APPENDIX 7

California Prison Health Care Services

Clinical Outcomes Initiative 2010
Cardiovascular Risk Reduction: Diabetes

Diabetes Outcomes Report

An analysis of diabetic patient outcomes from October 2009 through October 2010

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California Prison Health Care Services

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INTRODUCTION

In April 2010, California Prison Health Care Services (CPHCS) implemented a statewide initiative to reduce risk of cardiovascular disease among CPHCS patients, with an emphasis on patients with diabetes. This patient population was selected for a number of reasons, including increased cardiovascular morbidity and mortality, opportunities to improve cost-effective clinical care and patient outcomes, and evidence-based performance objectives that are nationally promoted and logistically feasible to obtain.

In addition to ongoing performance reports, this initiative has encompassed, among other activities:

- Dissemination of decision support materials for primary care teams, institution managers, and patients, including patient registries, guidelines summaries, and patient education materials.
- Professional development activities including continuing education sessions related to cardiovascular disease and diabetes.
- Issuance of a diabetes care registry that lists the diabetic patients assigned to each primary care team and identifies patients who have not received services or show abnormal laboratory results.

There are five performance objectives related to Diabetes Care, described in the Quality Management Plan 2010. Each quarter, a performance report is produced, which evaluates individual institution and statewide progress towards achieving these objectives. This is the third performance report. Outcome measures discussed in this report are updated, produced and posted on the Healthcare Services Performance Dashboard.

DATA SOURCES AND METHODS

Since the last outcomes report was released in August 2010, our data sources and methodology have expanded and improved. The Guardian pharmacy data system has been implemented at all 33 institutions, and some institutions have transitioned away from performing on-site laboratory testing, allowing for improved accuracy in reporting on performance measures and determining the prevalence of diabetes statewide.

There were two significant changes in our methodology for this report that need to be highlighted:

- The residency requirement for LDL-C and microalbumin performance reporting was changed from 12 months to 6 months, increasing the number of diabetics included within those measures, while also allowing enough time for institution providers to engage patients and impact care.
- In this and subsequent reports, we have changed our measure on screening for diabetic neuropathy from diabetic patients not on an angiotensin-converting enzyme inhibitor (ACEI) or angiotensin II receptor blocker (ARB) medication who have or have not received microalbumin testing to diabetic patients who have received microalbumin screening OR are on an ACEI or ARB.

A detailed description of data sources and methodology for this report, as well as specific report limitations, can be found in the Appendix.

MAJOR FINDINGS

- Diabetes mellitus (DM) prevalence statewide has remained relatively stable at approximately five percent (5%) or 7,952 of 155,245 inmates in the 33 institutions, consistent with what was reported in the previous two quarterly reports.

- The total number of DM patient inmates with HbA1c $\geq$ 9% is 911 or eleven percent (11%) of the total diabetic patient population (N=7,952). This represents a five percent (5%) reduction in the number of diabetics with HbA1c $\geq$ than 9% since the first Diabetes Report in March 2010.

- Of the 911 DM patients with HbA1c $\geq$ 9%, 259 or twenty-eight percent (28%) are on oral agents alone. Please refer to Figures 4A and 4B and Appendix Table 4.

- Four institutions met the 2010 Quality Management Plan objective for HbA1c levels; twice the number of institutions that had met this objective in the prior reporting period.

- Seventy-one percent (71%) of diabetic patients statewide met the goal of LDL < 100 mg/dL, though no institution has yet met the eighty-five percent (85%) objective for LDL-C levels.

- Ninety-one percent (91%) of diabetic patients statewide have met the goal of having had microalbumin screening within the past 12 months or are on an ACEI or ARB.

- 30 of 33 institutions met the microalbumin screening objective of 85% or above.

- Forty-seven percent (47%) of a statewide sample of diabetic patients met the blood pressure objective. This shows a four percent (4%) increase since the 2nd Diabetes Report in July 2010.

- Fifty-seven percent (57%) of a statewide sample of diabetic patients received an annual retinal screening per guidelines. This shows a ten percent (10%) increase in annual retinal screening for diabetic patients since the 2nd Diabetes Report in July 2010.

RECOMMENDATIONS

A variety of tools have been distributed to the field to assist health care staff in improving outcomes for patients with diabetes and cardiovascular risk factors. Institutions can use these tools to optimize performance in the clinical areas discussed in this report including, but not limited to, the following activities:

- Diabetic Patient Lists (Diabetes Care Registry). Each institution has access to a list of diabetic patients, separated by patient panel and assigned primary care team, which is updated quarterly. Through the registry, clinicians have access to their patients' HbA1c, LDL, and microalbumin values, as well as the dates of some important screening tests. Patients within the panel who have not received services per guidelines or who show abnormal laboratory values are highlighted. Clinicians can use this information, for example, which patients might warrant initiation or titration of insulin to achieve treatment blood sugar goals. Primary care teams also will be able to identify

patients who have not received critical screening tests, including annual microvascular disease screening for patients not already on either an ACE inhibitor or an ARB. We recommend at least quarterly review of this patient list by all primary care teams, though many have found it to be a valuable resource during the primary care team daily huddles or to have at the point of care to track their diabetic patients.

- Clinicians can access their patient lists here: **Diabetic Patient Lists**

- Basal Insulin. For patients with HbA1c > 9% and only receiving oral hypoglycemic agents, start basal insulin before starting on a third oral agent, since the chance of achieving > 1% decrease in HbA1c with the addition of a third oral agent is unlikely. Furthermore, in patients with very high HbA1c values, it is recommended to start insulin therapy even before a second oral hypoglycemic agent is started, as glucotoxicity may prevent oral agents from working effectively. Once a patient's blood sugar is at or near goal, a trial of oral agents alone may be reasonable, but not necessary.

- Timely Titration of Insulin Dosage. As an area of particular focus for patients with HbA1c > 9% on basal insulin, insulin titration should be done every 3-7 days, using fasting blood sugar readings initially, with a goal of 90-130 mg/dl for fasting blood sugars ("Fix the fasting first"). If fasting blood sugars are at goal, then the focus should be on pre-meal, postprandial and bedtime sugar levels. Please see the CPHCS Diabetes CareGuide for specific details.

- Glucometer Use. For appropriate and motivated patients with poorly controlled diabetes, glucometers can be an effective self-management tool, and should be considered for patients with adequate fasting blood glucose but an elevated HbA1c level, which suggests that postprandial blood glucose levels should be checked. The Implementation Package includes a sample Local Operating Procedure to help institutions employ glucometers.

- Patient Self-Management. The Diabetes CareGuide includes techniques and tools for patient self-management.

- Routine Practice Review Using Quality of Care Tools. Institutions have been provided with a Quality of Care Review Tool for care of diabetic patients. This tool assists providers and physician managers in determining whether the care provided to a particular patient followed guidelines. At present, physician managers are required to perform a quality of care review using at least ten patient charts monthly, but this tool could also be used for provider self-assessments or to guide case conferences during weekly provider meetings.

- Committee Team Involvement. Improvement activities targeting diabetic patients can be incorporated into the ongoing operations of a number of standing forum committees and meeting forums. The Implementation Package disseminated in April 2010 includes a "Roles and Responsibilities" document that outlines the role of different meeting forums in supporting management and improvement at a program, primary care team and patient level, and describes key tasks that might be performed, such as:
    - The **Quality Management Committee** (QMC) provides a platform for prioritizing, coordinating, and monitoring improvement activities across all disciplines. The QMC has the ability to set institution-specific performance goals and to evaluate the performance of individual clinics and Primary Care Teams.

