Report on a QI Project Eligible for Part IV MOC

Instructions

Determine eligibility. Before starting to complete this report, go to the UMHS MOC website [ocpd.med.umich.edu], click on “Part IV Credit Designation,” and review sections 1 and 2. Complete and submit a "QI Project Preliminary Worksheet for Part IV Eligibility.” Staff from the UMHS Part IV MOC Program will review the worksheet with you to explain any adjustments needed to be eligible. (The approved Worksheet provides an outline to complete this report.)

Completing the report. The report documents completion of each phase of the QI project. Final confirmation of Part IV MOC for a project occurs when the full report is submitted and approved.

An option for preliminary review (recommended) is to complete a description of activities through the intervention phase and submit the partially completed report. (Complete at least items 1-16 and 27a-b.) Staff from the UMHS Part IV MOC Program will provide a preliminary review, checking that the information is sufficiently clear, but not overly detailed. This simplifies completion and review of descriptions of remaining activities.

Questions are in bold font and answers should be in regular font (generally immediately below the questions). To check boxes electronically, either put an “X” in front of a box or copy and paste “☑” over the blank box.

For further information and to submit completed applications, contact either:
Grant Greenberg, MD, UMHS Part IV Program Lead, 763-936-1671, ggreenbe@med.umich.edu
R. Van Harrison, PhD, UMHS Part IV Program Co-Lead, 763-1425, rvh@umich.edu
Ellen Patrick, UMHS Part IV Program Administrator, 763-936-9771, ellpat@umich.edu

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QI Project Report for Part IV MOC Eligibility

A. Introduction

1. Date: 5/1/15

2. Title of QI project: Improving Chlamydia Screening Rates for women ages 16-24 in General Pediatrics through use of point of care decision support

3. Time frame
   a. Date physicians begin participating (may be in design phase): 5/21/14
   b. End date: 4/21/15

4. Key individuals
   a. QI project leader [also responsible for attesting to the participation of physicians in the project]
      Name: Heather L Burrows MD PhD
      Title: Associate Director of Education
      Organizational unit: UMHS Division of General Pediatrics
      Phone number: 647 5680
      Email address: armadill@umich.edu
      Mailing address: 300 North Ingalls St
      RM 6E12
      Ann Arbor, MI 48108-5456
   b. Clinical leader to whom the project leader reports regarding the project [responsible for overseeing/"sponsoring" the project within the specific clinical setting]
      Name: Kelly Orringer MD
      Title: Division Chief
      Organizational unit: UMHS Division of General Pediatrics
      Phone number: 647-3552
      Email address: korringe@umich.edu
      Mailing address: 300 North Ingalls St
      RM 6C11
      Ann Arbor, MI 48108-5456

5. Approximately how many physicians were involved in this project categorized by specialty and/or subspecialty? 25 General Pediatricians

6. Will the funding and resources for the project come only from internal UMHS sources?
   ☑ Yes, only internal UMHS sources
   ☐ No, funding and/or resources will come in part from sources outside UMHS, which are: ____________________________________________________________

The Multi-Specialty Part IV MOC Program requires that projects engage in change efforts over time, including at least three cycles of data collection with feedback to physicians and review of project results. Some projects may have only three cycles while others, particularly those involving rapid cycle improvement, may have several more cycles. The items below are intended to provide some flexibility in describing project methods. If the items do not allow you to reasonably describe the methods of your specific project, please contact the UMHS Part IV MOC Program office.

B. Plan
7. General goal

a. Problem/need. What is the “gap” in quality that resulted in the development of this project? Why is this project being undertaken?

Undiagnosed, unrecognized, and untreated chlamydia leads to significant morbidity including infertility and higher risk for ectopic pregnancy. Current UMHS performance for annualized Chlamydia Screening, based on HEDIS definition of appropriate patients was 29% as of May, 2014. This is well below HEDIS 75th Percentile performance of 59% of patients screened. Given UMHS' low performance, improving rates of chlamydia screening was identified as a priority for our patients' safety.

As such, we have chosen to undertake this project to improve our rates of annualized screening for chlamydia to at least 59% for eligible patients.

