the attitudes, beliefs, culture and challenges of young women and men in Botswana and throughout Southern Africa. In addition, the strategy development and subsequent decision to discontinue plans for direct implementation provided an important lesson on the importance of integrating all stakeholder (donor, community, and implementer) expectations and priorities into project development.

Another challenge that continues to provide opportunities for learning and improvements are the challenges around coordinating and collaborating with other implementers. This includes both international and local organizations which are working toward the same goals as ACHAP, but may have different mechanisms or priorities. A great deal of effort has been dedicated to supporting sharing of best practices and coordination of implementation efforts with other implementing agencies. These efforts have borne fruit through improved understanding of strategic and project plans, improved joint support of the government and development of modalities for monitoring outcomes for different partners.

While some degree of improvement can be seen, the selected model of support involves segregating most implementation activities to different districts to allow for an appropriate level of monitoring project outputs and individual implementer success. While this improves ability to report, it does not allow for the catalytic effect possible when collaboration allows different partners to focus on their relative strengths by assigning responsibilities based on capabilities. In addition, segregating implementation partners creates

an unfortunate competitive environment as mobile populations do not lend themselves to discrete district delineations While ease of access for the client should be the main deciding factor for facility choice, in many situations a potential client could be closer to health facilities in a neighboring district and many people work in one district while living in another.

A third area of continued challenge has been the **lack of technical capacity and sustainability** amongst many NGOs and CSOs. In Phase I ACHAP provided a great deal of capacity building support intended to build on in Phase II for improved implementation. However, the changing funding landscape in Botswana which includes a reduction in ACHAP and US government funding, coupled with a significant national resource gap significantly impacted many NGOs and CSOs abilities to maintain the capacity that had been previously developed In addition, the Phase II timing expectations made additional capacity building impractical. As a result, ACHAP moved towards direct implementation of many of the project activities. While this has supported satisfactory project performance, it does lead to concerns regarding sustaining future capacity building efforts.

The initial approach for SMC implementers was an integrated service deliverly approach which belied the general reliance on public sector delivery methods for project activities. While in theory this could be used to support sustainability, the actual experience is that project planning and implementation is significantly slowed through reliance on public sector delivery systems especially for programes that would benefit from time-limited completion period like SMC . In the case of SMC this led ACHAP to move into direct implementation of activities with SMC focused teams. This may not be the appropriate approach for every service delivery project as there is a need to balance project sustaibility, additional up front costs, with country time and resource constraints to determine the best route forward.

Within the area of governance, two main challenges were experienced. ACHAP's mechanism for partnering with the GoB is an MOU signed by the Ministry of Finance. While this is a standard practice, the specification of the Ministry of Finace was not sufficient to ensure consistent support from other ministries which are key to project success such as the Ministry of Health and the Ministry of Education. To avoid this situation ACHAP has decided to develop multiple MOU's that support the clear definition of the relationship with different ministry's in future implementation phases.

As part of Phase II, ACHAP consciously moved to increase and diversify board membership to include greater country and regional representation. This expansion was to support resource mobilization efforts as well as improve oversight of the organization Unfortunately, the impacts of this expansion have been limited given the high rate of board member turnover over the last four years. To reduce the turnover rate a sitting fee is being considred for independent board members to incentivize board participation.

Plans for Dissemination

Dissemination efforts include ICASA conference participation in 2013 and IAS conference participation in 2014. In addition a number of studies will be developed into papers for future dissemination through journals and conferences including:

- FSG Evaluation of ACHAP (funded by Merck)
- Economic evaluation of ACHAP funded Programs – Futures Institute
- SMC demand creation evaluation approaches – Italk
- TB Community Care Program Evaluation – co led by ACHAP and MOH

Challenges: The majority of ACHAP's major implementation challenges are directly related to organizational sustainability. At the end of Phase II, ACHAP is being transitioned from being fully funded by Merck and BMGF and moving toward a more traditional funding system of having several funders and

proposal driven implementation activities. Among the challenges related to this are staff retention, competing priorities for staff time and communication and messaging around the transition.

Staff retention

ACHAP's pending transition has created some challenges in recruiting and retaining key staff for continued project implementation Given the importance of controlling program costs and legal requirements regarding contracts in the Botswana, ACHAP has made several changes to its organizational structure and methods of managing staff. These changes include reducing expatriate benefits, restructuring the Operations team to reduce costs, and moving toward shorter term contracts to align contracts with secured funding commitments.

These changes have the unfortunate impact of creating some degree of uncertainty for ACHAP employees, in a social and cultural context where permanent and pensionable employment is the norm. As a result, increased staff turnover is being experienced throughout the organization with a particular negative impact on retaining Health Care Worker cadres. Recruitment is also particularly challenging in 2014 as staff contracts cannot be extended beyond the end date for currently secured project funding, December 2014. This means that newly recruited staff are being offered short term contracts. In response ACHAP has increased communication regarding sustainability planning and resource mobilization efforts and is developing a change management strategy to support staff retention.

Balancing resource mobilization activities with program implementation

Given the importance of delivering on the project objectives for country level health outcomes, the importance of mobilizing resources for continued organizational sustainability, and the strain on human resources as a result of the recruitment and retention issues discussed above, one major challenge is the competing priorities for ACHAP staff time and effort. Between 2010 and 2012, board and funder direction regarding this challenge was to focus on implementation activities exclusively with the hope that successful performance would lead to a more attractive case for future investments. While this advice had merit, it has created significant challenges around timing for resource mobilization in 2013 and 2014. In response to this challenge, ACHAP has expanded its Management team to include a Business Development Director and budgeted for additional support in proposal writing and resource mobilization

Branding and Messaging around ACHAP's Transition

A final challenge around ACHAP's transition has been developing appropriate messaging to stakeholders and concerned bodies The transition poses a major reputational risk for both ACHAP and funders which should be met with careful messaging. For ACHAP the reputational risk is potentially influential in other resource mobilization activities. ACHAP has attempted to support a positive interpretation of the transition and the funders decision. **Receiving support and guidance regarding messaging around the transition from Merck would be helpful.**

Additionally, a written testimonial to support ACHAP's implementation credentials from Merck would be invaluable in this period of active new resource mobilization.

III Plans for the Next Reporting Period

Objective 1: Safe Male Circumcision

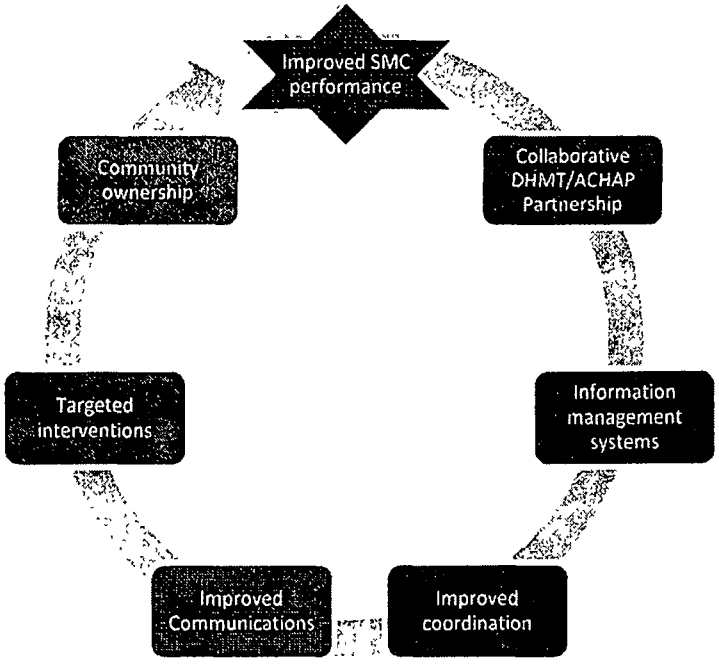
For the year 2014, the SMC program established preliminary targets for a period of 8 months, from January to August. The targets were defined taking into account both operational considerations (number

of clinical teams, expected performance (number of circumcisions per day), effective working days, planned school holiday periods) and historical trends (the seasonality of performance observed in the latest three years of implementation).

Cummulatively, the program is expected to perform 21,428 circumcisions between January 6th and mid-August 2014

ACHAP continues to support the Government of Botswana to achieve the National SMC target of 385,000 men circumcised. ACHAP achieves this through; technical, financial, logistical and service delivery support at national, district and community level.

During 2014, ACHAP plans to work with the Ministry of Health and focus districts to consolidate the gains made over the years and facilitate a smooth transition of ACHAP supported SMC activities to government. The diagram below shows the programme components that ACHAP is going to focus on as it builds local capacity for sustainability of SMC interventions.



An important goal for ACHAP during 2014 is to improve SMC performance through efficient use of available resources, strengthening community ownership, implementing targeted interventions, improving data management and reporting, and strengthening partnerships with District Health management teams to ensure a smooth transition.

Lessons learned during 2013 will be applied to programme planning and implementation to help improve performance and achieve set targets. Effective coordination between ACHAP teams in the districts and the DHMTs will be a critical area of improvement during the year. Similarly, coordination of programme of work between the programme officers and the SMC teams will be strengthened to ensure effective planning and implementation of both static and outreach services.

In 2014 ACHAP Plans to

- Strengthen demand creation efforts for men over the age of 24, creatively engaging and motivating older men to seek SMC services through use of women/partners of circumcised me as SMC advocates and mobilisers.
- Leverage circumcised men to serve as mobilisers and advocates for promoting SMC

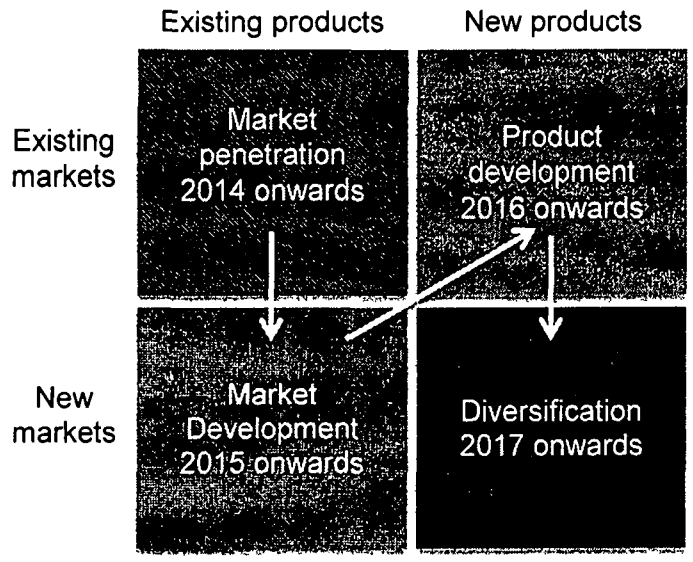
- Develop village mobilization teams and use a system of awards/incentives to acknowledge high achieving villages.
- Continue using school holidays to engage school going youth to circumcise and improve mobilization efforts prior to the holiday to support this.
- Support the MOH to improve mass media efforts to promote SMC
- Continue the use of static and outreach sites to provide SMC services in a manner that is accessible for potential clients.
- Improve monitoring and evaluation efforts and systematically use information to determine demand creation and service delivery activities, focusing on areas that have large numbers of potential clients.

