

## Jean Davison's Quality Improvement Module

**Purpose: To provide the student with an understanding of the quality improvement process and how to apply it using a population health approach.**

**Goals: *At the end of this presentation the learner will...***

1. Identify population health disparities, using epidemiological and demographic measures.
2. Demonstrate understanding of how to apply principles of continuous quality improvement to a practice setting/patient population using a methodology such as plan do study act (PDSA)
3. Monitor quality improvement for clinical care using demographic and epidemiologic methods to improve population health care and reduce health disparities.

### **Outline Content:**

1. *Principles of continuous quality improvement*
2. *Model for Improvement*
3. *Plan-Do-Study-Act Cycle*
4. *Population data bases and Meaningful Use Measures:*

*Using an example of a registry of a population data base of a CVD patient population outcomes and meaningful use measures related to CVD, one or more measures will be focused on to improve within a QI team.*

*Students will role play in a QI team:*

**Team Based and Experiential Learning:** Role playing; in the classroom setting in groups of 4-6, students will role play as a multidiscipline team (NP, medical director, nurse, Front Desk/IT data entry and Patient) using population data from a CVD registry in a primary care family practice and a blank PDSA handout to plan an intervention to improve care.

### **QI: Planning**

As a group they will come up with details of planning one intervention, specifics with who, when, where, what and how they will implement this plan using data from the CVD registry at a community health center.

Group discussion;

After they develop their plan of the PDSA, they will verbalize feelings of playing the roles and discussion of barriers, facilitators and collaboration involved.

Learning Objective	Content	Time Frame	Qualitative Assessment Strategy & Rationale and Proposed Evaluation Methods
<p>The learner will <i>explain and analyze</i> their results of their community data on CVD when they meet in their small groups</p> <p>This is using the team based learning approach in which students must come to class prepared to work within their groups. At the end of the class they will turn in their individual assignments to be graded based on the answers to the above questions for their individual counties.</p>	<p><b>Prior to this session</b> instructions on how to research epidemiology statistics and their community needs assessment using internet and media center resources will be given at the Health Science Library along with background on identifying health disparities using research data  <b>Resources:</b> internet computer and or media center.</p>	<p>Assigned self- research of county data prior to classwork estimated 1-2 hours prior to class then <b>30 minutes</b> of small group discussion on sharing commenting and discussing health disparities seen in their state of the county assessment</p>	<p>1. Student will print out a report and graph of incidence and prevalence of CVD in their county according to gender, age and race categories; this will be submitted after class and graded based on questions answered below for the group discussion.                  2. Discussion of results within their small group will focus on health disparities seen between gender, age and race. What kind of questions might you ask? Is your county rural or urban? What statistics are available regarding social economic status? Tobacco use? Obesity rates? CVD rates? Diabetes? What are some of the health priorities and needs of your county? What are some of the health disparities?  <b>Individual students will turn in their reports at the end of class.</b></p>
<p>At the beginning of class in groups of two, the RN graduate students will <i>demonstrate and explain</i> the correct method for taking a blood in the seated position comparing this to the procedure in the physical assessment guide and achieve a successful BP reading within 20mmHG of accuracy.</p>	<p>1. Using the JNC 7 guidelines and PDSA example, power point lecture on the importance of correct procedure for the screening, diagnosis and treatment of hypertension.                  2. Picture of correct position of patient and cuff for measuring systolic/diastolic in seated position.                  3. Demonstration and return demonstration with partner.</p> <p>This requires a BP cuff sphygmomanometer and stethoscope</p>	<p>Checking BP is an optional exercise if time permits this exercise and equipment is available:  <b>20 minutes for lecture and 10 minutes for check off</b></p>	<p>1. Students will demonstrate the correct procedure of taking a blood pressure with a check off skills sheet focus on accuracy of technique and successful BP reading within 20mmHG of accuracy.                  2. Students will be quizzed on JNC 7 guidelines for screening, detection and management of hypertension.                  *(See quiz questions below)</p>
<p><i>Demonstrate understanding of how to apply principles of continuous quality improvement to a practice setting/ patient population using a methodology such as plan do study act (PDSA)</i></p>	<p>1. <i>Principles of continuous quality improvement</i>                  2. <i>Model for Improvement</i>                  3. <i>Plan-Do-Study-Act Cycle</i>                  4. <i>Population data bases and Meaningful Use Measures:</i>  <i>Using an example of a registry of a population data base of a CVD patient</i></p>	<p><b>20 minutes</b> of lecture around QI and PDSA</p>	<p>QI: Planning                  As a group they will come up with details of planning one intervention, specifics with who, when, where, what and how they will implement this plan using data from the CVD registry at a community health center. (Example</p>