1 HEDIS criteria: Defined as Sexually active women ages 16-24 with a chlamydia test within the past 365 days. Sexually active is defined as women with a birth control prescription, a urine pregnancy test without a radiologic study within 7 days, or sexually transmitted infection testing.

2 UMHS criteria: Defined as all women ages 16-24 who are active patients (2 visits in 2 years, and one visit within the past 13 months) at a UMHS clinic. General pediatric clinics typically serve patients 16-20 years of age.

b. Project goal. What outcome regarding the problem should result from this project?

Improved rates of annual Chlamydia screening for all women aged 16-24

8. Patient population. What patient population does this project address.

All women aged 16-20 seen for at least one clinical appointment in the Division of General Pediatrics during the study period

9. Which Institute of Medicine Quality Dimensions are addressed? [Check all that apply.]

- Safety
- Effectiveness
- Efficiency
- Timeliness
- Equity
- Patient-Centeredness

10. What is the experimental design for the project?

- Pre-post comparisons (baseline period plus two or more follow-up measurement periods)
- Other: _____________________________

11. Baseline measures of performance:

a. What measures of quality are used? If rate or %, what are the denominator and numerator?

1. Screening Rate: Rate of Chlamydia Screening in women ages 16-24 seen for a clinic visit. Measures are calculated separately for each clinic within the division of General Pediatrics.

   Denominator: Women seen, ages 16-24 for a clinic visit
   Numerator: Number of women, ages 16-24, with an annual Chlamydia test (either performed during the office visit or in the past 365 days) or documented as not sexually active within the past 6 months.

2. Response to Point of Care Decision Support (Best Practice Alert, or BPA): Rate of responding to BPA that is triggered during appointment.

   Denominator: Office visits where the BPA fired (women aged 16-14 years old, no Chlamydia screen within the past 365 days)
   Numerator: Number of BPAs that are addressed (Chlamydia test obtained + assessment overridden (patient not sexually active, testing done elsewhere, or declined testing)

b. Are the measures nationally endorsed? If not, why were they chosen?
The screening rate measure is based on the national HEDIS criteria of annual screening for all sexually active women aged 16-24. For this measure, “sexually active” is defined as women with a birth control prescription, a urine pregnancy test without a radiologic study within 7 days, or sexually transmitted infection testing. Because young women are not always comfortable disclosing sexual activity, this definition will likely miss some women who are at risk of exposure to Chlamydia. Many young women are on birth control medications without being sexually active. Thus we felt that adhering to this definition would not accurately identify young women at risk. In addition, it was felt that universal screening would make this testing easier to accomplish in the context of providing confidential care to adolescents.

c. What is the source of data for the measure (e.g., medical records, billings, patient surveys)?
Medical records

d. What methods were used to collect the data (e.g., abstraction, data analyst)?
Data abstraction performed by institutional support

e. How reliable are the data being collected for the purpose of this project?
Very reliable

f. How are data to be analyzed over time, e.g., simple comparison of means, statistical test(s)?
Comparison of performance rates

g. For what time period was the sample collected for baseline data?
Baseline data was collected from 9/1/14-10/31/14

12. Specific performance objectives

a. What was the overall performance level(s) at baseline? (E.g., for each measure: number of observations or denominator, numerator, percent. Can display in a data table, bar graph, run chart, or other method. Can show here or refer to attachment with data.)

1. Screening Rate 9/1-10/31/14

<table>
<thead>
<tr>
<th>Clinic</th>
<th># women, aged 16-24y, seen in clinic</th>
<th># women, aged 16-24y, seen in clinic with annual Chlamydia test (either done during visit or in the past 365 days), or documented as not sexually active within the past 6 months</th>
<th>% of women seen with annual Chlamydia screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briarwood</td>
<td>49</td>
<td>22</td>
<td>45.9%</td>
</tr>
<tr>
<td>Brighton</td>
<td>28</td>
<td>16</td>
<td>57.1%</td>
</tr>
<tr>
<td>Canton</td>
<td>65</td>
<td>22</td>
<td>33.8%</td>
</tr>
<tr>
<td>East Ann Arbor</td>
<td>37</td>
<td>12</td>
<td>32.4%</td>
</tr>
<tr>
<td>Howell</td>
<td>48</td>
<td>28</td>
<td>58.3%</td>
</tr>
<tr>
<td>Northville</td>
<td>24</td>
<td>11</td>
<td>45.8%</td>
</tr>
<tr>
<td>Saline</td>
<td>46</td>
<td>10</td>
<td>21.7%</td>
</tr>
<tr>
<td>West Ann Arbor</td>
<td>14</td>
<td>6</td>
<td>42.9%</td>
</tr>
<tr>
<td>Ypsilanti</td>
<td>24</td>
<td>11</td>
<td>45.8%</td>
</tr>
<tr>
<td>All Clinics</td>
<td>335</td>
<td>138</td>
<td>41.2%</td>
</tr>
</tbody>
</table>
2. **Response to Point of Care Decision Support (Best Practice Alert, or BPA)**

