Date of Hearing: March 28, 2023

ASSEMBLY COMMITTEE ON HEALTH
Jim Wood, Chair
AB 425 (Alvarez) – As Introduced February 6, 2023

SUBJECT: Medi-Cal: pharmacogenomic testing.

SUMMARY: Adds pharmacogenomic testing as a Medi-Cal benefit and specifies several parameters related to coverage, including prohibiting prior authorization and establishing coverage for pharmacogenomic testing related to any drug known to have a gene-drug or drug-drug-gene interaction that has been demonstrated to be clinically actionable, as specified. Specifically, **this bill**:

1) Establishes pharmacogenomic testing as a covered Medi-Cal benefit, without prior authorization or Treatment Authorization Request (TAR).

2) Covers pharmacogenomic testing under the Medi-Cal program if a medication is being considered for use, or is already being administered, and is approved for use, in treating a Medi-Cal beneficiary's condition and is known to have a gene-drug or drug-drug-gene interaction that has been demonstrated to be clinically actionable, as defined by the United States Food and Drug Administration or by the Clinical Pharmacogenetics Implementation Consortium (CPIC) Guidelines for Level A, A/B, or B, if the test is ordered by an enrolled Medi-Cal clinician or pharmacist.

3) Specifies Medi-Cal reimbursement for pharmacogenomic testing is subject to the use of only one Current Procedural Terminology (CPT) code, or only one Healthcare Common Procedure Coding System (HCPCS) code, for the test. Prohibits each individual gene of a panel test from being billed with multiple CPT or HCPCS codes.

4) Permits sample collection for purposes of performing pharmacogenomic testing to be completed at home, within a pharmacy, or at a health facility. Prohibits the location of sample collection from impacting Medi-Cal reimbursement for pharmacogenomic testing.

5) Allows the Department of Health Care Services (DHCS) to implement coverage for pharmacogenomics testing by means of all-county letters, plan letters, plan or provider bulletins, or similar instructions, until the department promulgates regulations.

6) Makes the bill operative upon an appropriation by the Legislature.

7) Defines the following terms:

    a) "Pharmacogenomics" means the evaluation of how a person's genes affect how the person responds to medications. Pharmacogenomics enables the selection of drugs and doses best suited to reduce toxicity and adverse drug events, including treatment failures, severe harm, or even death;

    b) "Pharmacogenomic testing" means laboratory genetic testing, including, but not limited to, a panel test, by a California-licensed laboratory with accreditation by the College of

American Pathologists (CAP) or another accrediting agency approved by the federal Centers for Medicare and Medicaid Services (CMS) and a valid Clinical Laboratory Improvement Amendments certificate to identify how a person's genetics may impact the efficacy, toxicity, and safety of medications; and,

c) "Medication" means medication prescribed for any condition, including, but not limited to, behavioral or mental health, oncology, hematology, pain management, infectious disease, urology, reproductive or sexual health, neurology, gastroenterology, or cardiovascular diseases.

EXISTING LAW:

1) Establishes the Medi-Cal Program, administered by DHCS, to provide comprehensive health benefits to low-income individuals who meet specified eligibility criteria. [Welfare and Institutions Code (WIC) §14000 *et seq*.]

2) Establishes a schedule of benefits under the Medi-Cal program, including coverage of outpatient laboratory services, subject to utilization controls, and coverage of prescription drugs, subject to the Medi-Cal List of Contract Drugs and utilization controls. [WIC §14132]

FISCAL EFFECT: Unknown. This bill has not yet been analyzed by a fiscal committee.

COMMENTS:

1) PURPOSE OF THIS BILL. This bill is sponsored by Invitae Corporation to ensure equitable access to pharmacogenomic testing. According to the author, having Medi-Cal coverage of pharmacogenomic testing can improve clinical outcomes for many individuals who are going through mental health and physical health problems. As an example, the author indicates a high school student in the author's district suffered from depression for years, cycling through medications, none of which worked to resolve the student's symptoms. The student finally learned of pharmacogenomic testing through a Facebook support group. The author explained the student gained access to the test and was able to use the results to identify the most effective mental health medication for the student, and the student's symptoms dramatically improved with the right medication. The author indicates other states have passed bills that mandate Medicaid coverage for pharmacogenomic testing. The author asserts although California is usually a leader in providing access to evidence-based medicine, our Medi-Cal program has fallen behind, which presents health equity issues given commercial and Medicare patients can access the test.