Objective 3: Communications & Advocacy
For the year 2014, the Communications and Advocacy initiative will assist the organization in two key focus areas Firstly in consolidating the ACHAP story to date with a key emphasis on best practice and lessons learnt in Phase II. Secondly, it will support the organization's transition to Phase III. This will be achieved through the following strategic objectives.

1. Create an awareness of ACHAP's competencies in delivering HIV/AIDS programmes by
    a. Developing branding and marketing materials including
        i. Annual report
        ii. Corporate Capability Statement
        iii Various brochures and promotional materials
    b. Facilitate internal campaign on the new strategy, vision, mission and values by promoting the new RAPTURE vaules (Respect, Accountability, Passion, Transparency, Universal Integrity, Results with Impacts and Effectiveness and Efficiency).
    c. Facilitate documentation of ACHAP Phase I and Phase II with a documentary showcasing ACHAP's work in Botswana
2. Manage the reputation of ACHAP and perceptions about the organization by leveraging the pioneering nature of ACHAP in order to set the organization apart in a growing landscape of very active development partners by
    a. Informing and educating stakeholders, particularly the media, about ACHAP's work
    b. Leveraging relationsips to effect positive reputation building reporting on the organization
    c. Facilitating ACHAP's participation at regional and international events
    d. Developing and facilitating local media forums
    e. Facilitating international media coverage of ACHAP and
    f. Facilitating the development of a branding and marketing strategy
3. Partnering with relevant stakeholders to find common solutions and advocate for sustained prevention initiatives in order to reposition ACHAP's change in focus to comprehensive HIV prevention in the correct context and light and to share best practice in the wider society, regionally and internationally.
    a. Facilitate mass communications around comprehensive HIV preention and behavior Change
    b. Supporting the development of IEC materials for ACHAP projects and programmes

Transition Activities
2014 Business Development activities include implementation of ACHAP's business strategy. With a portfolio approach; ACHAP will target bil-lateral, multi-lateral, corporate private sector, GoB and Foundation funding with programmatic focus extending beyond HIV in Botswana to HIV in Southern Africa and population health issues in Botswana.

ACHAP have determined a growth strategy for new services and markets, which can be well illustrated using the following 'Ansoff matrix'



The goal for 2014 is to secure In 2014, it $9.4m of funding:

- $1.4m will contribute to the 2014 budget (taking total budget to $10m).
- $8m will contribute to the 2015 budget

Objective 4: Treatment Optimization

The goal of Treatment Optimization is to contribute to the reduction of HIV transmission and AIDS related deaths in Botswana through catalytic support to enhance treatment access for eligible patients currently receiving it using point of care CD4 testing, enhancing access to community based testing. In 2014 the TO project will expand to include piloting of additional CD4 diagnostics including Daktari and HumaCount machines and expanding from the initial six sites to 10 sites. The team will continue to use regular HIV Counselling and Testing (HCT) Outreaches to support increased testing including moon-light testing and door-to-door testing.

External quality assurance checks will be organized twice during 2014 to ensure compliance to minimum standards and equivalence to current CD4 testing measures. The main area of evaluation will be time between HIV diagnosis and treatment initiation.

Objective 5: TB/HIV Integration

To strengthen the national TB Programme in order to improve access to and utilization of integrated TB and HIV services on a national scale by 2014.

In 2014 ACHAP will continue support of the 14 focus districts, which were strategically selected as high TB burden areas. The aim will continue to be to strengthen the health care system to effectively scale up TB/HIV collaborative activities including to all the MDR-TB initiation sites in Botswana and improve TB infection prevention and control through:

- Coordination, governance and leadership
    - Support coordination of TB/HIV services in supported districts by functional TB/HIV commiittes
- Scale-up of TB/HIV collaborative and integrated services
    - Intensified case finding (ICF), active case detection of co-infected patients
    - Training of health care workers on MDR-TB case management to clinicians in all MDR-TB sites to capacitate them to implement TB/HIV collaboration and support initiation on ARVs for co-infected patients

- Supporting volunteers in Ghanzi to work as treatment supporters, conducting contact tracing and patient follow-up to reduce the burden of TB
- Sensitize community leaders on TB prevention and control activities through scaling up the Advocacy Communication and Social Mobilization efforts
- Orienting Health Education Assistants on community TB care, contact tracing and patient follow up in order to reduce defaulters
- Conduct regional benchmarking and learning tour on GeneXpert roll out and implementation of challenges
- Provide technical support during national Drug Resistant Survey in Botswana
- Support construction of shelters in the waiting areas of 10 IDCCs Monitoring and evaluation-
- Conduct mentoring, and support supervision visits for technical support and data auditing to all supported health facilities
- Routine data collection

Objective 6: Research, Monitoring and Evaluation

The focus of work during 2014 at the institutional level will be: (1) to refine and strengthen ACHAP existing systems and processes for Monitoring and Evaluation and to strategically support the MoH monitoring and evaluation of its HIV and TB programs, (2) to build ACHAP institutional research capacity and develop new lines of research work.

This will be accomplished through

- Continuation of basic monitoring of program activities in collaboration with the programs department
- Managing the final evaluation of ACHAP Phase II, which includes:
  - The evaluation of the economic and social impact at the national level of the activities implemented by ACHAP -both directly and indirectly through technical or financial support- during its two initial phases. Evaluation to be consucted through an external consultancy.
  - Estimation of HIV incidence and assessment of behavioral change among cohort of males circumcised under ACHAP program conditions. Studies to be conducted by ACHAP Research, Monitoring and Evaluation Department.
- Supporting MOH directly through a seconded M&E position through August 2014, and through continued participation in Technical Working Groups.
- Finalizing the evaluations of the SMC Demand Creation and of Community TB care approaches
- Developing institutional research capacity through
  - Mentoring and training
  - Seminar series
  - Establishment of collaboration with academic and research centres nationally and internationally
- Developing research proposals for submission to funding agencies such as NIH
- Supporting the development of programmatic proposals for funding applications, particularly the monitoring and evaluation componenets, health situation analyses and literature reviews

IV. Financial Update for the Reporting Period

BUDGET NARRATIVE

Variances for the Reporting Period

A total of US $7,041,703 was expended of Merck Funds in the period ended 31 December 2013 A significant amount was spent on human resource costs, these amounted to 45% of the total expenditure for the year. 10% was spent on travel costs for program implementation. The direct supplies and indirect costs amounted to 14% and 18% of the total expenditure for the year respectively.

In comparison to the budget and in accordance with the terms of agreement, all line items with variances over 10% are explained below·

Safe Male Circumcision

SMC expenditure for the year ended amounted to US $2.2 million which shows an over-expenditure when compared with the approved SMC budget that amounted to approximately US $1.6 million. The Organization intensified the program in order to achieve the targets that were agreed to with the funder. SMC targets were exceeded and cost effectiveness improved in the period under review. To guard against over expending in 2014, tighter cost control mechanisms are employed and activities are implemented as detailed per the approved budget and the budget will be closely monitored.

Communications & Advocacy

Under Communications & Advocacy objective, there was significant under-expenditure in human resource costs and supplies. Loss of key human resource in the department and a delay in finalizing the new strategy were the big contributors to the under expenditure

Treatment Optimization

Generally, there was under-expenditure across all budget line items for this pilot program. The program commenced towards the end of the year, August 2013 instead of April 2013 the original estimate for inception. Despite the late start the project was able to manage significant outreach activities which supported the project in reaching over 6000 individuals with HIV tests by December 2013.

TB/HIV Intergration

The spending within the TB/HIV Intergration program are essentially in accordance with the approved budget, variances for all but two budget line items are insignificant. Consultancy expenditure for the period under review amounted to US $44,190, however, there were no Consultancies budgeted for at the beginning of the year, hence the over expenditure. Community TB Care sub-contracts were also underspent by 21% in the period under review.

Knowledge Management

Spending under for the Monitoring & Evaluation, Research and Development programs were in accordance with the planned budget for the year ended 31 December 2013. The annual budget utilization rate stood at 95% as at year end.Significant savings were made in travel (13%) and supplies (17%).

Transition

Up to 74% was expended in the period under review. The Business Development Director was engaged in September 2013 to join hands with Grants Management in order to intensify resource mobilization to secure resources to fund the Organizational activities post December 2014. The appointment of the Director late in the year led to a delay in implementation of some activities which were planned for the year, hence the underspent balance.

Project Management

The expenditure for the program management stood at 85% of the approved budget as at 31 December 2013 Significant savings were made from the Supplies budget line. Cost management was greatly emphasized, and the positive results are shown by the savings