<table>
<thead>
<tr>
<th>Clinic</th>
<th># Clinic visits where BPA fired</th>
<th># BPAs addressed during visit (screening obtained or BPA overridden)</th>
<th>% of BPAs addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briarwood</td>
<td>37</td>
<td>14</td>
<td>37.8%</td>
</tr>
<tr>
<td>Brighton</td>
<td>24</td>
<td>15</td>
<td>66.7%</td>
</tr>
<tr>
<td>Canton</td>
<td>47</td>
<td>12</td>
<td>25.5%</td>
</tr>
<tr>
<td>East Ann Arbor</td>
<td>31</td>
<td>12</td>
<td>38.7%</td>
</tr>
<tr>
<td>Howell</td>
<td>32</td>
<td>13</td>
<td>40.6%</td>
</tr>
<tr>
<td>Northville</td>
<td>19</td>
<td>6</td>
<td>31.6%</td>
</tr>
<tr>
<td>Saline</td>
<td>39</td>
<td>20</td>
<td>51.3%</td>
</tr>
<tr>
<td>West Ann Arbor</td>
<td>11</td>
<td>4</td>
<td>36.4%</td>
</tr>
<tr>
<td>Ypsilanti</td>
<td>16</td>
<td>4</td>
<td>25.0%</td>
</tr>
<tr>
<td>All Clinics</td>
<td>256</td>
<td>100</td>
<td>39.0%</td>
</tr>
</tbody>
</table>

During this time 2 positive results were obtained.

b. **Specific aim:** What was the target for performance on the measure(s) and the timeframe for achieving the target?

By the conclusion of the post-adjustment period for this project (4/21/15):

**Screening rate:** 70% of women 16-24 who are seen for an office visit will have a Chlamydia screen done either at the visit or within the past 365 days

**Response to BPA:** 75% of BPA will be addressed during the office visit.

c. How were the performance targets determined, e.g., regional or national benchmarks?

The Faculty Group Practice QMP goal is based on the number of women aged 16-24y who are assigned to each primary care site who have had a Chlamydia screening test performed within the past 365 days (whether or not they have been seen in the clinic during that year). This goal is set at 59% for all women, with a goal of 23% for women 16-17 years old and 63% for women 18-24 years old. These metrics were determined by the 90%ile rates for the prior rates at UMHS. The performance targets for this project were based on patients who were actually seen in clinic and so were determined with the goal of achieving these FGP goals.

13. Data review and identifying underlying (root) causes.

a. Who was involved in reviewing the baseline data, identifying underlying (root) causes of the problem(s), and considering possible interventions (“countermeasures”) to address the causes? Briefly describe:

   - **Who was involved?**
     - Project Facilitator (Grant Greenberg MD), Project Manager (Cecilia Sauter), Ambulatory Care Administrator (Elly Samuels). Physician leads for each of the clinical areas (Fam Med: Allison Ursu MD, Pediatrics Heather Burrows MD, Gen Med Susan Blitz MD, Ob-Gyn Roger Smith MD, UHS Rob Ernst MD). This group met initially on 5/21/14 monthly to review the UMHS annualized data on chlamydia screening rates and discuss initial project planning/coordination. Heather Burrows then reviewed baseline data with participating physicians in General Pediatrics.
b. What were the primary underlying/root causes for the problem(s) that the project can address? (Causes may be aspects of people, processes, information infrastructure, equipment, environment, etc. List each primary cause separately. How the intervention(s) address each primary underlying cause will be explained in #14.c.)