- The **Medical Program Subcommittee** is well-situated to manage institution-wide improvement initiatives, such as development of a local operating procedure for glucometer use or implementing a new peer education program that focuses on diabetes.
- In the context of daily huddles, **Primary Care Teams** can review the diabetic patient list and develop a plan of action targeting patients with abnormal or missing laboratory results in that particular clinic. Additionally, insulin titration can be managed in this forum, by reviewing the blood sugar logs of patients a couple of times a week.
- **Weekly provider meetings** provide a forum for disseminating important practice information. During these meeting, facilitators can distribute provider decision support, conduct group self-assessment activities using the Quality of Care Review Tool, or collaborate with colleagues to optimize management for complex diabetic patients.
- **Regular staff meetings** including monthly primary care team meetings can serve as a mechanism for supervisors to familiarize staff with the statewide objectives for diabetes outcomes and work with staff to develop innovative ways to meet performance objectives.

- CareGuide and Diabetes PocketGuide. Primary Care Teams can use the CareGuide, a summary of current guidelines with medication information, algorithms, and patient education materials, to help patients identify and achieve treatment goals and otherwise engage patients in improving their health outcomes. A new PocketGuide for diabetes highlights important practice management messages including initiating insulin early and guiding insulin titration for fasting and prandial glucose goals.

  Find tools at the following links:

  - **CPHCS Diabetes CareGuide**
  - **CPHCS Diabetes Quality of Care Review**
  - **CPHCS Diabetes PocketGuide**

- Laboratory Test Ordering. To ensure that our patients allow comparison of CPHCS to outside organizations, we are recommending that all microalbumin testing include a microalbumin to creatinine ratio which is the preferred reporting measure rather than a microalbumin concentration alone. In the future, microalbumin concentration alone will not be considered satisfactory screening for nephropathy.

Findings by Category

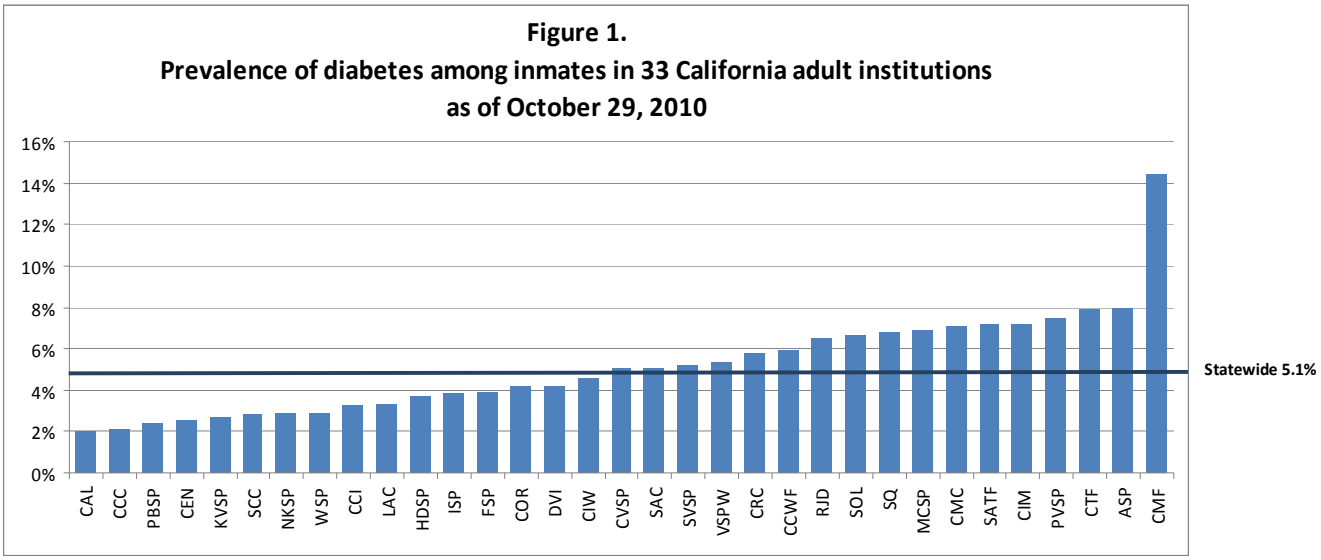
PREVALENCE

The estimated prevalence of diabetes mellitus (DM) among patient inmates in all California adult institutions as of October 29, 2010 is shown in Figure 1 and Appendix Table 1.

- The prevalence of DM statewide was approximately five percent (5%), or 7,952 of 155,245 inmates, in the 33 institutions.

- The highest prevalence of DM occurred at California Medical Facility (CMF), which was approximately fourteen percent (14%) and the lowest prevalence occurred at Calipatria State Prison (CAL) at approximately two percent (2%).

Figure 1.
Prevalence of diabetes among inmates in 33 California adult institutions as of October 29, 2010

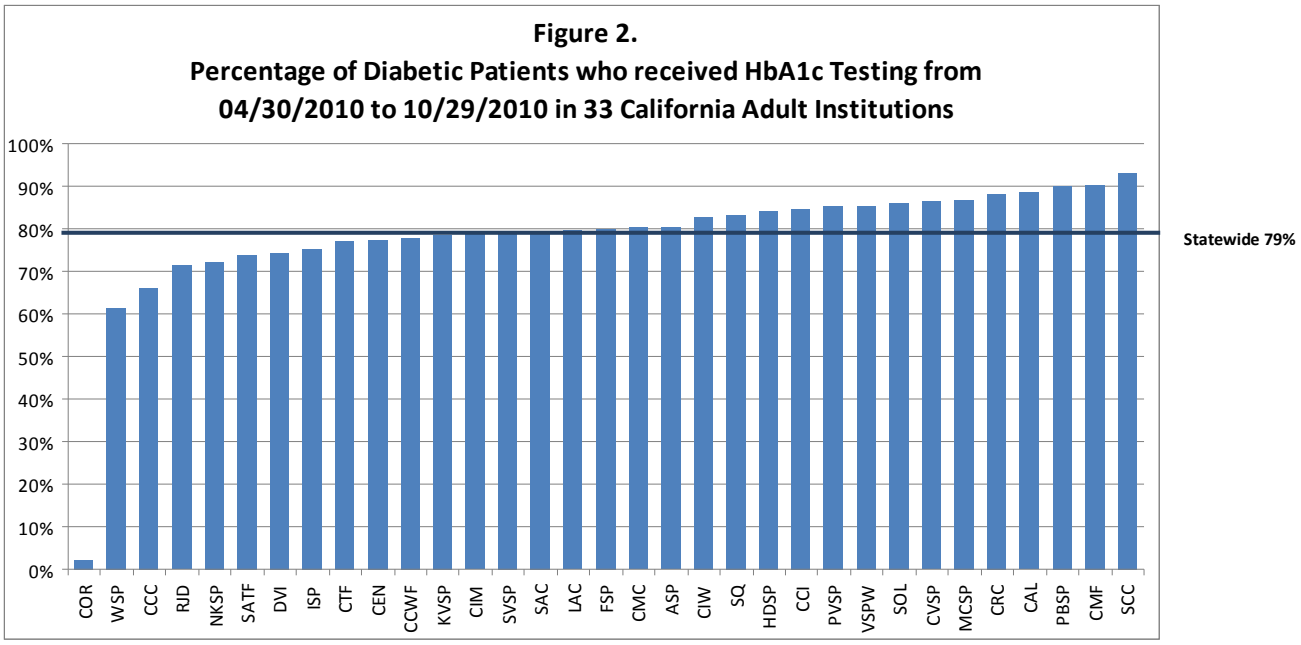


HEMOGLOBIN A1C COMPLETED

- To be eligible for this measure, diabetic patient inmates had to have been continuously incarcerated at a given institution for at least 6 months prior to October 29, 2010.

