



Oregon All Payer All Claims (APAC) Program Application for Limited Data Files APAC-3

This application is used to request limited data sets. If you would like to discuss APAC data in relation to your project prior to submitting this application, please contact apac.admin@state.or.us with a brief description of the project and your contact information. OHA will have someone contact you to help determine if APAC is appropriate for your project and, if so, which data elements may be needed.

PROJECT INFORMATION

Project Title: Variations and Disparities in Cancer Care, Costs, and Outcomes Across Oregon

Principal Investigator: John Lin, MD, MSHP

Title of Principal Investigator: Assistant Professor

Organization: The University of Texas M. D. Anderson Cancer Center

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SECTION 1: PROJECT SUMMARY

1.1 Project Purpose: Briefly describe the purpose of the project. You may submit a separate document that details the project's background, methodology and analytic plan in support of your request for APAC data elements.

Despite novel diagnostic and therapeutic options in cancer care, disparities in cancer care delivery and outcomes remain a critical issue, including in Oregon. These differences in cancer diagnosis, treatment, and survival occur across cancer types and populations, and are often associated with differences in race/ethnicity, gender, insurance, neighborhood socioeconomic status, and provider.

Our project goal is to examine mechanisms for disparities in care quality, treatment patterns, outcomes, and costs for patients with cancer. We aim to identify mechanisms including geographical, provider, payer, and patient characteristics.

As such, we are requesting Oregon APAC data, linked to the Oregon State Cancer Registry (OSCaR).

We are also requesting a hashed finder file (would hash identifiable information), with the purpose to link Oregon APAC data with Experian data (credit score, debt, bankruptcy, household income).

- **1.2 Research Questions:** What are the project's key research questions or hypotheses? If this project is research and has been approved by an Institutional Review Board (IRB), the research questions must align with the IRB approval documentation. If needed, a more detailed response may be submitted as a separate file.
 - Note: APAC staff will use your response to this question to determine the minimum data elements necessary for this project, in accordance with the HIPAA minimum necessary standard. The research questions should be specific enough to justify the need for each data element beyond identifying it as a "potential confounding variable."
 - 1. To assess disparities and patterns in cancer care (along the care continuum), quality, toxicities, outcomes, and costs.
 - 2. To evaluate geographic variations in cancer care.
 - 3. To evaluate mechanisms of disparities and patterns in cancer care, quality, toxicities, outcomes, and costs by provider, payer, and patient characteristics.
 - 4. To evaluate mechanisms of disparities and patterns related to financial toxicity.

In Phase 1, which will encompass 3 years, we will study the following mechanisms of disparities and patterns in care:

- 1. To assess disparities and patterns for patients with Medicare Advantage vs Medicare FFS (via SEER-Medicare).
- 2. To assess disparities and patterns for patients with Medicaid vs ACA Plan (Bronze, Silver, Gold) vs other private insurance.
- 3. To assess differences and disparities for patients seeing private equity purchased practices or 340B practices vs others.
- 4. To study the association between these insurances and financial toxicity among patients with cancer.

1.3 Products or Reports: Describe the intended product or report that will be derived from the requested data and how this product will be used. If needed, a more detailed response may be submitted as a separate document with this application.

Our goal is to produce research manuscripts to be presented in conferences and published in peer-reviewed journals based on the analyses above. These will be used to make recommendations that can be used to improve cancer care, costs, and outcomes generally, and policy recommendations to reduce racial/ethnic, income, and geographic disparities

1.4 Project Timeline: What is the timeline for the project?

Anticipated Start Date: 08/01/2024

Anticipated Publication/Product Release Date: 01/31/2029

Anticipated End Date: 07/30/2029

- 1.5 Data files may not be released or reused beyond the terms of the data use agreement resulting from this application regardless of funding source or other obligations of the principal investigator, organization or research team.
 - I understand this limitation and agree that data files or work products will not be shared at less than an aggregated, de-identified level.

I understand this limitation and request approval to share data files or work products at a potentially re-identifiable level as follows:

We will only release results of statistical analyses, which are summary statistics. These will not report any outcomes at an aggregate of cell sizes <30. At no point will any attempt be made to identify individual patients, providers, or hospitals.

SECTION 2: PROJECT STAFF

2.1 Project Staff: Please list all individuals in addition to the principal investigator who will have direct or indirect access to the data. This must include any contractors or other third parties with access to the data.

| Name: Xiudong Lei Email: xlei@mdanderson.org | Project role: Analyst |
|---|-------------------------------|
| Name: Jiangong Niu Email: jniu@mdanderson.org | Project role: Analyst |
| Name: Hui Zhao Email: huizhao@mdanderson.org | Project role: Data Custodian |
| Name: Mackenzie Wehner Email: mwehner@mdanderson.org | Project role: Co-Investigator |
| Name: Ying Xu Email: yingxu@mdanderson.org | Project role: Analyst |
| Name: Sharon Giordano Email: sgiordan@mdanderson.org | Project role: Co-Investigator |
| Name: Email: | Project role: |

Attach additional sheets as needed.

2.2 Technical Staff: Please list any additional staff who will be maintaining the data file(s) or otherwise assisting in the transfer or receipt of the data files. <u>Files will not be transferred to anyone who is not listed on this application as either project staff or technical staff.</u>

| Name: Reginald Maxwell Email: RLMaxwell@mdanderson.org | Technical role: Sr. Systems Analyst |
|--|-------------------------------------|
| Name: Michael A. Kirk Email: mkirk@mdanderson.org | Technical role: Sr. System Analyst |

Name: John Fueger

Email: jfueger@mdanderson.org

Attach additional sheets as needed.

The Oregon Health Authority

Technical Role: Mgr. Information Services

SECTION 3: DATA REQUEST

3.1 Purpose of the Data Request:

| | sted below are the purposes for which OHA may share APAC data. Please choose the gory in which your project falls under (<i>choose only one</i>). |
|-------|---|
| | Research (refer to 45 CFR 164.501 for definition) |
| | Public health activities as defined in 45 CFR 164.512(b) by the |
| | state or local public health authority |
| | Health care operations as defined in 45 CFR 164.501 |
| | Covered entity as defined in <u>45 CFR 160.103</u> ? |
| | Treatment of patient by health care provider as defined in 45 CFR 164.506 (c)(2) |
| | Covered entity? Yes No |
| | Payment activities performed by covered entity or health care provider as defined in 45 CFR 164.506 (c)(3) |
| | Covered entity? Yes No |
| | Work done on OHA's behalf by a Business Associate as defined in 45 CFR 160.103 |
| Our p | scribe how the project falls into the category chosen above. roject proposes to conduct research on variations and disparities in cancer care, costs, mes, and financial toxicity in Oregon. |
| | t identifiers. What level of data identifiers are you requesting (<i>choose only one</i>)? ence the <u>Data Elements Workbook</u> for the categorization of data elements. |
| | |
| 늗 | De-identified (as outlined in 45 CFR 164.514(e)) protected health information |
| | Limited, potentially re-identifiable data elements |
| Ш | Restricted direct identifiers (member name, address, date of birth, etc.) <i>Please note:</i> Direct identifiers are only released under special circumstances that comply with HIPAA requirements, and will require specific approvals, such as IRB approval, patient consent and/or review by the Oregon Department of Justice. |

3.3 Human Subjects Research: IRB protocol and approval are required for most research requests for limited data elements. Not obtaining IRB approval or waiver in advance may delay approval of the data request. The research questions reported in 1.2 of this application must match the documentation supporting the IRB approval received or the IRB approval will not be accepted for this data application.

The IRB application should indicate that APAC data contains sensitive personal health information and is subject to HIPAA regulations.

| a. Does the project have IRB approval for human subjects research or a finding that approval is not required? Yes No |
|---|
| If no, briefly explain why you believe that this project does not require IRB review. |
| |
| |
| If an IRB reviewed the project, include the IRB application and approval/finding memo with the submission of this APAC-3 and complete parts b-e below. IRB application and approval memo are attached. |

- b. Describe how this application is within the authority of the approving IRB. The Office of Human Subjects Protection's IRB reviews and approves research activities at M.D. Anderson Cancer Center.
- c. Describe why the project could not be practicably conducted without a waiver of individual authorization (a waiver of individual authorization is provided by the IRB in cases in which the researcher does not need written authorization from participants to use their PHI):

We cannot identify persons in the data and due to large sample size, is impracticable to obtain consent. IRB does not require continuing review and is without expiration.

d. On what date does the IRB approval expire? The IRB does not require continuing review and is without an expiration date.

SECTION 4: DATA ELEMENTS

| 4.1 Narrowing Data Needs : Refer to the <u>APAC Data Dictionary</u> for detailed information about the data elements. In compliance with HIPAA regulations, you will only receive data elements that are adequately justified. This means APAC will only provide the minimum necessary data required for the project as represented in the research questions, protocol and IRB approval. | |
|--|----------|
| a. What years of data are requested? 2011 through 2020 are currently available. 2011-2020. We would also like 2021 and 2022 data. | |
| b. What payer types are requested? Check all that apply Commercial Medicaid Medicare Advantage | |
| c. What types of medical claims are requested? | |
| d. Demographic data limitations 1. Gender All Male Female 2. Age All Only 65+ Only 18 and younger (Specify age range) | |
| e. Will data requested be limited by diagnoses, procedures or type of pharmaceutical? Add additional sheet if needed. Diagnoses, indicate ICD 9 and ICD10 codes to include: All persons linked to OSCAR data (i.e. with cancer) ICD10: C00-D49 Procedures, indicate CPT to include: All procedures | : |
| Pharmaceuticals, indicate NDC or therapeutic classes to include: All classes | |
| f. APAC has a small number of out-of-state residents included, most often through PEBB or OEBB coverage. Do you want to include out-of-state residents? | |
| 4.2 Data Element Workbook: Complete the <u>Data Element Workbook</u> to identify specific data requested. Data Element Workbook completed and attached, including justifications for each element requested. ✓ | |

The Oregon Health Authority

SECTION 5: DATA MANAGEMENT & SECURITY

5.1 Data Reporting: APAC data or findings may not be disclosed in a way that can be used to re-identify an individual. Data with small numbers – defined as values of 30 or less (n≤30) or subpopulations of 50 or fewer individuals (n≤50) – cannot be displayed in findings or outputs derived from APAC data. Please describe the techniques you will use to prevent re-identification when findings or outputs result in small numbers or subgroups (e.g. aggregation, cell suppression, generalization, or perturbation).

We will only release aggregate statistics from analyses, and will not provide any data with cell sizes less than or equal to 30 or subpopulations of individuals less than or equal to 50

5.2 Data Linkage: OHA seeks to ensure that APAC data cannot be re-identified if it is linked or combined with data from other sources at the record, individual or address level. Requesters are strongly encouraged to consult with APAC staff regarding linking APAC data with other data prior to submitting a data request. Health Analytics prefers to conduct APAC data linking in-house and share only encrypted identifiers with data requesters.

| а. | Does this project require linking to another data source? |
|----|---|
| | ■ Yes No |
| | If yes, please complete parts b-d below. |
| | |
| Э. | At what level will data be linked? |
| | Address Facility ✓ Individual person/member |
| | ✓ Individual provider |
| ٥. | If required to link |
| | ■ Authorized to provide data for linking at OHA |
| | Not authorized to provide data for linking at OHA |
| | Unknown |

d. Describe and justify all necessary linkages, including the key fields in each data set, how they will be linked, the software proposed to perform the linkage and why it is necessary.

We request APAC (Oregon APCD) data be linked to Oregon's cancer registry (OSCaR).