Potential root causes identified in May, 2014 prior to baseline data included:

Physician Factors:
- Lack of recognition of the need to screen the patient given the many other clinical tasks that occur at any given patient encounter
- Discomfort with the topic
- Lack of knowledge on the evidence-based recommendation for chlamydia screening
- Lack of recognition of less invasive options for screening beyond pelvic exam

Patient Factors:
- Confidentiality issues for patients < age 18
- Discomfort raising topic to physician/embarrassment
- Unwilling to undergo pelvic exam

Process/Staff Issues:
- Lack of standard mechanism to address adolescent visits in confidential manner
- No routine practice to obtain urine samples
- Different process for urine collection (dirty sample) than for screening for urinary tract infections (clean catch)
- Patient Self Swab product for chlamydia testing not present in all clinical areas

C. Do

14. Intervention(s).

a. Describe the interventions implemented as part of the project.

An Electronic Health Record (MiChart) point of care “Best Practice Advisory (BPA)” was initiated on 9/1/14 to remind physicians to screen patients who meet criteria for screening (female, age 16-24, no screening within last 365 days, not otherwise excluded due to lack of sexual activity).

Physician education was provided to address concerns about confidentiality issues around screening. Educational materials and letters for parents were developed to explain this initiative.

Training was provided for office support staff to develop work flows to allow medical assistants to obtain urine specimens from young women during the check in process. Specifically, a process for routinely checking in young women without parents present.

A process for documenting adolescent phone numbers was developed for communicating test results in a confidential manner.

b. How were underlying/root causes (see #13.b) addressed by the intervention(s)? (List each cause, whether it was addressed, and if so, how it was addressed.)

Physician Factors:
- Education provided addressed the various issues identified as potential physician factors (methods for screening, importance of screening)
- A BPA was developed to serve as a reminder to obtain the screening
Patient Factors:
- Educational materials developed for parents and adolescent patients to explain importance of screening.
  Universal screening was promoted to normalize screening and address confidentiality issues.

Process/Staff Issues:
- Education for staff on confidential care of adolescents improved comfort with this care.
- Standard workflow allowed support staff to obtain urine specimens in a timely and confidential manner at start of visit.
- Some clinics added urgent visits to the workflow for obtaining urine specimens from young women.
- Materials needed for screening was obtained and provided in all clinics.
- Method for documenting adolescent phone numbers in the medical record allowed for confidential reporting of results.

15. Who was involved in carrying out the intervention(s) and what were their roles?
   Project Facilitator (Grant Greenberg MD)
   Project Manager (Cecilia Sauter)
   Ambulatory Care Administrator (Elly Samuels)
   Physician leads for each of the clinical areas (Fam Med: Allison Ursu MD, Pediatrics Heather Burrows MD PhD, Gen Med Susan Blitz MD, Ob-Gyn Roger Smith MD, UHS Rob Ernst MD).
   --- this team met monthly starting 5/21/14 to develop project, BPA, educational materials, and discuss project planning.
   Pediatric Physician Lead Heather Burrows MD PhD also prepared data for presentation at division meetings and communicated with participating physicians to track clinical interventions.
   Participating Physicians participated in data review, self reflection on specific clinic data, participation in educational sessions on utilization of the BPA, and determination of specific interventions at each clinical site.
   Other Clinical Staff: Clerical staff provided information to patients and parents about screening intervention, Medical Assistants obtained urine specimens at many clinical sites, Health Center Managers supported these workflow changes within the clinics.

16. The intervention was initiated when? (For multiple interventions, initiation date for each.)
   Initial BPA implementation on 9/1/14 with review of baseline data on 12/9/14. Further implementations to improve utilization of the BPA after review of baseline data were implemented on 1/1/15.

D. Check

17. Post-intervention performance measurement. Did this data collection follow the same procedures as the initial collection of data described in #11: population, measure(s), and data source(s)?
   ☑ Yes ☑ No – If no, describe how this data collection was performed.