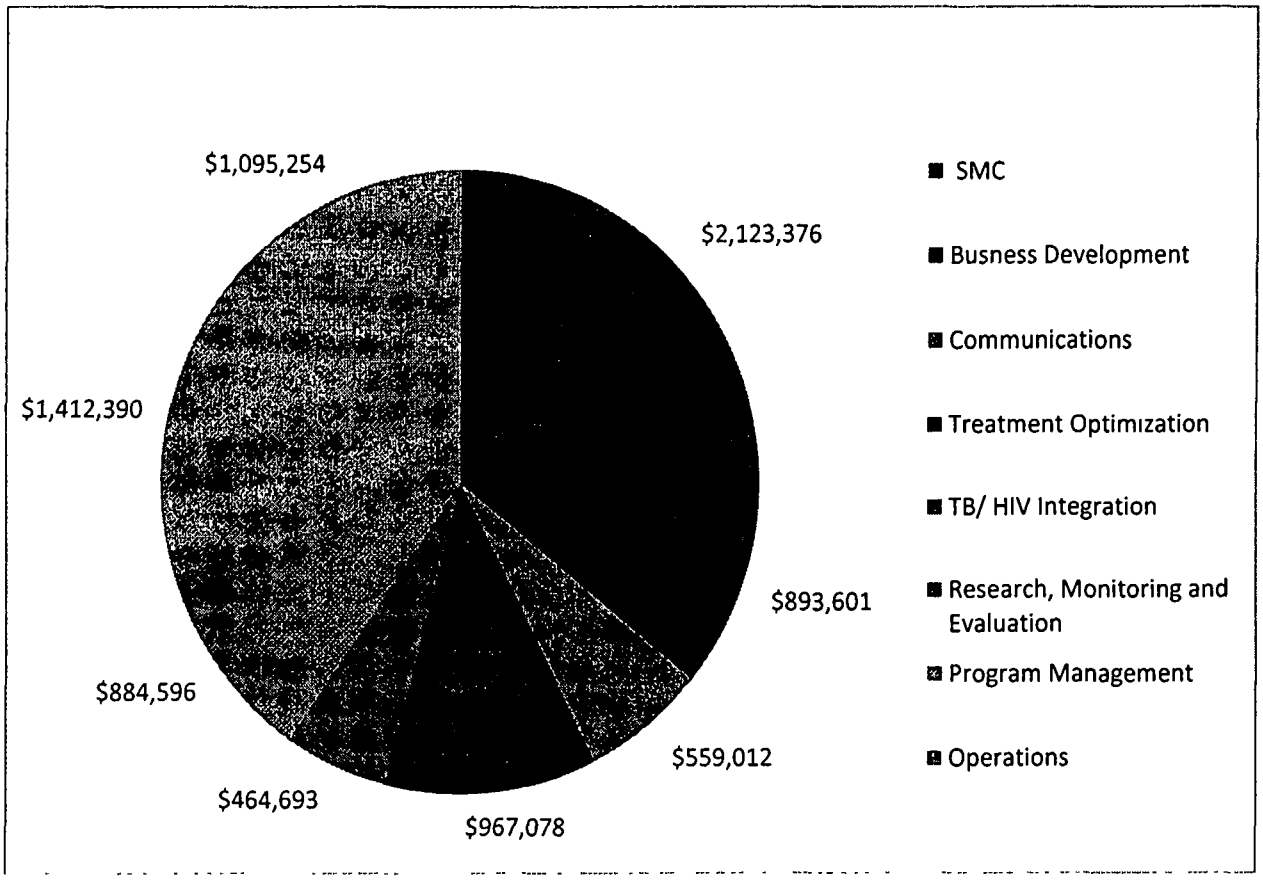
Indirect Costs

The indirect expenditure amounted to over US $1.3 million. This represented a total of 18% of the program costs. Costs in this category relate to human resource costs for administrative staff, office rental, utilities and other general administration expenditure. The Organisation will continue managing this cost category closely to bring it to the allowable limit.

Interest
Interest amounting to US $17,463 was earned in the period ended 31 December 2013, during the same period an exchange loss of $166,027 was realized.

Budget for the Coming Year

The total 2014 budget for ACHAP is $8 4 million. With the majority of programme activities planned and budgeted through August 2014.



The largest objective budget is SMC. The total budget for SMC ($2.1 million) is significantly lower than 2013's SMC budget $3 47 million, which included $1.5 million in funds related to the no cost extension from BMGF and $1 9 million in support from Merck The reduction in SMC funds for 2014 is accompanied by a slightly reduced target (21,423 circumcisions) and is heavily influenced by the shorter implementation period planned for 2014.

Communications and Advocacy is budgeted at $559k and includes both C&A and IT costs. Major cost drivers include personnel ($138k), costs to support IAS travel ($48k) and participation ($15k), a rebranding campaign ($50k) and IEC material production ($45k).

The Treatment Optimization budget is set at $967k with major costs including personnel ($155k), travel to support outreach activities ($140K) and procurement of Daktari C4 machines ($100k). The Treatment Optimization budget is significantly higher than the 2013 actual expense ($379k) as the project

commenced in August 2014 and ran for only 5 months in 2013. In 2014 project activities are budgeted for 8 months of full activity in 2014.

TB/HIV Integration is budgeted at $465k, with major cost drivers including personnel $112k, a consultancy to support training for TB/HIV planning and implementation ($55k) and renovations to support infection control ($60k). The TB/HIV budget is significantly lower than 2013s spend ($613k) as a result of completion of community TB Care subcontracts during 2013.

Knowledge Management (Research, Monitoring and Evaluation) was budgeted at $884k with major cost drivers including;personnel ($317k), Consultants to support the evaluation of ACHAP's economic impact ($60k) effectiveness of SMC through a cohort study($69k) and assessment of prevalence and risk factors for TB infection among health care workers and the community ($75k) The 2014 budget is significantly higher than the 2013 Knowledge Management budget as a result of the department being fully staffed in 2014 and a number of consultancies planned to support ACHAP's final evaluation.

The Transition (New Business) budget is programmed for $893k. Significant cost drivers include personnel $225k, travel to support new business $162k, conference attendance at $95k, consultants to support proposal development ($50k) and legal fees related to franchise development and management and US registration maintenance ($51k).

Sub-grantees and Subcontractors

Organization Name	Location (city, country)	Total contracted amount	Actual disbursement for this reporting period
BHP (Botswana Harvard AIDS Partnerships)	Tutume, Botswana	$63, 674.22	$63, 674.22
BOCAIP (Botswana Christian AIDS Intervention Programme)	Francistown, Botswana	$70, 235.13	$63, 518.48
Bana Ba Motho Theatre Artists	Kanye, Botswana	$21, 744 12	$13, 178.59
Tselakgopo Cultural Commune	Serowe, Botswana	$30, 847.06	$21, 084.08
Madiba Drama Group	Palapye, Botswana	$39, 851.76	$36, 165.55
Namane Ya Moroba	Thamaga, Botswana	$21, 992.71	$3, 783.43

Other Sources of Project Support
Report all amounts in U.S. dollars

Donor	Amount	Received or Potential
Bill & Melinda Gates Foundation	$14.9 million	received

Description of in-kind support, if any:

V. Optional Attachments

CLINICAL STUDIES AND REGULATED RESEARCH QUESTIONS

Question	Yes or No
Will the project involve a clinical trial[1]? According to the definition provided, what phase(s) will the project include (Phase I, II, III, or IV)?	No Phase
Does your project involve research using human subjects[2] and/or vertebrate animals?	YES
Does your project involve the use of recombinant DNA?	**NO**
Does your project involve the use of biohazards or genetically modified organisms or plants?	**NO**
Will the project involve the use of pathogens/toxins identified as select agents[3] by U.S. law?	**NO**

[1] clinical trials
[2] human subjects
[3] select agents

If you answered "yes" to any of the questions above, you must complete the Clinical Studies and Regulated Research Assurances Attachment and submit it along with your progress report.

TECHNOLOGY AND INFORMATION MANAGEMENT QUESTIONS

Please provide a response to the following questions using the definition of terms provided below. If you have submitted an annual report previously and nothing has changed from your previous submission, please indicate "no change".

Question	Yes/No/No Change
Do any Third Parties[1] have Rights[2] to Background Technology[3]?	**No**
Do any Third Parties have Rights in Project Technology[4]?	**No**
Have you filed any copyright registrations for or patent applications claiming any Project Technology?	**No**

[1] **Third Parties**: All individuals, organizations or companies that have not executed a foundation approved collaboration agreement associate with the project.
[2] **Rights:** (i) Any interest in patents, patent applications and copyrights (e.g. license, ownership, option, security interest and (ii) the rights to use any technologies, information, data or materials.
[3] **Background Technology**: All technologies and materials, and all associated Rights, used as part of your project that were created prior to or outside of the project.
[4] **Project Technology**: All technologies and materials created, conceived or reduced to practice as part of your project and all associated Rights.

If you answered "yes" to any of the questions above, you must complete the Technology and Information Management Attachment and submit it along with your progress report.

Privacy Notice

Merck Childhood Asthma Network, Inc. (MCAN)
Annual Report
2013

RESOURCES

Funding and Support/Reporting The most important resource for MCAN is The Merck Foundation, which provides grant funding for operations (including salaries) and programs. Merck provides equipment, information technology, technical, financial, legal, and human resources support. MCAN reports administratively through Merck's Global Public Policy and Corporate Responsibility division.

Advice and Consultation MCAN benefits greatly from the expertise of its Board of Trustees and National Advisory Board. In 2013, MCAN utilized the consultation services of Visionary Consulting Partners, LLC and the Chandler Chicco Agency LLC.

2013 ACTIVITIES

Goal 1: Improve *access* to and the *quality* of asthma healthcare for children, especially the vulnerable and medically underserved

Community Healthcare for Asthma Management and Prevention of Symptoms (CHAMPS)
CHAMPS is an innovative translational research, and community-based clinical partnership funded by MCAN and led by the George Washington University (GWU) School of Public Health and Health Services. Additional partners include Rho, Inc., and the RCHN Community Health Foundation. The project is designed to demonstrate that tailored, evidence-based asthma management programs proven efficacious in controlled trials, can be implemented in Federally Qualified Health Centers (FQHC), where many children and families most in need get care. In addition, the effectiveness, feasibility and cost of these implemented programs are evaluated using clinical and process measures. CHAMPS incorporates lessons learned from the "hybrid" case management/environmental mitigation of triggers intervention that was implemented in the Head-off Environmental Asthma in Louisiana (HEAL) project conducted in New Orleans post-Katrina as well as from recommendations made in the Changing pO_2licy report authored by GWU that identified CHCs as an ideal setting for treating high-risk children with asthma. CHAMPS is funded for four years (2010-2014) for a total of $4 million; the award in 2013 was $683,186.

There are six FQHCs participating in the CHAMPS program- three intervention sites and three matched comparison sites. The sites are located in Arizona, Michigan and the western region of Puerto Rico.

In 2013, the CHAMPS project research and health center team continued active recruitment and enrollment in the three intervention sites reaching the target aggregate total of 300 pediatric patients with allergic and poorly controlled, moderate to severe asthma enrolled in the project. The three comparison centers continued their enrollment throughout the year with assistance and close monitoring from the CHAMPS project research team. In addition, follow-up site visits were conducted at all six health center sites and qualitative data collection and preliminary analysis began. CHAMPS investigators developed a detailed protocol for the cost analysis and made significant progress working with commercial health plans in Arizona, Michigan and Puerto Rico. In preparation for the conclusion of the project, the CHAMPS team developed a dissemination and communication plan that uses a multi-level and multi-faceted approach and is based on lessons learned throughout the project period and is focused on encouraging replication of the intervention

on other FQHCs. Combined Baseline and 12 month outcomes measures for the 3 CHAMPS projects sites can be found in Appendix A. Publications and presentations by the CHAMPS project team in 2012-2013 can be found in Appendix B.

Care Coordination Program Sites

Through the Care Coordination grant portfolio, MCAN is seeking to demonstrate the feasibility and effectiveness of implementing and sustaining care coordination models that were developed in MCAN Phase 1 (2005-2009) in communities with significant childhood asthma morbidity and/or outcome disparities. The following projects are each funded for $900,000 from 2010 to 2014.