APAC and Experian will send a hashed (encrypted, de-identified) finder file comprised of encrypted patient information to the PI, who will use these finder files to match the respective databases. (See Experian Linkage document for details)

We will link practice-level characteristic data to the provider's NPI number.

e. Describe in detail the steps will you take to prevent re-identification of linked data.

All data will be stored on, accessed from, and analyzed on a secure server at MD Anderson. Data will only be accessed by study personnel who have been approved to access the data and have appropriate training. Dr. John Lin will ensure that data is accessed, managed, and analyzed in adherence with data use agreements. No statistical summaries that could potentially identify individuals will be released. Following completion of the study, restricted data will be deleted from the server.

5.3 Data Security:

- a. Attach a detailed description of your plans to manage security of the APAC data including:
 - Designation of a single individual as the custodian of APAC data, either the principal investigator or staff listed in Section 2 of this application, who is responsible for oversight of APAC data, including reporting any breaches to OHA and ensuring the data are properly destroyed upon project completion.
 - A security risk management plan applicable to APAC data that includes:
 - Secure storage in any and all mediums (e.g., electronic or hard copy)
 - Procedures to restrict APAC data access to only those individuals listed on the data use agreement
 - User account controls, i.e., password protections, maximum failed login attempts, lockout periods after idle time, user audit logs, etc.
 - Confirmation of training for personnel on how to properly manage protected health information in all formats
 - Protection of derivatives of APAC data at the re-identifiable level
 - If applicable, procedures for handling direct identifiers, such as allowing access on a 'need to know' basis only and minimizing risk by storing identifiers separately from other APAC data
 - Procedures for identifying, reporting and remedying any data breach
 - Statement of compliance with HIPAA and the HITECH Act
 - Electronic device protections, i.e., anti-virus or anti-malware software, firewalls, and network encryption
- b. Record level or derivative data that can be re-identified must be destroyed within 30 days of the end of the data use agreement, in a manner that renders it unusable, unreadable or indecipherable. What are your plans for destruction of the dataset and any potentially identifiable elements of the data once the data use agreement has expired?

All data will be completely deleted from the server within 30 days of the end of the data use agreement. This will include any datasets that were derived from the data, as well as those that were combined with other files.

SECTION 6: COST OF DATA

Because each data set is unique, cost can be determined only after the specific data elements are finalized. APAC staff will then review your request and estimate the number of hours required to produce and validate the data. APAC charges \$63 per hour of staff time. Payment must be received before the data will be provided. APAC staff will provide an invoice to facilitate payment. OHA's W-9 is available on request.

| SECTION | 7: CHECKLIST AND S | IGNATURE | | |
|---------------------|--|--|--|---|
| 7.1 Check | k list: Please indicate th | at the following are completed: | | |
| | | yment will not be refunded if OH ving entity does not have the cap | | |
| | All questions are answ | vered completely | | |
| | Data Element Workbo | ok is attached to email or printed | d application | |
| | IRB application with a or printed application, | pproval/finding memo is attached if applicable | d to email | |
| | | rity policies for the requesting or ns, are attached to the email or | • | • |
| • | ns if data will be used t I am interested in this | endum: Please see the last two to eliminate racial injustice. Is option apply to my data request | pages of this for | rm |
| applicat signing | ion and sign on behalf | ing below has the authority to coof the organization identified in states that all information containd correct. | Section 1. By | ata |
| Signati | Ure M. Monty 6257A58DD91941A | Da | ate ^{4/4/2024} | |
| Printed | I name Amy Moritz | | | |
| Title A | Asst Director, ORA T | The University of Texas M. [| D. Anderson C | ancer Center |
| Return the | completed form with re | quired attachments to APAC.Ac | | |
| | F | Read and Understood: | Reviewed and UTMDACC Lega ATMDACC Sign | d Services for |
| The Oregon F | _ lealth Authority | John Lin | MT2024-30366W | W 4 April 2024 Page 12 of 12 |
| _ | · · · · · · · · · · · · · · · · · · · | ieve optimum physical, mental and soc | cial well-being | Rev 12/2021 |

Oregon APAC Racial Justice Addendum

The primary purpose of our research is to alleviate racial disparities in cancer care, outcomes, costs, and financial toxicity, through both documenting the presence of such disparities in Oregon, <u>and also</u> identifying mechanisms by which we can eliminate these disparities.

Despite novel diagnostic and therapeutic options in cancer care, disparities in cancer care delivery and outcomes remain a critical issue. These differences in cancer prevention, diagnosis, treatment, and survival occur across cancer types and populations and are often associated with differences in race/ethnicity, gender, socioeconomic status, education, geographic area, and many more.

Moreover, cancer care has become extremely expensive, with novel cancer medications costing \$200,000-300,000 per year, with coinsurance amounts for patients who are insured ranging in the tens of thousands of dollars per year, resulting in financial toxicity for cancer patients. Historically, diagnoses of cancer have been associated with bankruptcies. For instance, 36% of patients newly diagnosed with late-stage (i.e., advanced) cancer had an adverse financial event prior to diagnosis (Warren JCO 2024). Furthermore, patients with cancer were 2.5 times more likely to go into bankruptcy than non-cancer controls—those going into bankruptcy were more likely to be non-White (Ramsey Health Affairs 2013). Those who have bankruptcy are more likely to die early from their cancer (Ramsey JCO 2016).

Such data highlight that financial toxicity is a critical racial/ethnic injustice that must be ameliorated. However, no study has examined the role of insurance as a mechanism for protecting against such financial toxicity, and the insurance factors that have led to racially/ethnically minoritized patients with cancer being less protected against financial catastrophe.

These disparities are also often heightened when assessing multiple social determinants of health factors and include many systems-level variables. Therefore, a multifaceted approach is needed to address and improve cancer care and eliminate ongoing gaps. Recognizing the ongoing need to provide equitable cancer care for all patients with cancer, the American Society of Clinical Oncology (ASCO) published a policy statement in 2020 advocating for equitable access and addressing structural barriers to high quality care.

Furthermore, the economic burden of cancer care continues to increase for payers (resulting in large taxpayer burdens and employer financial burdens) and patients alike. The annual national cancer care cost in 2015 was estimated to be \$183 billion and estimated to increase by 34% to \$246 billion by 2030. Moreover, the economic burden of cancer care for patients was estimated to be \$21.1 billion in 2019, with thousands of dollars in annual out of pocket costs for elderly patients at initial diagnosis and at end of life. However, the costs of care do not impact all patients equally, with race/ethnicity, education, comorbidities, type of insurance coverage, and income all playing a role in leading to increased financial toxicity.

Our project goal is to examine variations in preventive care, diagnoses, care quality, treatment patterns, outcomes, financial toxicity, and costs for patients with cancer. We aim to identify trends and disparities in cancer care across provider, payer, and patient characteristics in order to determine high priority areas for future cancer care interventions and policies.

Linked All Payer Claims Databases are uniquely positioned to provide the data needed to change health care delivery systems and policies.

Our research objectives are as follows:

- 1. To assess disparities and patterns in cancer care (along the care continuum), quality, financial toxicity, outcomes, and costs
- 2. To evaluate geographic variations in cancer care
- 3. To evaluate **mechanisms of disparities** and patterns in cancer care, quality, financial toxicity, outcomes, and costs by provider, payer, and patient characteristics

In Phase 1, which will encompass 3 years, we will study the following mechanisms of disparities and patterns in care:

- 1. To assess disparities and patterns for patients with Medicare Advantage vs Medicare FFS (via SEER-Medicare)
- 2. To assess disparities and patterns for patients with Medicaid vs ACA Plan (Bronze, Silver, Gold) vs other private insurance
- 3. To assess differences and disparities for patients seeing private equity purchased practices or 340B practices vs others

As is evident, our research will evaluate two types of mechanisms for disparities: how differential insurance structures and differential access to high-quality providers result in disparities in care, costs, financial toxicity, and outcomes among cancer patients.

One particular area that we want to highlight is disparities in financial toxicity to patients and how differential insurance can lead to more or less financial toxicity for racially/ethnically minoritized patients. This is an understudied area of research yet is a critical area of racial/ethnic injustice for cancer patients, many of whom take on medical debt through their cancer care. We propose to accomplish this through a novel linkage of APCD data with Experian credit score / bankruptcy / debt data.

1.0 Objectives

- 1. To assess cancer prevention, screening, and diagnoses
- 2. To assess cancer care treatment patterns and outcomes
- 3. To assess cancer treatment toxicities, including financial toxicity
- 4. To assess cancer care quality and costs
- 5. To assess survivorship care patterns and outcomes
- 6. To evaluate geographic variations in cancer care
- 7. To evaluate cancer care patterns, outcomes, and costs by multidimensional characteristics, e.g., insurance, provider, socioeconomic, etc.

Datasets: For this analysis, we will use a database comprised of the following linkages: cancer registry data (SEER) to insurance claims databases (All Payer Claims Databases) to patient financial databases (Experian).

2.0 Rationale

Despite novel diagnostic and therapeutic options in cancer care, disparities in cancer care delivery and outcomes remain a critical issue. These differences in cancer prevention, diagnosis, treatment, and survival occur across cancer types and populations and are often associated with differences in race/ethnicity, gender, socioeconomic status, education, geographic area, and many more. These disparities are also often heightened when assessing multiple social determinants of health factors and include many systems-level variables. Therefore, a multifaceted approach is needed to address and improve cancer care and eliminate ongoing gaps. Recognizing the ongoing need to provide equitable cancer care for all patients with cancer, the American Society of Clinical Oncology (ASCO) has advocated for equitable access and addressing structural barriers to high quality care. Furthermore, the economic burden of cancer care continues to increase for patients and payers alike. However, the costs of care do not impact all patients equally, with race/ethnicity, education, comorbidities, type of insurance coverage, and income all playing a role in leading to increased financial toxicity.

Our project goal is to examine variations in preventive care, screening, diagnoses, care quality, treatment patterns, outcomes, financial toxicity, and costs for patients with cancer. This study will help to evaluate gaps and disparities in cancer care, and will help to identify high priority areas for future interventions and modification of health care policy.

3.0 Eligibility of Subjects

We propose to study all cancer patients in the data specified above, as well as non-cancer control populations. We will include patients treated between 2000 and 2024 in our initial analyses, but additional years will be added over time (up to 2030).

Vulnerable Populations. We will study patients with cancer above the age of 18. As we do not have any methods to identify whether a subject is pregnant or cognitively impaired, we will not explicitly exclude those subjects from our sample. Moreover, we will not explicitly study these vulnerable populations.

4.0 Research Plan and Methods

Our cohort will be defined as above.

Patient Covariates:

- Patient demographics (age, race, ethnicity, gender, geographic information)
- Patient comorbidities
- Patient geographic socioeconomic indicators (zip-code linkage to socioeconomic indicators via the American Community Survey and Social Deprivation Index)

Outcomes:

- Care patterns, e.g., cancer screening, preventive services, emergency room visits, hospital
 admissions, days in hospital, clinic visits, new diagnoses, cancer directed therapies, supportive
 care therapies, monitoring for toxicity, etc.
- Clinical outcomes, e.g., treatment toxicity (e.g., Emergency room visits, hospital admissions, doctor visits, new diagnoses, rehabilitation stays), decline in functional status (e.g., new claim for indicators of poor performance status, home oxygen; home health agency use; canes, crutches, walkers; commodes; wheelchairs; hospital bed; skilled nursing facility use), overall survival, etc.
- Financial toxicity outcomes, e.g., credit score, bankruptcies, medical debt, non-medical debt, etc.
- Costs of care, including costs to payers and patients, etc.