	<p><i>population outcomes and meaningful use measures related to CVD, one or more measures will be focused on to improve within a QI team.</i></p> <p><i>Students will role play in a QI team: Team Based Learning: Role playing; in the classroom setting in groups of 4-6, students will role play as a multidiscipline team (NP, medical director, nurse, Front Desk/IT data entry and Patient) using population data from a CVD registry in a primary care family practice and a blank PDSA handout to plan an intervention to improve care (Appendix A).</i></p>	<p><b>10 minutes</b> to review the registry prior to role playing</p> <p><b>40 minutes</b> role playing and forming one plan</p>	<p>given Appendix A)</p>
<p>At the end of the team based learning group session, team members will role play a quality improvement team and then <i>discuss their experience during role playing and identify</i> barriers and solutions from the PDSA</p>	<p><i>During this role playing session the NP is the facilitator and wants to make multiple changes to the way the practice runs, the medical director thinks data is “bean counting for the feds”, the LPN will take the role of a barrier to change, as the center is understaffed and she cannot add “any more work to her load”! The patient is a representative of the community health center, he is 58 years old, AA male with uncontrolled HTN, recently lost his job due to layoffs and has no health insurance. The front desk staff is overwhelmed as she is in charge of collecting co-pays, calling back patients when they no-show, and ordering medications via the patient assistant program for qualified patients and data entry for the CVD registry. She is new to her job and doesn’t understand where to find the info in the charts. With recent layoffs in the community her work load has increased.</i></p>	<p><b>20 minutes</b> group discussion</p> <p><b>20 minutes</b> of classroom summary</p>	<p>Group discussion; After they develop their plan of the PDSA, they will verbalize feelings of playing the roles and discussion of barriers, facilitators and collaboration involved.</p> <p>Students will self- evaluate their work at the end of the semester and peers will evaluate each other’s work.</p>

**Discussion of Team Based and Experiential Learning**

My overall teaching method for this class is the Team-Based Learning (TBL) approach and using role playing for experiential learning. McKeachie and Svinick (2010) discuss active

learning group strategies and experiential learning principles in Chapter 14 and 15. In experiential learning, such as the above role playing, the learner uses “real-world situations” that “involve complex” problems, with more than one answer possible. The instructor is “a resource, not the leader” and the learners spend time reflecting on how they came to a conclusion or solution. The role playing is meant to represent this type of experiential learning. Chapter 14-15 discusses team-based learning (TBL), developed in the 1970s. To be effective TBL groups should be diverse, formed by the instructor, students must be made accountable (that is why there was a pre-class preparation that they did individually) and assignments should use course concepts to make complex decisions (Mennenga et al, 2010). The learner is actively involved and the “team” approach is greater than the sum. Since quality improvement is all about team work and collaboration, using this method prepares students for the real work of planning, doing, studying their results and acting on this for continuous improvement in their clinical/work environment using a multi-discipline team approach. Often time they are quizzed individually and then as a group and must explain their reasoning for choosing an answer, decision etc. TBL can effectively help the students learn and use the content, learn how to interact with other and continue to learn after the course is over. My teaching objectives are at a high learning level, so this challenges and engages these students. It is also very appropriate considering they are graduate students who were familiar with the content. I assign readings and provide a short power point lecture as an introduction to the group work. I also provide handouts on the Chronic Care Model, Plan-Do-Study-Act and the Reference Card From the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure ([Chobanian et al., 2003](#)). The role playing allows them to “place themselves in another’s shoe” and to strategize on ways to overcome barriers. The learning scenario is very

close to real life clinic practice I have worked in as a family nurse practitioner and quality improvement chair. Since I focused on CVD population health, they are able to see real examples of health disparities and discuss ways to narrow the gap. Learning theories used included Social Learning, Humanistic, and Adult learning theory. I feel it is important to let them have real life experiences as they are adult learners and that is how they will relate (adult learning theory).