1. **Los Angeles Unified School District, 'Yes We Can Children's Asthma Program,'** Awarded $225,000 in 2013

   The program involves a care coordination and education model that extends beyond the immediate school clinic to include system changes between health, educational and community settings. The program triages students and families into the appropriate level of intervention, improves the coordination of care between schools, clinics and community providers, and focuses on measuring symptom reduction and school days missed.

2. **University of Illinois at Chicago, School of Public Health 'Addressing Asthma in Englewood,'** Awarded $225,000 in 2013

   The program centers around a community educator model that links children with asthma to appropriate services, community groups, and local agencies; and a home visit case management program to enhance asthma education, identification and mitigation of asthma triggers.

3. **RAND Corporation and University of Puerto Rico School of Public Health, 'La Red de Asma Infantil de Merck de Puerto Rico,'** Awarded $225,308 in 2013

   The program involves evidence-based interventions as part of an asthma care coordination program across home, health care and community settings. Implemented in a Federally Qualified Health Center in San Juan, Puerto Rico, "La Red" aims to promote asthma-friendly communities throughout the island of Puerto Rico and to enhance access to quality asthma healthcare for this highly vulnerable and underserved community.

4. **Children's Hospital of Philadelphia, 'Asthma Care Navigator Program,'** Awarded $224,898 in 2013

   In this program, asthma care navigators located within four primary care centers operated by the hospital work with primary care providers as integral member of the family's asthma care team assisting families in the identification and reduction of asthma triggers in the home, providing asthma self-management education, and other support and resources for families of high risk children with asthma.

In 2013, Care Coordination Program Sites worked with the Center for Managing Chronic Disease (CMCD) at the University of Michigan on the cross-site evaluation of outcome measures, continuing to collect and share quantitative data on program participants as well as process indicators such as program design, implementation, partnerships and policy change efforts. All four program sites reached their baseline enrollment targets and completed baseline data collection.

With input from MCAN, the CMCD continued to refine the sustainability and translation components of the evaluation. MCAN and evaluators from CMCD visited the "La Red" program site in Puerto Rico to meet program staff and key partners, observe home visits, and tour facilities where the intervention activities occur. In addition, MCAN worked with the University of Michigan

on the cost analysis evaluation in the Philadelphia Care Coordination program site. Baseline and 12 month outcome measures for the 4 combined care coordination programs can be found in Appendix A. Publications and presentations by the care coordination program site teams can be found in Appendix B.

HEAL, Phase II

The Head-off Environmental Asthma in Louisiana (HEAL) project, Phase II is a continuation of the work of HEAL, a post-Katrina research project that studied the effects of mold and other indoor allergens on children with moderate to severe asthma, and the effectiveness of an asthma case management/environmental mitigation intervention in improving childhood asthma management. HEAL was funded by MCAN, the De Laski Family Foundation and the NIEHS and NIMHD of the NIH from 2006 to 2009.

HEAL Phase II, funded by MCAN for $1.8 million over four years (2010-2014) with $453,668.09 of funding in 2013, is led by the Xavier University of Louisiana Center for Minority Health & Health Disparities Research and Education (CMHDRE) working closely with a major health care provider, the Daughters of Charity Services of New Orleans (DCSNO), and the Children's Health Fund (CHF). The collaboration with CHF is funded by the Merck Foundation.

In HEAL Phase II, a team of certified asthma educators and community health workers provide tailored counseling and home visitations for individual children with asthma (ages 2-18) and their families to improve asthma management and avoid exacerbation of symptoms. The identified population in HEAL Phase II are children who are patients of the Daughters of Charity Services of New Orleans' Carrollton, St. Cecilia and Metairie Clinics. The program also enrolled children who receive care at the Children's Health Fund-Tulane University Health Sciences Center Department of Pediatrics mobile clinic that serves three elementary schools and one high school in New Orleans.

In 2013, the HEAL Phase II project team completed project enrollment and continued 6 and 12 month follow-up visits and counseling. In partnership with Daughters of Charity, the HEAL Phase II team continued to support the utilization of the enhanced decision support tool (Asthma Severity Index) into the Daughters of Charity Services' electronic health system. The project team set specific targets regarding documentation of Asthma Severity Index components for pediatric patients seen at the DCHC sites, which has improved adherence to asthma clinical guidelines. Specific baseline and 12-month outcome measures for the HEAL Phase II project can be found in Appendix A. Publication and presentations by the HEAL Phase II project team in 2012-2013 are noted in Appendix B.

Goal 2: Advance *policies* that expedite dissemination, implementation, and sustainability of science-based asthma healthcare

Childhood Asthma Leadership Coalition

In 2012, MCAN commissioned and funded The George Washington University (GWU) School of Public Health and Health Services and First Focus to form the Childhood Asthma Leadership Coalition, a national, bipartisan multi-sector advocacy group dedicated to improving childhood asthma management and symptom prevention through federal policy change and targeted state efforts.

Relying on a strong foundation of evidence-based policy analysis to inform its work and MCAN's previous investments in policy research, the CALC's leading policy goals include:

- Ensuring the availability of stable and continuous health insurance for children with asthma;
- Collaborating with stakeholders to promote the Medicaid rule change that gives new flexibility to states to cover and pay for community-based asthma interventions when carried out by non-licensed professionals

- Supporting policies that ensure high-quality clinical care, case management when appropriate, and asthma education is for all children;
- Exploring best practices to reduce asthma triggers in homes and communities;
- Creating a nationwide strategic plan for asthma research to develop new and effective treatments; and
- Identifying new opportunities to improve asthma care that arise from the implementation of the Patient Protection and Affordable Care Act (ACA).

Among many other accomplishments in 2013, one of the most notable was the outreach and research that CALC conducted leading up to the Medicaid rule change that was issued in July 2013. In February CALC hosted a webinar on asthma delivery innovations in Massachusetts, "*How State-Based Public Health Leaders are Creating Sustainable Models to Address Asthma Management in their Communities*". They also developed a widely distributed issue brief: *"Using Medicaid to Advance Community-Based Childhood Asthma Interventions: A Review of Innovative Medicaid Programs in Massachusetts and Opportunities for Expansion under Medicaid Nationwide."* The coalition issued regulatory comments, letters to the Hill and Administration, and communications to State Medicaid Directors that advocated and supported changes to the Medicaid law that give new flexibility to states to cover and pay for community-based asthma interventions when carried out by non-licensed professionals. CALC was successful in getting Senators Gillibrand (D-NY) and Boxer (D-CA) to lead a sign-on letter to HHS Secretary Sebelius expressing support for the new Medicaid rule changes. Once the rule was finalized, CALC and its members conducted follow-up outreach to CMS, State Medicaid Directors and other stakeholders to promote the new flexibility in Medicaid law and developed a "rapid response" widely dispersed one-pager that describes the rule change in detail.

Additional highlights of the Childhood Asthma Leadership Coalition's work in 2013 include:

- Hosted a briefing in July with representatives from HUD, EPA, CDC and NIH and generated numerous ideas for how the Coalition can work to support the *Coordinated Federal Action Plan to Reduce Racial and Ethnic Disparities*
- Through a series of congressional visits, introduced the Coalition to key offices on Capitol Hill, with a focus on a bipartisan group of Senators and Representatives who have expressed an interest in childhood asthma-related policies;
- Worked closely with Coalition members and the Congressional Children's Health Care Caucus on a briefing that highlighted the importance of new Medicaid rules for children with asthma;
- Developed the concept for the workgroup on asthma research and initial Coalition member support;
- Conducted a scan of recent grants awarded by NIH, PCORI and CMMI and by other funders, such as MCAN, which address the prevention of pediatric asthma;
- Drafted brief on how the United States Preventive Services Task Force (USPSTF) and the Community Guide can and should work together to ensure that appropriate community preventive services related to asthma are included within USPSTF recommendations.

Goal 3: Increase *awareness* and *knowledge* of childhood asthma and quality asthma care

National Ambulatory Medical Care Survey

The National Ambulatory Medical Care Survey (NAMCS) is a national survey of physicians to better understand how care is being delivered in providers' offices. MCAN provided support to the Centers for Disease Control and Prevention, National Center for Health Statistics (NCHS) to develop specific questions on the 2012 NAMCS on the National Asthma Education and Prevention Program (NAEPP) Guidelines for asthma and their use.

This will allow evaluation of guideline implementation from the healthcare provider's perspective and identification of barriers to the uptake of critical elements of guideline-based management of asthma. These findings can inform ongoing strategies to increase effective implementation of the NAEPP Guidelines. Other partners include: the National Institutes of Health (NHLBI, NICHD, NIEHS, NIAID) the Centers for Disease Control and Prevention (NCEH, NIOSH, NCHS), the U.S. Environmental Protection Agency and the Agency for Healthcare Research and Quality. In 2013, NCHS focused on cleaning and analyzing the dataset as well as strategizing with partners on dissemination of findings.

News/Media Highlights

In 2013, news of MCAN programs and partnerships reached an audience of nearly 14 million people.

April 1, 2013, MCAN News Brief, "Findings of 'La Red Project' Published in Pediatrics *Show Health Improvements for Children with Asthma"*

- In April 2013, MCAN posted a news brief announcing that research from the MCAN-funded Puerto Rico-based La Red Project was published in a supplement to the journal *Pediatrics.*
    - The results showed that combining existing evidence-based asthma interventions helped reduce asthma symptoms, emergency room visits and hospitalizations in children with moderate to severe asthma in two housing projects in San Juan, Puerto Rico.
    - *Pediatrics* is among the top 2 percent most-cited scientific and medical journals and has a circulation of 66,000.

May 1, 2013, MCAN Infographic, "Putting Together the Pieces to Manage Childhood Asthma"

- To coincide with National Asthma Awareness Month (May 2013), MCAN created and launched an educational infographic titled, "Putting Together the Pieces to Manage Childhood Asthma." The goal of the infographic was to raise awareness of the cost and devastation associated with childhood asthma; educate the public on the need to manage asthma in homes, schools, communities and on Capitol Hill; and, to increase general awareness of the condition and expand quality of care.
- The infographic appeared on more than 800 newspaper websites, reaching an influential audience of more than 11 million around the country in outlets near MCAN program sites including the Outlook Express (Philadelphia), The Independent (Chicago), Findit-LosAngeles.com (LA) and the Times-Picayune (New Orleans), among others.
- The infographic was shared on Merck's Facebook page, reaching 12,369 people and on Twitter by the following organizations:
    - The Asthma and Allergy Foundation of America (1,984 Followers)
    - First Focus (12,700 Followers)
    - Breathe Pennsylvania (234 Followers)
- MCAN also leveraged the Childhood Asthma Leadership Coalition network, our website, and access to more than 3,000 stakeholders via our e-Alert portal to share our message through several channels.