- Approximately seventy-nine percent (79%) or 4,373 of 5,552 patient inmates with diabetes mellitus had received an HbA1c test in the six-month period from May 2010 through October 2010. However, it should be noted that DM patients who are well controlled do not necessarily require testing every six months. Please refer to Figure 2 and Appendix Table 2

- The institutions with the highest proportion of HbA1c testing checked were SCC, CMF and PBSP, all at ninety percent (90%) or more of DM patient inmates checked. The institution with the lowest proportion was California State Prison, Corcoran at approximately two percent (2%), which likely represents under-reporting related to on-site HbA1c testing.



HEMOGLOBIN A1C CONTROLLED

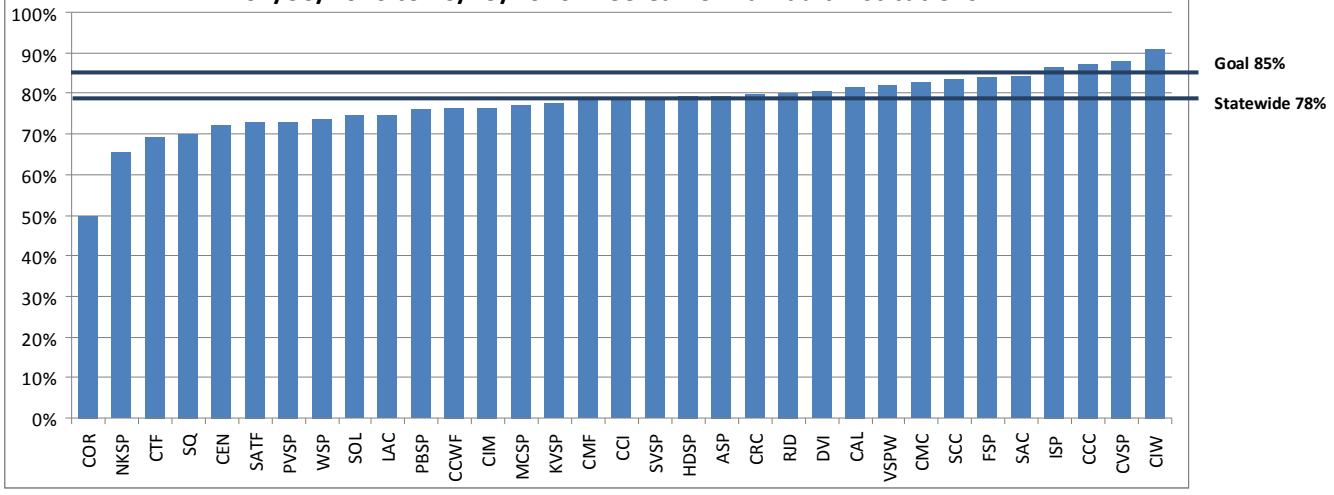
- To be eligible for this measure, diabetic patient inmates had to have been continuously incarcerated at a given institution for at least 6 months and received an HbA1c test during the period from May 2010 through October 2010.

- Statewide, seventy-eight percent (78%) or 3,408 of 4,373 diabetic patient inmates who were tested had an HbA1c level of less than 8 percent, which is considered controlled, for their most recent test. This is a three percent (3%) increase in this measure since last reported in August 2010. Please refer to Figure 3 and Appendix Table 3.

- The institution with the largest proportion of diabetic patients who had good control with an HbA1c less than 8 percent was California Institution for Women (CIW) at ninety-one percent (91%). The lowest proportion occurred at NKSP with sixty-five percent (65%). COR was not considered, as only approximately two percent (2%) of their diabetic patient inmates have an HbA1c reported.

- As of October 2010, four institutions (CIW, CVSP, CCC and ISP) met the 2010 quality improvement objective of having eighty-five percent (85%) or more patient inmates with an HbA1c level of less than 8 percent; an improvement over performance reported in August 2010, when two institutions had met this objective.

Figure 3.
Percentage of Diabetic Patients with an HbA1c Test Result <8% from 04/30/2010 to 10/29/2010 in 33 California Adult Institutions



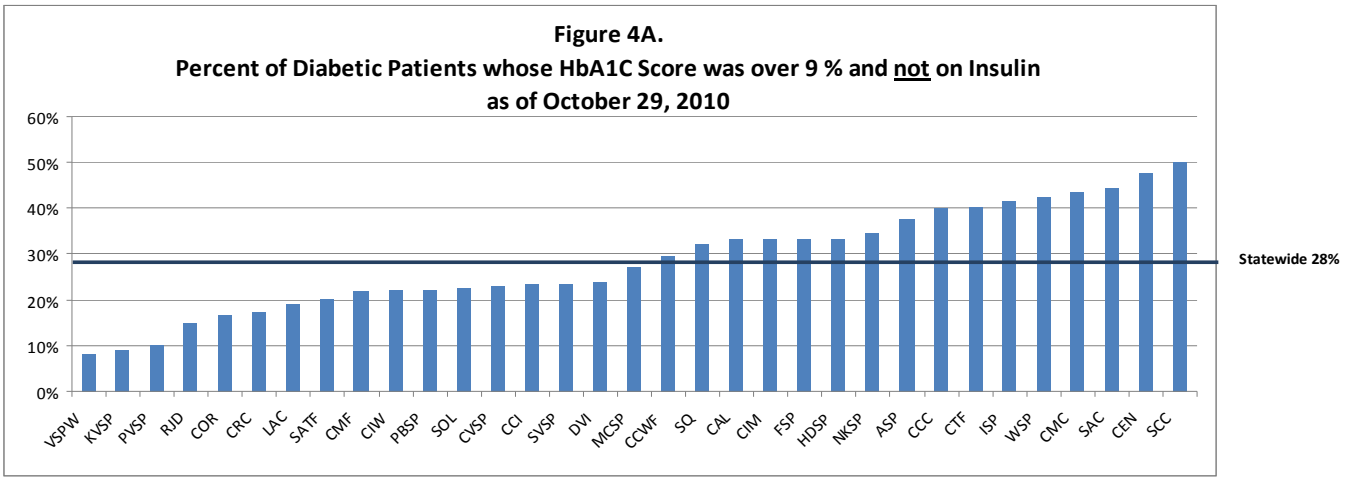
HEMOGLOBIN A1C > 9% AND NOT ON BASAL INSULIN

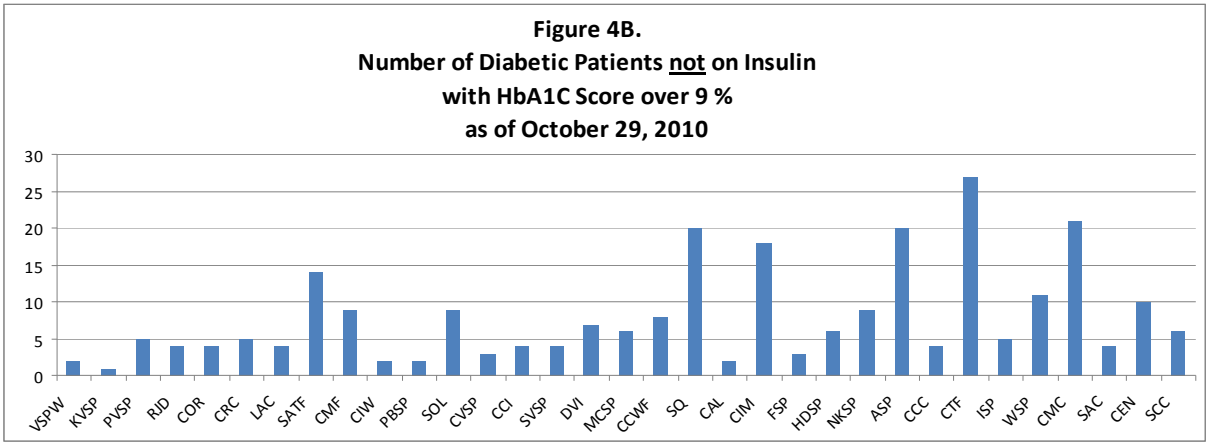
- To be eligible for this measure, diabetic patient inmates who had been tested between May 2010 and October 2010 and had an HbA1c > 9%, and were not on long acting insulin.