### **Evaluation**

The key evaluation for this exercise is both individual and group work

- A. Do they come to class prepared to discuss in class and then hand in at the end of the class their community assessment around CVD? Have they answered and discussed these questions with their team?

Is your county rural or urban?

What statistics are available regarding social economic status?

Tobacco use? Obesity rates? CVD rates? Diabetes rates?

What are some of the health priorities and needs of your county?

What are some of the health disparities?

(This “homework” is worth 10 points)

- B. As a group, are they able to come up with a “plan” to improve the CVD of the patient population that they analyzed/interpreted from the meaningful use data/CVDregistry information? Are they able to discuss solution, barriers etc that they found in role playing? Does their plan include the who, what, when, where, and how details?

(Appendix A Plan is worth 10 points)

The steps used in conducting evaluation in healthcare education as discussed in Bastable (2008) Chapter 14 is very similar to the quality improvement rapid cycle plan-do-study-act:

1. Determine the focus using the five basic components (audience, purpose, questions, scope and resources).
2. Design the evaluation (design should match the purpose and resources).
3. Conduct the evaluation (using the proper instruments to measure what you are trying to measure)
4. Determine the methods of analysis and interpretation of data collected (for meaningful use).
5. Report the results (audience and purpose focused).
6. And use evaluation results (why evaluate if you are not going to use the information)?

Evaluation involves gathering, summarizing, interpreting and using data for meaningful use, and evaluation should determine attainment of objectives. In this class we have discussed formative, content and summative evaluation. Formative is also referred to as process; as you evaluate you make adjustments as needed so the process is ongoing assessment, planning and implementation (checking in with students during or after class). Content evaluation is focused on whether the learner acquired the skills or knowledge that was taught. Summative evaluation, also referred to as outcome, evaluates whether the learning objectives were met and if the teaching was appropriate. In evaluating this QI instruction, I would use all three forms of evaluation. When evaluating the student I prefer using the criterion-referenced measurement as opposed to the norm-referenced. The norm-reference compares the peers to each other and is

frequently referred to as grading on the curve. Grades often take the shape of the mathematical bell curve, allowing for mean, average, standard deviation and are often used for SAT, GRE and other standardized tests. The criterion referenced method focuses more on if the student met the criteria, expectation, skill, objective in learning the material “as evidenced by”. In most of the graduate courses I teach in, critical thinking, writing and discussion are used to show understanding. In using criterion referenced evaluation, it is important that the student be judged fairly and the criterion and expectations be clear. For their plan- do- study- act group paper, I would give them an example of one done on depression (Appendix A). The summative evaluation would include a peer evaluation of each group member’s contribution to the team based learning throughout the course (Appendix A Peer Evaluation is worth 5 points).

In summary, team based learning is good to use for community focused evidence based practice instruction and evaluation. You can use problem based learning activities and case studies with critical thinking evaluation as written case studies, discussion, with teacher and peer evaluation. You can incorporate all learner domains and styles. It is also helpful in diversity as the instructor can form groups so the different ages, cultures and genders intact. As an instructor I try to be aware of any bias I may carry, and aware of different learning styles and needs. I would like to say I am equal and fair when evaluating students. The most important strategy is to make the learning objectives and expectations of the learner clear from the beginning and that you are evaluating the learning objectives and process just as you evaluate the learner. Also using rubrics as to how many points each activity is worth guides grading assignments in an objective manner (Billings & Halstead, 2011). As a teacher, you are always learning ways to do it better and it is a continual process. As with quality improvement, it is a plan-do-study-act, continuous process of improvement!