   In addition to the procedure for the initial collection of data, data on the FGP metric was also available following the initial intervention. This measures the rate of annual Chlamydia screening for all patients aged 16-24 who are assigned to the primary care site. (Whether or not they were seen in clinic during the intervention period)

   Denominator: all women aged 16-24 who have had at least two visits at that primary care site in the past 2 years with one in the preceding 13 months.
   Numerator: the number of women aged 16-24 who have had at least one Chlamydia screening test in the preceding 365 days.

   For the "Peds" measure, the age range is 16-17 years of age, and for the "Adult" measure, the age range is 18-24 years.
18. Performance following the intervention.

a. The collection of the sample of performance data following the intervention occurred for the time period: 1/1/15-1/31/15

b. What was post-intervention performance level? (E.g., for each measure: number of observations or denominator, numerator, percent. Can display in a data table, bar graph, run chart, or other method. Can show here or refer to attachment with data.)

1. Screening Rate (goal was 70%)

<table>
<thead>
<tr>
<th>Clinic</th>
<th># women, aged 16-24y, seen in clinic</th>
<th># women, aged 16-24y, seen in clinic with annual Chlamydia test (either done during visit or in the past 365 days), or documented as not sexually active within the past 6 months</th>
<th>% of women seen with annual Chlamydia screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briarwood</td>
<td>68</td>
<td>27</td>
<td>39.7%</td>
</tr>
<tr>
<td>Brighton</td>
<td>30</td>
<td>11</td>
<td>36.7%</td>
</tr>
<tr>
<td>Canton</td>
<td>59</td>
<td>26</td>
<td>44.1%</td>
</tr>
<tr>
<td>East Ann Arbor</td>
<td>46</td>
<td>20</td>
<td>43.5%</td>
</tr>
<tr>
<td>Howell</td>
<td>54</td>
<td>35</td>
<td>64.8%</td>
</tr>
<tr>
<td>Northville</td>
<td>36</td>
<td>19</td>
<td>52.8%</td>
</tr>
<tr>
<td>Saline</td>
<td>43</td>
<td>14</td>
<td>32.6%</td>
</tr>
<tr>
<td>West Ann Arbor</td>
<td>12</td>
<td>7</td>
<td>58.3%</td>
</tr>
<tr>
<td>Ypsilanti</td>
<td>27</td>
<td>16</td>
<td>59.3%</td>
</tr>
<tr>
<td>All Clinics</td>
<td>375</td>
<td>175</td>
<td>46.7%</td>
</tr>
</tbody>
</table>

2. Response to Point of Care Decision Support (Best Practice Alert, or BPA) (goal was 75%)

<table>
<thead>
<tr>
<th>Clinic</th>
<th># Clinic visits where BPA fired</th>
<th># BPAs addressed during visit (screening obtained or BPA overridden)</th>
<th>% of BPAs addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briarwood</td>
<td>55</td>
<td>22</td>
<td>40.0%</td>
</tr>
<tr>
<td>Brighton</td>
<td>22</td>
<td>5</td>
<td>22.7%</td>
</tr>
<tr>
<td>Canton</td>
<td>41</td>
<td>15</td>
<td>36.6%</td>
</tr>
<tr>
<td>East Ann Arbor</td>
<td>36</td>
<td>18</td>
<td>50.0%</td>
</tr>
<tr>
<td>Howell</td>
<td>36</td>
<td>14</td>
<td>38.9%</td>
</tr>
<tr>
<td>Northville</td>
<td>28</td>
<td>11</td>
<td>39.3%</td>
</tr>
<tr>
<td>Saline</td>
<td>33</td>
<td>14</td>
<td>42.4%</td>
</tr>
<tr>
<td>West Ann Arbor</td>
<td>8</td>
<td>2</td>
<td>25.0%</td>
</tr>
<tr>
<td>Ypsilanti</td>
<td>15</td>
<td>10</td>
<td>66.7%</td>
</tr>
<tr>
<td>All Clinics</td>
<td>274</td>
<td>111</td>
<td>40.5%</td>
</tr>
</tbody>
</table>

During this time 3 positive results were obtained.