Provider Covariates:

- Practice characteristics (e.g., size of practice, hospital affiliation, 340B status, teaching status, private-equity ownership, etc.). These practice level characteristics will be linked to provider-level NPI using datasets (IQVIA OneKey, Hospital Cost Reporting Information Systems, Health Resources and Services Administration NPPES, etc.)
- Provider characteristics (e.g., training duration, specialty type, training location, acceptance of pharmaceutical reimbursement) via publicly available information (e.g., Sunshine Act) linked to provider NPI

Insurance Covariates:

- Insurance type (e.g., Medicaid, ACA Plan [by tier], HDHP, Medicare Advantage, etc.)
- Insurance provider network characteristics. These will be obtained through linking insurance plan name with data from IDEON insurance provider network data.

The following Cancer Registry information will be studied:

- Patient demographics (age, race, ethnicity, gender, geographic information)
- Diagnostic modality (ex. Imaging studies, tissue biopsy)
- Tumor characteristics (ex. Stage, grade, histology, tumor genomic profiling and genetic testing)
- Cancer treatment (ex. Surgery, radiation, chemotherapy, targeted therapy, immunotherapy, hormone therapy)
- Cause-specific and overall survival

As above, we will use a database comprised of the following linkages: cancer registry data (SEER) to insurance claims databases (All Payer Claims Databases for multiple States [e.g., Colorado, Massachusetts, Oregon, Texas, etc.]) to patient financial databases (Experian).

- (1) Linkage of cancer registry to insurance claims. These linkages will be conducted by the each respective State APCD + cancer registry
- (2) Linkage to Experian data: Each SEER-APCD as well as Experian will send a hashed (encrypted, deidentified) finder file comprised of the following encrypted patient information (first name, last name, SSN, address, DOB, gender) to the principal investigator. The PI will use these finder files to match the respective databases.

We will request new data as it becomes available, as above.

5.0 Statistics and Justification of Sample Size

The sample size is determined by the size of the cohort. Baseline characteristics will be summarized for the total sample using frequencies, percentages, means, standard deviations, medians, and ranges as appropriate. The chi-square test will be used to compare the proportion of patients across groups and across treatments. Logistic regression models adjusted for demographics, comorbidities, and tumor characteristics will be used to compare patient groups and to compare the likelihood of receiving a treatment or test and the odds of toxicity between patient groups. The Homer and Lemeshow test will be used to check the goodness-of-fit model. Propensity score matching and instrumental variable analysis will be used as indicated to help minimize confounding. Cox proportional hazard models will be used for analyses of disease-specific and overall survival as well as time to the first toxicity.

6.0 Request for Waiver of Informed Consent

We request a Waiver of Informed Consent. We have no way to identify the persons in this dataset to obtain consent. Obtaining informed consent and permission to use Protected Health Information (PHI) is not feasible because of the large sample size.



Making Cancer History®

Office of Human Subjects Protection Unit 1637

Phone: 713-729-OHSP (2-6477)

Fax: 713-794-4589

APPROVAL

February 28, 2024

John Lin Health Svcs Research-Clinical

On 2/28/2024, the IRB reviewed the following protocol:

| 2024-0150 |
|--|
| Initial Study |
| Exempt |
| (4) Secondary research on data or specimens (no |
| consent required) |
| Secondary Analyses of Cancer Management |
| Name: University of Texas at Austin, Funding |
| Source ID: UT System Rising STARs Award |
| None |
| Waiver of Informed Consent 20240213 JKL.pdf, |
| Category: Consent Form; |
| CO Data Management Plan.docx, Category: |
| IRB Protocol; |
| CO Data Request.xlsx, Category: IRB Protocol; |
| • IRB Protocol - 20240222 JY.docx, Category: |
| IRB Protocol; |
| MA Data Management Plan.pdf, Category: IRB Protocol; |
| MA Data Request.xlsx, Category: IRB Protocol; |
| OR Data Management Plan.pdf, Category: IRB |
| Protocol; |
| • OR Data Request.xlsx, Category: IRB Protocol; |
| SEER Data Dictionary.pdf, Category: IRB |
| Protocol; |
| |
| Determinations on Waivers/Alterations: |
| The IRB serving in the capacity as the |
| privacy board has granted a waiver |
| |

| authorization for HIPAA for use of Ph | |
|---------------------------------------|-------------------------|
| | involved in this study. |

The IRB approved the protocol on 2/28/2024. This study does not require continuing review, per 2018 Common Rule. However, investigators are required to continue to meet all institutional requirements for conducting research with human subjects as outlined in HRP-103 – INVESTIGATOR MANUAL.

If consent documents were approved in this submission, please navigate to ePRTCL to access the IRB-approved consent form(s).

As a reminder:

- Modifications to this study must be approved by the IRB in advance of implementing changes to the research
- New information related to this study must be reported to the IRB in accordance with institutional reporting requirements
- Close this study once all research activities are complete

FWA #: 00000363

OHRP IRB Registration Number: IRB00000121

Oregon APAC Experian Linkage

The primary purpose of our research is to alleviate racial disparities in cancer care and outcomes, through both documenting the presence of such disparities in Oregon, <u>and also identifying mechanisms</u> by which we can eliminate these disparities.

Health insurance has two purposes: The first is to help patients receive the care they need. The second is to protect against cost-related financial catastrophe. Although there are many studies examining the first purpose, very few studies have examined the second. More worryingly, there are no studies examining whether health insurance protects racially/ethnically minoritized patients from financial harm, leaving a critical gap in our knowledge of whether insurance is functioning as intended.

"What gets measured gets fixed" is the guiding principle behind the proposed linkage. Until inequities are clearly described through rigorous research, there will be no drive to fix them. We propose to study whether cancer care (one of the most expensive types of care) disproportionately results in financial toxicity for patients from marginalized populations.

In my own practice, I treat young men with testicular cancer, which is curable with intensive hospitalizations, long rounds of chemotherapy, and multiple invasive surgeries. While cure rates are >95%, my Hispanic patients have been left with huge medical bills, sometimes must quit their jobs (because they cannot have long enough medical leave), and often are making an impossible choice between their money and their lives.

I propose to perform a data linkage, that will allow, for the first time, the associations between, medical care, and financial burden, as measured by credit score, medical debt, non-medical debt, bankruptcy, etc. We will study cancer patients. Cancer patients will be identified by beneficiaries which are linked successfully with OSCaR, as ICD codes are known to be unreliable in identifying those with cancer. If cancer diagnoses cannot be ascertained using OSCaR, we have provided a list of cancer ICD codes to use instead. By understanding drivers of financial burden related to medical care, we can take the first steps to alleviating this important inequity.

Given the high sensitivity of these data, we will take the utmost care to 1) ensure the linkage is done without revealing identifiable information to holders of different datasets and 2) to ensure the final dataset is stored in encrypted servers with strict access only to personnel engaging in the project, and 3) that all personnel will be trained in good data management and privacy practices. See Section 5 (Data Management & Security) for additional details.

The linkage will be conducted with the following steps:

- Both Experian and Oregon APAC will prepare "finder files" containing patient first name, middle name, last name, street address, zip-code, and date of birth. Oregon APAC's finder file will be limited to cancer patients.
- 2) Experian and Oregon APAC will use the same data cleaning measures to ensure standardization of data (e.g., removing dashes, certain spaces, etc.).
- 3) Experian will share "hashing" SAS code, which will be used to encrypt "hash" all patient identifiers. This will create a "hashed" version of the data fields. To increase likelihood of

- matching, data will be hashed based both on exact values (e.g., the exact spelling of a name) as well as the Soundex (i.e., what the name sounds like) of syllables. There will also be "hashed" versions of the first letter of the variable, and first four letters of the variable.
- 4) Experian and Oregon APAC will both test the hashing algorithm on "test data" to confirm the data are hashed identically.
- 5) Experian and Oregon APAC will use the hashing algorithm to hash all patient identifiers in their respective finder files.
- 6) Experian and Oregon APAC will send to me (MD Anderson) the de-identified (hashed) finder files. I will then conduct a proposed crosswalk between the patient IDs in the respective finder files.
- 7) I will mark patient IDs that are a "match" and send to Experian and Oregon APAC a list of the patient IDs that match in their respective datasets.
- 8) Oregon APAC will send me the full dataset (i.e., cancer patients that both did and did not match with someone in the Experian dataset). This is because we will study outcomes other than financial toxicity outcomes, and thus need to analyze the entire dataset.
- 9) Experian will send me the dataset of people only that matched with Oregon APAC.

Oregon All Payer All Claims data request

5.3 Data Security:

- a. Attach a detailed description of your plans to manage security of the APAC data including:
 - Designation of a single individual as the custodian of APAC data, either the
 principal investigator or staff listed in Section 2 of this application, who is
 responsible for oversight of APAC data, including reporting any breaches to OHA
 and ensuring the data are properly destroyed upon project completion.
 Hui Zhao will be the data custodian of the APAC data. Hui Zhao will be
 responsible for keeping APAC data safe and reporting any breaches to OHA and
 ensuring the data are properly destroyed upon project completion.
 - A security risk management plan applicable to APAC data that includes:
 - Secure storage in any and all mediums (e.g., electronic or hard copy) Upon receiving the Oregon APAC data, the data custodian, Hui Zhao, will save the data on the University of Texas MD Anderson's (UTMDACC) data server. The server to store the data is an IBM General Parallel File System (GPFS). GPFS is a high-performance, shared-disk file management system that can provide faster, more reliable access to a common set of file-based data. The GPFS allows multiple applications or users to share access to a single file simultaneously while maintaining the file-data integrity. All the data can be accessed through a SAS server. The GPFS file system is backed up nightly on another data server by the UTMDACC backup recovery team Monday through Friday. The GPFS data server and the SAS server are locked in the Tier-1 Data Center on the UTMACSS Mid Campus Building, 7707 Bertner Ave. Houston, TX 77030. The backup data server is located in another Tier-1 Data Center on the UTMDACC campus at 5610 Guhn Rd, Houston, TX 77040. These Data Centers are locked and are granted by Information Resources managers to MD Anderson personnel and contractors whose job responsibilities require access to that facility. The data media will be stored in a locked file cabinet in the data custodian Hui Zhao's office. Hui Zhao is the only person with access to this office and file cabinet. The office is located in the Department of Health Services Research – Unit 1444 at the University of Texas MD Anderson Cancer Center. The office building requires employees to wear picture identification badges during working hours. All visitors need to first register at the security desk and obtain a visitor sticker before they can get inside the building. The office building will be locked with badge access only after working hours or on weekends or holidays.
 - Procedures to restrict APAC data access to only those individuals listed on the data use agreement
 The permission to access the APAC data stored on the server will be granted by data custodian Hui Zhao, based on users included in the APAC data use agreement. Once approved for access, the data server can be

accessed from the data user's office, through UTMDACC's Local Area Network (LAN). UTMDACC also provides Virtual Private Network (VPN) access. Only UTMDACC domain users can be allowed VPN access to UTMDACC resources. Anyone requesting remote access to the UTMDACC network is required to sign a non-disclosure agreement prior to being granted access. Data users must adhere to all applicable UTMDACC's Information Resources policies when remotely accessing Information Resources. To access the data stored on the server, users need to sign an internal data use agreement to keep the data on the server and comply to the APAC Data Use Agreement.