## References

- Abdelkhalek N, Hussein A, Gibbs T, Hamdy H.(2010) [Using team-based learning to prepare medical students for future problem-based learning](#). Med Teach 2010;32:123-129.
- Bastable, S. (2008). Nurse as an Educator: Principles of Teaching and Learning for Nursing Practice. (3rd Ed.) Jones and Bartlett Publishers
- Billings, D and Halstead, J. (2011). Teaching in Nursing: A guide for Faculty. Fourth Edition. St. Louis: Elsevier Saunders. ISBN-13: 978-1455705511
- Chobanian, A., Bakris, G., Black, H., Cushman, W., Green, L., Izzo, J., . . . Committee, N. H. B. P. E. P. C. (2003). The seventh report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure: the JNC 7 report. *JAMA*, 289, 2560 - 2572.
- McKeachie, W. & Svinick, M. [McKeachie's Teaching Tips: Strategies, Research, and Theory for College and University Teachers, 13th Edition](#), (2010). Wadsworth Cengage Learning, ISBN-13: 978-0495809296
- Mennenga, Heidi A. and Smyer, Tish (2010) "A Model for Easily Incorporating Team-Based Learning into Nursing Education," International Journal of Nursing Education Scholarship: Vol. 7 : Iss. 1, Article 4. DOI: 10.2202/1548-923X.1924
- Available at: <http://www.bepress.com/ijnes/vol7/iss1/art4>

## Appendix A PDSA Assignment: Population Quality Improvement

Using one of the PDSA forms below, focus on a **population** quality improvement plan.

The emphasis should be on the **(P) plan** for this activity.

(Each question is worth 1 point for total 10 points)

CARE MODEL COMPONENT:    OrgHC   Comm   DelSysD   DecSupp   SelfMgt   CIS

1. Purpose of this cycle:

PLAN the change, prediction(s) and data collection	
2. What change are we testing?	
3. Who is testing the change?	
4. When are we testing?	
5. Where are we testing?	
6. PREDICTION: What do we expect to happen?	
<b>DATA COLLECTION</b>	
7. What data do we need to collect?	
8. Who will collect the data?	
9. When will the data be collected?	
10. Where will data be collected?	

**DO: Carry out the change/test, collect data, and begin analysis**

What was actually tested?

What happened?

Unexpected Observations:

Problems:

**STUDY: Complete analysis of data: Summarize what was learned and compare to prediction.**

ACT

What adjustments to the change or method of test should we make before the next cycle?

Are we ready to implement the change we tested?

What will the next test cycle be? (use back of form to elaborate)



**Model for Improvement  
PDSA Planning Worksheet**

**Team Name:** \_\_\_\_\_

**Cycle:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**PLAN**

Objective for this cycle:

Questions:

Predictions:

Plan for change or test: who, what, when, where:

Plan for collection of data: who, what, when, where:

**DO** Carry out the change or test. Collect data and begin analysis. Describe observations, problems encountered, and special circumstances.

**STUDY** Complete analysis of data. Summarize what was learned.

**ACT** Are we ready to make a change? Plan for the next cycle.



**Example of  
PDSA Assignment Grade (H)**

CARE MODEL COMPONENT: OrgHC **Comm** DelSysD DecSupp SelfMgt CIS

Purpose of this cycle:

PLAN the change, prediction(s) and data collection	
What change are we testing?	If implementation of a Postpartum Depression (PPD) Scale Tool will increase provider awareness of depression and institute appropriate treatment for patients either pharmacology or psychology. Current research indicates that that providers under estimate the level of PPD. A recent study reported that by implementing routine screening using the Edinburgh Postpartum Depression Screening (EPDS) Tool that diagnosis of PPD went up from 6.3% to 35.3% (Gjerdigen & Yawn, 2007). Therefore, a 25% increase in PPD diagnosis should be achieved by each provider in one year from the effective start date. Meetings will be held every 3 months x 1 year to discuss problems, ease of tool, and if each provider is at target goal which would be approximately 6% at every 3 month mark.
Who is testing the change?	<p>Quality Insurance Committee comprised of NP's, MD's, RN's, &amp; medical assistants. Each person will be instructed on the importance of routine screening for PPD. A copy of the DSM-IV guidelines for major depression shall be reviewed by each provider before the start date of this study. This is to ensure each provider is abreast of appropriate treatment protocols for PPD and able to prescribe based on medical guidelines as early detection is imperative in preventing loss of life (Beacham, 2008).</p> <p>A self-report test (EPDS-10 item scale) will be given by the medical assistant to the patient while waiting too see the provider. (See attachment for example of screening tool). Reports indicated that the EPDS can be filled out by the mother in approximately 5 minutes and are 100% sensitive and 95.5% specific in detecting major depression (Beacham et al, 2008). For mothers who cannot read then a medical assistant shall read each question to the patient in a nonjudgmental approach. If the patient has finished with the test before the provider has entered in the room then it may be scored by the medical assistant if time permits. However, this process shall be decided between individual providers and their assistants and procedure shall not waiver unless in extenuating circumstances.</p>
When are we testing?	At each postpartum visit x 1 year as reports indicate that mothers are at highest risk for symptomology for the duration of one year
Where are we testing?	In the clinic at Pinehurst Surgical for Women. Providers see on average 35 patients per day.
<p><b>PREDICTION:</b> What do we expect to happen? That by implementing a prevention tool based on DSM-IV-IR guidelines that more patients will be properly diagnosed and treated with an anti-depressant or referred for therapy. As listed above, I predict at least a 25% increase in diagnosis by each provider over the course of one year. The tool also allows for consistency among raters. It offers homogeneity of items which provides internal consistency and will hopeful help improve patients' outcomes. Cost to the clinic is also minimal as the official tool can be located on the internet and printed off at a bulk rate. Additionally, minimal training is involved as the patient answers the questionnaires alone then returning it only to be scored by a medical professional. Scoring guidelines are clearly indicated at the bottom of the questionnaire. I asked the clinic how much it would cost to print out 500 per month and they estimated approximately \$50 - \$75 for printing ink and paper.</p>	

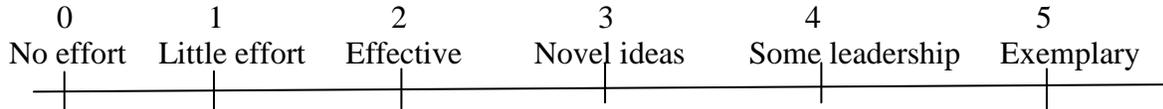
**DATA COLLECTION**

What data do we need to collect?	<ol style="list-style-type: none"> <li>1. Edinburgh Postnatal Depression Scale Data Sheet from each patient after completion.</li> <li>2. Document shall be placed on each individual chart by the provider or medical assistant.</li> <li>3. Additionally provider/medical assistant should score test and make note if treatment was initiated</li> <li>4. F/u in 2-4 weeks should be scheduled for retesting and to ensure the medication dosage is appropriate.</li> </ol>
Who will collect the data?	The provider/medical assistant during each postpartum visit. Each survey will be placed on the front of each patients chart. This process shall be worked out between individual providers and their medical assistants as the clinic is ran by 5 MD's and 3 NP's each with personal assistants. Once decision is made than consistency shall be maintained in order to prevent breakdown in system.
When will the data be collected?	Each postpartum visit x 1 year
Where will data be collected?	During the patients postpartum clinic visit
<b>DO: Carry out the change/test, collect data, and begin analysis</b>	
What was actually tested?	If the Edinburgh Postpartum Depression Scale would increase providers awareness by 25% for mothers experiencing PPD despite level.
What happened?	Providers realized that they were underestimating mother's feelings of postpartum. They found that mothers minimize their feelings in order not to seem selfish or appear as complaining. (I also spoke to my preceptor who said that EPDS use to be given to every mother but providers/medical assistants slowly drifted away from the protocol).
Unexpected Observations:	The Depression Scale gave patients a voice to openly express their feelings of sadness, anxiety, or moodiness. The tool was a stepping stone for providers to open a discussion about the mothers feelings and to provide reassurance to mother's that these feelings could be treated either pharmacology or with psychotherapy. Because of the providers' openness patients' willingly discussed feelings of unworthiness and that they (mom) felt left out or unimportant as the baby was now the center of attention. One mother busted out in tears when asked how she was feeling. She stated "no one has asked me as they are rightful concerned about the baby". This mother was also suffering from PTSD from being emergently intubated for HELPP Syndrome. She stated "I was unsure if I was going to wake up and ever see my husband or baby again". "No one seems concerned that I almost died". Another mother admitted to cutting and burning herself due to the stress of motherhood. These statements are validation that EPDS should be given to everyone as these mothers would have never expressed their true feelings.