- Statewide, eleven percent (11%) or 911 of 7952 diabetic patient inmates had an HbA1C level of greater than 9 percent for their most recent test.

- Statewide, twenty-eight percent (28%) or 259 of 911 diabetic patient inmates with an HbA1C greater than 9 percent were not on long acting insulin. Please refer to Figure 4A and Appendix Table 4.

- The institutions with the largest number of patient inmates with diabetes and an HbA1C of greater than 9% not on long acting insulin were CTF, CMC, ASP, and SQ (Please refer to Figure 4B and Appendix Table 4).



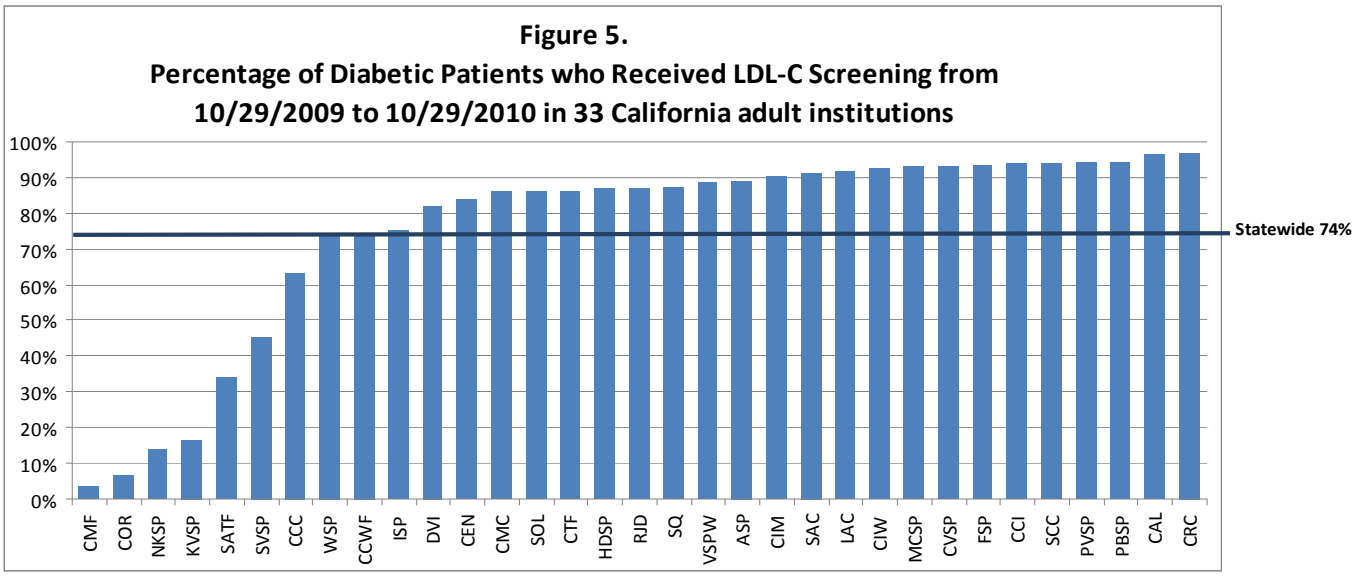


LDL-C TESTING COMPLETED

- To be eligible for this measure, diabetic patient inmates had to have been continuously incarcerated at a given institution for at least 6 months prior to October 29, 2010.

- Statewide, seventy-four percent (74%) or 4,134 of 5,552 of the diabetic inmate population received an LDL-C test in the prior 12 months. This represents a 4 percent increase in this measure since last reported in August 2010. Please refer to Figure 5 and Appendix Table 5.

- The highest proportion of LDL-C testing occurred at California Rehabilitation Center (CRC) and Calipatria State Prison (CAL) at ninety-seven percent (97%). Twenty-one (21) institutions had a screening rate of eighty-five percent (85%) or higher. The lowest proportions occurred at CMF, COR, NKSP, and KVSP, which is likely related to onsite testing.



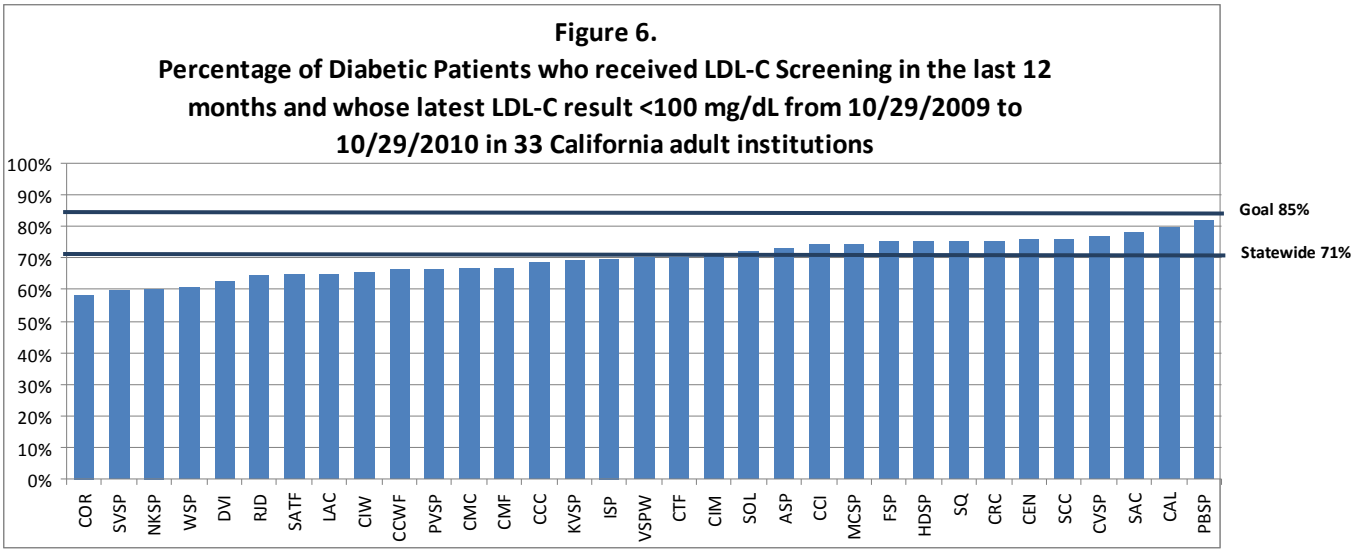
LDL-C CONTROLLED

- To be eligible for this measure, diabetes patient inmates had to have been continuously incarcerated at a given institution for at least 6 months on October 29, 2010 and received an LDL-C test in the previous 12 months.

- Seventy-one percent (71%) or 2,936 of 4,134 diabetes patient inmates tested had their most recent LDL-C measure less than 100 mg/dl (controlled). There has been no change in this measure since last reported in August 2010. Please refer to Figure 6 and Appendix Table 6.