- User account controls, i.e., password protections, maximum failed login attempts, lockout periods after idle time, user audit logs, etc. Data users need to use their UTMDACC username and password to log onto the data server to access the APAC data. The log-on password requires at least 12 characters long with complexity of mixing uppercase, lowercase, numeric, and symbols. The account will be locked after three failed log-on attempts, and the lockout period is 5 minutes. If the data user forgets the password, the account will be locked out. The data user must contact the Information System Service Desk and provide the employee information to recover the account. Time out session is set to be 15 minutes to prevent unauthorized access to the data.
- Confirmation of training for personnel on how to properly manage protected health information in all formats
 Every two years, our data users will take Human Subject Protections
 Training (HSPT) which covers the following four topics of HSPT history and ethics, HSPT regulations, HSPT informed consent and vulnerable populations, and HSPT study management. The HSPT training helps data users on how to properly manage protected health information.
- Protection of derivatives of APAC data at the re-identifiable level No findings or information derived from the APAC data will contain information that will allow identification of patients, hospitals, or physicians. We will not report tables or derived results with cell counts less than 11 in order to protect patients, hospitals, or physicians' identities.
- o If applicable, procedures for handling direct identifiers, such as allowing access on a 'need to know' basis only and minimizing risk by storing identifiers separately from other APAC data For the handling direct identifiers, we will save those identifiers in a separated data folder and give access to the users who "need to know".
- Procedures for identifying, reporting and remedying any data breach MDACC has procedures for identifying and remediating identified data breaches. If the breach rises to the level of a reportable offense, then MDACC is required by law to notify the Office of Civil Rights.
- Statement of compliance with HIPAA and the HITECH Act We attest that we compliance with HIPAA and the HITECH Act.
- Electronic device protections, i.e., anti-virus or anti-malware software, firewalls, and network encryption

The data will be stored on servers behind our institutional firewall. The UTMDACC Office of Information Security (OIS) has developed standards and guidelines for providing adequate information security for all UTMDACC information resources. The UTMDACC Information resource security program provides sound IT security within the university, for protecting information assets, safeguarding the integrity of institutional processes, and ensuring compliance with state and federal regulations. The existing network infrastructure at UTMDACC has been assessed as to its traffic demands and bandwidth capacity against both current and anticipated use.

Anti-Virus Software: UTMDACC is licensed to provide Trend Micro as an antivirus client software to protect computer systems.

Firewall is an essential component of the overall security architecture of the UTMDACC computer network. The UTMDACC Firewall Management Procedures apply to all individuals within the UTMDACC enterprise who are responsible for the management of UTMDACC's centralized firewall(s) and to any individual who may request changes to its rule-base.

Network: The UTMDACC network infrastructure is a vital information asset provided as a central utility for all users of UTMDACC Information Resources. All sensitive or protected digital data, includes social security numbers, Protected Health Information (PHI), and Sensitive Research Data etc., transmitted through open networks, must be encrypted in accordance to MD Anderson Encryption Requirement. This information must not be sent or forwarded to non-MD Anderson Internal email accounts, unless encrypted.

| Please answer each of the following questions about APAC data request options: | |
|--|---|
| <u> </u> | |
| Please indicate the year(s) of data requested | 2011-2022 X |
| Do you want out-of-state people and their claims included? | No X |
| Do you want orphan claims included? (claims, but no eligibility or coverage reported) | Yes X |
| Do you want denied claims included? | Yes X |
| Do you want fully reversed claims data included? (all lines payer and member paid=0 or the sum across claim lines=0) | Yes X |
| What payer types do you want? | Commercial, Medicaid, Medicare Advantage |
| Do you want all medical claims? | Yes, all medical claims |
| How do you want medical claim type(s) identified and selected? | You will provide definition |

| Please answer each of the following questions about APAC data request options: | |
|---|--|
| Which medical claim types do you want? | All claims |
| | X |
| Do you want pharmacy claims? | Yes X |
| Do you want dental claims? | Yes X |
| Do you want monthly eligibility data (insured/covered by month, by payer, by plan)? | Yes |
| Do you want monthly engionity data (insured/covered by month, by payer, by plan): | X |
| Do you want member demographic data? | Yes and I requested monthly eligibility data |
| Do you want provider data? | Yes X |
| Do you want claims and eligibility data for selected age groups only? | All ages X |
| Do you want to limit claims and eligibility data by gender? | Include all |

| Please answer each of the following questions about APAC data request options: | |
|---|-----------------------|
| Do you want to limit <u>medical claims</u> data to selected diagnoses? | No X |
| Do you want to limit <u>pharmacy data</u> to selected NDC codes or therapeutic classes? | No X |
| Do you want member paid amounts (copayment, coinsurance and deductible) set to zero for claims with both a primary and secondary payer? Primary payers report member paid amounts, but members covered | No |
| by more than one insurer do not actually pay the reported member paid amounts. | X |
| Do you want the allowed amount set to zero for the secondary payer for a claim? The secondary payer reported allowed amount duplicates the primary payer reported allowed amount. | |
| | |
| Are you requesting identifiable data? | Zip code X |
| One payer reported the claim status for all of their claims as fee-for-service for some years when most claims were encounter or managed care claims. Do you want the claim status changed to managed care? | Do not change X |
| Do you want APAC data linked to Oregon Center for Health Statitistics (CHS) Death Certificate data | Yes |

| Please answer each of the following questions about APAC data request options: | |
|--|-----|
| and/or Birth Certificate data? You will need approval from both CHS and APAC. Submit request to APAC first and after approval submit request to CHS and provide APAC approval notice. https://www.oregon.gov/oha/PH/BIRTHDEATHCERTIFICATES/VITALSTATISTICS/Pages/Data-Use- | |
| Requests.aspx | X |
| | Vaa |
| Is your requested APAC data going to be linked by the APAC Team or data requester to any other data | Yes |
| source? | Χ |

| Field | | Security | | |
|---|---------------------------------|---------------|---|--|
| Requested | Data Element | Level | Description | Justification |
| | uid | De-Identified | A unique identifier that links to the row as submitted in the MC Intake File Layout. | Needed to link tables |
| | release_id | De-Identified | A value associated with the data release | Needed to know data release |
| | mc059_service_start_dt | De-Identified | Date services for patient started | Needed for general use of data |
| | dw_claim_id | De-Identified | A unique medical claim identifier | Needed for general use of data |
| | mc005_line_no | De-Identified | Line number for the claim that begins with 1 and is incremented by 1 for each additional service line of a claim | Needed to identify unique member |
| | uniquepersonID | De-Identified | A unique identifier for a person across payers and time | Neeed to identify unique beneficiary |
| The data elements | dw_member_id | De-Identified | A payer & plan specific unique identifier for a person. A person can have multiple member IDs for a single payer because they can have multiple plans. DW_member_IDs are not unique identifiers for a person across payers and years | Needed to identify unique identifier by vendor |
| highlighted in blue are provided in | mc038_claim_status_cd | De-Identified | Claim status. P (Paid), D (Denied), C - (MCO/CCO encounter) E (other) | Needed to know if claim was paid or not |
| every data request | mc038a_cob_status | De-Identified | Coordination of benefit claim. Indicates secondary payer for a claim | Needed to know if there was a secondary payer |
| | orphan_fl | De-Identified | Identifies orphan claim with no corresponding eligibility for the date of service. 1 (Yes), 0 (No) | Needed to know if there was an orphan claim |
| | mc003_insurance_product_type_cd | De-Identified | A code that indicates an insurance | Needed to know insurance coverage |

| Field | | Security | | |
|-----------|----------------------|---------------|--|--|
| Requested | Data Element | Level | Description | Justification |
| | me016_member_state | De-Identified | Member State from latest quarterly data | Needed to know |
| | | | submitted | member state |
| | Suppressed_FI | De-Identified | 1 (denied claim line), 0 (other than denied) | Needed to know if claim was denied or not |
| | RemovedReversal_FI | De-Identified | 1 (claims not included before release 13 because the charge, paid amount, and allowed amounts are zero or zero when summed across claim lines and after the removal of denied claim lines, 0 (otherwise) | Needed to examine variations in insurance coverage |
| X | mc060_service_end_dt | De-Identified | Date services for patient ended | Needed to determine date of service |
| | Claim_LOB | De-Identified | Payer line of business: 1 (Medicare), 2 | Needed to examine |
| x | | | (Medicaid), 3 (commercial, 0 (no line of business reported), -99 (duplicate data reported) | variations by insurance |
| | mc207_payment_type | De-Identified | Indicates the payment methodology: 01 | Needed to examine |
| X | | | (Capitation); 02 (Fee for Service); 07 (Other) | variations by insurance |
| X | self_insured_fl | De-Identified | Self Insured flag | Needed to examine |
| ^ | | | | variations by insurance |
| | mc001_payer_type | De-Identified | | Needed to examine |
| Х | | | Carrier, (D) Medicaid, (G) Other government agency, (P) Pharmacy benefits manager, (T) Third-party administrator, (U) Unlicensed entity | variations by insurance |
| Х | mc018_admit_dt | De-Identified | Admission date | Needed to examine variations in care and outcomes |

| Field | | Security | | |
|-----------|------------------------------|---------------|---|---|
| Requested | Data Element | Level | Description | Justification |
| х | mc203_admit_type_cd | De-Identified | Admission type:1 (Emergency), 2 (Urgent), 3 (Elective), 4 (Newborn), 5 (Trauma Center), 9 (missing) | Needed to examine variations in care and outcomes |
| x | mc204_admission_source_cd | De-Identified | Admission source | Needed to examine variations in care and outcomes |
| х | mc205_admit_diagnosis_cd | De-Identified | Admitting diagnosis. ICD-10 diagnosis code for dates of service beginning 10/01/2015, ICD-9 diagnosis code for dates of service before 10/01/2015 | Needed to examine variations in care and outcomes |
| x | mc070_discharge_dt | De-Identified | Discharge date-required for inpatient hospitalization | Needed to examine variations in care and outcomes |
| х | mc023_discharge_status_cd | De-Identified | Status for member discharged from a hospital | Needed to examine variations in care and outcomes |
| х | LOS | De-Identified | Length of stay of inpatient admission measured in days. Discharge Date - Admit Date. <1 is rounded to 1. Negative values set to NULL | Needed to examine variations in care and outcomes |
| Х | mc036_bill_type_cd | De-Identified | Type of bill on uniform billing form (UB) | Needed to examine variations in care and outcomes |
| Х | mc037_place_of_service_cd | De-Identified | Industry standard place of service code | Needed to examine variations in care and outcomes |
| Х | mc054_revenue_cd | De-Identified | Revenue code | Needed to examine variations in care and outcomes |
| Х | mc041_principal_diagnosis_cd | De-Identified | Principal Diagnosis code | Needed to examine variations in care and outcomes |