May 1, 2013, The Huffington Post Blog, "Helping Children With Asthma Often Means Thinking Outside the Box"

- To further promote the Childhood Asthma infographic and MCAN's work in communities, Dr. Malveaux wrote a Huffington Post that encouraged outside of the box thinking to better manage childhood asthma at school, homes and in the community.
    - The blog post reached an audience of 1.4 million unique monthly visitors.

July 3, 2013, The Chicago Tribune's Voice of the People Section, "Children's Asthma"

- In response to the June 18, 2013 *Chicago Tribune* article, "Students Take Asthma Awareness Into Their Hands," Dr. Floyd Malveaux wrote a letter-to-the-editor highlighting the impact that programs like the MCAN-funded Addressing Asthma in Englewood Project are making in Chicago.
- The LTE was featured in the Voice of the People section of the newspaper and reached an audience of 522,357 unique readers.

August 11, 2013, The Philadelphia Inquirer, "Change Could Aid Kids with Asthma"

- This opinion editorial, penned by Dr. Floyd Malveaux, explored how the latest Centers for Medicare and Medicaid Services (CMS) decision to reimburse additional health care services will impact low-income children with asthma in Philadelphia.
- The piece highlighted the MCAN-funded asthma management program at the Children's Hospital of Philadelphia as an example of a program that will benefit from the new Medicaid change.
- The op-ed was published online and in the Sunday print edition of the paper, reaching a total audience of 530,000 people.

August 15, 2013, Eastern Group Publications, "Medicaid Changes Mean More Resources for Children with Asthma in Los Angeles"

- Dr. Malveaux's aforementioned opinion editorial on the CMS ruling was tailored to fit a Los Angeles audience. The updated op-ed was published online and in all 11 newspapers owned by Eastern Group Publications, the largest chain of Hispanic owned bilingual newspapers in the United States.
- The newspapers boast a combined readership of 500,000 in the Los Angeles area.

Policy and Public Health Education Activities

February 6, 2013, Childhood Asthma Leadership Coalition Webinar, "How State-Based Public Health Leaders are Creating Sustainable Models to Address Asthma Management in their Communities"

- MCAN partnered with the Childhood Asthma Leadership Coalition to host this offering as part of their Webinar Series. The webinar focused on mechanisms for sustainable funding of community asthma management and addressed efforts underway in Massachusetts to address the burden of childhood asthma through delivery system innovations and new reimbursement models that promote community-based interventions to reduce asthma triggers in homes and community settings.
- The webinar was attended by nearly 280 people from a variety of disciplines including practitioners, third-party groups, government agencies, etc.

June 6, 2013, ADVANCE for Respiratory Care & Sleep Medicine Webinar, "Closing the Gap in Care for Children with Asthma"

- MCAN partnered with trade magazine *ADVANCE for Respiratory Care & Sleep Medicine* and the Association of Asthma Educators (AAE) to co-host an interactive Webinar. The offering explored how expanding the healthcare team with asthma educators can help fill a gap in asthma care.

- The Webinar, which offered Continuing Nursing Education (CNE) Credit, also explored barriers to care such as limited reimbursement for educational and counseling services despite a national standardized certification process and minimal awareness about the role/benefits of asthma educators.
- Nearly 300 people participated in the webinar and more than 70 received continuing education credit.

July 12, 2013, Congressional Briefing, "Medicaid Matters to Children with Asthma: How Evidence-Based Interventions Can Make a Difference"

- Dr. Malveaux gave a presentation at the "Medicaid Matters for Kids" Capitol Hill Briefing co-hosted with the Children's Hospital Association, American Academy of Pediatrics, Family Voices, First Focus Georgetown Center for Children and Families, and March of Dimes.
- Dr. Malveaux's speech for Members and Capitol Hill staff focused on implementing evidence-based solutions to manage asthma appropriately, and also spotlighted MCAN's community programs in Philadelphia, Los Angeles, Chicago, Puerto Rico and New Orleans. The event was attended by dozens of Congressional staffers and allowed Dr. Malveaux to address what the new CMS ruling means in terms of covering preventive care such as asthma educators.
- Dr. Malveaux's presentation was summarized in an online article by Talk Radio News entitled, "What You Might Not Know About Children On Medicaid."

Ongoing Communications Activities

eMCAN Alerts

- In 2013, MCAN communicated with stakeholders, partners, Merck colleagues and policymakers through an electronic newsletter called the eMCAN Alert. Sent out on a periodic basis, this email communication provided important groups with pertinent and timely information on exciting MCAN happenings such as the previously mentioned Capitol Hill briefing, media placements, a variety of educational webinars and World Asthma Day activities.
- The eAlert was also used to help share news and help promote webinars for the Childhood Asthma Leadership Coalition.
- In 2013, MCAN distributed 15 eAlerts to more than 3,000 stakeholders at each instance. On average, the eAlerts had an open rate of 27.5 percent – higher than the industry average of 23 percent. The average "click-through" rate of the eAlert is approximately 31 percent – meaning those readers clicked through at least one of the links in the email. This rate was higher than the industry standard for government agencies (13 percent) and non-profits (11 percent).

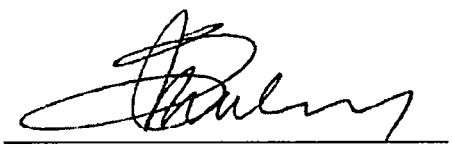
MCAN Exhibits

MCAN sponsored and participated in exhibits at the following meetings in 2013: American Thoracic Society and American Academy of Allergy, Asthma and Immunology. Exhibits highlighted MCAN's programmatic activities by distributing MCAN brochures, CDC National Center for Health Statistics' "Asthma Prevalence, Health Care Use, and Mortality: United States, 2005-2009," the MCAN sponsored report, "Changing pO_2licy: The Elements for Improving Childhood Asthma Outcomes," the policy briefs, "The Affordable Care Act, Medical Homes, and Childhood Asthma: A Key Opportunity for Progress ," and "Addressing the Challenges of Reporting on Childhood Asthma in a Changing Health Care System: Building Better Evidence for High Performance," and materials on AsthmaCommunityNetwork.org.

MCAN Website. www.mcanonline.org.
MCAN updates its website periodically with a message from the Executive Director and the most recent MCAN events and news.

ACCOUNTING FOR GRANT FROM THE MERCK FOUNDATION

The Merck Foundation made a grant to MCAN of $4,400,000 in 2013. Of this amount, $4,061,605.72 was spent during 2013 on MCAN operations and programs. Financial statements for 2013 are available. All expenditures were approved by The Merck Foundation. All of MCAN's activities are related to its charitable purpose of supporting and advancing evidence-based programs that improve the quality of life for children with asthma and their families and reducing, through the dissemination of effective interventions, the burden of the disease on them and society.



Floyd J. Malveaux, MD, PhD
Executive Vice President
March 18, 2014

Appendix A

Demographic Characteristics of Participants Enrolled at Baseline in MCAN's Translational Research Projects

Characteristic/Variable	Care Coordination	HEAL Phase II	CHAMPS
Patients Enrolled through 2013 (N)	1223	222	319
Age (Mean)	7.62	9.0	7.8
Sex (%)			
Male	60	55	60
Race/Ethnicity (%)			
White	2	9	6
Black	42	84	9
Other (Asian, Native Am., Mixed, Hisp.)	6	2	2
Hispanic	50	10**	83

**Hispanics' not a mutually exclusive category

Clinical Characteristics of Study Participants at Baseline and 12-months

Characteristic/ Variable	Care Coordination		HEAL Phase II		CHAMPS	
	Baseline N=416	12-month Follow-up N=416	Baseline N=222	12-month Follow-up N=164	Baseline N=317	12-month Follow-up N=164
Missed School Days, Past Year (Mean)*1,2	11.27	4.28	1.4	0.5	1.5	0.5
Limited Activities, Past Month (Mean)	6.70	2.51	-	-	4.7	1.3
Nighttime Awakenings, Past Month (Mean)	6.48	2.29	-	-	4.7	1.0
Emergency Room Visits, Past Year (Mean)	2.88	0.99	-	-	5.9	0.6
Hospitalizations, Past Year (Mean)	0.80	0.29	-	-	0.3	0.02
Daytime Symptoms	7.93	3.09	8.2	5.2	8.7	2.6
Use of Rescue Medication	5.13	2.38	-	-	8.2	1.8

*1 The HEAL Phase II Figure is for the past 3 months

*2 The CHAMPS figure is for the past month

Appendix B

Publications and Presentations 2012-2013

Presentations

HEAL, Phase II

Environmental Factors Influencing Asthma Severity And Control Among Children Participating in HEAL, Phase II. Candice Wilson, Kristi Rapp, Sandra C. Hayes, Leonard Jack Jr, Robert Post, Floyd Malveaux, Margaret Sanders, Stacey Denham. American Public Health Association 2013

Improving Pediatric Asthma Outcome Among Immigrant Communities In Post-Katrina New Orleans. Stacey Denham, MSW, MPH, AE-C, Kristi Isaac Rapp, PharmD, AE-C, Leonard Jack Jr., PhD, Msc, Candice Wilson, MPH, Margaret Sanders, MS Ed, AE-C, Doryne Sunda- Meya, BS, Alfreda Porter, Pamela Dixon, Nancy Morris, PhD, Floyd Malveaux, MD, PhD. American Public Health Association 2013

Assessing and Addressing Barriers to Care. Margaret A. Sanders, MSEd, AE-C; Kl Rapp, PharmD, AE-C; CM Wilson, MPH; SO Denham, MSW, MPH, AE-C; D Sunda-Meya, BS; L Jack, Jr., PhD,MSc; AP Porter; P Dixon; R Arnaud, RN; JM Flores, MD; FJ Malveaux, MD, PhD, Association of Asthma Educators, 2013

Engaging Partners in An Evidence-Based Health Management Project. D Sunda-Meya; Kl Rapp; L Jack Jr.; CM Wilson; SD Denham; MA Sanders; AP Porter; P Dixon; N Morris; R Arnaud; FJ Malveaux. Sixth Annual Health Disparities Conference, Xavier University, New Orleans, LA, March 7-9, 2013.

The Role of Community Health Workers In Conducting Environmental Assessments To Improve Patient Asthma Management. P Dixon; AP Porter; Kl Rapp; L Jack Jr.; D Sunda- Meya; MA Sanders; SD Denham; CM Wilson; FJ Malveaux. Sixth Annual Health Disparities Conference, Xavier University, New Orleans, LA, March 7-9, 2013.