- The highest proportion of LDL-C less than 100 mg/dl occurred at Pelican Bay State Prison (PBSP) at eighty-one percent (81%). The lowest proportion occurred at California State Prison, Wasco (WSP) at sixty percent (60%). COR, NKSP, CMF and KVSP were not considered, as small percentages of their diabetic patient inmates had an LDL-C reported.

- None of the 33 institutions met the 2010 quality improvement objective of having eighty-five percent (85%) or more of diabetic patient inmates tested with most recent LDL-C measure less than 100 mg/dl.



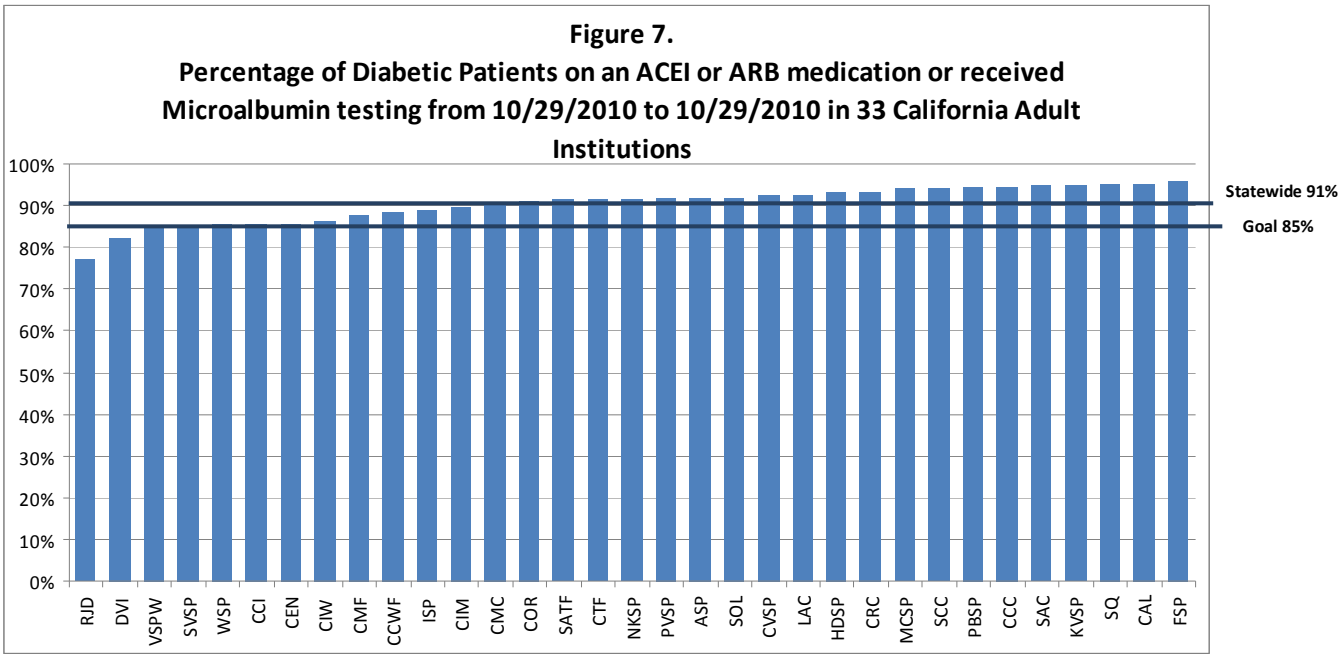
MICROALBUMIN TESTING COMPLETED

- To be eligible for this measure, diabetic patient inmates had to have been continuously incarcerated at a given institution for at least 6 months on October 29, 2010.

- Ninety-one percent (91%) or 5,033 of 5,552 diabetics patient inmates received microalbumin testing or were prescribed an ACEI or ARB from October, 30 2009 through October, 29 2010. Please refer to Figure 7 and Appendix Table 7.

- Thirty-one of the thirty-three institutions had eighty-five percent (85%) or higher of diabetes patient inmates receiving microalbumin testing or prescribed an ACEI or ARB.

Figure 7.
Percentage of Diabetic Patients on an ACEI or ARB medication or received Microalbumin testing from 10/29/2010 to 10/29/2010 in 33 California Adult Institutions

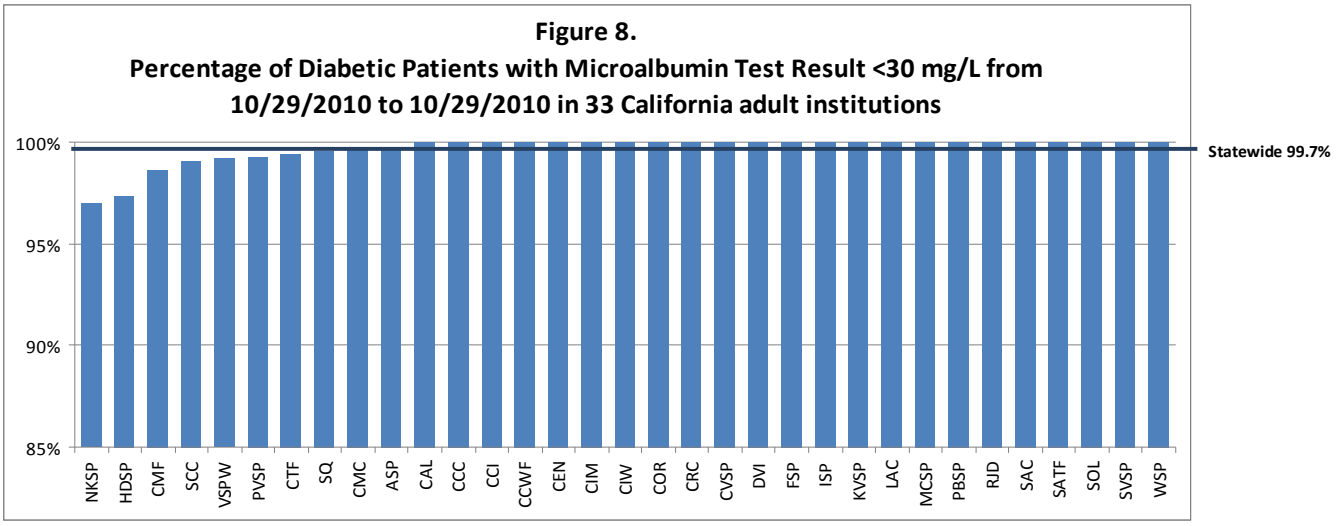


MICROALBUMIN RESULTS

- To be eligible for this measure, diabetic patients had to have been continuously incarcerated at a given institution for 6 months from October 29, 2010 and received microalbumin testing from October 30, 2009 through October 29, 2010.

- Statewide, almost one-hundred percent (100%) or 5016 of 5,033 patient inmates with diabetes had a microalbumin result lower than 30 mg/L at their latest test indicating control. Please refer to Figure 8 and Appendix Table 8.