| Field | | Security | | |
|---------------------------------------|----------------------------|---------------|---|---------------------------------|
| Requested | Data Element | Level | Description | Justification |
| | Dx_Description | De-Identified | ICD diagnosis code description | Needed to examine |
| X | | | | variations in care and |
| | | | | outcomes |
| | mc041p_poa_p | De-Identified | Required present on admission flag for | Needed to examine |
| \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | diagnosis 1: Yes, no, W (clinically | variations in care and |
| X | | | undetermined), U (information not in | outcomes |
| | | | record), diagnosis exempt from POA | |
| | POA Description | De-Identified | reporting (1), Null if not reported Present on admission description | Needed to examine |
| X | FOA_Description | De-identified | Present on authission description | variations in care and |
| ^ | | | | outcomes |
| | mc042 other diagnosis 2 | De-Identified | Additional Diagnosis 2 | Needed to examine |
| X | moo iz_otrior_diagriooio_z | Do Idontinod | National Biagnosis 2 | variations in care and |
| | | | | outcomes |
| | mc042p poa 2 | De-Identified | Required POA flag for diagnosis 2 if | Needed to examine |
| X | '-' - | | populated | variations in care and |
| | | | | outcomes |
| | mc043_other_diagnosis_3 | De-Identified | Additional Diagnosis 3 | Needed to examine |
| X | | | | variations in care and |
| | | | | outcomes |
| | mc043p_poa_3 | De-Identified | Required POA flag for diagnosis 3 if | Needed to examine |
| X | | | populated | variations in care and |
| | | | | outcomes |
| | mc044_other_diagnosis_4 | De-Identified | Additional Diagnosis 4 | Needed to examine |
| X | | | | variations in care and |
| | | De Identified | Described DOA floor for dispussois 4 if | outcomes |
| X | mc044p_poa_4 | De-Identified | Required POA flag for diagnosis 4 if populated | Needed to examine |
| ^ | | | | variations in care and outcomes |
| | mc045 other diagnosis 5 | De-Identified | Additional Diagnosis 5 | Needed to examine |
| x | IIICOTO_OUICI_GIAGIIOSIS_3 | De-Identilled | Additional Diagnosis 5 | variations in care and |
| | | | | outcomes |
| | | | | Journal |

| Field | Data Element | Security Level | Description | Justification |
|-----------|--------------------------|-------------------|--|---|
| Requested | | | • | |
| x | mc045p_poa_5 | De-Identified | Required POA flag for diagnosis 5 if populated | Needed to examine variations in care and outcomes |
| Х | mc046_other_diagnosis_6 | De-Identified | Additional Diagnosis 6 | Needed to examine variations in care and outcomes |
| х | mc046p_poa_6 | De-Identified | Required POA flag for diagnosis 6 if populated | Needed to examine variations in care and outcomes |
| Х | mc047_other_diagnosis_7 | De-Identified | Additional Diagnosis 7 | Needed to examine variations in care and outcomes |
| x | mc047p_poa_7 | De-Identified | Required POA flag for diagnosis 7 if populated | Needed to examine variations in care and outcomes |
| х | mc048_other_diagnosis_8 | De-Identified | Additional Diagnosis 8 | Needed to examine variations in care and outcomes |
| х | mc048p_poa_8 | De-Identified | Required POA flag for diagnosis 8 if populated | Needed to examine variations in care and outcomes |
| Х | mc049_other_diagnosis_9 | De-Identified | Additional Diagnosis 9 | Needed to examine variations in care and outcomes |
| х | mc049p_poa_9 | De-Identified | Required POA flag for diagnosis 9 if populated | Needed to examine variations in care and outcomes |
| х | mc050_other_diagnosis_10 | De-Identified | Additional Diagnosis 10 | Needed to examine variations in care and outcomes |

| Field | Data Element | Security Level | Description | Justification |
|-----------|-------------------------------|-------------------|--|---|
| Requested | | | · · | |
| X | mc050p_poa_10 | De-Identified | Required POA flag for diagnosis 10 if populated | Needed to examine variations in care and outcomes |
| х | mc051_other_diagnosis_11 | De-Identified | Additional Diagnosis 11 | Needed to examine variations in care and outcomes |
| x | mc051p_poa_11 | De-Identified | Required POA flag for diagnosis 11 if populated | Needed to examine variations in care and outcomes |
| Х | mc052_other_diagnosis_12 | De-Identified | Additional Diagnosis 12 | Needed to examine variations in care and outcomes |
| x | mc052p_poa_12 | De-Identified | Required POA flag for diagnosis 12 if populated | Needed to examine variations in care and outcomes |
| Х | mc053_other_diagnosis_13 | De-Identified | Additional Diagnosis 13 | Needed to examine variations in care and outcomes |
| х | mc053p_poa_13 | De-Identified | Required POA flag for diagnosis 13 if populated | Needed to examine variations in care and outcomes |
| х | mc201_icd_version_cd | De-Identified | Identifies ICD9 or ICD10 version | Needed to examine variations in care and outcomes |
| х | mc055_procedure_cd | De-Identified | Current Procedural Terminology (CPT) code or Healthcare Common Procedure Coding System (HCPCS) | Needed to examine variations in care and outcomes |
| х | mc056_procedure_modifier_1_cd | De-Identified | CPT or HCPCS modifier | Needed to examine variations in care and outcomes |

| Field | Data Element | Security Level | Description | Justification |
|-----------|--------------------------------|-------------------|--|---------------------------------|
| Requested | | | CPT or HCPCS modifier | Needed to examine |
| X | mc057_procedure_modifier_2_cd | De-Identified | CPT of HCPCS modiller | Ivariations in care and |
| ^ | | | | outcomes |
| | mc057a procedure modifier 3 cd | De-Identified | CPT or HCPCS modifier | Needed to examine |
| X | | DC-IdCITITICA | | variations in care and |
| | | | | outcomes |
| | mc057b procedure modifier 4 cd | De-Identified | CPT or HCPCS modifier | Needed to examine |
| X | | | | variations in care and |
| | | | | outcomes |
| | APACgrouper | De-Identified | Groups all lines of a claim in prioritized | Needed to examine |
| | | | order as inpatient, emergency | variations in care and |
| x | | | department, outpatient, professional, | outcomes |
| X | | | pharmacy and other based on type of bill, | |
| | | | revenue and place of service codes | |
| | alaina tura | Do Idontificat | Vandan naranatad alaina litura I dantifia a | No adad ta avancina |
| | claim_type | De-Identified | , , | Needed to examine |
| | | | claim lines as inpatient facility claim (1), outpatient facility claim (2) and | variations in care and outcomes |
| x | | | professional claim (3) based on bill type, | louicomes |
| | | | revenue code and place of service. Null | |
| | | | means claim line type could not be | |
| | | | determined. | |
| | mc058_icd_primary_procedure_cd | De-Identified | The main inpatient procedure code | Needed to examine |
| X | | | | variations in care and |
| | | | | outcomes |
| х | mc058a_icd_procedure_2 | De-Identified | Inpatient procedure ICD-10 code 2 | Needed to examine |
| | | | | variations in care and |
| | | | | outcomes |
| | mc058b_icd_procedure_3 | De-Identified | Inpatient procedure ICD-10 code 3 | Needed to examine |
| X | | | | variations in care and |
| | | | | outcomes |

| Field | Data Element | Security Level | Description | Justification |
|-----------|-------------------------|-------------------|------------------------------------|---|
| Requested | | | | |
| x | mc058c_icd_procedure_4 | De-Identified | Inpatient procedure ICD-10 code 4 | Needed to examine variations in care and outcomes |
| Х | mc058d_icd_procedure_5 | De-Identified | Inpatient procedure ICD-10 code 5 | Needed to examine variations in care and outcomes |
| x | mc058e_icd_procedure_6 | De-Identified | Inpatient procedure ICD-10 code 6 | Needed to examine variations in care and outcomes |
| Х | mc058f_icd_procedure_7 | De-Identified | Inpatient procedure ICD-10 code 7 | Needed to examine variations in care and outcomes |
| х | mc058g_icd_procedure_8 | De-Identified | Inpatient procedure ICD-10 code 8 | Needed to examine variations in care and outcomes |
| x | mc058h_icd_procedure_9 | De-Identified | Inpatient procedure ICD-10 code 9 | Needed to examine variations in care and outcomes |
| Х | mc058j_icd_procedure_10 | De-Identified | Inpatient procedure ICD-10 code 10 | Needed to examine variations in care and outcomes |
| x | mc058k_icd_procedure_11 | De-Identified | Inpatient procedure ICD-10 code 11 | Needed to examine variations in care and outcomes |
| Х | mc058l_icd_procedure_12 | De-Identified | Inpatient procedure ICD-10 code 12 | Needed to examine variations in care and outcomes |
| Х | mc058m_icd_procedure_13 | De-Identified | Inpatient procedure ICD-10 code 13 | Needed to examine variations in care and outcomes |

| Field | | Security | | |
|-----------|-----------------------------------|---------------|---|---|
| Requested | Data Element | Level | Description | Justification |
| х | final_mdc | De-Identified | a code identifying the final Major Diagnostic Category (MDC) | Needed to examine variations in care and outcomes |
| Х | final_drg | De-Identified | a code indentifying the final Diagnosis Related Group | Needed to examine variations in care and outcomes |
| х | final_ms_ind | De-Identified | a flag indicating if final_mdc is medical or surgical | Needed to examine variations in care and outcomes |
| х | drg description | De-Identified | Final DRG description | Needed to examine variations in care and outcomes |
| х | mdc description | De-Identified | Final MDC description | Needed to examine variations in care and outcomes |
| х | MS DRG MDC cross walk Description | De-Identified | Crosswalk DRG to MDC | Needed to examine variations in care and outcomes |
| Х | mc061_service_qty | De-Identified | count of units reported on claim line | Needed to examine variations in care and outcomes |
| Х | mc017_paid_dt | De-Identified | Payment date | Needed to examine variations in care and outcomes |
| х | mc063_paid_amt | De-Identified | Payment made by payer. Does not include expected copayment, coinsurance or deductible by the member | Needed to examine |
| Х | mc064_prepaid_amt | De-Identified | Prepaid amount | Needed to examine variations in costs |
| X | mc065_copay_amt | De-Identified | Expected Co-payment by the member | Needed to examine variations in costs |

| Field | | Security | | |
|-----------|----------------------------------|---------------|---|-------------------------|
| Requested | Data Element | Level | Description | Justification |
| Х | mc066_coinsurance_amt | De-Identified | Expected Co-insurance by the member | Needed to examine |
| ^ | | | | variations in costs |
| x | mc067_deductible_amt | De-Identified | Expected Deductible by the member | Needed to examine |
| ^ | | | | variations in costs |
| | mc206_pay_to_patient_flag | De-Identified | Payment to patient. 1- If patient was | Needed to examine |
| X | | | directly reimbursed, 2 - patient was not directy reimbursed | variations in costs |
| Χ | Zeropaid_FL | De-Identified | All lines in a claim paid zero dollars | Needed to examine |
| ^ | | | | variations in costs |
| x | LowPaid_fl | De-Identified | All lines in a claims sum to less than \$4 | Needed to examine |
| ^ | | | paid | variations in costs |
| | mc202_provider_network_indicator | De-Identified | Indicator of service received in or out of | Needed to examine |
| X | | | network:1 (in network), 2 (National | variations in access to |
| | | | network), 3 (out-of-network) | provider |
| | dw_rendering_provider_id | De-Identified | A unique identifier associated with a | Needed to examine |
| X | | | unique rendering provider across plans, | variations in access to |
| | | | payers and years | provider |
| | dw_billing_provider_id | De-Identified | A unique identifier associated with a | Needed to examine |
| X | | | unique billing provider across plans, | variations in access to |
| | | | payers andyears | provider |
| | rendering_hospital_id | Limited | Hospital that rendered services | Needed to examine |
| X | | | | variations in access to |
| | | _ | | provider |
| | hospital_name | De-Identified | Name of Oregon Hospital | Needed to examine |
| X | | | | variations in access to |
| | | | | provider |
| | billing_hospital_id | Limited | Hospital billed for services | Needed to examine |
| X | | | | variations in access to |
| | | | | provider |
| | rendering_asc_id | Limited | Ambulatory surgery center that rendered | Needed to examine |
| X | | | services | variations in access to |
| | | | | provider |