Asthma By Age: Differences In Health Outcomes. CM Wilson; Kl Rapp; L Jack; J Flores; FJ Malveaux; RM Post; SD Denham; MA Sanders; D Sunda-Meya; N Morris. Sixth Annual Health Disparities Conference, Xavier University, New Orleans, LA, March 7-9, 2013.

Barriers Affecting Asthma Medication Compliance In Minority Children. MA Sanders; Kl Rapp; L Jack Jr.; CM Wilson; SD Denham; R Arnaud; D Sunda-Meya; AP Porter; P Dixon; FJ Malveaux. Sixth Annual Health Disparities Conference, Xavier University, New Orleans, LA, March 7-9, 2013.

Improving Pediatric Asthma Outcomes Among Hispanic Communities. SD Denham; Kl Rapp; L Jack Jr.; CM Wilson; MA Sanders; D Sunda-Meya; AP Porter; P Dixon; N Morris; FJ Malveaux. Sixth Annual Health Disparities Conference, Xavier University, New Orleans, LA, March 7-9, 2013.

A Multi-Dimensional Evaluation Framework: The Head-off Environmental Asthma In Louisiana, Phase II Project. Leonard Jack, Jr., PhD, MSc, Candice Wilson, MPH, Kristi Isaac Rapp, PharmD, AE-C, BCACP, Jose Flores, MD, Floyd Malveaux, MD, PhD, Robert Post, MD, Margaret Sanders, MSEd, AE-C, Doryne Sunda-Meya, BS, Nancy Morris, PhD, Stacey Denham, MSW, MPH, AE-C. NIH Summit Science of Eliminating Health Disparities, National Harbor, MD, December 17-19, 2012

Care Coordination

Clark, N.M., Bryant-Stephens, T., Kelly, P., Lara, M., Malveaux, F., Ohadike, Y., Uyeda, K., Weems, D. "Framework for Assessing Translation of Evidence Based Interventions for Asthma Care Coordination in Vulnerable Children" Poster presentation at the 2012 Science of Eliminating

Health Disparities Summit, National Harbor, MD, November 2012

CHAMPS

"Identifying and Training Asthma Counselors for Evidence-based Asthma Interventions in Federally Qualified Healthcare Centers" poster presentation at the Association of Asthma Educators 2013 Conference

"Childhood Asthma and Medical Homes: A Breath of Fresh Air" panel presentation at the National Association of Community Health Centers' Community Health Institute (CHI), August 2013

"Evaluating the Real-World Implementation of Evidence-based Childhood Asthma Management Practices in Primary Care", poster presentation at AcademyHealth Annual Research Meeting, June 2013

"Evaluating Implementation of Evidence-based Childhood Asthma Practices in Primary Care" Poster presentation at the Translational Science Meeting of the NIH-funded Clinical and Translational Science Awards (CTSAs), April 2013

"The Case of Translating and Implementing Evidence-Based Childhood Asthma Interventions in Federally Qualified Health Centers" was presented by Anne Marcus as a use case at the Pragmatic Clinical Trials Infrastructure Workshop of the NIH-funded Clinical and Translational Science Awards (CTSAs), November 2012

"Integrating CHWs into Health Care Teams: Improving Quality and Containing Costs" oral presentation at the American Public Health Association, San Francisco, CA, October 2012

Publications

HEAL, Phase II

Jack, L., Hayes, S., Rapp, K. et al. Successes and Opportunities to Adopting Evidence Based Practices to Improve Asthma Care in New Orleans: Lessons from the Head-Off Environmental Asthma in Louisiana, Phase II Project. *Journal of Asthma & Allergy Educators,* November 2012

Rapp, K., Jack, L., Post, R. et al. The HEAL, Phase II Project: Enhancing Features of an Electronic Medical Record to Improve Adherence to Asthma Guidelines. *Journal of Health Care for the Poor and Underserved,* February 2013

Care Coordination

Bryant-Stephens T., West C., Dirl C., et al. "Asthma Prevalence in Philadelphia: Two Methodologies of Community Screening" *Journal of Asthma*, August 2012

Banda E., et al. "Exposure to Home and School Environmental Triggers and Asthma Morbidity in Chicago Inner-City Children" *Pediatric Allergy and Immunology*, December 2013

Turyk M., Banda E., Chisum G., Weems D. Jr., Liu Y., Damitz M., Williams R., Persky V. "A Multifaceted Community Based Asthma Intervention in Chicago: Effects of Trigger Reduction and Self-Management Education on Asthma Morbidity" *Journal of Asthma*, September 2013

Lara M., Ramos-Valencia G., González-Gavillán J., López-Malpica F., Morales-Reyes B., Marín H., Rodríguez-Sánchez M., Mitchell H. "Reducing Quality of Care Disparities for Childhood Asthma: La Red de Asma Infantil Intervention in San Juan, Puerto Rico" *Pediatrics,* March 2013

CHAMPS

Rossier Markus A., Andres E., West K., Tuchman Gerstein, M., Lyons, V., "Medicaid Payment Innovations to Financially Sustain Comprehensive Childhood Asthma Management Programs at Federally Qualified Health Centers" *Journal of Asthma & Allergy Educators*, June 2013.

Merck Institute for Science Education
Highlights
First Quarter, 2013

The Professional Development Design Workshop

The Professional Development Design Workshop (PDDW) was held from March 13-15 at the Princeton Marriott in Princeton, NJ. Twenty-five administrators, district supervisors, consultants and MISE staff members were in attendance. The PDDW was held for the purpose of supporting Instructional Team Members (ITs) as they prepared for and began to plan six summer Peer Teacher Workshops (PTWs) for teachers in grades K-5. The PDDW focused on developing the ITs' knowledge of professional development design for module-based workshops. ITs deepened their understanding of effective science instruction, practiced facilitation skills for adult learners, and drew on these enhanced understandings to design and plan for the Peer Teacher Workshops.

The focus of this year's workshop was frameworks that support effective science instruction. New frameworks are in place in both the state (for teacher evaluation) and the country (*A Framework for K-12 Science Instruction*, which guided the creation of the new national science standards). Participants examined these frameworks, comparing them with and adding to their understanding of the frameworks that they already use in order to deepen their understanding of effective science instruction. In addition to the frameworks, participants explored protocols for examining student work through analyzing written work and classroom video. ITs were provided with a new PTW Roadmap, a tool that identifies major components of the PTWs and provides direction as to their placement in workshop agendas.

The PDDW also included a session for new ITs focused on providing background and context about the Partnership and the theory behind our professional development programs, as well as information about facilitation skills and an introduction to the elements of effective science instruction.

High School Peer Teacher Workshop Academic Year Session

An academic year follow-up session for the 2012 High School Peer Teacher Workshop was held on March 19. Sixteen educators attended the session. Participants engaged in activities to continue to deepen their understanding of the Practices of Science, which they had been introduced to in the summer session. Teachers brought laboratory investigations and associated student work to analyze with their peers, examining their integration of the Practices and where it could be improved. The session provided an opportunity for participants to deepen their understanding of two particular practices, Engaging in Argument From Evidence and Constructing Explanations. Additionally, participants offered suggestions and feedback for the design team as they plan the 2013 workshop.

The Academy for Leadership in Science Instruction Academic Year Sessions – Cohort 3

The Academic Year Session for the Academy for Leadership in Science Instruction Cohort 3was held at the Princeton Marriott Hotel and Conference Center in Princeton, NJ. Seventeen Cohort 3 School-based Teams and six District-based Teams participated in Day 14 of the Academy curriculum on February 25th. The day was designed to provide the School-based and District-based Teams with professional development and support for achieving the Academy goals.

One of the primary goals and purposes of the Academy is to help teachers understand what makes science instruction effective. Working toward that goal, the Academy provides access to the latest research in the field related to science instruction. Teams have read the *Framework for K-12 Science Education*, a report commissioned by the National Research Council which presents the 21st century vision for science education. This document is the basis for the development of the Next Generation Science Standards (NGSS). To amplify their understanding of the *Framework* and the NGSS, Stephen Pruitt, Senior Vice

President for Content, Research and Development at Achieve, Inc. provided a presentation for the school-based teams. Stephen served on the National Academies of Science's Committee on Conceptual Framework for New Science Education Standards, which developed the *Framework for K-12 Science Education,* and he led the development of the Next Generation Science Standards. Stephen provided information and responded to questions from the team regarding implementation of the NGSS.

Another goal of the Academy is engage with colleagues as a community of learners to improve science instruction. During this day, teams experienced a process to collaboratively engage their colleagues in creating a vision of effective science instruction and were given *tools* (i.e., a facilitator's guide, an article on the practices of science) to help them facilitate learning about effective science instruction with their colleagues. They were also given planning time to discuss their possible next steps in building and sustaining their school community of learners.

Teacher Learning Continuum

The National Research Council (NRC), through its Board on Science Education (BOSE) is undertaking a comprehensive study of how to provide coherent support for elementary, middle, and high school teachers' learning across their careers with funding from the Merck Foundation. The project is being led by an NRC-appointed committee of experts who review and synthesize the available research, consider existing programs for induction and professional development and outline a coherent professional growth continuum for science teachers that is integrated with and supported by the school, district, and state-level contexts where teachers work. The committee will write a final NRC consensus report that contains their findings, conclusions and recommendations,

On February 6, this committee conducted its second meeting at which members covered a range of issues that form the context for thinking about teacher learning in K – 12 grade levels. The public was invited to the open session to participate in the discussion as well as the sponsor, represented by Margo Bartiromo of MISE, who discussed the charge and goals of the study from the sponsor's perspective:

MISE has the drive to be guided by evidence. In the past, this has led MISE to work with the National Academy in supporting studies that inform the field on the latest research on science education. The Institute has supported the development of Taking Science to School and Ready, Set, Science! Since MISE's work has been evidence-based and centers on designing and implementing professional development, the Institute has always been interested in what the research says are effective models and/or methods of professional development. A similar drive to base professional development programs on evidence has led MISE to working with the National Academy on the development and support of the Teacher Learning Continuum. The Merck Institute for Science Education wants to contribute to the field the research behind effective, sustainable strategies for professional learning and growth

Future meetings for the Teacher Learning Continuum Study are scheduled for September and January. The expectation is that a final draft of the report including the committee's conclusions and recommendations will be completed by January. The report will enter the NRC review process by March of 2014 and a pre-publication version of the report will be available in June 2014.

Merck Institute for Science Education
Highlights
Second Quarter, 2013

The Academy for Leadership in Science Instruction Academic Year Sessions – Cohort 4
The Academic Year Session for the Academy for Leadership in Science Instruction was held at the Princeton Marriott Hotel and Conference Center in Princeton, NJ. Twelve Cohort 4 School-based Teams and three District-based Teams participated in Day 7 of the Academy curriculum on April 8th. The day was designed to provide the School-based and District-based Teams with professional development and support for achieving the Academy goals.