Figure 8.
Percentage of Diabetic Patients with Microalbumin Test Result <30 mg/L from 10/29/2010 to 10/29/2010 in 33 California adult institutions



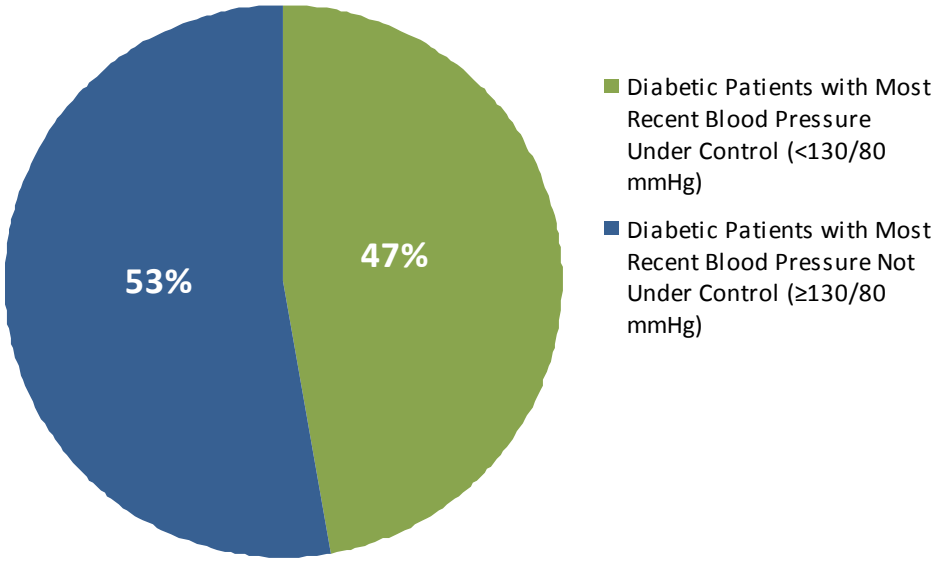
BLOOD PRESSURE CONTROLLED

- To calculate performance on the blood pressure control measure, a representative sample of 301 diabetic patient inmates continuously incarcerated for 6 months from 33 institutions was used.

- Forty-seven percent (47%) of sampled diabetic patient inmates had their most recent systolic blood pressure below 130 and diastolic blood pressure below 80, which represent blood pressures that were considered under control. This shows a four percent (4%) increase since the 2nd Diabetes Report in July 2010. Please refer to Figure 9 and Appendix Table 9.

- Fifty-three percent (53%) of sampled diabetic patient inmates had their systolic blood pressure equal to or above 130 or diastolic blood pressure equal to or above 80, which represents blood pressures that were considered not under control.

Figure 9.
Blood Pressure Control Among a Representative Sample of 301 Diabetic Patients Statewide September 2010



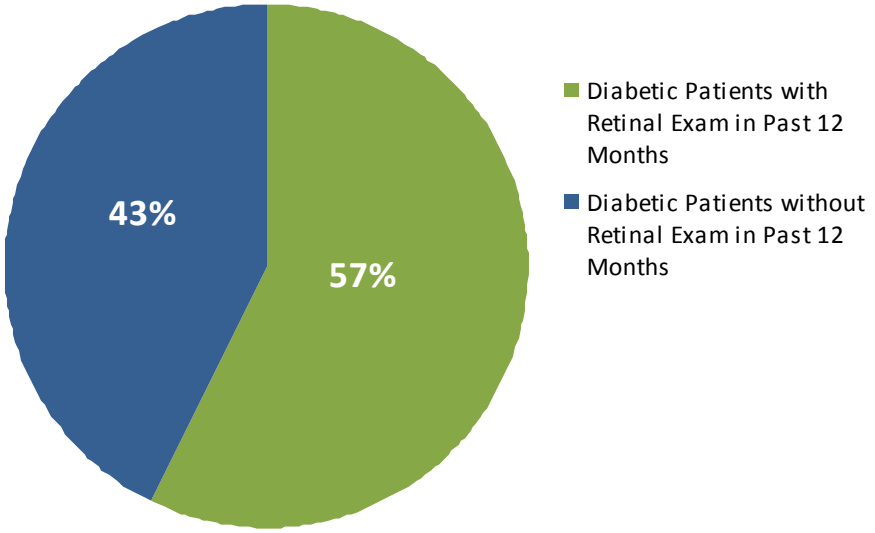
RETINAL EXAMINATIONS COMPLETED

- To calculate performance on the annual retinal exam measure, a sample of 301 diabetic patient inmates continuously incarcerated for 6 months from 33 institutions was collected in September 2010. Please refer to Figure 10 and Appendix Table 10.

- Fifty-seven percent (57%) of sampled diabetic patient inmates received an annual retinal examination. This shows a ten percent (10%) increase in annual retinal screening for diabetic patients since the 2nd Diabetes Report in July 2010.

- Forty-three percent (43%) of sampled diabetic patient inmates did not receive a retinal examination within the last 12 months.

Figure 10.
Retinal Examinations Among a Representative Sample of 301 Diabetic Patients Statewide September 2010



- This concludes the findings by category. Following are the appendices.

APPENDIX

DETAILED DESCRIPTION OF DATA SOURCES AND METHODOLOGY

For the purposes of this report, a diabetic patient is defined as any patient inmate who is prescribed one or more medications for the treatment of diabetes at any time and/or had a Hemoglobin A1c (HbA1c) greater than or equal to 6.5 percent at any time through October 2010. To identify diabetic patients, staff extracted data from the Guardian pharmacy system and merged it with laboratory data from Quest Diagnostics and Foundation Laboratories, using inmate location information from the Distributed Data Processing System (DDPS) to assign patients to specific institutions.

There were two significant changes in our methodology for this report that need to be highlighted. First, the residency requirement for LDL-C and microalbumin performance reporting was changed from 12 months to 6 months. This was changed for two reasons: 1) to encourage more timely evaluation and intervention and 2) to better reflect our performance for these two measures in our population, which frequently moves from institution to institution. By reducing the residency requirement from 12 months at an institution to 6 months, we capture more of our diabetic patients, while also allowing enough time for institution providers to engage patients and impact care. Second, the way we are reporting screening for diabetic nephropathy has changed. In this and subsequent reports, we have changed our measure from diabetic patients not on an angiotensin-converting enzyme inhibitor (ACEI) or angiotensin II receptor blocker (ARB) medication who have or have not received microalbumin testing to diabetic patients who have received microalbumin screening OR are on an ACEI or ARB. This change considers a larger population that meet the desired outcome of not only screening, but also appropriate treatment of diabetic nephropathy.

As with all data analysis, this report is subject to limitations, which may include:

- Well-controlled diabetic patients who are not on medications may not be identified.
- The diabetic patient population was identified using a variety of data sources gathered during different timeframes. While DDPS inmate location information was current, Guardian pharmacy data were and the laboratory data from Quest and Foundation were obtained up through October 2010. In calculating the prevalence of diabetes mellitus among CPHCS patients, this report may not capture diabetics who are new arrivals, or whose pharmacy or laboratory data was entered into our data collection systems after the production of monthly pharmacy and laboratory data sets.
- This report does not include laboratory data from outside medical facilities, such as testing that occurred during inpatient hospitalizations, data from community laboratories that were not processed through Quest or Foundation, or testing performed on-site at an institution laboratory.
- Five institutions (CMF, COR, KVSP, NKSP and SVSP) performed on-site testing for at least a portion of cholesterol screenings, and one institution, COR, tested HbA1c levels on-site. As a result, the reports may not accurately reflect the performance of those institutions in measures involving those respective tests. These omissions may result in under-reporting statewide of both diabetes prevalence and the rate of HbA1c and/or low-density lipoprotein cholesterol (LDL-C) testing. Please refer to Appendix Table 11.
- Because of the staggered implementation of the Guardian system, several institutions did not have 12 months of pharmacy data. For these institutions, there may be under-reporting of diabetes prevalence, although this was partly mitigated by the use of laboratory data. This potential

limitation will diminish in subsequent reports, as we continue to build data history at these institutions.

For the first three measures in this report, pertaining to HbA1c, LDL-C, and urine microalbumin testing, two sets of indicators are provided:

- Percentage of testing completed within specified timeframes, and
- Percentage of those tested that have achieved the outcome objective (e.g., HbA1c level of less than 8%).