| Field | | Security | | |
|-----------|------------------------|-----------------|---|--|
| Requested | Data Element | Level | Description | Justification |
| х | ASC_name | De-Identified | Name of Oregon Ambulatory Surgery Center | Needed to examine variations in access to provider |
| X | billing_asc_id | De-Identified | Ambulatory surgery center billed or services | Needed to examine variations in access to provider |
| х | age | De-Identified | Age on date of service | Needed to examine variations by beneficiary characteristics |
| х | age_group | De-Identified | Age bands based on date of service | Needed to examine variations by beneficiary characteristics |
| х | me013_member_gender_cd | De-Identified | member's gender F = Female, M = Male, U = Unknown | Needed to examine variations by beneficiary characteristics |
| х | urban_fl | De-Identified | Zip codes grouped into urban and rural identified by OHA | Needed to examine variations by beneficiary characteristics |
| X | interim_fl | De-Identified | Flag identifying interim bills | Needed to examine variations by billing |
| X | interim_claim_id | De-Identified | Unique identifier set by DW_Claim_ID of the initial interim claim | Needed to identify initial claim |
| | Data ele | ements that are | e frequently denied | |
| X | mc062a_allowed_amt | Limited | Allowed amount | Recommended |
| x | me017_member_zip | Limited | Zip code from the date of service | Needed to examine variations by zip-code level socioeconomic |
| | | | | characteristics |

| Field | | Security | | |
|-------------------------|---------------------------------|---------------|---|---|
| Requested | Data Element | Level | Description | Justification |
| | uid | | submitted in the PC Intake File Layout. Used for linking tables/views | Needed to link tables |
| | release_id | De-Identified | A value associated with the data release | Needed to know data release |
| | dw_claim_id | De-Identified | A unique medical claim identifier | Needed for general use of data |
| | pc032_prescription_fill_dt | De-Identified | Prescription fill date | Needed to know timing of prescription drug |
| The data | dw_member_id | De-Identified | A payer & plan specific unique identifier for a person. A person can have multiple member IDs for a single payer because they can have multiple plans. DW_member_IDs are not unique identifiers for a person across payers and years | Needed to identify unique member |
| elements highlighted | uniquepersonID | De-Identified | A unique identifier for a person across payers and time | Neeed to identify unique beneficiary |
| in blue are provided in | pc025_claim_status_cd | De-Identified | Claim status. P (Paid), D (Denied), C - (MCO/CCO encounter) E (other) | Needed to know insurance coverage |
| every data request | pc003_insurance_product_type_cd | De-Identified | A code that indicates an insurance coverage type | Needed to know insurance coverage |
| | me016_member_state | De-Identified | Member State from latest quarterly data submitted | Needed to know member state |
| | orphan_fl | De-Identified | Identifies orphan claim with no corresponding eligibility for the date of service. 1 (Yes), 0 (No) | Needed to know if there was an orphan claim |
| | Suppressed_FI | De-Identified | 1 (denied claim line), 0 (other than denied) | Needed to know if claim was denied or not |

| Field | | Security | | |
|-----------|----------------------------|---------------|---|--|
| Requested | Data Element | Level | Description | Justification |
| | RemovedReversal_FI | De-Identified | because the charge, paid amount, and allowed amounts are zero or zero when summed across claim lines and after the removal of denied claim lines, 0 (otherwise) | Needed to examine variations in insurance coverage |
| X | pc025_claim_status_cd | De-Identified | Claim status. P - Paid,C - CCO encounter, E - other | Needed to examine access and usage of drugs |
| X | pc001_payer_type | | Payer reported payer type codes:(C) Carrier, (D) Medicaid, (G) Other government agency, (P) Pharmacy benefits manager, (T) Third-party administrator, (U) Unlicensed entity | Needed to examine variations by insurance |
| X | Claim_LOB | De-Identified | Payer line of business: 1 (Medicare), 2 (Medicaid), 3 (Commercial, 0 (no line of business reported), -99 (duplicate data reported) | Needed to examine variations by insurance |
| X | self_insured_fl | De-Identified | Self Insured flag | Needed to examine variations by insurance |
| Х | dw_pharmacy_id | De-Identified | A unique identifier associated with a unique pharmacy across plans, payers and years | Needed to examine access to pharmacy and access to drugs by pharmacy |
| Х | dw_prescribing_provider_id | De-Identified | A unique identifier associated with a unique prescribing provider across plans, payers and years | Needed to examine variations by provider |
| Х | pc021_pharmacy_npi | De-Identified | Pharmacy's National Provider Identifier (NPI) | Needed to examine access to pharmacy and access to drugs by pharmacy |

| Field | Data Flamout | Security | Description. | Land Control |
|-----------|---------------------------------|---------------|--|---------------------------|
| Requested | Data Element | Level | Description | Justification |
| X | pc020_pharmacy_name | De-Identified | Name of pharmacy | Needed to examine |
| | | | | access to pharmacy and |
| | | | | access to drugs by |
| | | | | pharmacy |
| X | pc022_pharmacy_city | De-Identified | City of pharmacy | Needed to examine |
| | | | | access to pharmacy and |
| | | | | access to drugs by |
| | | | | pharmacy |
| X | pc023_pharmacy_state | De-Identified | State of Pharmacy | Needed to examine |
| | | | | access to pharmacy and |
| | | | | access to drugs by |
| | | | | pharmacy |
| X | pc024_pharmacy_zip | De-Identified | Zip Code of Pharmacy | Needed to examine |
| | | | | access to pharmacy and |
| | | | | access to drugs by |
| | | | | pharmacy |
| X | pc048_prescribing_physician_npi | De-Identified | Identifier for the provider who prescribed | Needed to examine |
| | | | the medication as assigned by the | access to drugs by |
| | | | reporting entity | provider |
| X | pc026_drug_cd | De-Identified | National Drug Code (NDC) | Needed to identify |
| | | | | variations in drug access |
| X | pc033_dispensed_qty | De-Identified | Quantity dispensed | Needed to identify |
| | | | | variations in drug access |
| X | pc034_days_supply_qty | De-Identified | Number of days that the drug will last if | Needed to identify |
| | | | taken at the prescribed dose | variations in drug access |
| X | pc030_dispense_as_written_cd | De-Identified | Dispense as written. Indicates if drug | Needed to identify |
| | | | substitution authorized | variations in drug access |

| Field | | Security | | |
|-----------|---------------------------|---------------|---|---|
| Requested | Data Element | Level | Description | Justification |
| X | pc028_calc_refill_no | De-Identified | Processor's count of times prescription refilled | Needed to identify variations in drug access |
| X | pc031_compound_drug_ind | De-Identified | Indicates if it is a compound drug, 1 (no), 2 (yes), Null | Needed to identify variations in drug access |
| Х | pc017_paid_dt | De-Identified | Prescription Payment date | Needed to identify variations in drug access |
| X | pc036_paid_amt | De-Identified | Payment made by payer. Does not include expected copayment, coinsurance or deductible by the member 0 if amt=0, blank if missing | Needed to identify variations in drug access |
| X | pc037_ingredient_cost_amt | De-Identified | Ingredient cost/list price 0 if amt=0, blank if missing | Needed to examine variations in costs |
| X | pc039_dispensing_fee_amt | De-Identified | Dispensing fee paid 0 if amt=0, blank if missing | Needed to examine variations in costs |
| Х | pc040_copay_amt | De-Identified | Expected Co-payment by the member 0 if amt=0, blank if missing | Needed to examine variations in costs |
| Х | pc041_coinsurance_amt | De-Identified | Expected Co-insurance by the member. Medcaid values are not co-insurance and should not be included 0 if amt=0, blank if missing | Needed to examine variations in costs |
| Х | pc042_deductible_amt | De-Identified | Expected Deductible by the member 0 if amt=0, blank if missing | Needed to examine variations in costs |
| Х | age | De-Identified | Member age in years calculated on the first day of the month | Needed to examine variations by beneficiary characteristics |

| Field | | Security | | |
|-----------|------------------|---------------|--|--|
| Requested | Data Element | Level | Description | Justification |
| X | age_group | De-Identified | Age bands based on date of service | Needed to examine variations by beneficiary characteristics |
| Х | urban_fl | | Zip codes grouped into urban and rural identified by OHA | Needed to examine variations by beneficiary characteristics |
| | Data ele | ments that ar | e frequently denied | |
| Х | me017_member_zip | Limited | Zip code-static from the date of service | Needed to examine variations by zip-code level socioeconomic characteristics |

| Field | Data Flamout | Security | Description | 14:£: 4: |
|---|---------------------------------|---------------|---|---------------|
| Requested | Data Element | Level | Description | Justification |
| | release_id | De-Identified | A value associated with the data release | |
| | uid | De-Identified | A unique identifier that links to the row as submitted in the DC Intake File Layout (DC RAW) | |
| | dc059_service_start_dt | De-Identified | Date services to patient rendered | |
| | dw_claim_id | De-Identified | A unique dental claim identifier | |
| | dc005_line_no | De-Identified | Line number for the claim that begins with 1 and is incremented by 1 for each additional service line of a claim | |
| | uniquepersonID | | A unique identifier for a person across payers and time | |
| The data elements highlighted in blue are provided in | dw_member_id | | A unique identifier associated with a single plan and payer and assigned to all eligibility and claims records associated with a given individual for that plan/payer. An individual can have multiple member ids for a payer because they can have multiple plans. | |
| every data | dc038_claim_status_cd | De-Identified | Claim status. P (Paid), D (Denied), C - (MCO/CCO encounter) E (other) | |
| request | dc003_insurance_product_type_cd | De-Identified | A code that indicates an insurance coverage type | |
| | me016_member_state | De-Identified | Member State from latest quarterly data submitted | |
| | orphan_fl | De-Identified | Identifies orphan claim with no corresponding eligibility for the date of service. 1 (Yes), 0 (No) | |
| | Suppressed_FI | De-Identified | 1 (denied claim line), 0 (other than denied) | |

| Field | | Security | | |
|-----------|--------------------------------|---------------|--|---------------|
| Requested | Data Element | Level | Description | Justification |
| | RemovedReversal_FI | De-Identified | 1 (claims not included before release 13 because the charge, paid amount, and allowed amounts are zero or zero when summed across claim lines and after the removal of denied claim lines, 0 (otherwise) | |
| X | dc060_service_end_dt | De-Identified | Date services for patient ended | Pending |
| X | Claim_LOB | | Payer line of business: 1 (Medicare), 2 (Medicaid), 3 (Commercial, 0 (no line of business reported), -99 (duplicate data reported) | Pending |
| X | dc001_payer_type | De-Identified | Payer reported payer type codes:(C) Carrier, (D) Medicaid, (G) Other government agency, (P) Pharmacy benefits manager, (T) Third-party administrator, (U) Unlicensed entity | Pending |
| X | self insured fl | De-Identified | Self Insured flag, 1=Y, 0=N | Pending |
| X | dc037_place_of_service_cd | | Industry standard place of service code | Pending |
| X | dc038_claim_status_cd | De-Identified | Claim status. P - Paid, D - Denied, C - CCO encounter, E - other | Pending |
| Х | dc038a_denial_reason_cd | De-Identified | Code that defines the reason why the claim was denied. Required when DC038 = D | Pending |
| Х | dc039_cdt_cd | De-Identified | The Common Dental Terminology Code (CDT) for the dental procedure on the claim | Pending |
| X | dc039a_procedure_modifier_1_cd | De-Identified | Procedure modifier required when a modifier clarifies/improves the reporting accuracy of the associated CDT code. Blanks allowed. | Pending |