3. FGP Metrics (Screening Rates for all Women Assigned to the Primary Care Site)

<table>
<thead>
<tr>
<th>Clinic</th>
<th>% clinic assigned women aged 16-24 years with annual chlamydia screen</th>
<th>% of young women aged 16-17 years (&quot;peds&quot;) with an annual screen</th>
<th>% of women aged 18-24 years (&quot;adult&quot;) with an annual screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGP Goal (90%ile)</td>
<td>59%</td>
<td>23%</td>
<td>63%</td>
</tr>
<tr>
<td>Briarwood</td>
<td>34%</td>
<td>30%</td>
<td>39%</td>
</tr>
<tr>
<td>Brighton</td>
<td>31%</td>
<td>27%</td>
<td>38%</td>
</tr>
</tbody>
</table>
c. Did the intervention produce the expected improvement toward meeting the project's specific aim (item 12.b)?
Rates of Chlamydia screening did increase both overall and at individual clinics. In addition, the BPA was addressed more often during the visits than it was initially. The rates did not yet meet the desired rates however. Progress was made with meeting the FGP goals for screening women aged 16-24 who are assigned to the clinical panel (screening rate was assessed whether or not these patients had been seen in the clinic during this period). 6/9 clinics achieved appropriate levels of screening for the younger patients (16-17 years). None of the clinics achieved the goal levels for adult patients (18-24 years old).

E. Adjust – Replan


a. Who was involved in reviewing the post-intervention data, identifying underlying (root) causes of the continuing/new problem(s), and considering possible adjustments to interventions ("countermeasures") to address the causes? Briefly describe:

- Who was involved? Participating physicians and general pediatric project lead Heather Burrows MD PhD

- How? All faculty had the opportunity to reflect on data provided at a regular division meeting on 2/17/15. At this meeting, faculty discussed issues impacting responses to the BPA and workflow issues around support staff assistance with obtaining urine specimens.

b. What were the primary underlying/root causes for the continuing/new problem(s) that the project can address? (Causes may be aspects of people, processes, information infrastructure, equipment, environment, etc. List each primary cause separately. How the intervention(s) address each primary underlying cause will be explained in #20.c.)

Physician Factors:
- Some physicians not clear on how to utilize the BPA within the chart to obtain screening or document lack of sexual activity

Patient Factors:
- Some parents continue to decline testing for their adolescents.

Process/Staff Issues:
- Time available for urgent visits is a factor with providing confidential care to adolescent girls
- Staff forget to obtain and document appropriate phone number
- Staff forget to obtain urine specimen

F. Redo


a. The second intervention was initiated when? (For multiple interventions, initiation date for each.) 3/1/15
b. What interventions were implemented?
Additional training on use of BPA. Some clinics increased time allotted to adolescent female well visits. Additional workflow training provided to support staff.

c. How were continuing/new underlying/root causes (see #19.b) addressed by the intervention(s)? (List each cause, whether it was addressed, and if so, how it was addressed.)

Physician Factors:
- Additional education about the use of the BPA will help with efficiency and appropriate documentation of patient assessments in clinical flow.

Patient Factors:
- No specific interventions were proposed to affect parental concerns, although we hope that continued discussions will help normalize this testing process.

Process/Staff Issues:
- Additional time was added to some adolescent well visit encounters to allow sufficient time to discuss confidential topics
- Support staff was reminded of appropriate workflows

G. Recheck

21. Post-second intervention performance measurement. Did this data collection follow the same procedures as the initial collection of data described in #11: population, measure(s), and data source(s)?
☐ Yes  ☐ No – If no, describe how this data collection

The additional information on the FGP measure was not available for this time period at the time of this report.

22. Performance following the second intervention.

a. The collection of the sample of performance data following the intervention(s) occurred for the time period: 3/1/15-3/30/15

b. What was the performance level? (E.g., for each measure: number of observations or denominator, numerator, percent. Can display in a data table, bar graph, run chart, or other method. Can show here or refer to attachment with data.)