2) BACKGROUND.

a) Pharmacogenomics. According to the Centers of Disease Control and Prevention (CDC), pharmacogenomics is an important example of the field of precision medicine, which aims to tailor medical treatment to each person or to a group of people. According to the National Human Genome Research Institute (Institute) under the federal National Institutes of Health, pharmacogenomics uses information about a person's genetic makeup, or genome, to choose the drugs and drug doses that are likely to work best for that particular person. This field combines the science of how drugs work, called pharmacology, with the science of the human genome, called genomics.

The Institute indicates pharmacogenomics may help to quickly identify the best drugs to treat people with certain mental health disorders. For example, while some patients with depression respond to the first drug they are given, many do not, and doctors have to try another drug. Because each drug takes weeks to take its full effect, patients' depression may grow worse during the time spent searching for a drug that helps. The Institute explains, recently, researchers identified genetic variations that influence the response of depressed people to citalopram (Celexa), which belongs to a widely used class of antidepressant drugs called selective serotonin re-uptake inhibitors (SSRIs). Clinical trials are now underway to learn whether genetic tests that predict SSRI response can improve patients' outcomes.

Pharmacogenomic testing is performed using a cheek swab or blood sample, which is then sent to a laboratory for analysis. The CDC indicates doctors are starting to use pharmacogenomic information to prescribe drugs, but such tests are routine for only a few health problems, including certain cancers. For instance, someone with a particular genetic makeup may have an adverse reaction to a certain treatment. However, given the field's rapid growth, pharmacogenomics is soon expected to lead to better ways of using drugs to manage heart disease, cancer, asthma, depression and many other common diseases.

There are two major sources of pharmacogenomic testing recommendations: The U.S. Food and Drug Administration (FDA) and the CPIC. The CPIC is an international consortium of individual volunteers and a small staff interested in facilitating use of pharmacogenetic tests for patient care. CPIC creates, curates, and posts evidence-based gene/drug clinical practice guidelines. FDA lists therapeutic products with pharmacogenomic information found in the drug labeling. FDA notes labeling for some, but not all, of the products includes specific actions to be taken based on the pharmacogenomic information.

Invitae Corporation, the sponsor of this bill, points out improving coverage of pharmacogenomics is important to improve health equity, given women and people of color are more likely to experience negative outcomes and adverse drug events resulting from a medication they take. Due to historical practices that excluded women and people of color from clinical trials, Invitae notes, many of the recommended doses and medications are predicated on evidence generated by studies involving primarily non-Hispanic white men. For this reason, Invitae asserts improving coverage for pharmacogenomics testing that can help optimize medication will have a disproportionate positive impact on women and people of color.

b) California Health Benefits Review Program (CHBRP) analysis. AB 1996 (Thomson), Chapter 795, Statutes of 2002, requests the University of California to assess legislation proposing a mandated benefit or service and prepare a written analysis with relevant data on the medical, economic, and public health impacts of proposed health plan and health insurance benefit mandate legislation. CHBRP was created in response to AB 1996. CHBRP reviewed similar bill last year, SB 1191 (Bates) of 2022. Components of the SB 1191 analysis relevant to this bill include the following**:**

i) Impact on Medi-Cal expenditures. Several studies that found pharmacogenomics testing could lead to significant cost offsets, including a reduction in emergency

room utilization, unplanned hospital admissions, and outpatient visits, but CHBRP could not make a projection of actual savings. There is some evidence that the use of pharmacogenomic testing for specific types of diseases is cost-effective, but this varies significantly by disease, treatment, and outcomes assessed.

ii) Medical effectiveness.

(1) The use of pharmacogenomics in conjunction with a comprehensive medication management program has been shown to help identify medication appropriateness, improve adherence, and reduce adverse reactions in a more comprehensive way than either of these approaches can alone. More than 90% of patients are thought to carry at least one genetic variant that should prompt a change in dosing or medication if certain medications are prescribed.