## Peer Review Form

**My Name** \_\_\_\_\_

Using a 0-5 scale, **where 5 is exemplary leadership and group participation** and 0 is no effort. Rate your student peers according to your perception of their contributions to the group effort. Ask yourself, did they come to class prepared? Did they participate and allow other to contribute to the group discussion. Did they add quality to the group discussion?



If there was controversy, absence from group discussions, or other issues, please write about these as well.

Name of Peer #1: \_\_\_\_\_ Rating: \_\_\_\_\_  
Comments:

Name of Peer #2: \_\_\_\_\_ Rating: \_\_\_\_\_  
Comments:

Name of Peer #3: \_\_\_\_\_ Rating: \_\_\_\_\_  
Comments:

Name of Peer #4: \_\_\_\_\_ Rating: \_\_\_\_\_  
Comments:

Name of Peer #5: \_\_\_\_\_ Rating: \_\_\_\_\_  
Comments:

Name of Peer #6: \_\_\_\_\_ Rating: \_\_\_\_\_  
Comments:

Example of CVD Registry

3.11.282-051805

Cardiovascular Registry Summary Report

From

1/22/2010

Thru

1/21/2011

All Clinics and Providers

DEMOGRAPHICS

VISIT INFO

TEST/DATA INFO

1. Patients

1404	0.54
815	58.0%
572	40.7%
17	1.2%
0	0.0%

- a. Total registry & Avg
- b. Pts w/ 0 visits
- c. Pts w/ 1-2 visits
- d. Pts w/ 3-5 visits
- e. Pts w/ 6+ visits

2. Sex

879	62.6%
525	37.4%
0	0.0%
0	0.0%

- a. Female
- b. Male
- c. Other
- d. Unspecified

3. Age

0	0.0%
3	0.2%
13	0.9%
327	23.3%
623	44.4%
390	27.8%
48	3.4%

- a. Age unspecified
- b. 0 - 14
- c. 15 - 29
- d. 30 - 49
- e. 50 - 64
- f. 65 - 84
- g. >= 85

4. Race

455	32.4%
869	61.9%
0	0.0%
3	0.2%
26	1.9%
0	0.0%
5	0.4%
46	3.3%

- a. Caucasian
- b. African American
- c. American Indian
- d. Asian
- e. Hispanic
- f. Pacific Islander
- g. Other
- h. Race unspecified

5. Insurance

1403	99.9%
357	25.4%
208	14.8%
135	9.6%

- a. Insurance indicated
- b. Private Ins
- c. Medicaid
- d. Medicare

8. BMI

562	40.0%
74	13.2%
147	26.2%
136	24.2%
103	18.3%
102	18.1%

- a. BMI calculated
- b. < 25
- c. 25 - 29.9
- d. 30 - 34.9
- e. 35 - 39.9
- f. >= 40

9. Blood Pressure

589	42.0%
154	11.0%
134	79
378	64.2%
224	38.0%
535	41.7%
263	49.2%

- a. Patients w/bp checked
- b. Patients w/2 bp checks
- c. Avg systolic & Avg diastolic
- d. Patients BP >= 130/80
- e. Patients BP >= 140/90
- f. Htn Pts c BP Checked
- g. Htn Pts BP in Control

10. Medications

713	50.8%
260	18.5%
643	45.8%
12	0.9%
591	42.1%
60	74.1%
732	52.1%
2	0.1%
3	0.2%
509	36.3%
804	57.3%
3	0.2%
3	0.2%
128	9.1%
2	0.1%
815	58.0%
80	5.7%