Day 7 provided the opportunity for team to examine types of teacher leadership, with a focus on the type of leadership proposed for the Academy teams, Practical Leadership. Practical Leadership differs from typical forms leadership which are defined by a set of prescribed roles. Practical leadership relies on the context of a particular situation and deliberation toward what might work in that given situation. It does assign specific leadership roles, does not rely on protocols, and does not necessitate specialized expertise.

Teams also engaged in a study group discussion on the attributes of effective communities of learners. They read several research studies and identified a variety of attributes that supported effective communities of learners. Using those attributes, each team self-assessed their own progress toward building and sustaining a community of learners in their schools.

To amplify their understanding of the practices of science and add to their vision of effective science instruction, the teams then engaged in a webinar presented by the National Science Teachers Association. The webinar, presented by Dr. Joseph Kracjik from Michigan State University, focused on two of the practices of science: Engaging in Argument from Evidence and Constructing Explanations and Designing Solutions.

The day concluded with a time for planning next steps for engaging with their school colleagues in learning about and improving science instruction. Teams were encouraged to think about which of the resources they experienced on Day 7 could support in their leadership and be useful tools in engaging with colleagues to improve science instruction.

National Conference on Science Education
MISE provided registration, travel, and accommodation funding for 15 science educators from Partnership school districts to attend the National Conference on Science Education of the National Science Teachers Association. The Conference was held April 10-14 in San Antonio. The National Conference is a significant professional development event, providing opportunities for educators to learn more about effective science teaching, preview new classroom materials, and network with other educators. Attendees typically return with notes, handouts, and information to enrich the professional lives of their school and district colleagues. The focus of this year's conference was the new Next Generation Science Standards, which were released at the start of the conference and will have a significant impact on professional development programs over the next three to five years.

Planning Meetings for Middle and High School Peer Teacher Workshops
A series of planning meetings were held for teams of middle and high school teachers to design Peer Teacher Workshops specifically focused on supporting teachers as they integrate the Practices of Science into their curriculum materials. The High School team of three classroom teachers and four content experts met with MISE staff on April 23-24 (with a follow up meeting scheduled for July 10). The Middle School team of six classroom teachers and one content expert met with MISE staff on May 13-14 and again on June 7. Both groups examined evaluation reports from the 2012 workshops, which included observational reports and participant surveys. Selected members of each planning team had attended the National Science Teachers Association

Meeting (referenced above) and integrated information from the conference into the planning agenda. Finally, the spring meeting of the teachers who had attended last years' High School Peer Teacher Workshop provided valuable feedback for refining the agenda.

The American Education Research Association (AERA)

The Merck Institute submitted a proposal to the American Education Research Association (AERA) to present early impact findings on the Academy for Leadership in Science Instruction. The American Educational Research Association provides an annual forum for researchers to explore and discuss the latest education research. The paper, entitled ***Engaging School Based Leadership Teams in Science Education Reform: Early Results of a Professional Leadership Model*** was accepted by AERA and MISE was invited to participate in a roundtable discussion at the annual conference in San Francisco on May 1. The presentation included a brief description of the Academy format, but primarily focused on early impact findings of improving science instruction in our partnership districts. The findings were documented through surveys administered two times within Partnership districts to both SbT members and non-SbT members of the first two Academy cohorts in order to track change over time within the district context (N=1436 teachers, response rates of 77% Elementary, 74% Middle, and 86% High school; N=63 principals, response rate of 84%). These surveys were developed and administered by an external evaluation group. The surveys focused on school-based practices such as teacher collaboration, science instruction, school science culture, and professional learning opportunities in the school.

Additionally, case studies of three schools, one elementary, one middle, and one high school selected at random, were conducted after one year of the Academy experience. The case studies drew on classroom observations of both SbT teachers and non-SbT teachers and focus groups of both SbT and non SbT teachers at the school site. Survey data were also used in the descriptive cases to illustrate participation patterns in science instruction professional development and leadership experiences. After completing the three years of the Academy, 24 interviews were conducted with members of the first two cohorts.

Results and conclusions

- Teachers reported significant changes in their preparation to use a variety of important science instructional techniques
- Teachers in the district schools are discussing science instruction more than they had in the previous year.
- Overall, the Partnership teachers felt well-supported in terms of material resources in their districts.
- Conditions for collaboration and expanding the SbTs leadership enactment with the schools appear to be strong across the Partnership districts.

The Academy for Leadership in Science Instruction Cohorts 3 and 4 Retreats

Cohort 4

A one-day Academy Faculty and Team Facilitator Retreat for Cohort 4 Year 2 was held on June 6 at the Merck Institute for Science Education. This retreat was attended by 17 participants including School-based Team members who have experience as Team Facilitators, MISE staff, and consultants with expertise in science content, pedagogy and professional development design. Each Team Facilitator was assigned to support a School-based Team in Cohort 4.

The year two curriculum focuses on earth science, specifically the earth-moon-sun system, as well as the practices of science, developing communities of learners and school culture. This is the fourth year the Academy has implemented the year 2 curriculum. The design team has also made adjustments to this curriculum, primarily to highlight the inclusion of the practices of science.

Since all but one of the Team Facilitators and faculty returned to facilitate this curriculum, the retreat focused on deepening the Team Facilitators' understanding of the science content and the practices of science. The goal was to ensure that all Team Facilitators were confident in their understanding of the science content and the practices, in order to support the progress of the teams toward these learning goals. The Team Facilitators also provided formative feedback to the Academy design team on the progress of teams toward all of the learning goals.

Cohort 3

A two-day, residential Academy Faculty and Team Facilitator Retreat for Cohort 3 Year 3 was held on June 27 – 28 at the Princeton Marriott Hotel and Conference Center. This retreat was attended by 25 participants including MISE staff, consultants with expertise in science content, pedagogy and professional development design, seven *new* Team Facilitators who were "graduates" of Cohort 2, and eight *returning* Team Facilitators who were "graduates" of Cohort 1and 2. Each Team Facilitator was assigned to a returning School-based Team in Cohort 3.

The curriculum for this year focuses on natural selection and the nature of science, as well as the practices of science, developing communities of learners, school culture and School Based Inquiry. This is the third year the Academy has implemented the year 3 curriculum. The design team has also made adjustments to this curriculum, primarily to highlight the inclusion of the practices of science.

Since many of the Team Facilitators were new, this retreat focused on acclimating them to their role and developing clear responsibilities and expectations. The retreat also provided the Team Facilitators with professional development in science content, the practices of science, and strategies for working with adult learners. The residential aspect of the retreat allowed for community building for the new Team Facilitators and time to engage in discussions with experienced Team Facilitators, consultants, and the Academy design team members.

Each Team Facilitator was assigned to provide support in all content areas for their School-based Team. Additionally, the Team Facilitators were a source of formative feedback on the progress of teams toward their learning goals.

Merck Institute for Science Education
Highlights
Third Quarter, 2013

The Academy for Leadership in Science Instruction

Two cohorts attended the Academy for Leadership in Science Instruction in Princeton, NJ. Cohort 3, comprised of 77 educators and fifteen K-12 School-based Teams, entered into its third year of the Academy curriculum. Cohort 4, comprised of 66 educators and twelve K-12 School-based Teams, experienced its second year of the Academy curriculum.

Cohort 4 attended the Academy from July 15th – 19th. In their second year of the Academy, this cohort continued its examination of the research on effective science instruction, also focusing on the practices of science as described in the *Framework for K-12 Science Education*. As adult learners, teams experienced science content which focused on the Earth Moon Sun system. They then analyzed how they learned the science content, examining their engagement in the practices, specifically two science practices: developing and using models and constructing explanations from evidence. Two additional content areas were included in this curriculum to build the capacity of these leadership teams and to provide new leadership tools - School Culture and School Based Inquiry (SBI). The analysis of school *science* culture enabled the teams to identify assets and areas of improvement in their school environments. The areas needing improvement become foci for examination through a School Based Inquiry process. The intent is for teams to engage with colleagues in the SBI, a process of data collection, analysis and evidence-based decision making, to increase their school's capacity to make continuous progress toward improving science instruction for all students.

Cohort 3 attended the Academy from July 29th through August 2nd. This was Cohort three's final summer at the Academy. The teams engaged in experiences focused on deepening their vision of effective science instruction and strengthening their leadership skills to sustain professional learning with their school colleagues. Teams engaged in science experiences to develop their understanding of Natural Selection and the nature of science. Then they analyzed how they learned the science content, examining their engagement in the practices of science, specifically engaging in argument from evidence and constructing explanations. They also recorded their Academy experiences and their engagement with colleagues by developing Journey Maps. Their journey maps helped them to recount, share and celebrate their accomplishments throughout their three-years of professional development experiences and subsequent work with colleagues.

Peer Teacher Workshops

Twelve Peer Teacher Workshops were held in Elizabeth, NJ in August attended by 211 educators from Elizabeth, Hillside, Linden, Newark, North Penn and Rahway. The six workshops designed for teachers of grades K-5 focused on grade-level curriculum materials currently in use in the Partner districts. Teachers who attended these workshops had the opportunity to experience investigations from their modules in order to deepen their understanding of the content and the materials. A new focus added this year was the districts' teacher evaluation frameworks. Participants had the opportunity to examine the intersection between the elements of effective science instruction (as outlined in the Horizon Research, Inc. report: *Effective Science Instruction: What Does Research Tell Us?*) and these evaluation frameworks in order to support meaningful implementation that aligns with district expectations.

Six additional workshops offered for 81 middle and high school teachers with a focus on the practices of science as outlined in the National Research Council Report *A Framework for K-12 Science Education*. Teachers engaged in investigations and experiences to deepen their understanding of three of the practices as well as to increase their ability to engage their students in these practices. Teachers collaborated across

grade levels and subject areas for introductory investigations followed by the opportunity to work with their own curriculum materials in smaller groups. There will be a follow up meeting in the late fall to support the participants in this work. This was the second year that this workshop was offered to high school teachers and the first year it was offered to middle school teachers. The initial feedback was uniformly positive, with participants stating that they felt the workshop was an excellent use of their time and would prove useful in their classrooms.