1. Screening Rate (Goal was 70%)

<table>
<thead>
<tr>
<th>Clinic</th>
<th># women, aged 16-24y, seen in clinic</th>
<th># women, aged 16-24y, seen in clinic with annual Chlamydia test (either done during visit or in the past 365 days), or documented as not sexually active within the past 6 months</th>
<th>% of women seen with annual Chlamydia screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briarwood</td>
<td>35</td>
<td>17</td>
<td>48.6%</td>
</tr>
<tr>
<td>Brighton</td>
<td>71</td>
<td>33</td>
<td>46.5%</td>
</tr>
<tr>
<td>Canton</td>
<td>66</td>
<td>30</td>
<td>45.5%</td>
</tr>
<tr>
<td>East Ann Arbor</td>
<td>47</td>
<td>30</td>
<td>63.8%</td>
</tr>
<tr>
<td>Howell</td>
<td>65</td>
<td>46</td>
<td>70.8%</td>
</tr>
<tr>
<td>Northville</td>
<td>45</td>
<td>23</td>
<td>51.1%</td>
</tr>
</tbody>
</table>
2. **Response to Point of Care Decision Support (Best Practice Alert, or BPA) Goal was 75%**

<table>
<thead>
<tr>
<th>Clinic</th>
<th># Clinic visits where BPA fired</th>
<th># BPAs addressed during visit (screening obtained or BPA overridden)</th>
<th>% of BPAs addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Briarwood</td>
<td>25</td>
<td>7</td>
<td>28.0%</td>
</tr>
<tr>
<td>Brighton</td>
<td>52</td>
<td>24</td>
<td>46.2%</td>
</tr>
<tr>
<td>Canton</td>
<td>49</td>
<td>19</td>
<td>38.8%</td>
</tr>
<tr>
<td>East Ann Arbor</td>
<td>28</td>
<td>16</td>
<td>57.1%</td>
</tr>
<tr>
<td>Howell</td>
<td>38</td>
<td>20</td>
<td>52.6%</td>
</tr>
<tr>
<td>Northville</td>
<td>28</td>
<td>11</td>
<td>39.3%</td>
</tr>
<tr>
<td>Saline</td>
<td>39</td>
<td>26</td>
<td>66.7%</td>
</tr>
<tr>
<td>West Ann Arbor</td>
<td>12</td>
<td>6</td>
<td>50.0%</td>
</tr>
<tr>
<td>Ypsilanti</td>
<td>11</td>
<td>8</td>
<td>72.7%</td>
</tr>
<tr>
<td>All Clinics</td>
<td>282</td>
<td>137</td>
<td>48.6%</td>
</tr>
</tbody>
</table>

During this time 1 positive result was obtained.

c. **Did the second intervention produce the expected improvement toward meeting the project’s specific aim (Item 12.b)?**

Although each clinic did show improvement on the specific aims, only 2 clinics met the goal of a screening rate of 70% for all women 16-24 who were seen in clinic during that time period and not documented as not sexually active (East Ann Arbor and Ypsilanti). The overall rate of screening for all clinics went from 41.2% at baseline to 46.7% after the first intervention to 55.8% after the second intervention.

None of the clinics met the goal of addressing the BPA during the visit at least 75% of the time. The rate of response to the BPA went from 39% at baseline to 40.5% after the first intervention and then to 48.6% after the final intervention.

H. **Readjust**


a. **Who was involved in reviewing the data, identifying underlying (root) causes of the continuing/new problem(s), and considering additional possible adjustments to interventions (“countermeasures”) to address the causes? Briefly describe:**

- **Who was involved?** 25 physicians completed the entire project and participated in reviewing the final data

- **How?** (e.g., in a meeting of clinic staff) Final Data Analysis was performed at the regular monthly pediatric division meeting on 4/21/15.

b. **What were the primary underlying/root causes for the continuing/new problem(s) that the project can address?** (Causes may be aspects of people, processes, information infrastructure, equipment, environment, etc. List each primary cause separately.)

**Physician Factors:**

- Physicians are now aware of how to access the BPA, but do not always remember to look for it.