Guidelines for laboratory testing for each of the measures varies: 6 months for the HbA1c access measure, and 12 months for the LDL-C and microalbumin measures. For this report, patients identified as diabetic had to have been housed at an institution for at least 6 months to be included in any performance measure (HbA1c, LDL-C and microalbumin). This was done so that institutions' performance would not be unfairly weighted by patients that had not resided at the institution long enough to implement effective diagnostic and therapeutic interventions**.**

For this report, the measured timeframe for labs is from 10/30/09 to 10/29/10.

Poorly controlled diabetic patients are defined as those with HbA1c $\geq$ 9%. A residency requirement was not used for this section, as the focus is to help target those patients in poor control, regardless of how long they have been at any institution or in the system. Please refer to Figures 4A and 4B and Appendix Table 4.

Likewise, when creating diabetic patient lists (Diabetes Registry) for distribution to primary care teams, all known diabetic patients are listed, regardless of length of incarceration, because these lists are intended to support clinical management of individual patients rather than measure performance.

For the period May through September 2010, there was not enough data collected to measure institution-level performance with respect to blood pressure and retinal examinations. However, we did collect a representative sample of 301 diabetic patients for these measures statewide for the month of September 2010. These results are shown in this Outcomes Report at a statewide performance level in Figures 9 and 10 and Appendix Tables 9 and 10. In future Outcomes Reports, individual institution performance for these measures will be reported when appropriate sample sizes have been collected for all institutions.

Please note that the graphs are organized in an ascending order by the level of compliance of each institution whereas the tables are organized alphabetically by institution. In this and subsequent reports, the statewide rate will be identified by a horizontal line, to make graphs easier to read.

Table 1 Data Used For Figure 1: Number and prevalence of diabetic patient inmates among inmates as of October 29, 2010 in 33 California adult institutions

Institution	Diabetes Population (n)	Inmate Population on October 31, 2010 (n)	Diabetes Prevalence
ASP	543	6,786	8.0%
CAL	89	4,311	2.1%
CCC	119	5,596	2.1%
CCI	193	5,938	3.3%
CCWF	228	3,833	6.0%
CEN	118	4,676	2.5%
CIM	379	5,295	7.2%
CIW	119	2,593	4.6%
CMC	463	6,497	7.1%
CMF	415	2,873	14.4%
COR	229	5,480	4.2%
CRC	254	4,393	5.8%
CTF	479	6,064	7.9%
CVSP	176	3,483	5.1%
DVI	152	3,627	4.2%
FSP	148	3,819	3.9%
HDSP	166	4,484	3.7%
ISP	162	4,237	3.8%
KVSP	129	4,804	2.7%
LAC	181	5,471	3.3%
MCSP	261	3,797	6.9%
NKSP	153	5,333	2.9%
PBSP	81	3,370	2.4%
PVSP	363	4,868	7.5%
RJD	307	4,710	6.5%
SAC	155	3,058	5.1%
SATF	492	6,893	7.1%
SCC	158	5,614	2.8%
SOL	340	5,082	6.7%
SQ	336	4,946	6.8%
SVSP	189	3,622	5.2%
VSPW	204	3,821	5.3%
WSP	171	5,871	2.9%
*** Statewide**	**7,952**	**155,245**	**5.1%**

Table 2 Data Used For Figure 2: Number and percent of diabetic patient inmates who received Hemoglobin A1c testing from May 2010 through October 2010 in 33 California adult institutions

Institution	Diabetes Population (continuously incarcerated at an institution 05/2010-10/2010) (n)	Number who received an HbA1c test in last 6 months (05/2010-10/2010)	Percentage who received an HbA1c test in last 6 months (05/2010-10/2010)
ASP	415	333	80%
CAL	61	54	89%
CCC	71	47	66%
CCI	112	95	85%
CCWF	148	115	78%
CEN	98	76	78%
CIM	124	98	79%
CIW	81	67	83%
CMC	349	280	80%
CMF	339	306	90%
COR	180	4	2%
CRC	168	148	88%
CTF	356	274	77%
CVSP	133	115	86%
DVI	62	46	74%
FSP	125	100	80%
HDSP	121	102	84%
ISP	137	103	75%
KVSP	79	62	78%
LAC	109	87	80%
MCSP	234	203	87%
NKSP	36	26	72%
PBSP	70	63	90%
PVSP	291	248	85%
RJD	178	127	71%
SAC	136	108	79%
SATF	351	259	74%
SCC	118	110	93%
SOL	289	249	86%
SQ	242	201	83%
SVSP	126	100	79%
VSPW	151	129	85%
WSP	62	38	61%
*** Statewide**	**5,552**	**4,373**	**79%**

Table 3 Data Used For Figure 3: Number and percent of diabetic patient inmates whose latest Hemoglobin A1c <8% from May 2010 through October 2010 in 33 California adult institutions

Institution	Number who received an HbA1c test in last 6 months (5/2010-10/2010)	Number whose latest HbA1c < 8%	Percentage whose latest HbA1c < 8%
ASP	333	265	80%
CAL	54	44	81%
CCC	47	41	87%
CCI	95	75	79%
CCWF	115	88	77%
CEN	76	55	72%
CIM	98	75	77%
CIW	67	61	91%
CMC	280	232	83%
CMF	306	240	78%
COR	4	2	50%
CRC	148	118	80%
CTF	274	190	69%
CVSP	115	101	88%
DVI	46	37	80%
FSP	100	84	84%
HDSP	102	81	79%
ISP	103	89	86%
KVSP	62	48	77%
LAC	87	65	75%
MCSP	203	157	77%
NKSP	26	17	65%
PBSP	63	48	76%
PVSP	248	181	73%
RJD	127	102	80%
SAC	108	91	84%
SATF	259	189	73%
SCC	110	92	84%
SOL	249	186	75%
SQ	201	141	70%
SVSP	100	79	79%
VSPW	129	106	82%
WSP	38	28	74%
*** Statewide**	**4,373**	**3,408**	**78%**

Tables 4 Data Used For Figures 4A and 4B: Percent of diabetic patient inmates whose Hemoglobin A1c Score equal to ≥ 9 % and were **not** on insulin; and, number of diabetic patient inmates **not** on insulin with Hemoglobin A1c Score over 9 %

Institution	Total Number whose HbA1c >9% as of 10/29/2010	Number whose HbA1c >9% and not on insulin as of 10/29/2010	Percentage whose HbA1c >9% and not on insulin as of 10/29/2010
ASP	53	20	38%
CAL	6	2	33%
CCC	10	4	40%
CCI	17	4	24%
CCWF	27	8	30%
CEN	21	10	48%
CIM	54	18	33%
CIW	9	2	22%
CMC	48	21	44%
CMF	41	9	22%
COR	24	4	17%
CRC	29	5	17%
CTF	67	27	40%
CVSP	13	3	23%
DVI	29	7	24%
FSP	9	3	33%
HDSP	18	6	33%
ISP	12	5	42%
KVSP	11	1	9%
LAC	21	4	19%
MCSP	22	6	27%
NKSP	26	9	35%
PBSP	9	2	22%
PVSP	49	5	10%
RJD	27	4	15%
SAC	9	4	44%
SATF	69	14	20%
SCC	12	6	50%
SOL	40	9	23%
SQ	62	20	32%
SVSP	17	4	24%
VSPW	24	2	8%
WSP	26	11	42%
*** Statewide**	**911**	**259**	**28%**

Table 5 Data Used For Figure 5: Number and percent of diabetic patient inmates who received LDL testing from October 30, 2009 through October 29, 2010 in 33 California adult institutions