Seeds of Science/Roots of Reading Evaluation Meeting

Twelve teachers from 4 districts who had piloted the *Variation and Adaptation* unit participated in an end-of–pilot meeting on April 26 at MISE. Using a protocol adapted from the National Research Council document *Selecting Instructional Materials*, participants analyzed samples of student work and other materials in order to make a recommendation as to whether the Partner Districts should adopt the *Seeds of Science/Roots of Reading* curriculum materials. Discussion focused on the protocol's seven categories including whether the curriculum met state and pending national standards, was scientifically accurate and significant, promoted active engagement of all students and developed a depth of understanding of content. The teachers reported a positive experience with the materials but recommended that the Partnership delay purchase of new materials until they had been aligned with the new national standards.

Teacher Learning Continuum

On October 12th, the National Research Council's committee of experts commissioned to study the research on the professional grow continuum for science teachers conducted its fourth meeting in Washington, D.C. MISE attended the open session of the meeting to review progress, since the study is funded by the Merck Foundation.

At this meeting, the committee explored some of the constraints on state and district level decisions to deploy resources to support science teachers' learning. A panel discussion including current or former district superintendents and another that included state-level officials focused on how state and district leaders make decisions about supporting science teachers' learning, and where science falls into the range of considerations that they have to make.

Merck Institute for Science Education
Highlights
Fourth Quarter, 2013

The Academy for Leadership in Science Instruction

Two Academic Year Sessions for the Academy for Leadership in Science Instruction were held at the Princeton Marriott Hotel and Conference Center in Princeton, NJ. Twelve Cohort 4 School-based Teams participated in Day 13 of the Academy curriculum on October 28th. Fifteen Cohort 3 School-based Teams participated in Day 20 of the Academy curriculum on October 21st. A total of 120 participants were involved in these sessions. Both sessions provided the School-based Teams with professional development and support for achieving the Academy goals.

Day 13 and Day 20 focused on three areas: renewing the teams' commitment for providing effective science instruction to all students, building an understanding of the School Based Inquiry (SBI) process as a vehicle to sustain the reform of science instruction, and team planning for engaging with their colleagues in SBI.

In both cohorts, School-based Teams had the opportunity to collectively renew their commitment to providing effective science instruction to all students in their school. The Academy structured this process by providing selected reading from the current research on science education to increase the teams' understanding for why it is important that students learn science well. Working in teams, each person selected key ideas from the readings that s/he thought might be good additions to their original rationale constructed during the summer Academy. Then, in a "Gallery Walk", teams read the rationales of other teams and took notes of ideas they wanted to incorporate into their own team rationale. Finally they worked to edit their rationales to include the new ideas. Throughout the activity, the emphasis was on the ***process*** of thinking about a rationale and ***not*** a formalized, finished ***product***.

SBI is the Academy vehicle for sustainability. It is a collaborative process for improving instruction that involves investigating questions that focus on classroom practice. By collecting some data like student work samples or video/audio observations, teachers share their observations, interpret the selected data and decide what would be appropriate action in response to the data analyzed. Cohort 4 has just begun to engage in SBI, therefore the day included a review of the process, and a discussion related to what the progress teams had made so far toward engaging their colleagues in SBI. Cohort 3 has been engaged in SBI for one year, so their progress reports offered an opportunity to share successes and challenges that teams have experienced. Both cohorts engaged in discussions which included the identification of and elaboration on the elements of an inquiry-oriented community of learners. In previous sessions, teams had the opportunity to discuss the elements/attributes of learning communities. Additional elements specific to an inquiry-oriented community of learners are:

- Have a comprehensive view of what constitutes data and are willing to consider all forms and types of data
- Hold the group accountable for and document learning

Finally, the remainder of the day was designated to team planning. Teams had the opportunity to apply their experiences from this day to planning for SBI with their colleagues. Academy faculty worked closely with each team to guide them in identifying ways to motivate and engage colleagues as an inquiry-oriented community of learners. Teams will provide reports of their progress to the Academy on December 6th and February 12th.

Partnership Liaison Meetings

The first Liaison meeting of the year was held on *October 12th* at MISE. All of the partner school districts attended the meeting. This year's focus is on developing systems that will enable the partners to continue the professional development efforts among the school districts when MISE is no longer part of the Partnership. The Liaisons identified several sustainable capacities they will continue to have without the Institute as a resource. Those include, but are not limited to:

- A common vision/mindset of effective science instruction shared among the partners
- Human resources in the roles of coaches, Instructional Team members and Academy Leadership Teams
- Common curriculum materials which lend to shared professional development opportunities
- Assessments developed through the partnership that are closely aligned to the materials taught
- An institutionalized professional development models, i.e. Peer Teacher Workshop
- The Liaison community

Working toward sustainability this year, the partners agreed to plan and host the Liaison meetings in the school districts instead of at MISE. They have also established a system to provide professional development to new teachers of science by sharing existing district structures and communicating scheduling of that professional development among the partners. All districts have taken initiative to share science articles and Common Core resources electronically, which had previously been a role for MISE. Through this school year, the Liaison meetings will be devoted to designing systems that are reasonable and manageable for the school districts to sustain.

The second meeting was held on *December 18th* at the Rahway Academy (Middle School). All but one of the partner school districts attended the meeting (the absent district is in the process of hiring a new Liaison). Continuing this year's theme of sustainability, in addition to the fact that the meeting was hosted by a partner district, the agenda focused on continuity. Program updates led to a discussion of how tools introduced at the Academy and PTWs could be used in district for grade-level or subject area professional development. A session on "what are the benefits of participating in a professional learning community (PLC)?" supported Liaisons as they thought about how to continue to sustain PLCs in their buildings and districts. The meeting concluded with agenda setting for the next meeting, which will also be held in a partnership school in Elizabeth, in February.

Middle and High School Peer Teacher Workshop Academic Year Session

An academic year follow-up session for the 2013 Middle and High School Peer Teacher Workshop was held on December 12. Twenty educators attended this session which focused on classroom implementation of the Practices that were discussed this summer. Participants shared their own successes and challenges in implementing the practices, and examined student work using a protocol to analyze student learning and develop instructional strategies to address gaps in student understanding. In grade-level groups, participants examined new literature that examined classroom implementation of Developing and Using Models and Engaging in Argument from Evidence. They compared the experiences described in these articles to their own in order to deepen their understanding of these practices. At the end of the meeting, participants provided suggestions and feedback for the team that is planning the 2014 workshops.

National Research Council's Board on Science Education Workshop

On December 9-10, the MISE Director and Manager attended a workshop at the NRC entitled *Literacy for Science in the Common Core ELA Standards and the Next Generation Science Standards*. The workshop brought together experts in science education and language arts education to:

1. explore the intersections and overlap between the "Literacy in Science" portions of the Common Core State Standards (CCSS) for English Language Arts (ELA) and Practice 8 in the NRC's

framework related to "obtaining, evaluating, and communicating information" including consideration of the unique characteristics of communication in science;
2. consider the complementary roles of English/language arts teachers and science teachers as well as the unique challenges and approaches for different grade levels and articulate the knowledge and skills teachers need to support students in developing competence in reading and communicating in science;
3. consider design options for science and ELA curricula and courses that provide aligned support for students to develop competencies in reading and communicating in science;
4. discuss the role of district and school administrators in guiding implementation of science and ELA to help ensure alignment.

The adoption of the Common Core has created pressure for districts to spend more time on language arts and mathematics at the expense of science. The focus of this workshop was to find synergy between work in various classrooms or subject areas, and to maximize that opportunity and avoid conflicts in interpretation and implementation demands between teachers in the different areas. A number of consultants who had helped to design the Academy were speakers at this workshop, and their insights and the articles they discussed will inform program planning for both the Academy and the Peer Teacher Workshops.

C&V

FILED
DEC 19 2012
STATE TREASURER

CERTIFICATE OF AMENDMENT TO THE RESTATED CERTIFICATE OF INCORPORATION OF THE MERCK COMPANY FOUNDATION

0900037621

The Merck Company Foundation, a New Jersey nonprofit corporation (the "Foundation"), to amend its Certificate of Incorporation pursuant to Section 15A:9-4 of the New Jersey Nonprofit Corporation Act, hereby certifies as follows:

1. Name of the Corporation: The Merck Company Foundation.

2. Foundation Number: 0900037621.

3. Article FIRST of the Restated Certificate of Incorporation is hereby amended to read in its entirety as follows:

FIRST: The name of the Foundation shall be:

MERCK FOUNDATION, A NEW JERSEY NONPROFIT CORPORATION

4. The Foundation has members.

Number entitled to vote	12
Voting FOR	12
Voting AGAINST	0

5. Date of adoption: November 27, 2012.

Name: Geralyn S. Ritter
Title: President
Date: December 19, 2012

Mail to: PO Box 308
Trenton, NJ 08646

FEE REQUIRED

STATE OF NEW JERSEY
DIVISION OF REVENUE

Overnight to: 33 West State St.
6th Floor
Trenton, NJ 08608-1001

REGISTRATION OF ALTERNATE NAME

C-150G

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Complete the following applicable information, and sign in the space provided. Please note that once filed, the information contained in the filed form is considered public. Refer to the instructions on page 26 for filing fees and field-by-field requirements. Remember to remit the appropriate fee amount. Use attachments if more space is required for any field.

FILED
JAN 11 2013
STATE TREASURER

Check Appropriate Statute:

☐ Title 14A:2-2.1 (2) New Jersey Business Corporation Act

☐ Title 42:2[illegible]

☒ Title 15A:2-2-3 (b) New Jersey Nonprofit Corporation Act

☐ Title 42:2A-6 Limited Partnership

Pursuant to the provisions of the appropriate statute, checked above, of the New Jersey Statutes, the undersigned corporation/business entity hereby applies for the registration of an Alternate Name in New Jersey for a period of five (5) years, and for that purpose submits the following application:

0900037621

1. Name of Corporation/Business: Merck Foundation, a New Jersey Nonprofit Corporation
2. NJ 10-digit ID number: 0900037621
3. Set forth state of Original Incorporation/Formation: New Jersey
4. Date of Incorporation/Formation: 12/11/57

   Date of Authorization (Foreign):
5. Alternate Name to be used: Merck Foundation
6. State the purpose or activity to be conducted using the Alternate Name: funding support to qualified non-profit, charitable organizations
7. The Business intends to use the Alternate Name in this State.
8. The Business has not previously used the Alternate Name in this State in violation of this Statute, or; if it has, the month and year in which it commenced such use is: n/a

Signature requirements:

For Corporations — Chairman of the Board., President, Vice-President
For Limited Partnerships — General Partner
For all Other Business Types — Authorized Representative

SIGNATURE: [signature]

President
TITLE:

Geralyn S. Ritter
NAME (please type):

1/4/2013
DATE:

THE PURPOSE OF THIS FORM IS TO SIMPLIFY THE FILING REQUIREMENTS. IT DOES NOT REPLACE THE NEED FOR COMPETENT LEGAL ADVICE.

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