**Patient Factors:**

- Some parents continue to decline testing for their adolescents.
Process/Staff Issues:
- Time available for urgent visits continues to be a challenge for confidential care for adolescents
- Staff still do not always obtain a urine specimen when rooming adolescents

I. Future Plans

24. How many subsequent PDCA cycles are to occur, but will not be documented as part of the “project” for which Part IV credit is designated?
   No additional formal future data cycles are planned. However, as this metric is a FGP focus measure and will be included in the pay for performance metrics in an ongoing manner, analysis of results will continue at the individual clinic level. We continue to offer faculty support in utilizing efficiency tools such as clinical support triggers (ie BPAs) within the electronic medical record. Additional education for support staff in improving clinical support and interaction with the EMR will continue. Screening is only performed when adolescent girls come to the clinic for office appointments, so improving adolescent well visit rates will likely improve screening rates as well. We are shifting clinical efforts to improve outreach to adolescents and increase well visit rates in this age group.

25. How will the project sustain processes to maintain improvements?
   The BPA generated during this project will continue to fire at appropriate office encounters. Detailed reports documenting which physicians and support staff have viewed each BPA will continue to be generated and shared with individual physicians and clinical leadership.

26. Do other parts of the organization(s) face a similar problem? If so, how will the project be conducted so that improvement processes can be communicated to others for “spread” across applicable areas?
   This project has been a joint project with involvement of all service areas that provide care for young women aged 16-24 (Pediatrics, Family Medicine, Internal Medicine, OB/Gyn, and University Health Services). All areas have worked together to develop this project as well as the various interventions.

J. Physician Involvement

27. Physician’s role. What were the minimum requirements for physicians to be actively involved in this QI effort? (What were physicians to do to meet each of the basic requirements listed below? If this project had additional requirements for participation, also list those requirements and what physicians had to do to meet them.)
   a. Interpreting baseline data and planning intervention:
      Attendance at division meeting 12/9/14 for educational material on Chlamydia screening, review of BPA utilization, and analysis of baseline data.
   b. Implementing intervention:
      Incorporating BPA into daily practice, supporting clinical workflows to promote screening
   c. Interpreting post-intervention data and planning changes:
      Attendance at division meeting 2/17/15 and involvement in discussion
   d. Implementing further intervention/adjustments:
      Further modifications to clinical workflows as indicated
   e. Interpreting post-adjustment data and planning changes:
      Attendance at division meeting 4/21/15 and involvement in discussion

28. How were reflections of individual physicians about the project utilized to improve the overall project?
   Suggestions made by individual faculty at division meetings were incorporated into the process development. This input was utilized to facilitate development of workflows within the individual clinics.
29. How did the project ensure meaningful participation by physicians who subsequently request credit for Part IV MOC participation?
   All faculty were required to demonstrate active longitudinal participation by attending all division meetings where educational sessions were provided as well as meetings where data was discussed and further interventions planned. The general pediatrics project lead monitored the participation of all faculty. For faculty who were unable to attend one division meeting for a legitimate reason (illness, maternity leave) we did allow one “excused absence”. These faculty then had to review the appropriate data and respond electronically to the general pediatrics project lead with reflections on the data and plans for additional interventions.

K. Project Organizational Role and Structure

30. UMHS QI/Part IV MOC oversight – this project occurs within:
   ☑ University of Michigan Health System
   • Overseen by what UMHS Unit/Group? Faculty Group Practice Quality Focus Measure, Division of General Pediatrics

   • Is the activity part of a larger UMHS institutional or departmental initiative?
     ☐ No   ☑ Yes – the initiative is: Faculty Group Practice QMP Quality Focus Measure

   ☐ Veterans Administration Ann Arbor Healthcare System
   • Overseen by what AAVA Unit/Group?

   • Is the activity part of a larger AAVA institutional or departmental initiative?
     ☐ No   ☐ Yes – the initiative is:

   ☐ An organization affiliated with UMHS to improve clinical care
   • The organization is:

   • The type of affiliation with UMHS is:
     ☐ Accountable Care Organization type (specify which):

     ☐ BCBSM funded, UMHS lead Collaborative Quality Initiative (specify which):

     ☐ Other (specify):

   • Who is the individual at UMHS responsible for oversight of the QI project regarding Part IV requirements?
     Name: Grant Greenberg, R. Van Harrison
     Title: UMHS Part IV Program co-Leads,
     Institutional/organizational unit/affiliation: UMHS Quality Management Program
     Phone number: 763-936-1671, 763-1425
     Email address: ggreenbe@med.umich.edu, rvh@umich.edu