| Field | | Security | | |
|-----------|--------------------------------|---------------|---|---------------|
| Requested | Data Element | Level | Description | Justification |
| X | dc039b_procedure_modifier_2_cd | De-Identified | Procedure modifier required when a | Pending |
| | | | modifier clarifies/improves the reporting | |
| | | | accuracy of the associated CDT code. | |
| | | | Blanks allowed | |
| X | dc040_dental_quadrant_1 | De-Identified | standard quadrant identifier when CDT | Pending |
| | | | code indicates procedure on 3 or more | |
| | | | consecutive teeth | |
| X | dc040a_dental_quadrant_2 | De-Identified | standard quadrant identifier when CDT | Pending |
| | | | code indicates procedure on 3 or more | |
| | | | consecutive teeth | |
| X | dc040b_dental_quadrant_3 | De-Identified | standard quadrant identifier when CDT | Pending |
| | | | code indicates procedure on 3 or more | |
| | | | consecutive teeth | |
| X | dc040c_dental_quadrant_4 | De-Identified | standard quadrant identifier when CDT | Pending |
| | | | code indicates procedure on 3 or more | |
| | | _ | consecutive teeth | |
| X | dc041_diagnosis_cd | De-Identified | ICD diagnosis code | Pending |
| X | dc207_tooth_number_1 | De-Identified | Number to identify tooth on which service | Pending |
| | | _ | was performed | |
| X | dc208_tooth_1_surface_1 | De-Identified | Code representing the tooth surface on | Pending |
| | | | which the service was performed | |
| X | dc208a_tooth_1_surface_2 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc208b_tooth_1_surface_3 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc208c_tooth_1_surface_4 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc208d_tooth_1_surface_5 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc208e_tooth_1_surface_6 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |

| Field | | Security | | |
|-----------|--------------------------|---------------|--|---------------|
| Requested | Data Element | Level | Description | Justification |
| X | dc209_tooth_number_2 | De-Identified | Number to identify additional tooth on | Pending |
| | | | which service was performed | |
| X | dc210_tooth_2_surface_1 | De-Identified | Code representing the tooth surface on | Pending |
| | | | which the service was performed | |
| X | dc210a_tooth_2_surface_2 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc210b_tooth_2_surface_3 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc210c_tooth_2_surface_4 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc210d_tooth_2_surface_5 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc210e_tooth_2_surface_6 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc211_tooth_number_3 | De-Identified | Number to identify additional tooth on | Pending |
| | | | which service was performed | |
| X | dc212_tooth_3_surface_1 | De-Identified | Code representing the tooth surface on | Pending |
| | | | which the service was performed | |
| X | dc212a_tooth_3_surface_2 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc212b_tooth_3_surface_3 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc212c_tooth_3_surface_4 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc212d_tooth_3_surface_5 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc212e_tooth_3_surface_6 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc213_tooth_number_4 | De-Identified | Number to identify additional tooth on | Pending |
| | | | which service was performed | |
| X | dc214_tooth_4_surface_1 | De-Identified | Code representing the tooth surface on | Pending |
| | | | which the service was performed | |

| Field | | Security | | |
|-----------|--------------------------|---------------|---|---------------|
| Requested | Data Element | Level | Description | Justification |
| X | dc214a_tooth_4_surface_2 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | - |
| X | dc214b_tooth_4_surface_3 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc214c_tooth_4_surface_4 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc214d_tooth_4_surface_5 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc214e_tooth_4_surface_6 | De-Identified | Additional tooth surface on which the | Pending |
| | | | service was performed | |
| X | dc063_paid_amt | De-Identified | Payment made by payer. Does not | Pending |
| | | | include expected copayment, coinsurance | |
| | | | or deductible by the member. 0 if amt=0, | |
| | | | blank if missing | |
| X | dc064_prepaid_amt | De-Identified | Prepaid amount. 0 if amt=0, blank if | Pending |
| | | | missing | |
| X | dc065_copay_amt | De-Identified | , , , , | Pending |
| | | | if amt=0, blank if missing | |
| X | dc066_coinsurance_amt | De-Identified | Expected Co-insurance by the member. | Pending |
| | | | Medcaid values are not co-insurance and | |
| | | | should not be included. 0 if amt=0, blank | |
| | | | if missing | |
| X | dc067_deductible_amt | De-Identified | Expected Deductible by the member. 0 if | Pending |
| | | | amt=0, blank if missing | |
| X | dc067a_patient_paid_amt | De-Identified | Expected Patient paid amount. Amount | Pending |
| | | | patient paid. Required if co-payment, co- | |
| | | | insurance or deductible are missing. 0 if | |
| | | | amt=0, blank if missing | |
| | | | | |
| X | dc017_paid_dt | De-Identified | Payment date | Pending |

| Field | | Security | | |
|-----------|----------------------------------|---------------|---|---------------------|
| Requested | Data Element | Level | Description | Justification |
| X | dw_rendering_provider_id | De-Identified | Rendering provider composite ID. A | Pending |
| | | | unique identifier associated with a unique | |
| | | | rendering provider across plans and | |
| | | | payer | |
| X | dw_billing_provider_id | De-Identified | Billing provider composite ID. A unique | Pending |
| | | | identifier associated with a unique billing | |
| | | | provider across plans and payer | |
| X | dc202_provider_network_indicator | De-Identified | Indicator of service received in or out of | Pending |
| | | | network:1 (in network), 2 (National | |
| | | | network), 3 (out-of-network) | |
| X | age | De-Identified | Age on date of service | Pending |
| X | age_group | De-Identified | Age bands based on date of service | Pending |
| X | urban_fl | De-Identified | Zip codes grouped into urban and rural | Pending |
| | | | identified by OHA | |
| | Data ele | ments that ar | e frequently denied | |
| Χ | dc062a_allowed_amt | Limited | Allowed amount. 0 if amt=0, blank if | OHA recommended for |
| | | | missing | detailed payment |
| | | | | analysis |
| X | me017_member_zip | Limited | Zip code-static from latest quarterly data | Pending |
| | | | submitted | |

| Field | | Security | | |
|--|---------------------------------------|---------------|---|---|
| Requested | Data Element | Level | Description | Justification |
| | uid | De-Identified | A unique identifier that links to the row as submitted in the MM Intake File Layout. Used for linking tables/views | |
| | release_id | De-Identified | A value associated with the data release | |
| | year_Eligibility | De-Identified | Year of eligibility | |
| | month_Eligibility | De-Identified | Month of eligibility | |
| The data elements highlighted in blue are provided in every data request | dw_member_id | De-Identified | A unique identifier associated with a single plan and payer and assigned to all eligibility and claims records associated with a given individual for that plan/payer. An individual can have multiple member ids for a payer because they can have multiple plans. | |
| | uniquepersonID | De-Identified | A unique identifier for a person across payers and time | |
| | me003_insurance_product_type_cd | De-Identified | A code that indicates an insurance coverage type | |
| | me018_medical_coverage_flag | De-Identified | Medical Coverage Flag not required when ME001=E | |
| | me019_prescription_drug_coverage_flag | De-Identified | Prescription Drug coverage flag | |
| | me207_dental_coverage_flag | De-Identified | Flag indicates dental coverage for the month | |
| | me016_member_state | De-Identified | Member State from latest quarterly data submitted | |
| X | Month_Start | De-Identified | Date of Eligibility set to the first of the month | Needed to examine variations by insurance |
| Х | Me005a_plan_term_dt | De-Identified | Plan termination date | Needed to examine variations by insurance |

| Field | | Security | | |
|-----------|--------------------------------|---------------|--|--|
| Requested | Data Element | Level | Description | Justification |
| Х | LOB | De-Identified | Payer line of business: 1 (Medicare), 2 (Medicaid), 3 (Commercial, 0 (no line of business reported), -99 (duplicate data reported) | Needed to examine variations by insurance |
| Х | me009a_pebb_flag | De-Identified | members Oregon includes out-of-state residents | Needed to examine variations by insurance |
| X | me009b_oebb_flag | De-Identified | Oregon Educators Benefit Board covered members Oregon includes out-of-state residents | Needed to examine variations by insurance |
| X | me201_medicare_coverage_flag | De-Identified | Type of Medicare coverage for Medicaid members only. A - Part A, B - Part B, AB - Parts A and B, C - Part C, D - Part D, CD - Part C and D, X - other, Z - none, not required when ME001=E | Needed to examine variations by insurance |
| X | me012_member_subscriber_rlp_cd | De-Identified | Relationship code | Needed to examine variations by insurance |
| Х | me013_member_gender_cd | De-Identified | Member Gender:M (male), F (female), and U (unknown) | Needed to examine variations by demographics |
| X | age | De-Identified | Member age in years calculated on the first day of the month | Needed to examine variations by demographics |
| Х | age_group | De-Identified | Age bands based on date of service | Needed to examine variations by demographics |
| X | me202_market_segment_cd | De-Identified | Market Segment | Needed to examine variations by insurance |

| Field | | Security | | |
|-----------|-----------------------------------|---------------|--|---|
| Requested | Data Element | Level | Description | Justification |
| Х | me203_metal_tier | De-Identified | Health benefit plan metal tier for qualified health plans (QHPs) and catastrophic plans as defined in the ACA:0 (Not a QHP or catastrophic plan), 1 (catastrophic), 2 (bronze), 3 (silver), 4 (gold), 5 (platinum) | Needed to examine variations by insurance |
| X | me205_high_deductible_health_flag | De-Identified | High Deductible Health Plan Flag | Needed to examine variations by insurance |
| X | me206_primary_insurance_ind | De-Identified | Flag indicates primary insurance | Needed to examine variations by insurance |
| X | me009c_medical_home_flag | De-Identified | Flag indicates medical home | Needed to examine variations by insurance |
| X | MCAID_PERC | Limited | Medicaid program eligibility codes. Not fully populated | |
| X | MCAID_cde_medicare_status | De-Identified | Medicare status reported for Medicaid recipients: MA (Part A only), MAB (Part A & B), MABD (Part A,B&D), MAD (Part A & D), MB (Part B only), MBD (Part B & D), MD (Part D only) | Needed to examine variations by insurance |
| X | MCAID_cde_enroll_recip_status | De-Identified | Medicaid enrollment status: managed care enrolled cap payment (1), managed care enrolled no cap payment (3), not managed care enrolled cap payment (5), fee for service (6) or null | Needed to examine variations by insurance |

| Field | | Security | | |
|-----------|-----------------------|---------------|---|--|
| Requested | Data Element | Level | Description | Justification |
| X | MCAID_cde_pgm_health | De-Identified | / | Needed to examine variations by insurance |
| X | MCAID_Delivery_System | De-Identified | | Needed to examine variations by insurance |
| X | urban_fl | De-Identified | Zip codes grouped into urban and rural identified by OHA | Needed to examine variations by demographics |
| X | rarestre | De-Identified | The rarest race-ethnicity identified for a person across payers and years (only one | Needed to examine |

| Field | | Security | | |
|-----------|-------------------------|---------------|--|---|
| Requested | Data Element | Level | Description | Justification |
| X | re1_race_cd | De-Identified | All races reported by all payers for all years for a person: (P) Native Hawaiian or Pacific Islander, (B) Black or African American, (I) American Indian or Alaskan Native, (A) Asian, (W) White, (O) other, (U) unknown, (R) refused and null | Needed to examine variations by demographics |
| X | re2_ethncity_cd | De-Identified | All ethnicities reported by all payers for all years for a person: (H) Hispanic), (O) Not Hispanic, (U) unknown, (R) refused and null | |
| Х | re3_primary_language_cd | De-Identified | All primary spoken languages reported by all payers for all years for a person | Needed to examine variations by demographics |
| | Data ele | ments that ar | re frequently denied | |
| X | me017_member_zip | Limited | Zip code-from the date of eligibility | Needed to examine variations by zip-code level socioeconomic status |