Institution	Diabetes Population (continuously incarcerated at an institution (05/2010-10/2010) (n)	Number who received an LDL-C test in last 12 months (10/2009-10/2010)	Percentage who received an LDL-C test in last 12 months (10/2009-10/2010)
ASP	415	370	89%
CAL	61	59	97%
CCC	71	45	63%
CCI	112	105	94%
CCWF	148	110	74%
CEN	98	82	84%
CIM	124	112	90%
CIW	81	75	93%
CMC	349	300	86%
CMF	339	12	4%
COR	180	12	7%
CRC	168	163	97%
CTF	356	307	86%
CVSP	133	124	93%
DVI	62	51	82%
FSP	125	117	94%
HDSP	121	105	87%
ISP	137	103	75%
KVSP	79	13	16%
LAC	109	100	92%
MCSP	234	218	93%
NKSP	36	5	14%
PBSP	70	66	94%
PVSP	291	274	94%
RJD	178	155	87%
SAC	136	124	91%
SATF	351	119	34%
SCC	118	111	94%
SOL	289	249	86%
SQ	242	211	87%
SVSP	126	57	45%
VSPW	151	134	89%
WSP	62	46	74%
*** Statewide**	**5,552**	**4,134**	**74%**

Table 6 Data Used For Figure 6: Number and percent of diabetic patient inmates whose latest LDL <100 mg/dL from October 30, 2009 through October 29, 2010 in 32 California adult institutions

Institution	Number who received an LDL-C test in last 12 months (10/2009-10/2010) (n)	Number whose latest LDL-C <100 mg/dL	Percentage whose latest LDL-C <100 mg/dL
ASP	370	270	73%
CAL	59	47	80%
CCC	45	31	69%
CCI	105	78	74%
CCWF	110	73	66%
CEN	82	62	76%
CIM	112	79	71%
CIW	75	49	65%
CMC	300	200	67%
CMF	12	8	67%
COR	12	7	58%
CRC	163	123	75%
CTF	307	216	70%
CVSP	124	95	77%
DVI	51	32	63%
FSP	117	88	75%
HDSP	105	79	75%
ISP	103	72	70%
KVSP	13	9	69%
LAC	100	65	65%
MCSP	218	162	74%
NKSP	5	3	60%
PBSP	66	54	82%
PVSP	274	182	66%
RJD	155	100	65%
SAC	124	97	78%
SATF	119	77	65%
SCC	111	84	76%
SOL	249	179	72%
SQ	211	159	75%
SVSP	57	34	60%
VSPW	134	94	70%
WSP	46	28	61%
*** Statewide**	**4,134**	**2,936**	**71%**

Table 7 Data Used For Figure 7: Number and percent of diabetic patient inmates who were on an ACEI or ARB medication or received microalbumin testing from October 30, 2009 through October 29, 2010 in 33 California adult institutions

Institution	Number of Diabetes Population (continuously incarcerated 5/2010-10/2010)	Number who received Microalbumin testing in last 12 months (10/2009-10/2010)	Percentage Microalbumin testing in last 12 months (10/2009-10/2010)
ASP	415	381	92%
CAL	61	58	95%
CCC	71	67	94%
CCI	112	96	86%
CCWF	148	131	89%
CEN	98	84	86%
CIM	124	111	90%
CIW	81	70	86%
CMC	349	316	91%
CMF	339	298	88%
COR	180	164	91%
CRC	168	157	93%
CTF	356	326	92%
CVSP	133	123	92%
DVI	62	51	82%
FSP	125	120	96%
HDSP	121	113	93%
ISP	137	122	89%
KVSP	79	75	95%
LAC	109	101	93%
MCSP	234	220	94%
NKSP	36	33	92%
PBSP	70	66	94%
PVSP	291	268	92%
RJD	178	137	77%
SAC	136	129	95%
SATF	351	321	91%
SCC	118	111	94%
SOL	289	266	92%
SQ	242	230	95%
SVSP	126	107	85%
VSPW	151	128	85%
WSP	62	53	85%
*** Statewide**	**5,552**	**5,033**	**91%**

Table 8 Data Used For Figure 8: Number and percent of diabetic patient inmates who on ACEI or ARB medications and whose latest microalbumin <30 mg/L from October 30, 2009 through October 29, 2010 in 33 California adult institutions

Institution	Microalbumin testing in last 12 months (10/2009-10/2010)	Number whose latest microalbumin <30 mg/L	Percentage whose latest microalbumin <30 mg/L
ASP	381	380	99.7%
CAL	58	58	100%
CCC	67	67	100%
CCI	96	96	100%
CCWF	131	131	100%
CEN	84	84	100%
CIM	111	111	100%
CIW	70	70	100%
CMC	316	315	99.7%
CMF	298	294	98.7%
COR	164	164	100%
CRC	157	157	100%
CTF	326	324	99.4%
CVSP	123	123	100%
DVI	51	51	100%
FSP	120	120	100%
HDSP	113	110	97.4%
ISP	122	122	100%
KVSP	75	75	100%
LAC	101	101	100%
MCSP	220	220	100%
NKSP	33	32	97.0%
PBSP	66	66	100%
PVSP	268	266	99.3%
RJD	137	137	100%
SAC	129	129	100%
SATF	321	321	100%
SCC	111	110	99.1%
SOL	266	266	100%
SQ	230	229	99.6%
SVSP	107	107	100%
VSPW	128	127	99.2%
WSP	53	53	100%
*** Statewide**	**5,033**	**5,016**	**99.7%**

Table 9 Data Used For Figure 9: Number and percent of 301 diabetic patient inmates statewide whose blood pressure screening was completed in September 2010.

	Latest Blood Pressure <130/80 mmHg	Latest Blood Pressure ≥130/80 mmHg
(n)	142	159
(%)	47% [95% confidence interval 42%-53%]	53% [95% confidence interval 47%-58%]]

Table 10 Data Used For Figure 10: Number and percent of 320 diabetic patient inmates statewide who received a retinal exam within the last 12 months.

	Received a retinal exam in the last 12 months	Did not receive a retinal exam in the last 12 months
(n)	172	129
(%)	57% [95% confidence interval 52%-63%]	43% [95% confidence interval 37%-49%]

Table 11: California adult institutions that perform on-site laboratory testing, October 2010

Institution	HbA1c	LDL	MA
CIM	F	F	F
CMC	F	F	F
CMF	Q	On-Site	Q
COR	On-Site	On-Site	F
KVSP	F	On-Site	F
NKSP	F	On-Site	F
PVSP	F	F	F
SATF	F	F	F
SVSP	Q	On-Site	Q
WSP	F	F	F

KEY
On-site
F = Foundation
Q = Quest

Table 12: California Adult Institutions that use Quest Laboratories, Foundation Laboratories, or Maxor Pharmacy, October 2010.

	Laboratory		Pharmacy
	Quest	Foundation	Maxor
Northern Region			
CCC	■		■
CMF	■		■
DVI	■		■
FSP	■		■
HDSP	■		■
MCSP	■		■
PBSP	■		■
SAC	■		■
SCC	■		■
SOL	■		■
SQ	■		■
Central Region			
CCWF		■	■
CMC		■	■
CTF	■		■
KVSP		■	■
NKSP		■	■
SVSP	■		■
VSPW		■	■
WSP		■	■
Southern Region			
CAL		■	■
CCI		■	■
CEN		■	■
CIM		■	■
CIW		■	■
CRC		■	■
CVSP		■	■
ISP		■	■
LAC		■	■
RJD		■	■
Fourth Region			
ASP		■	■
COR		■	■
PVSP		■	■
SATF		■	■