(2) Evidence on the effectiveness and clinical utility of pharmacogenomic testing varies significantly across conditions. Some studies have found that pharmacogenomic testing leads to changes in medications and a reduction in hospital admissions. While the studies identified by CHBRP show that pharmacogenomic testing may result in changes to medication for some patients, especially to prevent adverse reactions, most patients who receive pharmacogenomic testing remain on their previously prescribed medication regimen

CHBRP also notes systematic reviews of the efficacy of pharmacogenomics testing have described the weakness of relevant literature as having insufficient sensitivity analyses, heterogeneity in study designs and populations, and low quality of data and methodologies.

c) Current Medi-Cal Coverage. According to the CHBRP analysis of SB 1191, all Medi-Cal beneficiaries have coverage for biomarker testing, including pharmacogenomics testing, that is supported by medical and scientific evidence and is determined medically necessary. However, Medi-Cal coverage of pharmacogenomic testing is not clearly specified. Based on a search of the Medi-Cal provider manual, the only reference to pharmacogenomic testing is CPT code 81418 (described as "Drug metabolism (eg, pharmacogenomics) genomic sequence analysis panel, must include testing of at least six genes, including CYP2C19, CYP2D6, and CYP2D6 duplication/deletion analysis"), which is listed in the Medi-Cal provider manual as a non-benefit. Some other genetic tests the author provided as commonly used for pharmacogenomics purposes are also not listed in the Medi-Cal provider manual, are listed as non-benefits, or are listed as covered with an approved TAR.

However, in spite of the status of some pharmacogenomics-related services codes as non-benefits, they can be covered by Medi-Cal if specified conditions are met. The Medi-Cal provider manual specifies Medi-Cal may provide reimbursement for a non-benefit with an approved TAR if medical necessity is established. This bill is intended to clarify Medi-Cal coverage for pharmacogenomic testing and clearly specify the parameters of coverage.

3) SUPPORT. Invitae Corporation, this bill's sponsor, indicates several commercial insurances cover pharmacogenomic testing for their beneficiaries, and this bill will mitigate those disparities and open up access to this potentially life-saving test. Biocom, in support, states

this bill will reduce adverse drug events, improve clinical outcomes, reduce healthcare spending, and create more equitable access to better medication management.

4) **RELATED LEGISLATION.** AB 365 (Aguiar-Curry) specifies continuous glucose monitors and related supplies required for use with those monitors are covered benefits for the treatment of diabetes under Medi-Cal. AB 365 is pending in the Assembly Appropriations Committee.

5) **PREVIOUS LEGISLATION.** SB 1191 was similar to this bill and would have added pharmacogenomic testing as a covered benefit under Medi-Cal, requiring the Medi-Cal program to cover pharmacogenomic testing if a medication is being considered for use, or is already being administered, and is approved for use, in treating a Medi-Cal beneficiary's condition and is known to have a gene-drug or drug-drug-gene interaction that has been demonstrated to be clinically actionable, if the medication is ordered by an enrolled Medi-Cal clinician or pharmacist. AB 1191was vetoed by the Governor, who stated, "I appreciate the author's interest in facilitating access to PGx testing, which is currently available in Medi-Cal with prior approval when medically necessary. Although this bill is contingent upon an appropriation, it creates tens of millions of dollars in General Fund cost pressures not accounted for in the budget."

6) **AMENDMENTS.** In consultation with the author, the Committee proposes the following amendments:

   a) To address concerns about excessive specificity of the parameters of coverage and to maintain DHCS's authority to establish appropriate utilization controls, amendments strike the bill's proposed stand-alone section of law and instead simply specify pharmacogenomics is a covered benefit, subject to utilization controls, in WIC §14132, the section of current law that establishes the Medi-Cal schedule of benefits. This amendment removes the specific parameters of coverage, including the prohibition on TARs, the requirement to cover any pharmacogenomics tests with known genetic interactions by reference to specific clinical guidelines, the prohibition on use of more than one CPT or HCPCS codes, and parameters specifying allowable locations of sample collection.

   b) Conform legislative findings and declarations to changes described in a) above. Amendments would address the veto message to SB 1191, a similar bill, by aligning with the Governor's statement that pharmacogenomics testing is currently available in Medi-Cal with prior approval when medically necessary. Amendments would specify pharmacogenomics testing is a covered benefit, similar to how other Medi-Cal benefits are specified in the statute, subject to utilization controls. As such, DHCS would retain authority to cover testing pursuant to a TAR if such controls are deemed appropriate.

REGISTERED SUPPORT / OPPOSITION:

Support

Invitae Corporation (sponsor)
Biocom California
California Life Sciences
California Senior Legislature

DBSA California
Illumina, INC.

Opposition

None on file.

Analysis Prepared by: Lisa Murawski / HEALTH / (916) 319-2097