| Field | | Security | | |
|--------------------------------|----------------------|---------------|---|---|
| Requested | Data Element | Level | Description | Justification |
| Provided in every data request | release_id | De-Identified | A value associated with the data release | |
| X | dw_provider_id | De-Identified | A unique identifier associated with a unique provider across plans and payers | Need to identify individual and organization providers to examine differences by individual and organization provider characteristics |
| X | provider_entity | De-Identified | Provider entitiy-1) Individual or 2) organiza | |
| X | national_provider_id | De-Identified | National Provider Identifier (NPI) | Need to identify individual and organization providers to examine differences by individual and organization provider characteristics |
| X | provider_tax_id | De-Identified | Provider Tax identifier (attending, billing, pharmacy) | Need to identify organization providers to examine differences by organization provider characteristics |

| Field | Data Flamont | Security | Decembris | |
|-----------|-----------------|---------------|---|--|
| Requested | Data Element | Level | Description | Justification |
| X | license_1 | De-Identified | Provider state license code number 1 | Needed to examine differences by individual provider characteristics |
| X | license_state_1 | De-Identified | State where provider license number 1 was | Needed to examine differences by individual provider characteristics |
| Х | license_2 | De-Identified | Provider state license code number 2 | Needed to examine differences by individual provider characteristics |
| X | license_state_2 | De-Identified | State where provider license number 2 was | Needed to examine differences by individual provider characteristics |
| X | license_3 | De-Identified | Provider state license code number 3 | Needed to examine differences by individual provider characteristics |
| X | license_state_3 | De-Identified | State where provider license number 3 was | Needed to examine differences by individual provider characteristics |
| X | license_4 | De-Identified | Provider state license code number 4 | Needed to examine differences by individual provider characteristics |
| Х | license_state_4 | De-Identified | State where provider license number 4 was | Needed to examine differences by individual provider characteristics |

| Field | | Security | | |
|-----------|--------------------|---------------|--|---|
| Requested | Data Element | Level | Description | Justification |
| Х | license_5 | De-Identified | Provider state license code number 5 | Needed to examine differences by individual provider characteristics |
| Х | license_state_5 | De-Identified | State where provider license number 5 wa | Needed to examine differences by individual provider characteristics |
| Х | Provider_First_Nm | De-Identified | Provider first name; null if provider is an organization entity (attending, billing, pharmacy) | Need to identify individual providers to examine differences by individual provider characteristics |
| X | Provider_Middle_Nm | De-Identified | Provider middle name or organization name (attending, billing, pharmacy) | Need to identify individual and organization providers to examine differences by individual and organization provider characteristics |
| Х | Provider_Last_Nm | De-Identified | Provider last name or organization name (attending, billing, pharmacy) | Need to identify individual and organization providers to examine differences by individual and organization provider characteristics |
| Х | Provider_Suffix | De-Identified | Suffix of provider name | Need to identify individual providers to examine differences by individual provider characteristics |

| Field | | Security | | |
|-----------|-------------------------|---------------|---------------------------------|---------------------------|
| Requested | Data Element | Level | Description | Justification |
| Х | Provider_Org_Nm | De-Identified | Name of provider's organization | Need to identify |
| | | | | individual and |
| | | | | organization providers to |
| | | | | examine differences by |
| | | | | individual and |
| | | | | organization provider |
| | | | | characteristics |
| X | Provider_Prefix | De-Identified | Prefix of provider name | Need to identify |
| | | | | individual providers to |
| | | | | examine differences by |
| | | | | individual provider |
| | | | | characteristics |
| X | Provider_Org_Nm_Other | De-Identified | Other name of organization | Need to identify |
| | | | | individual and |
| | | | | organization providers to |
| | | | | examine differences by |
| | | | | individual and |
| | | | | organization provider |
| | | | | characteristics |
| X | Provider_Last_Nm_Other | De-Identified | Other last name of provider | Need to identify |
| | | | | individual providers to |
| | | | | examine differences by |
| | | | | individual provider |
| | | | | characteristics |
| X | Provider_First_Nm_Other | De-Identified | Other first name of provider | Need to identify |
| | | | | individual providers to |
| | | | | examine differences by |
| | | | | individual provider |
| | | | | characteristics |

| Field | | Security | | |
|-----------|--------------------------|---------------|-------------------------------------|---------------------------|
| Requested | Data Element | Level | Description | Justification |
| X | Provider_Middle_Nm_Other | De-Identified | Other middle name of provider | Need to identify |
| | | | | individual providers to |
| | | | | examine differences by |
| | | | | individual provider |
| | | | | characteristics |
| X | Provider_Prefix_Other | De-Identified | Other prefix of provider | Need to identify |
| | | | | individual providers to |
| | | | | examine differences by |
| | | | | individual provider |
| | | | | characteristics |
| X | Provider_Suffix_Other | De-Identified | Other suffix of provider | Need to identify |
| | | | | individual providers to |
| | | | | examine differences by |
| | | | | individual provider |
| | | | | characteristics |
| X | primary_street | De-Identified | Provider street address (attending, | Need to identify |
| | | | billing, pharmacy) | individual and |
| | | | | organization providers to |
| | | | | examine differences by |
| | | | | individual and |
| | | | | organization provider |
| | | | | characteristics |
| X | primary_city | De-Identified | Provider city (attending, billing, | Need to identify |
| | | | pharmacy) | individual and |
| | | | | organization providers to |
| | | | | examine differences by |
| | | | | individual and |
| | | | | organization provider |
| | | | | characteristics |

| Field | | Security | | |
|-----------|-------------------|---------------|--|---|
| Requested | Data Element | Level | Description | Justification |
| Х | primary_state | De-Identified | Provider state (attending, billing, pharmacy) | Need to identify individual and organization providers to examine differences by individual and organization provider |
| | | | | characteristics |
| X | primary_zip | De-Identified | Provider location zip (attending, billing, pharmacy) | Need to identify individual and organization providers to examine differences by individual and organization provider characteristics |
| X | Credential_Text_1 | | | Need to identify individual and organization providers to examine differences by individual and organization provider characteristics |
| X | Credential_Text_2 | De-Identified | Provider NPI credential 2 | Need to identify individual and organization providers to examine differences by individual and organization provider characteristics |

| Field | | Security | | Justification | |
|-----------|-------------------|---------------|--|---|--|
| Requested | Data Element | Level | Description | | |
| Х | Credential_Text_3 | De-Identified | Provider NPI credential 3 | Need to identify individual and organization providers to examine differences by individual and organization provider characteristics | |
| Х | provider_gender | De-Identified | Gender of provider - U if unknown | Provider characteristic by which we will examine variations in care | |
| X | Taxonomy_Cd_1 | De-Identified | NUCC provider taxonomy for the billing provider; NPI if not reported | Provider characteristic by which we will examine variations in care | |
| Х | Taxonomy_Cd_2 | De-Identified | NUCC provider taxonomy for the billing provider; NPI if not reported | Provider characteristic by which we will examine variations in care | |
| Х | Taxonomy_Cd_3 | De-Identified | NUCC provider taxonomy for the billing provider; NPI if not reported | Provider characteristic by which we will examine variations in care | |
| Х | Taxonomy_Cd_4 | De-Identified | NUCC provider taxonomy for the billing provider; NPI if not reported | Provider characteristic by which we will examine variations in care | |
| Х | Taxonomy_Cd_5 | De-Identified | NUCC provider taxonomy for the billing provider; NPI if not reported | Provider characteristic by which we will examine variations in care | |

| Field | | Security | | |
|-----------|-------------------------|---------------|--|---|
| Requested | Data Element | Level | Description | Justification |
| Х | Taxonomy_grouping | De-Identified | Code that indicates provider specialty or taxonomy 1 | Provider characteristic by which we will examine variations in care |
| X | Taxonomy_classification | De-Identified | Taxonomy classification | Provider characteristic by which we will examine variations in care |
| Х | Taxonomy_specialization | De-Identified | Taxonomy specialization | Provider characteristic by which we will examine variations in care |
| Х | county_fips | De-Identified | Five digit Federal Information Processing Standard (FIPS) county code associated with me017_member_zip | Provider characteristic by which we will examine variations in care |
| Х | county name | De-Identified | Name of county | Provider characteristic by which we will examine variations in care |

New or Amended APAC Data Request Review (custom or OHA Business Associate)

Staff Reviewer: Oliver

DRTS Number: 6072

Date review completed: 4/4/2024

| | Yes | No | N/A | Need more information | |
|--|-----|----|-----|--|--|
| Is this a new APAC request? | Χ | | | | |
| | | | | | |
| New APAC Request (skip to next section if amendment request): | | | | | |
| 1.1 Project staff contact information provided | X | | | | |
| 1.2 Project technical staff information provided | X | | | | |
| 2.1 Project summary provided with adequate detail to identify a specific unambiguous project | X | | | Cancer health disparities research | |
| 2.2 Research questions provided with adequate detail | Х | | | See application | |
| 2.3 Described planned products and reports derived from requested data | X | | | Peer reviewed publications | |
| 2.4 Project begin and end date provided | Х | | | | |
| 2.5 Acknowledgement that APAC data cannot be reused beyond the DUA | Х | | | | |
| 2.5 Acknowledgement that data cannot be shared beyond the DUA | X | | | | |
| 3.1ab Data request purpose box checked & description | X | | | | |
| 3.2 Checked box for level of data identifiers | Χ | | | | |
| 3.3 IRB application, approval memo, end date | X | | | Exempt, no end date | |
| 4.1 Completed data elements workbook | Х | | | | |
| 4.2 Adequately described how the data elements requested are the minimum necessary | X | | | We have done a lot of work to narrow the scope, both by eliminating unnecessary columns and reducing the number of rows requested. | |
| 5.1 Plan provided to prevent re-identification | X | | | | |
| 5.2ab Plan to link APAC data to other data source | X | | | Link to provider characteristics by NPI, link to SDOH data by zip code, link to Experian by hashed member identifiers | |
| 5.2c Requests OHA to link APAC to other data | X | | | OSCaR, Vital Stats | |
| 5.2d Detailed data linking plan provided | Х | | | Linkages by NPI and zip code are intuitive. Details of data hashing | |
| 5.3 Provided adequate description of data management, | Χ | | | | |
| security and data destruction plan | | | | | |
| Passes Minimum Necessary Review | X | | | Work is staged to minimize the scope of the request. | |
| Recommend management approval | X | | | I implore management approval. | |
| | | | | | |

Tentative Work Flow for Data Request 6072 (Cancer Disparities)



Stage 1: cancer data

- 1.1 APAC approval (pending)
- 1.2 OSCaR approval (pending)
- 1.3 OSCaR linkage (at Public Health Division)
- 1.4 APAC cancer data extracts
- 1.5 Review cancer data (MD Anderson)

Stage two: control group(s)

- 2.1 Meet to discuss control group(s)
- 2.2 Amend APAC application to include control group(s)
- 2.3 APAC control group(s) extracts
- 2.4 Review control group(s) data (MD Anderson)

Stage 3: external data

- 3.1 Vital Stats application/approval
- 3.2 Vital Stats linkage including cancer cases and controls (at APAC)
- 3.3 Test hashing process with Experian (APAC)
- 3.4 APAC hashed finder file including cancer cases and controls
- 3.5 Hashed finder file linkage (at MD Anderson)