- a. ACE Inhibitors
- b. ARB
- c. Antiplatelet/anticoagulant
- d. Coumadin
- e. Beta Blocker
- f. Beta Blocker (CAD only)
- g. Diuretic
- h. Digoxin
- i. Antiarrhythmic
- j. Calcium Channel Blocker
- k. Statins
- l. Non DHP-CCB
- m. DHP-CCB
- n. Anti-depressants
- o. Smoke Cessation Meds
- p. Lipid lowerer
- q. Other BP

12. Speciality Care Received

1179	84.0%
586	41.7%
1366	97.3%
39	2.8%
5	0.4%
0	0.0%
324	23.1%
103	7.3%
1092	77.8%
0	0.0%

- a. CVD Education (ev
- b. Self-Mgt Goal Set
- c. Nutrition Edu. (ever
- d. Dental Exam
- e. Depression Screen
- f. Sub Abuse Screenin
- g. Pneumonia Vacc. (
- h. Flu vaccination
- i. Fasting Lipid Pane
- j. Medication SM Train

13. Cholesterol Test

464	33.00%
176.3	464
122	26.3%

- a. Patients with test
- b. Avg Cholesterol / n
- c. Patients >= 200

14. Triglycerides Test

464	33.0%
148.9	464
77	16.6%

- a. Patients with test
- b. Avg Triglycerides /
- c. Patients >= 200

15. HDL Test

464	33.0%
48.8	464
70	15.1%

- a. Patients with test
- b. Avg HDL / n
- c. Patients < 35

16. LDL Test

452	32.2%
99.2	451
95	21.00%
252	55.8%
112	24.8%
54	11.9%
33	7.3%
5	0.4%
4	80.0%

- a. Patients with test
- b. Avg LDL / n
- c. Patients < 70
- d. Patients < 100
- e. Patients 100-129
- f. Patients 130 - 160
- g. Patients > 160
- h. CVD with LDL and
- i. LDL in control

180	12.8%	e. Medicaid + Medicare
60	4.3%	f. Medicare + Private
3	0.2%	g. CHAMPUS/TRICARE
0	0.0%	h. Catastrophic Only
1	0.1%	i. CHIP
14	1.0%	j. Other
446	31.8%	k. Uninsured

**6. Type of CVD**

1284	91.5%	a. Hypertension
81	5.8%	b. CAD
808	57.5%	c. Dyslipidemia
557	39.7%	d. CVD w/CAD or DM
515	36.7%	e. CVD and DM
382	27.2%	f. (CAD or DM) and age >= 55

**7. Special Populations**

137	9.8%	a. Migrant
2	0.1%	b. Homeless
0	0.0%	c. Refugee

<b>67</b>	<b>82.7%</b>	<b>r. Aspirin/antithromb (CAD)</b>
239	62.6%	s. ACE/ARB (age55+ CAD or DM)

**11. Health Profile**

1284	91.5%	a. Hypertension
808	57.5%	b. Dyslipidemia
81	5.8%	c. CAD
7	0.5%	d. PAD
1	0.1%	e. AAA
12	0.9%	f. CerebroVDz
5	0.4%	g. Nephropathy
41	2.9%	h. CHF
515	36.7%	i. DM
105	7.5%	j. Depression
198	14.1%	k. Self Monitor BG
0	0.0%	l. Exercise wk Doc'ed
0	0.0%	m. Exercise >= 3/wk
186	13.2%	n. Smoking Status Doc'ed
79	42.5%	o. Current Smoker
492	35.0%	p. BMI > 25 Doc'ed
13	2.6%	q. Weight Reduction >= 10lb

**17. Creatinine**

461	32.8%	a. Patients with test
427	92.6%	b. < 1.5
29	6.3%	c. 1.5 - 2.5
5	1.1%	d. > 2.5

**18. Potassium**

395	28.1%	a. Patients with test
2	0.5%	b. Abnormal (< 3.2)
5	1.3%	c. Abnormal (> 5.5)

**19. HbA1c (DM Patients Only)**

233	45.2%	a. Patients with test
7.4	233	b. Average HbA1c / n
53	10.3%	c. 2+ A1c 91+ days ap